



**Australian Government**  

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**Commonwealth Grants Commission**

**REPORT ON**  
**GST REVENUE SHARING RELATIVITIES**

**2015 REVIEW**

**VOLUME 1 – MAIN REPORT**

**Canberra**

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**Australian Government**  
**Commonwealth Grants Commission**

**LETTER OF TRANSMITTAL**

27 February 2015

The Hon Joe Hockey MP  
Treasurer  
Parliament House  
CANBERRA ACT 2600

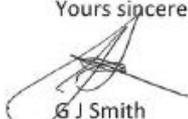
Dear Treasurer

As members of the Commonwealth Grants Commission appointed under the *Commonwealth Grants Commission Act 1973*, we respond in this report to terms of reference received in a letter on 21 June 2013 from The Hon Wayne Swan MP and supplementary terms of reference in a letter received on 19 December 2014 from you.

The Commission was asked to review the methods used to derive the relativities for distributing the Goods and Services Tax revenue among the States and Territories and to provide a report on the relativities considered appropriate for use from 2015-16.

In addition, you sought advice on 23 December 2014 on a possible treatment of volatile revenues in the GST distribution system that would mitigate their negative effects. This advice is provided separately from this report.

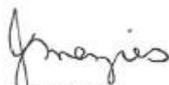
Yours sincerely



G J Smith  
Chairperson



G P Appleyard  
Member



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Member



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## ACKNOWLEDGMENTS

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We are grateful for the ready co-operation extended to the Commission and its staff, throughout the review, by the Australian, State and Territory governments and their officials across a range of departments and agencies. We are particularly grateful for the efforts of the State Treasuries in organising submissions to the inquiry, participating in conferences and responding to our many requests for information. Staff of the Australian Bureau of Statistics, the Independent Hospital Pricing Authority, the Australian Institute of Health and Welfare and other Commonwealth agencies have been most helpful in providing the data needed to complete the necessary calculations. We also acknowledge the help of other research and data gathering agencies.

The Commission expresses its special thanks to all Commission staff whose professionalism and dedication have been essential to the completion of the review.

# TERMS OF REFERENCE

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Mr Alan Henderson AM  
Chairperson  
Commonwealth Grants Commission  
86-88 Northbourne Avenue  
Braddon ACT 2612

15 JUN 2013

Dear Mr Henderson

I am writing to you to convey the enclosed terms of reference for the Commission's *2015 Methodology Review of GST Revenue Sharing Relativities*.

As you know, on 30 March 2011, the Government appointed the Hon John Brumby, Mr Bruce Carter and the Hon Nick Greiner AC to review Australia's system of distributing the GST amongst the States and Territories. The final report of the *GST Distribution Review (Review)* was released publicly on 30 November 2012. I discussed the recommendations of the Review with my State colleagues at the Standing Council on Federal Financial Relations meeting of 3 April 2013. The Standing Council agreed to initiate an expedited methodology review, including asking the Commission to take into account certain recommendations from Chapters 3, 6 and 7 from the Review.

The terms of reference also ask the Commission to consider the appropriate treatment of disability services during the transition to DisabilityCare Australia and once the full scheme is operating nationally and school education funding under the National Education Reform Agreement funding arrangements.

This review will require close and regular engagement with the Commonwealth and States. The terms of reference require the Commission to provide a draft report within 12 months of receipt of the terms of reference. The final report is due by 28 February 2015, in order to inform consideration of the 2015-16 GST revenue sharing relativities.

I appreciate that this will be a challenging task for the Commission, however I have every confidence that you can deliver within these timeframes.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Wayne Swan'.

WAYNE SWAN  
enc

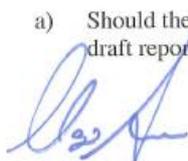
**Terms of Reference**  
**Commonwealth Grants Commission 2015 Methodology Review**

I, Wayne Maxwell Swan, Deputy Prime Minister and Treasurer, pursuant to sections 16, 16A and 16AA of the *Commonwealth Grants Commission Act 1973*, refer to the Commission for inquiry into the methodological approach to determining the per capita relativities to be used to distribute Goods and Services Tax (GST) revenue among the States, the Northern Territory and the Australian Capital Territory (collectively referred to as the States) from 2015-16. The Commission should provide its final report to the Commonwealth and States by 28 February 2015.

1. In preparing its assessments the Commission should:
  - a) take into account the Intergovernmental Agreement on Federal Financial Relations (as amended), which provides that the GST revenue will be distributed among the States in accordance with the principle of horizontal fiscal equalisation;
  - b) aim to have assessments that are simple and consistent with the quality and fitness for purpose of the available data;
  - c) ensure robust quality assurance processes; and
  - d) develop methods to appropriately capture the changing characteristics of the Indigenous population.
2. In undertaking its assessments, the Commission should also have regard to the recommendations of the final report of the *GST Distribution Review* (October 2012) to:
  - a) consider the appropriateness of the current materiality thresholds (Recommendation 3.1);
  - b) consider the appropriateness of continuing to round relativities to five decimal places (Recommendation 3.2);
  - c) develop a new transport infrastructure assessment. This should include, if appropriate, a framework to identify payments for nationally significant transport infrastructure projects which should affect the relativities only in part and options for providing that treatment (Recommendation 6.1);
  - d) consider the use of data which is updated or released annually with a lag, or updated or released less frequently than annually (Recommendation 6.2);
  - e) examine the merits of adopting a simplified and integrated assessment framework (Recommendation 6.3);
  - f) investigate whether it is appropriate and feasible to equalise interstate costs on a 'spend gradient' basis (Recommendation 6.4);
  - g) develop a new mining revenue assessment (Recommendations 7.1 and 7.2); and
  - h) consider the appropriate treatment of mining related expenditure (Recommendation 7.3).

3. The Commission should prepare its assessments on the basis that:
  - a) National Specific Purpose Payments (NSPPs), National Health Reform (NHR) funding and National Partnership (NP) project payments should affect the relativities, recognising that these payments provide the States with budget support for providing standard state and territory services;
    - i. NHR funding and corresponding expenditure relating to the provision of cross-border services to the residents of other States should be allocated to States on the basis of residence.
  - b) NP facilitation and reward payments should not affect the relativities, so that any benefit to a State from achieving specified outputs sought by the Commonwealth, or through implementing reforms, will not be redistributed to other States through the horizontal fiscal equalisation process;
  - c) general revenue assistance, excluding GST payments, will affect the relativities, recognising that these payments are available to provide untied general budget support to a State or Territory;
  - d) those payments which the Commission has previously been directed to treat as having no direct influence on the relativities continue to be treated in that way. Where those payments are replaced, the treatment of the new payment should be guided by subparagraphs 3(a) – (c) and paragraph 4, unless otherwise directed; and
  - e) where responsibilities for funding and delivering aged care and disability services has not been transferred to the Commonwealth by a State under the NHR Agreement, these responsibilities will continue to be assessed as State services for that State.
4. Notwithstanding subparagraphs 3(a) – (c), with the exception of reward payments under NPs, the Commission may determine that it is appropriate for particular payments to be treated differently, reflecting the nature of the particular payment and the role of the State governments in providing particular services.
5. The Commission should consider the most appropriate treatment of disability services during the transition to DisabilityCare Australia (the National Disability Insurance Scheme) and once the full scheme is operating nationally.
6. The Commission will ensure that the GST distribution process will not have the effect of unwinding the recognition of educational disadvantage embedded in the National Education Reform Agreement (NERA) funding arrangements. The Commission will also ensure that no State or Territory receives a windfall gain through the GST distribution from non-participation in NERA funding arrangements.

7. The Commission will consult regularly with the Commonwealth and States as it considers these terms of reference.
8. The Commission will develop a work program, in consultation with the Commonwealth and States, which sees the matters outlined in paragraphs 1(d), 2(c), 2(g), 2 (h), 5 and 6 being progressed as a priority and subject to early consultation (including multilateral discussions) with the Commonwealth and States.
9. The Commission should provide a draft report for consideration by the Standing Council on Federal Financial Relations within 12 months from receipt of these terms of reference.
  - a) Should the Commission expect to make significant changes following consultation on the draft report, further consultation with the States on those changes will be required.



WAYNE SWAN



TREASURER



Mr Greg Smith  
Chairperson  
Commonwealth Grants Commission  
First Floor, Phoenix House  
86-88 Northbourne Ave  
BRADDON ACT 2612

19 DEC 2014

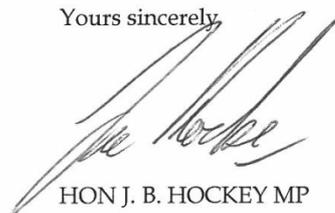
Dear Mr Smith 

I am writing to you to convey the enclosed supplementary terms of reference for the Commonwealth Grants Commission's *2015 Methodology Review of GST Revenue Sharing Relativities*.

The supplementary terms of reference deal with the treatment of Commonwealth payments under the Asset Recycling Initiative, certain other infrastructure payments as well as drawdowns from the DisabilityCare Australia Fund.

The supplementary terms of reference also require the Commission to provide the Review to me by 28 February 2015, which will then allow me to provide it to the states at a later date. I appreciate your efforts during the Methodology Review process and look forward to receiving the report.

Yours sincerely

  
HON J. B. HOCKEY MP

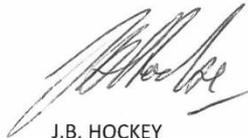
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Telephone: 02 6277 7340 Facsimile: 02 6273 3420

**Supplementary Terms of Reference for the Commonwealth Grants Commission 2015 Methodology Review**

***Commonwealth Grants Commission Act 1973***

I, Joseph Benedict Hockey, Treasurer, pursuant to sections 16, 16A and 16AA of the *Commonwealth Grants Commission Act 1973*, refer to the Commission for inquiry into and report upon, by 28 February 2015, the question of the per capita relativities to be used to distribute GST revenue among the states, the Northern Territory and the Australian Capital Territory (collectively referred to as the states) from 2015-16.

1. This supplementary information is to be read in conjunction with the terms of reference provided by the former Treasurer Wayne Swan on 15 June 2013.
2. The Commission should provide its final Report to the Commonwealth by 28 February so that the Commonwealth can provide the Report to the states at an appropriate time, but before the 2015-16 Commonwealth Budget.
3. The Commission should prepare its assessment on the basis that:
  - a) a 50 per cent discount should be applied to the following Commonwealth payments for major roads when assessing the GST relativities;
    - i. \$1.5 billion for WestConnex;
    - ii. \$3 billion for the East-West Link;
    - iii. \$2.9 billion for the Western Sydney Infrastructure Plan;
    - iv. \$0.6 billion for the Toowoomba Second Range Crossing;
    - v. \$0.9 billion for the Perth Freight Link/Roe Highway;
    - vi. \$0.4 billion for the North-South Road Corridor; and
    - vii. \$0.1 billion for the Northern Territory Roads Package.
  - b) Commonwealth payments under the \$5 billion Asset Recycling Initiative should have no impact on the GST relativities; and
  - c) states' drawdowns from the DisabilityCare Australia Fund during the transition phase for the National Disability Insurance Scheme should have no impact on the GST relativities.
4. The Commission should consult the Commonwealth Government and the states before deciding on any changes in methods that arise as a result of a significant change in arrangements which govern Commonwealth-state relations and which are considered appropriate for the Commission to fulfil its obligations in respect of these supplementary terms of reference.



J.B. HOCKEY

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This report contains the Commission’s response to the terms of reference. It contains our position on the principles we have used and assessments we have made in preparing our recommended relativities. It has been prepared on the basis of State circumstances as we understand them.

## VOLUME 1

Volume 1 contains an overview of our findings, including the per capita relativities to be used to distribute GST revenue among the States in 2015-16. It explains the requirements of the terms of reference and discusses the equalisation objective and our decisions on the main issues, including the priority issues identified in the terms of reference. It also identifies the main fiscal differences between States and explains why they have changed since the 2014 Update of GST relativities.

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Volume 2 explains how we have implemented the equalisation objective, including how we have used the supporting principles, treated Commonwealth payments and undertaken the assessments for each category and each disability which affects a number of category assessments.

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## **ATTACHMENTS**

Technical attachments provide a summary of the main data used in our calculations and an explanation of how we have used them.

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# MAIN FINDINGS

## OVERVIEW

This report presents our recommendations for the distribution of the GST revenue to the States and Territories (the States) for 2015-16, and the results of our review of the methodologies used to determine the States' relative fiscal capacities.

Consistent with our terms of reference, our objective is unchanged. It is to ensure that the GST revenue is distributed on the basis of horizontal fiscal equalisation (HFE) so that each of Australia's States has the same fiscal capacity, under average policies, to provide general government infrastructure and services.

The States' assessed fiscal capacities continue to reflect divergent trends in their economies and other key influences on their circumstances. Particularly significant in recent years are the strong population and economic growth arising from mining development in Western Australia, the large impact of natural disaster costs on Queensland and the ongoing high fiscal disabilities experienced by the Northern Territory and Tasmania. Other emerging influences have been the property market recovery in New South Wales and the relatively high growth in Commonwealth payments to Victoria, each of which reduce their assessed GST shares.

The result of our methodology review is to broadly retain the assessment principles and approaches used in previous years, but a range of improvements have been adopted in specific areas. These respond to matters raised in our terms of reference, changing data sources, suggestions made by States and our analysis of key issues.

The main changes in this review are a more comprehensive assessment of State housing and public transport infrastructures and services, the adoption of new data sources and methods in health and schools, responses to new funding arrangements for disability services and aged care, and a revised assessment structure for mining revenues.

We have reviewed the impact of our methods on budget volatility. We concluded that existing methods, applied consistently to all assessments, provide the most reliable, practical and appropriate outcome consistent with achieving HFE over a run of years (albeit with a lag since reliable data are only available on a historical basis). We have retained the three year averaging approach adopted in the 2010 Review which balances competing considerations of practicality, data reliability, contemporaneity and policy neutrality, and which provides for some readily predictable smoothing of payment flows over time.

## THE TASK

- 1 The Commonwealth and the States and Territories (the States) have agreed that Goods and Services Tax (GST) revenue should be distributed to the States to equalise their fiscal capacities. The Intergovernmental Agreement on Federal Financial Relations (the IGA) sets out this requirement.
- 2 The Commission has been asked in terms of reference received from the Commonwealth Treasurer on 21 June 2013 to review the methods which should be used to distribute the GST from 2015-16 to achieve this outcome. Supplementary terms of reference were received on 19 December 2014. We are asked to recommend how the GST should be distributed in accordance with the ‘principle of HFE’ and to consider a number of priority issues, including some nominated recommendations of the GST Distribution Review.<sup>1</sup> The terms of reference also provides guidance on the treatment of Commonwealth payments and direction on how some payments should be treated. The Commission is not asked to comment on the appropriateness of fiscal equalisation as a policy.
- 3 The definition of the ‘principle of HFE’ we have adopted for this review is unchanged:

State governments should receive funding from the pool of goods and services tax such that, after allowing for material factors affecting revenues and expenditures, each would have the fiscal capacity to provide services and the associated infrastructure at the same standard, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency.
- 4 In adopting this definition, and in developing its methodology, the Commission is conscious of the desirability of minimising any adverse impacts of HFE on the operations of government and the economy generally.
- 5 Our approach is based on using the most recent available data to assess State fiscal capacities. As those data are only available with a lag, our assessments capture differences in fiscal capacities with a lag. We consider that it is appropriate to calculate GST requirements in this way because it provides the best combination of reflecting current conditions and using robust data. It means that we do not attempt to precisely reflect conditions in the year our assessments are used (because these are unknowable) but rather achieve HFE over several years as current conditions become reflected in published and administrative data.
- 6 The Commission also received a separate letter from the Treasurer on 23 December 2014 requesting advice on a possible approach that would mitigate the negative effects of large and volatile revenues and ensure that States’ shares of GST in the year are appropriate for their fiscal circumstances in that year. That advice is provided separately from this report.

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<sup>1</sup> The Australian Government, *GST Distribution Review, Final Report*, October 2012.

## RESULTS

- 7 Table 1 shows the per capita relativities we recommend for use in distributing the GST revenue among the States in 2015-16. It also shows State shares of the GST revenue implied by our 2015-16 recommendations and an illustrative total GST revenue distribution. It compares these with the results for the 2014-15 year.
- 8 The methods we have used to derive these results for 2015-16 are set out in the rest of the report. Using our new methods and data for 2011-12, 2012-13 and 2013-14, we have measured how the economic and social conditions in the States affect the relative expenses States incur in providing services (including on infrastructure) and the relative capacity of States to raise their own revenue. The expense and revenue estimates are then combined with the other Commonwealth support States receive (payments for specific purposes) and State populations to calculate State shares of the GST. These shares aim to provide States in 2015-16 with the fiscal capacity to provide the average standard of services and associated infrastructure for their populations, if they make the average effort to raise revenue and operate at the average level of efficiency.
- 9 We recommend these methods be used in years following 2015-16 using updated data for three assessment years.

**Table 1 Results – relativities, shares and GST distribution 2014-15 and 2015-16**

	Relativities		Shares		GST distribution	
	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
			%	%	\$m	\$m
New South Wales	0.975	0.947	31.2	30.3	16 774	17 311
Victoria	0.883	0.893	22.0	22.3	11 828	12 755
Queensland	1.079	1.128	21.8	22.8	11 704	13 046
Western Australia	0.376	0.300	4.2	3.4	2 248	1 935
South Australia	1.288	1.359	9.2	9.7	4 955	5 525
Tasmania	1.635	1.819	3.6	3.9	1 914	2 236
Australian Capital Territory	1.236	1.100	2.0	1.8	1 097	1 040
Northern Territory	5.661	5.571	5.9	5.9	3 189	3 351
<b>Total</b>	<b>1.000</b>	<b>1.000</b>	<b>100.0</b>	<b>100.0</b>	<b>53 710</b>	<b>57 200</b>

Note: For further information see Chapter 3.

Source: Commission calculation.

## EQUALISATION ENVIRONMENT

- 10 Although States can access similar revenue bases and have similar responsibilities in service provision, their innate capacities to raise revenue and cost of providing an average level of services differ because of differences in their economic, social and demographic characteristics.
- 11 Table 2 shows the major causes of differences in innate State fiscal capacities. It illustrates the extent to which each drives differences from an equal per capita GST distribution. For example, because:
  - Western Australia can raise so much more per capita in mining royalties at average rates, other things being equal, it warrants \$2 180 less per capita in GST; its capacity to raise revenue from most other tax bases is also above average, implying it requires less GST
  - Western Australia needs to spend so much more per capita on delivering the average level of services, other things being equal, it requires \$1 197 more per capita in GST
  - the Northern Territory has very high costs of service provision, it needs \$11 661 more per capita in GST to provide the average level of services; it also needs more GST (\$337 per capita) because of its below average revenue raising capacity.
- 12 It is the net impact of all these pluses and minuses which determine a differential GST distribution.
- 13 In this review, data and evidence provided to us have established that there are significant differences in the innate fiscal capacities of States which, for equalisation to be achieved, warrant a distribution of GST revenue which also differs significantly from one based on State population shares.
- 14 We have also observed that, over the assessment years, innate State fiscal capacities continued to diverge and this requires, for equalisation, that the GST distribution also continues to diverge from one based on population shares. Further information is provided in Chapters 3 and 4.

**Table 2 GST effects of differences in innate fiscal capacities, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ave
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
<b>Effects of revenue raising capacity</b>									
Mining production	294	498	-56	-2 180	310	404	516	-49	257
Payrolls paid	-19	77	42	-411	227	403	-44	63	53
Property sales	-99	-4	51	-64	283	342	25	173	40
Land values	5	-20	-6	-99	134	156	133	91	17
Other revenue effects	32	10	-21	-91	-18	37	101	58	16
<b>Total revenue effects</b>	<b>213</b>	<b>560</b>	<b>9</b>	<b>-2 845</b>	<b>935</b>	<b>1 342</b>	<b>731</b>	<b>337</b>	<b>320</b>
<b>Effects of expenditure requirements</b>									
Socio-demographic features									
Remoteness and regional costs	-174	-185	143	187	76	729	-384	3 519	108
Indigenous status	-15	-216	122	70	-70	163	-139	2 857	66
Socio-economic status	49	-13	-13	-108	181	70	-528	-300	30
Other socio-demographic	-6	-61	67	-41	56	53	-88	426	23
Wage costs	45	-105	-95	311	-96	-214	212	370	57
Population growth	-96	-25	32	373	-157	-303	-93	717	56
Urban centre size	42	124	-116	9	-89	-408	-137	-442	45
Administrative scale	-58	-47	-35	16	69	436	596	1 079	37
Natural disaster relief	-28	-39	136	-28	-52	-48	-42	-14	27
Small communities	-41	-46	19	69	37	43	-49	943	25
Non-State sector	-43	-38	5	158	-21	120	149	83	25
Other expense effects	-62	-165	54	181	70	46	-108	2 424	63
<b>Total expense and investment effects</b>	<b>-386</b>	<b>-816</b>	<b>319</b>	<b>1 197</b>	<b>5</b>	<b>688</b>	<b>-611</b>	<b>11 661</b>	<b>336</b>
<b>Effects of Commonwealth payments</b>	<b>57</b>	<b>10</b>	<b>-15</b>	<b>-8</b>	<b>-77</b>	<b>-73</b>	<b>127</b>	<b>-1 115</b>	<b>23</b>
<b>Total</b>	<b>-116</b>	<b>-246</b>	<b>313</b>	<b>-1 656</b>	<b>863</b>	<b>1 958</b>	<b>248</b>	<b>10 883</b>	<b>284</b>

Note: For explanations of what each disability factor includes, please see Volume 2 of this report and the supporting information to this report located on the [Commission's website](http://www.cgc.gov.au) (www.cgc.gov.au).

Source: Commission calculation.

## WHAT HAS CHANGED IN THIS REVIEW?

- 15 State capacities change relative to each other over time because of changes in the characteristics identified above. This requires the continual adjustment of the GST distribution to bring these fiscal differences into balance. The larger the relative changes, the greater the change in the GST distribution.
- 16 The methods we use to measure these differences also change to better capture changing State characteristics and to use the best available data to measure them.

17 Table 3 shows the differences between the estimated GST distribution for 2014-15 and the illustrative distribution for 2015-16. Changes have occurred for a number of reasons:

- State populations between 2014-15 and 2015-16 have changed
- the amount of GST revenue available for distribution has increased
- the relative fiscal capacities of the States have changed because of revisions to data, changes in Commission methods and changes in State circumstances.

18 The Commission's work relates only to the changes in fiscal capacities. The largest changes resulting from the work of the Commission are due to changes in circumstances, followed by changes in methods.

**Table 3 Distribution of the 2014-15 GST and the illustrative 2015-16 GST**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Estimated 2014-15	16 774	11 828	11 704	2 248	4 955	1 914	1 097	3 189	53 710
Illustrative 2015-16	17 311	12 755	13 046	1 935	5 525	2 236	1 040	3 351	57 200
Change	537	927	1 342	-313	571	322	-57	161	3 490
Change caused by new:									
Population	-34	26	24	32	-33	-26	1	10	0
Pool	1 088	770	762	148	320	123	71	208	3 490
Fiscal capacities	-517	131	556	-494	284	225	-129	-56	0
- Method changes	-105	423	-186	-255	74	89	-93	53	0
- Revised data	-157	-44	-45	202	58	-7	-47	40	0
- New circumstances	-254	-249	787	-441	152	144	10	-149	0
Change (\$m)	537	927	1 342	-313	571	322	-57	161	3 490
Change (\$pc)	70	154	276	-116	334	623	-143	638	145

Source: Australian Government Budget, *Mid-Year Economic and Fiscal Outlook 2014-15*, Commonwealth Treasury and Commission calculation.

19 The major cause of change in State fiscal capacities was due to changes in State capacities to raise revenues from mining royalties. Western Australia's capacity to raise revenue increased further, reducing its need for GST. There has been a dramatic increase in natural disaster relief expenses claimed by Queensland under the Natural Disaster Relief and Recovery Arrangements (NDRRA) in 2013-14, leading to increases in its GST share. The increased investment needs arising from changes in population growth and the inclusion of housing and urban transport infrastructure in the investment assessment increased Western Australia's need for GST and reduced that of Queensland.

## Method changes

- 20 The development of revised methods has benefited from substantial consultation with all States and detailed submissions from them.
- 21 In this review, we have not changed how fiscal equalisation is defined nor what we equalise (net financial worth). We have continued to use the same assessment principles to guide us in our work. Methods, as far as practical and feasible, should:
- reflect what States do
  - be policy neutral in that an individual State should not be able, by its own actions, to directly influence its own share of the GST distribution
  - capture as contemporaneously as reliable data will allow, the conditions in the States in the year the GST is distributed
  - be derived in a practical way, as simply as possible, consistent with achieving horizontal fiscal equalisation and the quality of the available data.
- 22 However, we have sought to develop methods that reflect State policy and practice in service delivery and revenue raising, and which are resilient so that they will continue to be relevant and appropriate as State policies change and as their economic and social circumstances change. This has meant some changes to previous methods to get the best available measure of innate fiscal capacities. In some cases, a method change was made because of changes in the data available to us.
- 23 We have adapted the methods used in previous reviews to make them more relevant. For example, in the 2010 Review, we moved to directly capture the impact of State spending on infrastructure to recognise more quickly the impact of differential population growth. In this review, we have broadened the scope of that work to include infrastructure expenditure on public housing and urban public transport.
- 24 The terms of reference asked us to consider particular issues as a matter of priority. Our response to these issues is summarised below and in full in Chapter 2 of this volume.
- Clause 1(d). To more appropriately capture the changing characteristics of the Indigenous population, we have used a new more direct measure of the socio-economic status of Indigenous residents in assessing service delivery costs.
  - Clause 2(c). We have introduced a new urban transport infrastructure assessment which recognises that State urban transport infrastructure requirements increase with city size. We do not consider it appropriate or possible for us to develop a framework to identify which transport infrastructure projects are of national significance. However, we note that the terms of reference have instructed us to treat 50% of certain roads payments as

not impacting the relativities. We have decided to treat all payments for road and rail projects on the national transport networks in the same way.

- Clause 2(g). We have developed a mining revenue assessment which assesses mining revenue capacity on a mineral by mineral basis. We regard this assessment as achieving HFE while avoiding practical concerns that arose through the grouping of minerals under the 2010 Review approach.
- Clause 2(h). In considering the appropriate treatment of mining related expenditure, such as spending on services and social infrastructure for mining communities and on services to the mining industry, we have concluded that, on balance, most is being assessed appropriately. We have introduced assessments of additional expenses incurred in providing more than an equal per capita level of spending on community amenities in high growth areas and higher spending on planning and regulation relating to investment.
- Clause 5. In considering the most appropriate treatment of disability services during the transition to DisabilityCare Australia and once the full scheme is operating, we have decided to assess State expenses relating to disability care using dual assessments – State spending on disability service delivery and State contributions to DisabilityCare Australia. The assessment relating to State spending will cease if and when it becomes immaterial.
- Clause 6. To ensure no unwinding of the embedded educational disadvantage in the National Education Reform Agreement (NERA) funding arrangements, we have assessed the distribution of Commonwealth funding provided to the States on the basis of the Schools Resourcing Standard. As all States are now participating in NERA, no action was required to ensure a non-participating State received any windfall gain through the GST distribution.

25 Chapter 2 also provides a response to the request from Western Australia that we make our relativities more contemporaneous, consistent with our supporting principles, particularly in relation to the mining assessment.

26 Our response to other specific issues in the terms of reference and supplementary terms of reference is summarised in Table 4. A full response to them is provided elsewhere in the report, as specified in the table.

**Table 4 Response to other issues in terms of reference**

2015 Review reference clause	Response	Reference
1(a) take into account the IGA ... which provides that the GST will be distributed among the States in accordance with the principle of HFE	The Commission has taken into account the IGA in preparing its assessments. It has explained its understanding of the HFE objective and supporting principles and applied these in developing its assessments.	Volume 1 Chapter 1 and Volume 2
1(b) aim to have assessments that are simple and consistent with the quality and fitness for purpose of the available data	The Commission's supporting principle of practicality, articulated in guidelines which it uses to develop assessments, aims to ensure assessments have these features.	Volume 2 Chapter 1
1(c) ensure robust quality assurance procedures	The requirements of the Commission's Quality Assurance Strategic Plan, on which States were consulted, have been satisfied.	Volume 1 Chapter 5
2(a) consider the appropriateness of the current materiality thresholds (recommendation 3.1)	The Commission has increased the thresholds for disabilities to \$30 per capita and for data adjustments to \$10 per capita.	Volume 2 Chapter 1
2(b) consider the appropriateness of continuing to round the relativities to five decimal places (recommendation 3.2)	The Commission does not consider there is significant benefit in terms of simplification or reduced false precision from rounding the relativities to less than five decimal places. Doing so may have a material impact on State GST shares.	Volume 2 Chapter 1
2(d) consider the use of data which are updated or released annually with a lag, or updated or released less frequently than annually (recommendation 6.2)	The Commission will continue to use data which best reflect States' likely circumstances in the year of application.	Volume 2 Chapter 1
2(e) examine the merits of adopting a simplified and integrated assessment framework (recommendation 6.3)	The Commission will continue equalising State net financial worth per capita and recognising needs for infrastructure and net financial worth directly and immediately, rather than adopting the simplified and integrated or other holding cost approaches.	Volume 2 Chapter 1
2(f) investigate whether it is appropriate and feasible to equalise interstate costs on a 'spend gradient' basis (recommendation 6.4)	The Commission will not adopt a spend gradient approach to interstate costs, because doing so is inconsistent with HFE.	Volume 2 Chapter 1
3 and 4 of main reference and 3 of supplementary reference - treatment of Commonwealth payments	The requirements of the IGA have been followed in deciding the treatment of Commonwealth payments, except where specifically quarantined in whole or in part by the terms of reference.	Volume 2 Chapter 2 and Attachment 2
7, 8 and 9 of main reference and 4 of supplementary reference - consultation	The Commission has consulted regularly and extensively with the Commonwealth and State Governments on the development of principles and methods. We held early consultations on those issues to be progressed as a priority. We provided a draft report and advice on significant changes following the draft report.	Volume 1 Chapter 1 and Volume 2 Attachment 7

27 Other substantial changes in assessment methods during this review included.

- **Schools.** We used Australian Curriculum and Reporting Authority (ACARA) data to calculate the loadings for high cost students. We consider the new data provides us with more reliable estimates of the additional costs of certain high cost students. In addition, we have moved to actual enrolments as our broad measure of use for all age groups, whereas in the 2010 Review, we calculated an average policy number of pre- and post-compulsory students.
- **Health.** We developed a more direct method of assessment for each health service which recognises the main drivers of expenses as the socio-demographic profile of State populations and the impact of the non-State sector. We consider that new data sourced from the Independent Hospital Pricing Authority (IHPA) provide us with a more accurate estimate of the net cost for each population group.
- **Welfare.**<sup>2</sup> Since the 2010 Review, the Commonwealth has taken over State responsibilities in the areas of aged care services and disability services for older people. Commonwealth payments and spending on aged care services now have no impact on State GST shares.
- **Housing.** The Commission considers the provision of social housing is more like a general government than a commercial service so housing services now include both general government and public non-financial corporation (PNFC) expenditures and revenue. We have made separate assessments of housing expenses and revenue. The assessments recognise that expenses and revenue vary across States because of the socio-demographic composition of State populations.
- **Investment and net borrowing.** We now assess the effects of interstate differences in city size on the infrastructure required to provide urban transport services and income, Indigenous status and remoteness on public housing infrastructure.

## Data revisions

28 We consider our recommendations should be based on the best data available at the time they are made. That means as data are revised our recommendations adapt. The major revisions to data during this review included the following.

- **Road investment.** We decided to use a mix of State and National Transport Commission (NTC) data on the urban/rural dissection of investment for road gross capital expenditure, Department of Infrastructure and Regional Development data on the location of projects funded by national network road (NNR) payments and up-to-date State data on the split of depreciation. This

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<sup>2</sup> Further changes will also occur when the National Disability Insurance Scheme enters its transition phase, probably in the 2016 Update, as discussed in Chapter 2 – Main issues.

substantially increased measured investment in rural roads relative to the previous review.

- **Payroll tax.** The ABS made large upward revisions to ACT payroll data for the years 2010-11 to 2012-13. These revisions increased its assessed payroll tax capacity, reducing its GST share. Over the same period, the ABS made smaller upward revisions to data for New South Wales, Queensland, Western Australia and South Australia, increasing their assessed payroll tax capacities and reducing their GST shares.

## Changes in circumstances

29 Our recommendations for the GST distribution in 2015-16 are based on data for 2011-12 to 2013-14. Compared to our recommendations last year, we incorporate data for 2013-14 while data for 2010-11 no longer affect the GST distribution. In this way, we track the evolution of State economies and the spending and revenue policies of the States. The most important changes in circumstances were:

- **Commonwealth payments.** We observed significant changes in the size and distribution of the payments among the States in the last year. For Victoria, its increased share of road and rail construction funding between 2010-11 and 2013-14 reduced its GST share.
- **Mining revenue.** A decline in iron ore prices between 2010-11 and 2013-14 was offset by large increases in the volume of production. As the majority of production occurs in Western Australia, its assessed mining capacity increased, reducing its GST share. Over the same period, the decline in coal prices was not offset by production increases. The price decline reduced Queensland's assessed mining capacity, increasing its GST share.
- **Natural disaster relief.** There has been a dramatic increase in the natural disaster relief expenses (net of Commonwealth assistance) for Queensland in 2013-14 compared with 2010-11, leading to increases in its GST share. Its expenses principally related to the flood and cyclone events of 2011 and 2012. On the other hand, New South Wales and Victoria expenses in 2013-14 were more than offset by Commonwealth reimbursements paid or payable for expenditure incurred in previous years.
- **Stamp duty.** There was a 40% increase in the value of property transferred in New South Wales between 2010-11 and 2013-14. This increased its assessed property capacity, reducing its GST share. Victoria experienced a below average increase over this time, reducing its assessed capacity and increasing its GST share.

## The future

- 30 In this review, we have identified a number of areas of State activity that will require monitoring. These include the following.
- We will monitor developments in State mining policies:
    - to ensure our mineral by mineral assessment is not influencing State behaviour
    - to check whether other minerals, such as coal seam gas, become material, requiring a change to the minerals separately assessed
    - to ensure the revenue base we observe with respect to say, coal seam gas, is consistent with average policy.
  - We will review the advice provided by the Department of Infrastructure and Regional Development on which projects are on the national road and rail networks to ensure identified projects are consistent with our understanding of those networks and are treated appropriately, including for projects not declared to be on the network until after completion.
  - We may need to reconsider the natural disaster relief assessment if the Commonwealth changes the Natural Disasters Relief and Recovery Arrangements following the Productivity Commission's report on those.
- 31 Also in this review, we have found the data required to properly review an assessment is not always available. For example, we have not made any changes to the wage costs assessment because the replacement dataset (Compensation of Employees) which will replace the Survey of Employment and Training is not yet available. We will consider changes when the new data are available, expected within the next 12 months. We will need to review whether a conceptual case for the disability continues to exist, and if it does, the most appropriate method to assess it.
- 32 The Commission has update guidelines, agreed with States, which give us the flexibility to make changes in methods, following consultation, in relation to major changes in federal financial relations and major budget developments and to apply new or better data. This ensures the relativities remain as contemporaneous as possible but are not changed unnecessarily. Re-examination of the wage costs data would be permitted by these guidelines. Similarly, the use of a 2011 Census based Socio-economic index for individuals (SEIFI) or households instead of the adjusted 2006 Census based SEIFI in the Welfare category would be feasible.
- 33 Work could also commence on improving the data available to support assessments. The areas in which this would be beneficial have been identified throughout the report, and include work on the quantum of administrative scale expenses, the Indigenous socio-economic index, disaggregating services to industry expenses and improving the split of urban and rural roads data. In the past, such work has been undertaken by a working party of State and Commission officers. We intend to

continue this approach. Table 5 provides a summary of the areas in which work could be undertaken.

- 34 Other work that might lead to a method change such as exploring the relationship between urban road and transport spending and progressing the development of the urban transport infrastructure model should be left to a methodology review.

**Table 5 Improving data to support assessments**

Category	Dataset	Work required
Wage costs	ABS Compensation of employees	Reconsider whether a conceptual case for the disability continues to exist, and if it does, the model used to measure it; whether wage levels should be based on whole of State or capital cities; whether a State specific regional cost allowance is required; and the appropriate level of discounting.
Administrative scale	Quantum of scale affected expenses	Review scale affected expenses and collect data on these.
Socio-economic status classification	Indigenous socio-economic status	Consider whether there is a more fit for purpose index.
Health	Independent Hospital Pricing Authority hospital data	Monitor improvements in these data, including data on block funded hospitals.
Services to communities	Electricity and water subsidies by location and urban centre size	Develop data collection with States in an attempt to better specify the relationship.
Services to communities	Other influences	Explore impact of other influences such as physical environment, water quality and distance from water source.
Justice	Australian Institute of Criminology national police custody data	Review to determine their suitability to replace existing police data; whether they could be used to derive Indigenous cost weights; and whether the level of discounting is appropriate.
Services to industry	Disaggregating category expenses by purpose (regulation/industry development)	Consider new options for doing this.
Roads	Rural roads synthetic network	Review parameters and update.
Roads	Urban road lengths	Consider development of alternative proxy to urban population.
Roads infrastructure	Urban/rural roads data splits	Review definition of urban and rural roads and collect more consistent data from States. Review discount.
Transport infrastructure	Asset values by city size	Improve quality of data.

## STATE FISCAL CAPACITIES AND CHANGES SINCE THE 2014 UPDATE

- 35 Changes that had important effects on the assessed fiscal capacity of each State are summarised in the following section. The changes described as due to movements in relativities are based on 2015-16 GST revenue and December 2015 populations. The tables for each State may not add due to rounding. Chapter 3 – Why State fiscal capacities differ and Chapter 4 – Changes in the GST distribution, provide more detail.

## NEW SOUTH WALES

New South Wales has the third highest assessed fiscal capacity, and is one of three States with above average fiscal capacity. It has below average assessed costs of providing services, reflecting the State's below average shares of Indigenous people and people living in remote areas, above average non-State provision of health services and economies of scale in administration. Above average wages increase its expenses.

It also has below average assessed requirements for infrastructure because of below average population growth. Those effects are partly offset by the State's below average revenue raising capacity, which is mainly due to its below average mining production and motor vehicle registrations, although it does have an above average capacity to raise revenue through stamp duty and taxable payrolls.

Compared with 2014-15, the State's GST will rise by \$537 million or 3.2%. However, its GST share will fall from 31.2% to 30.3%, primarily due to a substantial increase in its share of stamp duty revenue and a fall in its share of natural disaster relief expenses.

**Table 6 Assessed GST, 2015-16**

	\$m	\$pc
Equal per capita share	18 200	2 370
Effect of assessed:		
Expenses	-2 511	-327
Investment	-539	-70
Net borrowing	85	11
Revenue	1 638	213
Commonwealth payments	438	57
Assessed GST	17 311	2 254

Note: The table may not add due to rounding.

**Table 7 Changes in GST**

	\$m	\$pc
Change due to:		
New population	-34	-4
Growth in GST available	1 088	142
New relativities	-517	-67
Revised data	-157	-21
Method changes	-105	-14
New circumstances	-254	-33
Total change	537	70

**Table 8 Five largest changes for New South Wales**

Change (\$m)	Reason for change
<b>Changes in data</b>	
-177	<b>Capital.</b> Improved investment data increased the importance of roads, especially rural roads, which reduced assessed investment in New South Wales and its GST revenue.
<b>Changes in methods</b>	
310	<b>Capital.</b> Recognising the impact of city size and urban population growth on the need for urban transport infrastructure increased New South Wales' GST revenue.
-221	<b>Schools education.</b> New student loadings based on ACARA data, a move to actual enrolments and a new assessment of NERA funding reduced New South Wales' GST revenue.
<b>Changes in circumstances</b>	
-297	<b>Stamp duty.</b> Above average growth in property turnover, increased the State's share of the property transfers tax base from 33% in 2010-11 to 39% in 2013-14, thus reducing its GST revenue.
-167	<b>Other expenses.</b> A large increase in net natural disaster relief expenses in Queensland, coupled with a large fall in net expenses in New South Wales in 2013-14 reduced the State's GST revenue.

## VICTORIA

Victoria has the second highest assessed fiscal capacity. This is due to its well below average assessed expenses in providing services and infrastructure.

Below average expense requirements reflect its below average shares of government school enrolments, Indigenous people, and people living in remote areas and economies of scale in administration. It is accentuated by below average wage levels.

Those effects on its fiscal capacity are partly offset by its below average revenue raising capacity, which is mainly due to its well below average mining production and taxable payrolls.

**Table 9 Assessed GST, 2015-16**

	\$m	\$pc
Equal per capita share	14 234	2 370
Effect of assessed:		
Expenses	-4 823	-803
Investment	-71	-12
Net borrowing	-9	-2
Revenue	3 366	560
Commonwealth payments	59	10
Assessed GST	12 755	2 123

Note: The table may not add due to rounding.

**Table 10 Changes in GST**

	\$m	\$pc
Change due to:		
New population	26	4
Growth in GST available	770	128
New relativities	131	22
Revised data	-44	-7
Method changes	423	70
New circumstances	-249	-41
Total change	927	154

Compared with 2014-15, the State's GST will rise by \$927 million or 7.8%. Its GST share will rise from 22.0% to 22.3%, primarily due to an increase in its need for urban transport infrastructure and below average growth in property turnover.

**Table 11 Five largest changes for Victoria**

Change (\$m)	Reason for change
<b>Changes in methods</b>	
255	<b>Capital.</b> Recognising the impact of city size and urban population growth on the need for urban transport infrastructure increased Victoria's GST.
197	<b>NPPs.</b> Half the payments from the Commonwealth for its national rail network projects no longer affect the GST. Since the State has a relatively high percentage of such payments, this increased its GST revenue.
<b>Changes in circumstances</b>	
-219	<b>Other expenses.</b> A large increase in net natural disaster relief expenses in Queensland, coupled with a large fall in net expenses in Victoria in 2013-14 reduced its GST revenue.
204	<b>Stamp duty.</b> Victoria experienced below average growth in property turnover, leading to a below average share of property transactions in 2013-14 increasing its GST revenue.
-170	<b>NPPs.</b> Victoria experienced above average growth in Commonwealth revenue for road construction, thus reducing its GST revenue.

## QUEENSLAND

Queensland now has the fourth lowest assessed fiscal capacity, with a below average fiscal capacity due to above average assessed expenses. Queensland's revenue raising capacity is now slightly below average which reflects a below average payroll tax base and below average stamp duty, although this is almost offset by its above average mining production. It also receives an above average share of Commonwealth payments.

Its high expense requirements are due to above average shares of government school enrolments, Indigenous people and people living in remote areas. In addition, Queensland's share of natural disaster relief net expenses is well above average. Those effects are partly offset by its below average wages.

**Table 12 Assessed GST, 2015-16**

	\$m	\$pc
Equal per capita share	11 525	2 370
Effect of assessed:		
Expenses	1 599	329
Investment	-25	-5
Net borrowing	-21	-4
Revenue	43	9
Commonwealth payments	-74	-15
Assessed GST	13 046	2 682

Note: The table may not add due to rounding.

**Table 13 Changes in GST**

	\$m	\$pc
Change due to:		
New population	24	5
Growth in GST available	762	157
New relativities	556	114
Revised data	-45	-9
Method changes	-186	-38
New circumstances	787	162
Total change	1 342	276

Compared with 2014-15, the State's GST will rise by \$1 342 million or 11.5%. Its GST share will rise from 21.8% to 22.8%, primarily due to a fall in its mining revenues and a substantial increase in its share of natural disaster relief net expenses.

**Table 14 Five largest changes for Queensland**

Change (\$m)	Reason for change
<b>Changes in methods</b>	
-388	<b>Capital.</b> Recognising the impact of city size and urban population growth on the need for urban transport infrastructure reduced Queensland's GST revenue.
154	<b>Mining.</b> The removal of the previous restrictions in terms of reference on the assessment of iron ore fines lowers its relative capacity and increases its GST revenue.
-114	<b>Transport.</b> Queensland has below average needs for transport spending. The move to a more comprehensive assessment of transport expenses reduced Queensland's GST revenue.
<b>Changes in circumstances</b>	
424	<b>Other expenses.</b> Queensland experienced a large increase in net natural disaster relief expenses in 2013-14, thus increasing its GST revenue.
282	<b>Mining.</b> Iron ore production in Western Australia has grown even further, reducing Queensland's assessed capacity, in relative terms. This has increased its GST revenue.

## WESTERN AUSTRALIA

Western Australia has the highest assessed fiscal capacity due to its high revenue raising capacity.

The high capacity is due to above average capacity in all revenue streams except insurance taxes, but especially high capacity in mining production, and to a lesser extent payrolls. Those effects on its fiscal capacity are partly offset by having the third highest assessed expenses and second highest infrastructure requirements per capita.

Its high expense requirements are due to above average shares of Indigenous people and people in remote areas, and above average population growth. Above average wage levels and below average non-State provision of health services also contributed significantly.

**Table 15 Assessed GST, 2015-16**

	\$m	\$pc
Equal per capita share	6 425	2 370
Effect of assessed:		
Expenses	2 320	856
Investment	1042	384
Net borrowing	-115	-42
Revenue	-7 714	-2 845
Commonwealth payments	-22	-8
Assessed GST	1 935	714

Note: The table may not add due to rounding.

**Table 16 Changes in GST**

	\$m	\$pc
Change due to:		
New population	32	12
Growth in GST available	148	55
New relativities	-494	-182
Revised data	202	75
Method changes	-255	-94
New circumstances	-441	-162
Total change	-313	-116

Compared with 2014-15, the State's GST will fall by \$313 million or 13.9%. It is one of two States to receive less GST in 2015-16 than in 2014-15. Its GST share will fall from 4.2% to 3.4%, primarily due to an increase in its assessed mining revenue and taxable payrolls.

**Table 17 Five largest changes for Western Australia**

Change (\$m)	Reason for change
<b>Changes in data</b>	
225	<b>Capital.</b> Improved investment data increased the importance of roads, especially rural roads, which increased assessed investment and its GST revenue.
<b>Changes in methods</b>	
-230	<b>Mining.</b> The use of mineral specific royalty rates in place of the former grouped mineral rates and the removal of the previous restrictions in terms of reference on the assessment of iron ore fines increases its relative capacity and decreases its GST revenue.
-225	<b>Health.</b> We are now assessing a smaller impact of the effects on State expenses of below average provision of private services in Western Australia. This reduces its GST revenue.
<b>Changes in circumstances</b>	
-410	<b>Mining.</b> Western Australia's value of iron ore production grew by 28% between 2010-11 and 2013-14, thus reducing its GST revenue.
-155	<b>Payroll tax.</b> Above average growth in taxable compensation of employees increased its share of the payroll tax base from 13% in 2010-11 to 16% in 2013-14, reducing its GST revenue.

## SOUTH AUSTRALIA

South Australia has the third lowest assessed fiscal capacity, mainly because of its below average revenue raising capacity in mining revenue, payroll tax, stamp duty and land tax. Those effects are reinforced by its above average assessed expenses, which reflect its above average shares of older people and people of low socio-economic status, offset partially by below average wage levels and assessed transport costs.

Its above average requirement for GST is mitigated by its below average population growth, leading to below average assessed investment, and by above average revenue from Commonwealth payments.

**Table 18 Assessed GST, 2015-16**

	\$m	\$pc
Equal per capita share	4 050	2 370
Effect of assessed:		
Expenses	307	179
Investment	-337	-197
Net borrowing	39	23
Revenue	1 598	935
Commonwealth payments	-132	-77
Assessed GST	5 525	3 233

Note: The table may not add due to rounding.

**Table 19 Changes in GST**

	\$m	\$pc
Change due to:		
New population	-33	-20
Growth in GST available	320	187
New relativities	284	166
Revised data	58	34
Method changes	74	44
New circumstances	152	89
Total change	571	334

Compared with 2014-15, the State's GST will rise by \$571 million or 11.5%. Its GST share will rise from 9.2% to 9.7%, primarily due to a fall in its revenue raising capacity, an increase in its overall expense requirements and a fall in its share of Commonwealth payments.

**Table 20 Five largest changes for South Australia**

Change (\$m)	Reason for change
<b>Changes in methods</b>	
-163	<b>Welfare.</b> Changes in Commonwealth-State responsibilities for aged care services and better recognition of the effects of its above average need for disability services decreased South Australia's GST revenue.
96	<b>Schools education.</b> Move to actual enrolments for pre- and post-compulsory students as a broad measure of use increased the State's GST revenue.
57	<b>Health.</b> Better recognition of the effects of the State's above average share of low SES people increased the State's GST revenue.
<b>Changes in circumstances</b>	
78	<b>Stamp duty.</b> A 3% decline in the property tax base between 2010-11 and 2013-14 increased South Australia's GST revenue.
72	<b>NPPs.</b> South Australia experienced below average growth in Commonwealth revenue for rail projects, thus increasing its GST revenue.

## TASMANIA

Tasmania has the second lowest assessed fiscal capacity. It has the weakest revenue capacity in most tax bases, along with well below average capacity for mining revenue. In addition to this, it has the highest per capita assessed expenses other than the Northern Territory for schools education, health, welfare and housing.

The high service delivery costs reflect the State's above average shares of people of low socio-economic status, older people and government school students, compounded by diseconomies of small scale in administration.

This is partly offset by its below average population growth, leading to below average investment needs, and by above average revenue from Commonwealth payments.

**Table 21 Assessed GST, 2015-16**

	\$m	\$pc
Equal per capita share	1 224	2 370
Effect of assessed:		
Expenses	525	1 016
Investment	-191	-370
Net borrowing	22	42
Revenue	694	1 342
Commonwealth payments	-38	-73
Assessed GST	2 236	4 328

Note: The table may not add due to rounding.

**Table 22 Changes in GST**

	\$m	\$pc
Change due to:		
New population	-26	-50
Growth in GST available	123	237
New relativities	225	436
Revised data	-7	-14
Method changes	89	171
New circumstances	144	278
Total change	322	623

Compared with 2014-15, the State's GST will rise by \$322 million or 16.8%. Its GST share will rise from 3.6% to 3.9%, primarily due to a fall in its revenue raising capacity, an increase in its overall expense requirements and a fall in its share of Commonwealth payments.

**Table 23 Five largest changes for Tasmania**

Change (\$m)	Reason for change
<b>Changes in methods</b>	
92	<b>Health.</b> Better recognition of the effects of the State's above average share of low SES people increased the State's GST revenue.
61	<b>Service to communities.</b> The removal of the assessment of water quality and availability and changes in the remoteness classification which now classifies urban centres on the west coast of Tasmania as remote, increased its GST revenue.
-61	<b>Transport.</b> Tasmania has below average needs for transport spending. The move to a more comprehensive assessment of transport expenses reduced Tasmania's GST revenue.
-46	<b>Welfare.</b> Changes in Commonwealth-State responsibilities for aged care services and better recognition of the effects of its above average need for disability services reduced its GST revenue.
<b>Changes in circumstances</b>	
110	<b>NPPs.</b> Tasmania experienced a fall in its share of Commonwealth health infrastructure funding between 2010-11 and 2013-14, thus increasing its GST revenue.

## AUSTRALIAN CAPITAL TERRITORY

The ACT now has the fourth highest assessed fiscal capacity. This is largely due to its below average assessed cost of providing services and infrastructure.

The low cost of its relatively young, urbanised, higher socio-economic status population more than offsets the impact of diseconomies of scale in administration and above average wage levels.

The ACT has below average capacity to raise revenue across most revenue streams. It has no mining industry and very low motor vehicle and land tax capacity.

Despite not being able to levy payroll tax on Commonwealth employees, the ACT has above average payroll tax capacity. It also receives the lowest level of per capita Commonwealth payments.

**Table 24 Assessed GST, 2015-16**

	\$m	\$pc
Equal per capita share	942	2 370
Effect of assessed:		
Expenses	- 192	-482
Investment	-51	-128
Net borrowing	0	-1
Revenue	291	731
Commonwealth payments	51	127
Assessed GST	1 040	2 617

Note: The table may not add due to rounding.

**Table 25 Changes in GST**

	\$m	\$pc
Change due to:		
New population	1	3
Growth in GST available	71	180
New relativities	-129	-325
Revised data	-47	-117
Method changes	-93	-234
New circumstances	10	26
Total change	-57	-143

Compared with 2014-15, the State's GST will fall by \$57 million or 5.2%. Along with Western Australia, it will receive less GST in 2015-16 than in 2014-15. Its GST share will fall from 2.0% to 1.8%, primarily due to a fall in its overall expense and capital requirements.

**Table 26 Five largest changes for the ACT**

Change (\$m)	Reason for change
<b>Changes in data</b>	
-35	<b>Payroll tax.</b> Upward revisions to ABS Compensation of employees data reduced the ACT's GST revenue.
<b>Changes in methods</b>	
-33	<b>Transport.</b> The ACT has below average needs for transport spending. The move to a more comprehensive assessment of transport expenses reduced the ACT's GST revenue.
-31	<b>Health.</b> We are now assessing a smaller impact of the effects on State expenses of below average provision of private sector services in the ACT, thus reducing its GST revenue.
-27	<b>Capital.</b> Recognising the impact of city size and urban population growth on the need for urban transport infrastructure reduced the ACT's GST revenue.
<b>Changes in circumstances</b>	
25	<b>Stamp duty.</b> A 3% decline in the property tax base between 2010-11 and 2013-14 increased the ACT's GST revenue.

## NORTHERN TERRITORY

The Northern Territory has the lowest assessed fiscal capacity primarily due to its above average assessed expenses and infrastructure requirements. This is exacerbated by below average revenue raising capacity. Its high expense requirements are due to above average shares of a range of population groups, but in particular it has exceptionally high proportions of Indigenous people and people in remote areas. This is compounded by the greatest diseconomies of small scale in administration of all States.

The Northern Territory has below average revenue raising capacity for all revenue streams except mining, resulting in a below average overall revenue raising capacity. Its considerably above average need for assistance is partially met through well above average Commonwealth payments.

**Table 27 Assessed GST, 2015-16**

	\$m	\$pc
Equal per capita share	599	2 370
Effect of assessed:		
Expenses	2 776	10 978
Investment	174	686
Net borrowing	-1	-3
Revenue	85	337
Commonwealth payments	-282	-1 115
Assessed GST	3 351	13 252

Note: The table may not add due to rounding.

**Table 28 Changes in GST**

	\$m	\$pc
Change due to:		
New population	10	39
Growth in GST available	208	822
New relativities	-56	-223
Revised data	40	159
Method changes	53	209
New circumstances	-149	-591
Total change	161	638

Compared with 2014-15, the State's GST will rise by \$161 million or 5.1%. Its GST share will remain at 5.9%.

**Table 29 Five largest changes for the Northern Territory**

Change (\$m)	Reason for change
<b>Changes in data</b>	
75	<b>Capital.</b> Improved investment data increased the importance of roads, especially rural roads, which increased assessed investment and its GST revenue.
<b>Changes in methods</b>	
75	<b>Depreciation.</b> Its assessed asset stocks and depreciation expenses were increased by the changes in the measures of service use, thus increasing its GST revenue.
-49	<b>Welfare.</b> Improved measurement of use of family and child services by SDC groups, and changes to the assessment of other general welfare services reduced its GST revenue.
44	<b>Schools education.</b> New student loadings based on ACARA data and a new assessment of NERA funding increased the Northern Territory's GST revenue.
<b>Changes in circumstances</b>	
-55	<b>Capital.</b> Declining investment on services other than roads and urban transport reduced its need to invest and its GST revenue.

## CHAPTER 1

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### ACHIEVING HORIZONTAL FISCAL EQUALISATION

- 1 On 21 June 2013, the Commission received terms of reference from the Treasurer, asking for a review of fiscal equalisation methodologies to apply to the GST distribution from 2015-16. On 19 December 2014, supplementary terms of reference were received. Copies of those terms of reference are at the front of this report.
- 2 This chapter sets out the context of the review, what the Commission considers it is asked to do by the terms of reference, the approach taken and the principles it has used in developing its response. It also provides an overview of how the equalisation system works in Australia.

#### CONTEXT OF THE REVIEW

- 3 Since 1976, fiscal equalisation has been an agreed Commonwealth and State policy, with the Commission being tasked with advising governments on how that could be achieved through the distribution of general revenue assistance from the Commonwealth to the States.
- 4 Intergovernmental agreements in 1999 and 2008 and, most recently, the Intergovernmental Agreement on Federal Financial Relations 2011 (the IGA), signed by the Commonwealth and all State governments, provide for the revenue collected from the GST to be paid to the States for them to use for any purpose. The agreements also said the GST is to be distributed among the States in accordance with the principle of horizontal fiscal equalisation (HFE).
- 5 At its simplest, equalisation aims to put all States on a level fiscal playing field. It aims to ensure they all have the same fiscal capacity to provide services to their residents.
- 6 Determining a distribution of the GST that equalises State fiscal capacities involves a comprehensive examination of the impact of State social, physical, and economic circumstances on the costs of providing the full range of State general government services and acquiring the associated infrastructure, and the revenues they can raise. This approach ensures all fiscal advantages and disadvantages of the States are taken into account. To ensure the continuing relevance of the recommended distributions, the Commission has reviewed its methods at about five yearly intervals since 1981 and updated the distribution between reviews since 1989.

- 7 Following its consideration of the GST Distribution Review Final Report, 2012, the April 2013 meeting of the Standing Council on Federal Financial Relations agreed to ask the Commission to undertake a review of its methodology for distributing the GST among the States.

## REQUIREMENTS OF THE TERMS OF REFERENCE

- 8 The terms of reference ask the Commission to inquire 'into the methodological approach to determining the per capita relativities to be used to distribute the GST among the States from 2015-16'. They contain instructions and guidance on how we should approach the task but otherwise do not limit the changes we might make to methods, including the guidelines we use to develop assessments or the scope of the assessments. They ask us:
- to take into account the IGA
  - to aim for assessments that are simple and consistent with the quality and fitness for purpose of the available data
  - to ensure robust quality assurance processes
  - to develop methods to appropriately capture the changing characteristics of the Indigenous population.
- 9 They also ask the Commission to have regard to nominated recommendations of the GST Distribution Review in undertaking the review. In some cases, we are asked to consider a specific recommendation while in others we are directed to develop new assessments. We have followed these directions in our work. However, we have not responded to the more general findings of the GST Distribution Review, or to other recommendations of that review, considering that to be beyond our terms of reference.
- 10 Specific guidance and direction on specific payments is provided in relation to the treatment of Commonwealth specific purpose payments (SPPs) and National partnership payments (NPPs). The terms of reference require the Commission:
- to ensure some specified payments (usually referred to as quarantined payments), including all reward NPPs, have no impact on the GST distribution
  - to apply a 50% discount to specified payments for major roads
  - to treat national SPPs, National health reform funding, project NPPs and general revenue assistance (GRA), other than the GST, so that they would affect GST shares, but to treat facilitation NPPs so that they would not.
- 11 However, the Commission is given discretion to vary the treatment of the third group of payments where it is appropriate, 'reflecting the nature of the particular payment and the role of the State governments in providing particular services'.

- 12 The terms of reference also identified a number of issues to be progressed as a priority and subject to early consultation with the States.

## COMMISSION'S APPROACH TO THE REVIEW

- 13 The terms of reference ask the Commission to develop a work program for the review, in consultation with the Commonwealth and States. This is set out in Table 1. It involved consultations with State Treasurers on the principles and methods which should be reviewed and on the priority issues. These were followed by a Commission position paper on the equalisation objective and supporting principles and staff papers on the priority issues the Commission was asked to address in the terms of reference, other implementation issues and proposed assessments. Further discussions also took place between State Treasury and Commission staff before the provision of a draft report to the Commonwealth Treasurer on 20 June 2014.
- 14 Following the draft report, the Commission held further consultations with the States and considered further submissions. Subsequent significant changes to the proposed methodology set out in the draft report were advised to States in November 2014 and submissions were received in December 2014 and January 2015. Volume 2, Attachment 7 provides a list of Commission papers, States submissions and consultations held as part of the review process. They are available on the [Commission's website](https://www.cgc.gov.au/) (<https://www.cgc.gov.au/>).
- 15 The last review of methods was completed in 2010. It started with a clean slate and entailed a rigorous justification of each assessment. While that review resulted in significant changes in certain areas, it also showed that much existing methodology was robust.
- 16 In this review, while changes to all methods were permitted within the terms of reference, given the shorter timeframe, we adopted an approach of focusing attention on areas where, in consultation with the States, we considered change was most warranted and likely to achieve an improved equalisation outcome. Again, the result has been a number of major changes, such as the inclusion within the scope of HFE of housing and public transport public non-financial corporations (PNFCs) which provide general government like services, and a change in the way mining royalty revenues are assessed. We have also responded where there have been major changes in federal financial relations, such as in schools education, disability services and aged care services. There are also smaller changes reflecting, for example, changes in the data available to us.

**Table 1 2015 Review program**

Date	Event
<b>2013</b>	
21 June	Receipt of terms of reference
End July	State submissions due on: <ul style="list-style-type: none"> <li>• principles and architecture</li> <li>• priority issues as outlined in the terms of reference</li> <li>• other issues of priority for States, including specific assessments and identifying assessments which should not change.</li> </ul>
August/September	Bilateral meetings Commission (CGC) and Treasurers/Heads of Treasury to discuss State submissions.
End October	CGC sends to States: <ul style="list-style-type: none"> <li>• Commission views on principles and architecture</li> <li>• staff views on priority issues and changes to assessments.</li> </ul>
End November	CGC staff meetings with State officials to discuss issues.
<b>2014</b>	
End January	State submissions due on October papers: <ul style="list-style-type: none"> <li>• principles and architecture</li> <li>• priority issues and changes to assessments.</li> </ul>
April	Multilateral meeting between CGC and Heads of Treasury (not held but replaced by multilateral meeting between CGC staff and State Treasury officials).
20 June	CGC provides draft report to Treasurer.
1 August	Treasurer releases draft report to States.
20 August	New issues paper issued by CGC staff.
1-5 September	CGC staff meet with State officials via telepresence or visit to discuss draft report.
19 September	State submissions on draft report due.
26 September	State submissions on new issues due.
29 October	Meeting with Heads of Treasury of WA, Qld, Vic, SA and ACT to discuss draft report.
26 November	Meeting with Heads of Treasury of NSW and NT to discuss draft report.
28 November	CGC to consult with States, as required by the terms of reference on significant changes to the draft report.
17 December	Meeting with Head of Treasury of Tas to discuss draft report.
31 December	Final State comments due on proposed changes to draft report.
<b>2015</b>	
17 January	Final State comments due on contemporaneity issues raised by WA.
28 February	Provision of final report to the Commonwealth.

17 Some States considered the short time frame meant that a comprehensive review, with adequate time for analysis and meaningful consideration of all assessments, was not undertaken. Other States disagreed. It is our view that changes have been considered where the terms of reference require it, State circumstances, including those arising from changes in federal financial relations, have changed, better data have become available or where other evidence, including in State submissions, has convinced us to reconsider previous approaches. While a longer review could have provided greater opportunity to consider issues, we are not convinced that it would

have provided States with greater opportunity to provide data to support the cases they were arguing, the single biggest constraint in the review process. Many of the arguments had been raised in previous reviews and States were still not able to provide data to support them. We are satisfied a comprehensive and balanced review of the assessment methodology, with considerable opportunities for State input, has been undertaken.

- 18 In this review, our terms of reference required us to consult with States on any significant changes we proposed to make after considering their responses to our draft report. We consider that round of consultation added little to the review process because few new arguments were raised by States. Our view is that the most effective approach is through consultations on the draft report, followed only by a final report.
- 19 Of course, if substantive issues not previously canvassed by the Commission arise late in a review period, there may need to be special consultation with States on them. We consider the contemporaneity issue raised by Western Australia in its response to the draft report to be an example of such a substantive issue. We have consulted with States on this issue before preparing our response.
- 20 We have not documented State arguments in detail throughout the report. Instead, we have responded to the issues States have raised. We have allowed State submissions to speak for themselves.
- 21 All Commission papers, State submissions, other supporting data and a mathematical presentation of the HFE model are available on the [Commission's website](https://www.cgc.gov.au/) (<https://www.cgc.gov.au/>).

## OBJECTIVES OF THE GST DISTRIBUTION

- 22 For the 2015 Review, the terms of reference direct the Commission to take into account the IGA. This provides that the GST revenue will be distributed among the States in accordance with 'the principle of horizontal fiscal equalisation (HFE)'.
  - 23 The Commission considers it appropriate to articulate the 'principle of HFE' using the definition it developed in the 2010 Review:

State governments should receive funding from the pool of goods and services tax such that, after allowing for material factors affecting revenues and expenditures, each would have the fiscal capacity to provide services and the associated infrastructure at the same standard, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency.
  - 24 That definition has, with only minor variations, formed the basis for distributing the GST since that tax's introduction and Financial Assistance Grants before that.

- 25 The definition focuses on the main task of the Commission: to identify innate differences ('disabilities') among the States which would cause their fiscal capacities to diverge and to recommend a distribution of GST revenue which would remove the impact of that divergence on State finances. As a result, States will have the same capacity to deliver services, provided they deliver them at the average level of technical efficiency and make the same effort to raise revenue.
- 26 If we can reliably measure a disability which has a material impact on the GST distribution, we include it in our methodology. In some cases, a judgment based on the available information is needed. The Commission does not aim to achieve precise equalisation because not all disabilities are included, either because they cannot be reliably measured or have an immaterial impact. We aim for proximate (or comparable) equalisation.
- 27 Material disabilities affecting revenue and expenditures mean innate differences in State circumstances that:
- give rise to differences in the capacities of States to raise revenue or differences in the cost of providing services or infrastructure, over and above any impact of the policies of individual States
  - have an impact on the recommended GST distribution which exceeds materiality thresholds<sup>1</sup>
  - can be measured or estimated reliably.
- 28 The disabilities assessed cover a range of influences on the finances of a State. For example:
- different demographic profiles can generate differences in what States need to spend to deliver the average service to their residents
  - in some areas the provision of services by the private sector, Commonwealth or local government reduces what States need to spend to deliver the average level of services:
    - for example, a State with an above average level of non-government schooling has a reduced need to provide public education, so above or below average provision of services in this way can constitute a material disability.
- 29 Based on the data available to us, these disabilities have a material impact on States' fiscal capacities. We conclude an equal per capita (EPC) GST distribution would not be consistent with HFE.
- 30 New South Wales disagrees, arguing that an EPC distribution would still involve equalisation, albeit one which is simpler, more objective, more predictable and more easily understood. However, if the task is to give all States the same capacity to

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<sup>1</sup> For more information on materiality thresholds see Volume 2, Chapter 1 – Implementing equalisation.

deliver services after taking into account their revenue raised at average policy, then the distribution advocated by New South Wales would not achieve that outcome. An EPC distribution which, by definition, does not change the relative fiscal capacities of State governments, cannot result in the equalisation of their fiscal capacities.

- 31 Some States have also said GST revenue should not be distributed according to the HFE principle, or the operation of HFE should be limited by other policy objectives, for example raising national productivity. In particular, one State asked the Commission to take into account the intent of other Commonwealth-State financial agreements when developing methods and making decisions which impact on the GST distribution. Another State said the Commission should be more proactive in the area of tax reform, effectively holding governments to account in relation to reform agreements.
- 32 However, we consider our terms of reference are clear: we are to recommend how the GST should be distributed in accordance with the 'principle of HFE'. We are not asked, nor given the discretion, to decide when other policy objectives or agreements between the Commonwealth and the States should moderate the achievement of HFE, unless explicitly directed in our terms of reference. In fact, the terms of reference provide guidance on how Commonwealth payments should be treated, both those that should have an impact and those that should not.
- 33 Nonetheless, in adopting the definition of HFE, and in developing its methodology, the Commission is conscious of the desirability of minimising any adverse impacts of HFE on the operations of government and the economy generally.

## SUPPORTING PRINCIPLES

- 34 In making and explaining decisions on the development of methodology to achieve HFE, the Commission has adopted certain supporting principles. They capture the main influences which experience suggests the Commission has to consider through the course of a review in evaluating alternative assessment methods. These principles also provide guidance to the States in preparing their submissions through the consultation process.
- 35 However, the principles remain subsidiary to the Commission's primary objective of achieving HFE and they should not override that objective. We do not agree with the view of some States that these principles should take precedence over HFE. We use them as guidance in how HFE should best be achieved in practice.

- 36 Based on our experience and the views expressed to us in consultations, we have maintained the supporting principles from the 2010 Review, and used them to guide us in the development of the 2015 methodology. As such, equalisation will be implemented by methods that:
- ***reflect what States collectively do.*** This principle aims to ensure the GST distribution provides financial support for the activities of State governments – the services and infrastructure they are providing, given the revenues they are able to raise. It means neither the Commission, nor any other body, dictates what States should do and State sovereignty is preserved.
  - ***are policy neutral.*** This principle aims to ensure a State’s own policies or choices, in relation to the services it provides, or the revenues it raises, do not directly influence the level of grants it receives. It also aims to ensure the GST distribution methodology creates no incentives or disincentives for States to choose one policy over another.
  - ***are practical.*** This principle means that assessments should be based on sound and reliable data and methods, be as simple as possible while also reflecting the major influences on State expenses and revenues. It is consistent with the terms of reference which say the Commission should prepare its assessments to distribute GST revenue in accordance with the principle of HFE (Clause 1(a)) and ‘aim to have assessments that are simple and consistent with the quality and fitness for purpose of the available data’ (Clause 1(b)).
  - ***deliver relativities that, as far as possible, are appropriate to the application year (contemporaneous relativities).*** This principle means that, as far as reliable data will allow, the distribution of GST provided to States in a year should reflect State circumstances in that year. Without that, the capacity to provide services and the associated infrastructure at the same standard, if each State made the same effort to raise revenue from its own sources and operated at the same level of efficiency, would be compromised.
- 37 These principles are deliberately expressed in aspirational terms and ideally all methods would embody these attributes. In practice, the Commission often has to evaluate alternative methods which embody mixtures of these principles and has to decide trade-offs among them — for example, between methods that capture what States do in detail and methods that are policy neutral. The Commission has not set rules for how it would decide the appropriate approach in any such cases, nor has it established a hierarchy among the principles. As required, judgment is used to devise the best overall equalisation result.
- 38 We do not think that the need to achieve a balance between principles in some cases is an argument, as some States have suggested, for diverging from HFE. Our approach is to develop methods which achieve HFE first, balancing the principles we have established to guide us among alternative methods.

- 39 Like past Commissions, we are not convinced other objectives, such as predictability or stability, should be added to the list of supporting principles. Our view is the important principles are included in our approach and such other principles would move the GST distribution away from what the 'principle of HFE' implies. The 2010 Review report provides a detailed explanation of our position on this matter.
- 40 While the supporting principles are helpful in guiding the development of Commission methods, it is the equalisation objective that must be achieved through the distribution of the GST. What that means in practice is set out in the rest of this report.

## EQUALISATION IN AUSTRALIA

- 41 In a federation comprising a national government and a number of States, services can be delivered in two broad ways. Services can be provided by the national government on a uniform basis across the federation. For example, old age pensions are provided across Australia in the one way so that similar people receive the same benefit. States also deliver services, but because they have different fiscal capacities and make different choices, only similar residents in a State receive the same standard of services.
- 42 In the same way, national taxes fall equally on similar residents across the federation while policy choice means even similar taxes are levied at different rates among States.
- 43 The aim of fiscal equalisation in Australia is to create the capacity/opportunity for similar residents across the federation to receive similar State services as well as face the same tax burden. However, preserving State choice, which gives them control over the best mix of services and revenues for their residents, is maintained as a key part of the equalisation process. Equalisation creates the capacity/opportunity for equal outcomes, rather than necessarily creating equal outcomes.
- 44 If States adopted the same policies, with equalisation, State services could be provided as if they were national services, without a role for the national government, and without it meaning some States bear a disproportionate fiscal burden. If States applied a national approach for service delivery without equalisation, some would incur a greater fiscal burden than others. For example, for services to homeless persons, the State with the largest concentration of homeless persons in its population would bear the largest per capita cost in its budget.
- 45 What equalisation overcomes is that if States were to provide the same standard of services to similar residents and raise revenue in the same way, their budget outcomes per person would vary widely. For example, those with a high concentration of high cost residents, say older persons for health care, or with a small

revenue base, say little or no mining royalties, would have a higher than average budget deficit per person. Equalisation offsets these innate differences creating a more balanced fiscal setting across the federation in which State policy makers can set spending and revenue policy. It does this by giving equalising grants to the States (different levels of general purpose grants) depending on their varying fiscal equalisation needs.

- 46 Equalisation complements the automatic redistribution across the federation inherent in national policies, where service standards in different States are not tied to the national revenues raised in those States.

The Equalisation system reflects the average policy of States.

47 The equalisation process could be implemented in several ways. For example, it could be based on a package of notional or hypothetical State service standards and some idealised State revenue system. While this might, because of its stylised nature, be easier to implement, it would differ from what the experience of States reveals about the relative importance of different services to residents, the desired standard of those services and the appropriate mix of revenues to fund them. Rather than base equalisation on an idealised or hypothetical standard, the Australian system is built on the foundation of the actual average service delivery and revenue policy of the States. It distributes revenue so that each has the capacity to deliver the observed average service delivery standard, if each applied the observed average tax rates.

- 48 The Australian equalisation system also recognises that grants paid by the Commonwealth to States for specific purposes such as schools or hospitals provide States with financial capacity to deliver services. This revenue is taken into account when determining the size of the equalising grant each State should receive to give it the capacity to provide the average level of services.

The Equalisation system adapts to reflect State experience.

49 Because the equalisation system is founded on the observed experience of the States, and that experience is updated on an annual basis as new statistics are released, the pattern of equalising grants changes over time to reflect the evolution of individual State fiscal circumstances. For example, the buoyancy of State real estate markets changes over time, as does the capacity of States to raise revenue from the stamp duty on real estate transactions. As a State's capacity rises, relative to other States, its equalising grant falls. If States on average choose to spend more on providing services to a particular group of their residents, for example, those living in remote communities, then those States with a high proportion of residents in remote communities would have to spend disproportionately more on providing the higher average service level, increasing their equalising payment. If a State were to receive an increase in their share of

payments from the Commonwealth then, with no other changes, its equalising grant would decline.

The Equalisation system is comprehensive and transparent, not a 'black box'.

50 To capture the material differences in State fiscal capacities the equalisation system comprehensively covers the service delivery, investment and revenue activities of States. While each part of the assessment of fiscal capacities is of itself relatively simple, when considered as a system, it is as complex as the State Governments which are its subject matter. To provide the greatest transparency, our methodology is developed in consultation with States. Most of this material, apart from confidential information provided by States, is also on the [Commission's website](https://www.cgc.gov.au/) (<https://www.cgc.gov.au/>) to enable replication of results and is open to public scrutiny.

- 51 The methodology is also based on the best available data capturing the average service delivery and revenue policies of the States. Most often, this comes from national data collections which detail, for example, the average State spending on persons with different socio-demographic characteristics, supplemented by specific purpose data collected from the States and then averaged. The available data are often incomplete and so from time to time the Commission has to use informed judgment where we consider, based on the evidence before us, that a better equalisation outcome is achieved by adjusting the way that available data are used in our calculations. Those decisions are documented in our reports.
- 52 Equalisation in Australia has a single objective, to give all States the same fiscal capacity to deliver services to individuals as in other States, as evidenced by the average service States provide to those individuals. This is not the same as giving all individuals within States the same services because that is not what States do. Typically, States choose to spend different amounts on providing services to residents across their States (for example, service levels tend to vary between remote and non-remote regions) and the fiscal implications of this are captured in the equalisation process.
- 53 The equalisation system operates together with other Commonwealth programs and related funding to shape the environment in which States operate. The Commission is asked to recommend an equalising distribution, including by taking other Commonwealth support into account. While this can cut across the distribution of that funding and so might appear to undermine other policies, nothing equalisation does affects those other policies in other than their bottom line financial impact on States. For example, agreements to fund programs and matching arrangements are not affected. In making our recommendations, the Commission is not required by our terms of reference to adjudicate between equalisation and other policy objectives. In some particular cases, where the financial effects on States of other policies are

required to be preserved, the Commission is asked in terms of reference to ensure that outcome is achieved.

- 54 It has been suggested the Commission should adjust the equalisation system to create incentives to support other policy outcomes, for example, State tax reform. However, the Commission restricts its activities to the directions in our terms of reference which instruct us to take account of only one policy - that is, equalisation. We do not consider we have the role of weighing competing policy outcomes when that choice could compromise the achievement of equalisation. We do, however, consider that within equalisation the methods we adopt should create the minimum incentive for States to distort policy choice.
- 55 The equalisation process does not create incentives to adopt a particular form of Commonwealth-State interaction. For example, it operates equally well with competitive as well as co-operative federalism. Because it endows States with the same fiscal capacity, it facilitates a greater range of choice for States in their service delivery and revenue policies. Because it preserves State policy flexibility, while giving them equal capacity, it lets them choose service delivery levels and mechanisms as well as revenue policies which best suit their State.

Governments set HFE policy.

56 There are critics of the aim of fiscal equalisation. The Commission considers that the policy discussion about the place and form of equalisation is important, but sees our role only to ensure there is appropriate information and clear understanding of the equalisation arrangements. Any debate on the aim of equalisation belongs in the wider community and in the agreements made between governments in the federation.

The Equalisation system delivers outcomes which are as contemporaneous as possible.

57 Managing an equalisation process is challenging. The Commission seeks to provide States with equalising grants which in the year they receive them, would equalise their fiscal capacity. However, because we base our work on the average of what States do, we have to wait for data which reveals that to us. Our recommendations are always catching up to fiscal conditions that States actually confront. In general, that trade-off between the delay required for data certainty and actual budget-year conditions appears reasonable, but there might be exceptional circumstances which warrant the Commission to anticipate the statistics to allow a more immediate response to developments. This occurs already, for example, where there have been major changes in Commonwealth-State relations. Western Australia has raised its forecast of a large decrease in iron ore royalties as an example of an exceptional circumstance that could seriously compromise equalisation outcomes. We address this issue in the following chapter on Main issues.

58 The equalisation system, while grounded in data, also represents a series of Commission decisions. We accept that there may be some factors impacting on State fiscal capacities which we either do not capture or capture imperfectly. This is because the quality of data varies widely, and in some cases the underlying conceptual case is less clear cut than in others. Until better and more comprehensive data and analysis are available we will always be faced with decisions on how important a factor is likely to be and how confident we can be that making an assessment is consistent with a sound equalisation outcome.

## CHAPTER 2

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### MAIN ISSUES

- 1 The terms of reference for the 2015 Methodology Review ask the Commission to progress a number of matters as a priority and undertake early consultation with the Commonwealth and the States. Those matters are:
  - the Mining revenue assessment
  - the treatment of mining related expenditure
  - ensuring educational disadvantage funding embedded in the National Education Reform Agreement (NERA) is not unwound and there is no windfall gain for non-participating States
  - the appropriate treatment of the National Disability Insurance Scheme (NDIS) arrangements
  - the development of a Transport infrastructure assessment and the appropriate treatment of transport infrastructure payments
  - appropriately capturing Indigenous status (including socio-economic status) in the assessments.
- 2 In addition, another important issue arose late in the review: whether the relativities could be more contemporaneous. Western Australia stated in its response to the draft report that, with a major fall forecast for its iron ore royalties, using average royalties for 2011-12 to 2013-14 as the basis of the 2015-16 GST distribution would be inappropriate. It suggests that a distribution based on prospective 2015-16 conditions would be preferable. State views were sought in relation to this issue, including during discussions with Heads of Treasury.
- 3 This chapter briefly outlines our final response to each matter. Implementation details are covered in the appropriate assessment chapters.

## THE MINING REVENUE ASSESSMENT

### Background

- 4 The terms of reference ask the Commission to:
  - ... have regard to the recommendations of the final report of the GST Distribution Review to ... develop a new mining revenue assessment.
- 5 In the 2010 Review, the Commission adopted a two-tier mining assessment. The GST Distribution Review panel found the two-tier mining assessment could produce excessively large GST share effects when a commodity moved between groups. It recommended the Commission and stakeholders develop a new mining revenue assessment that:
  - avoids excessively large GST share effects, such as when a commodity moved between groups under the two-tier assessment (Recommendation 7.1)
  - treats iron ore, coal and petroleum differently from minerals that are not subject to the Commonwealth resource rent taxes (Recommendation 7.2).
- 6 The States had differing views on how mining revenue raising capacity should be assessed. Western Australia favoured a mineral by mineral approach. Most other States favoured assessing minerals in groups, although their views varied on the number and composition of groups.
- 7 Queensland and Western Australia argued the mining assessment should be discounted by up to 50%. They considered discounting as a means of addressing perceived issues with policy neutrality, unassessed mining related expenditures, the assessment's sensitivity to royalty rate changes, the need for judgment and intergenerational risk.

### Commission response

- 8 For the 2015 Review, we have decided to adopt a mineral by mineral approach. We have done this because we consider this achieves equalisation more accurately. We acknowledge that this has the potential to make the assessment less policy neutral because changes in State policies may have a larger impact on their shares of GST.
- 9 However, we consider that the goal of policy neutrality is subsidiary to the requirement to achieve equalisation. We also consider that while it is theoretically possible for changes in State policies to affect GST shares, in practice we do not observe that States adopt policies for this purpose. If we do observe a significant change in behaviour which raises policy neutrality concerns, we will revisit the assessment in a future update.
- 10 Under our mineral by mineral approach, we will separately assess a mineral if it is material to do so. This approach means the seven minerals that generate most

royalties will be separately assessed. These are iron ore, coal, gold, on-shore oil and gas, copper, bauxite and nickel. The remaining minerals will be assessed together. All coal will be assessed together and all iron ore will be assessed together.

- 11 The only movement of minerals between groups will relate to entry or exit from the balance of minerals group. These minerals generate small royalties (less than \$20 million) and a separate assessment would not materially affect the GST distribution. Therefore, the new mining assessment avoids excessively large GST share effects arising from minerals moving between groups.
- 12 We have not discounted the assessment because we use discounting when we have concerns about the reliability of our measure of fiscal capacity, concerns we do not have in relation to the mining assessment.

### *Iron ore fines*

- 13 Compared to our assessment in the 2014 Update, where we were directed not to capture the full fiscal consequences of Western Australia's decision to raise the effective royalty rate on iron ore fines, an iron ore royalty assessment including fines significantly increases Western Australia's assessed fiscal capacity. Had previous updates more closely tracked the evolution of Western Australia's fiscal capacity, the change from the 2014 Update would have been considerably smaller.
- 14 We considered if the direction in previous Update terms of reference constrained how we assess Western Australia's capacity to raise revenue in the assessment years covered by those terms of reference. We decided that because the Update terms of reference made explicit mention of operating between methodology reviews, and terms of reference for this review were silent on the issue, we should frame our assessment only from the perspective of achieving HFE.
- 15 We also considered whether some phasing of this 'bringing to book' of higher iron ore fines royalty rates was appropriate, consistent with the usual three year phasing embedded in our assessment methodology. However, we have decided that no different treatment for this methodology change is warranted. We will use the new methodology in each of the reference years. The effective royalty rates used in the iron ore assessment in each year are, therefore, those shown in Table 1. In 2013-14, the effective rate applying to fines and lump is the same. This is the only assessment year where, on current policy settings, the effective rates are contemporaneous with those applying in the application year.

**Table 1**      **Effective royalty rate on iron ore**

	2009-10	2010-11	2011-12	2012-13	2013-14
	%	%	%	%	%
Effective royalty rate	5.4	6.2	6.1	6.7	7.3
Cause of change		Removal of concession		First rate increase	Second rate increase

Source: ABS and State provided data.

- 16 Most States opposed phasing because it was inconsistent with HFE, the supporting principles, the terms of reference and the approach taken in other assessments. Only Western Australia supported phasing because it would avoid the situation where its loss in GST would exceed the additional revenue raised as a consequence of its decision to raise royalty rates in 2012-13. It viewed this outcome as an unacceptable breach of policy neutrality. Tasmania said it accepted the role of judgment in the Commission's decision making process and it did not oppose the Commission's use of judgment on this issue.
- 17 Box 1 shows the GST impacts of the two major effects resulting from the method changes to the mining revenue assessment.
- 18 This assessment is described in Volume 2, Chapter 8 – Mining revenue.

### Box 1 Method changes in the assessment of mining revenues

The Commission decided to adopt a mineral by mineral assessment for mining revenue. This decision had two effects for the mining assessment. As shown in the table below, for most States the effects moved GST revenue in offsetting directions.

- **The move from two mineral groups to eight mineral groups.** This change reduced the assessed capacity of Western Australia and the Northern Territory and increased the assessed capacities of other States. Queensland was unaffected. In the table below, we have assessed iron ore fines separately, but have applied the same effective rate as that for the 2014 Update low royalty rate group.
- **Applying the average iron ore royalty rate to iron ore fines.** Previous terms of reference instructed the Commission to apply the effective rate for the low royalty rate group to iron ore fines. In this review, we apply the average iron ore royalty rate for all iron ore to both lump iron ore and to iron ore fines. This change increased the revenue capacity of Western Australia, as 97% of iron ore fines production occurs in that State.

#### Illustrative GST effects of mining revenue assessment method changes, 2015-16

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Mineral by mineral (a)	-257	-172	0	434	-7	-2	-12	14	449
Applying the average iron ore royalty rate to iron ore fines	244	191	154	-664	46	10	13	7	664
<b>Total change</b>	<b>-13</b>	<b>19</b>	<b>154</b>	<b>-230</b>	<b>39</b>	<b>9</b>	<b>1</b>	<b>21</b>	<b>243</b>

(a) Lump iron ore assessed separately at its average effective royalty rate. Iron ore fines assessed separately at the effective rate as per the low royalty group in the 2014 Update.

Source: Commission calculation.

Under the move to a mineral by mineral assessment, the effective rate applying to lump iron ore decreased, decreasing Western Australia's assessed revenue raising capacity and increasing its GST. The effective rate on export coal increased, increasing the assessed revenue raising capacity for New South Wales and Queensland, decreasing their GST shares. In Queensland's case, the decrease was nearly exactly offset by an increase in GST resulting from the lower effective rate being applied to its major minerals other than coal.

Applying the average royalty rate to iron ore fines increased the effective rate applying to iron ore overall, increasing Western Australia's assessed revenue raising capacity and decreasing its share of GST. This was the larger effect for Western Australia.

## MINING RELATED EXPENDITURE

### Background

- 19 The terms of reference ask the Commission to:
  - ... have regard to the recommendations of the final report of the GST Distribution Review to ... consider the appropriate treatment of mining related expenditure.
- 20 The GST Distribution Review concluded that, while most of the direct mining related needs of Queensland and Western Australia are recognised in the Commission's assessments, some small gaps exist. It recommended the Commission re-examine mining related expenditures in the next methodology review.
- 21 In the 2010 Review, the Commission changed the way it assessed State infrastructure investment, to more directly reflect the impact of population growth. This captured the impact of fast growing economies on State infrastructure requirements, driven by mining or other sectors. In the 2010 Review, the Commission also considered the influences on State business development expenditure but concluded that the nature of a State's economy does not determine how actively it attempts to develop its economy.
- 22 We have reconsidered whether there are any other unassessed needs relating to mining related expenditure in the review.
- 23 States have provided information about how much they spend on direct mining related activities. Table 2 below provides the data we received from the States.
- 24 Western Australia was unable to provide data on direct mining expenditures due to difficulties in identifying relevant expenditures and the inability to apportion costs between mining and non-mining related activity. Instead, Western Australia provided data on the level and purpose of spending through its Royalties for Regions (RFR) program explaining that much of this spending is support for its mining economy.
- 25 Western Australia's RFR expenditure in 2012-13 was \$1 billion. Similar amounts were allocated to the program in 2010-11 and 2011-12. Over 75% of RFR expenditure was for social and economic infrastructure in the regions, including schools, hospitals, courts, police facilities, community amenities, town infrastructure, housing, electricity, water, irrigation projects and other community development. About a quarter of the infrastructure expenditure was provided to local government for community amenities. The other 25% of RFR expenditure was for recurrent purposes, including pensioner fuel subsidies, regional worker loadings, mining exploration, community events, tourism promotion and local government reform.

**Table 2 Mining related expenditure, annual average spending for 2010-11 to 2012-13**

	NSW	Vic	Qld	WA(b)	SA(a)	Tas	ACT	NT	Total	Category or component expense
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Recurrent expenses (net)										
Roads	0	na	90	na	0	0	0	0	90	6 494
Service to industry									0	
Business development (c)	0	na	56	na	0	0	0	0	56	3 438
Regulation	72	na	7	na	18	5	0	0	103	2 164
Protection of the environment	0	na	22	na	0	0	0	0	22	2 283
Other	0	na	27	na	0	0	0	0	27	174 041
<b>Total recurrent expenses</b>	<b>72</b>	<b>na</b>	<b>203</b>	<b>na</b>	<b>18</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>299</b>	<b>188 419</b>
Capital expenditure										
Roads	0	na	87	na	0	0	0	0	87	4 118
Non-roads	0	na	43	na	0	0	0	0	43	14 401
<b>Total capital expenditure</b>	<b>0</b>	<b>na</b>	<b>131</b>	<b>na</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>131</b>	<b>18 519</b>
<b>Total State expenditure</b>	<b>72</b>	<b>na</b>	<b>334</b>	<b>na</b>	<b>18</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>429</b>	<b>206 939</b>

(a) A two year average is used for South Australia.

(b) Western Australia provided a detailed breakdown of its Royalties for Regions expenditure for 2012-13. However, this was not comparable to the breakdown provided by other States.

(c) Not all these expenses are classified to Services to industry.

na Not able to provide data.

Source: State provided data.

26 We observe that New South Wales and Queensland also have RFR programs but their spending is a fraction of Western Australia's spending. Their programs fund economic and social infrastructure in regional areas.

27 We also observe that the majority of the RFR spending is in categories for which needs are already assessed.

## State views

28 Queensland and Western Australia said they face higher costs due to the presence of a large mining industry which are not recognised in the Commission's assessments. They described expenditures they incur and proposed how the Commission could assess them. Western Australia presented detailed assessment proposals and estimated its unrecognised needs were about \$2 billion per annum.

29 New South Wales, Victoria and the ACT said they did not support any further changes to the assessments to recognise mining related expenditure needs because it has not been demonstrated that mining States face higher costs or that the current assessments do not adequately recognise mining related needs. New South Wales said the GST Distribution Review concluded there are no significant unrecognised

mining related expenditure needs. New South Wales and Victoria noted the high level of private sector investment in mining infrastructure, and Victoria said this meant that the mining industry would require less government investment than other industries.

- 30 Queensland said there are inherent problems with the category by category approach adopted by the Commission for examining mining related needs due to data and methodological limitations as well as materiality issues. Queensland said the ideal approach for recognising mining related expenditure is to assess net mining revenue. However, it said this approach is not practical due to issues such as the lumpy nature of capital expenditure supporting the mining industry, timing differences between expenses and the resulting revenues, and difficulties in measuring costs such as opportunity cost and risk. Queensland said the next best option is to apply a discount to the mining revenue assessment. Failing this, the Commission should aggregate all the relevant expenses and make an assessment using a broad indicator such as private sector investment in the mining industry.
- 31 Western Australia was broadly supportive of the category by category approach the Commission adopted. It did not want the Commission to make a separate mining expenditure assessment. It said if the Commission was unable to quantify its costs through the expenditure assessments, it supported a discount to the mining revenue assessment as a 'rough justice way' of addressing this.
- 32 South Australia, Tasmania and the Northern Territory supported an examination of mining related expenditure but said the Commission should apply its assessment guidelines, including materiality, when considering new assessments. They said this approach is more transparent and accurate and less subjective than discounting the mining revenue assessment. The Northern Territory said any assessments should recognise the stage of development.
- 33 State views on the specific assessment issues are outlined in the relevant chapters of Volume 2 of this report.

## Commission response

- 34 We understand that States with rapidly expanding mining sectors have experienced significant budgetary pressures dealing with the growth in demand for State services and in the provision of related infrastructure associated with population growth. We are also aware that the impact of a smaller but fast growing mining sector might have a bigger budgetary impact than an industry which is larger, but stable. In this review, as in past reviews, we have given careful consideration to how well our assessment methodology captures the impact of mining activity on State fiscal capacities, and whether a given sized mining sector has a different impact than say a similar sized finance sector with the same growth profile.

- 35 Our approach, notwithstanding Queensland’s concerns, has been to systematically consider category by category the potential influences identified by the mining States. We have examined any potentially unrecognised mining related expenditure needs using the assessment framework used for all other assessments. We do not consider that mining expenditures should be accorded special treatment compared to, for example, State spending on agriculture, manufacturing or service industries.
- 36 We consider that mining related expenditure should be limited to the expenditure directly associated with the development and management of mining activities. We examined the data provided by the States, including Western Australia’s RFR data. In most cases, the expenditure States identified as relating to mining is a small part of what they spend. The data indicate direct mining expenditure is less than one quarter of 1% of total State expenditure.
- 37 Where a conceptual case has been established, reliable data are available and it is material, we have made an assessment. Following this approach we identified two new assessments, for planning and regulation of investment projects and capital grants to local government, to better capture the impact of economic activity on State fiscal capacities. However, in respect of the other issues raised by Queensland and Western Australia, we have concluded that, in most areas, States with significant mining sectors face no higher expenses per capita than States with a different industrial composition. Our responses to the expenditures identified by States are summarised in Table 3. Further details are provided in the relevant chapters of Volume 2.

### *Planning and regulation of investment projects*

- 38 The Commission considers there is a conceptual case for including a disability reflecting the additional planning and regulation costs incurred by States to facilitate investment projects. States with expanding mining or other industries usually have higher levels of construction activity that result in higher project planning and approval expenses, including environmental assessment costs.
- 39 New South Wales, Victoria, Tasmania and the ACT did not support the assessment, although the ACT accepted there was a conceptual case. These States said it should be discounted significantly because of data and other concerns. Victoria said both residential and non-residential construction incurs project planning and approval expenses, and most costs should be recovered by States. Queensland, Western Australia, South Australia and the Northern Territory supported it because it recognised the high costs they face especially in relation to mining.
- 40 We consider there is a conceptual case for making the assessment. We observe that States with higher shares of planning and regulation expenses tend to have higher shares of private investment expenditure. While there may be some deficiencies with the State provided expense data, they are only used to determine the average net

expense. Because some States had difficulties providing some of the data, it is likely that the average expense is under-estimated. We have used net expenses instead of gross expenses so the average expense used in the assessment takes account of average cost recovery rates. On balance, we consider the data sufficiently reliable for the purpose it is used.

- 41 We considered a number of drivers for assessing State spending including private non-dwelling construction and private gross fixed capital formation as well as a number of industry specific drivers. We have decided to assess these expenses using State shares of private non-dwelling construction expenditure as a policy neutral indicator of both private and public investment. Making the assessment in this way will allow us to recognise the higher costs of mining States but not discriminate between industries. This assessment is described in Volume 2, Chapter 19 — Services to industry.
- 42 We do not consider a discount necessary as the conceptual case has been established and the expense data and assessment are sufficiently reliable for our purpose.

### ***Capital grants to local government***

- 43 The Commission considers there is a conceptual case for including a disability reflecting the additional costs incurred by States to support local government infrastructure provision relating to community development and amenities and culture and recreation. Previously, these expenses were assessed on the basis of population shares (EPC) and so did not explicitly recognise the impact of population growth. We consider local governments experiencing rapid population growth will undertake more investment, requiring more than a per capita share of capital grants from State governments to maintain their per capita levels of infrastructure. We observe higher levels of capital grants paid to local governments through the Royalties for Regions programs, particularly in Western Australia but also in Queensland and New South Wales. We have assessed these grants using shares of population growth rather than population shares. This assessment is described in Volume 2, Chapter 20 — Other expenses.
- 44 New South Wales, Victoria, South Australia, Tasmania and the ACT did not support the proposed assessment. They said there is no conceptual case that population growth is the driver of needs, and the data are unreliable. South Australia suggested there are a range of other factors that drive needs including population dispersion, the socio-economic status and age profile of residents in a local government area and possibly the proportion of Indigenous residents. Most States opposed to the assessment said that if the Commission implemented it, it should be discounted significantly. Queensland, Western Australia and the Northern Territory supported it.
- 45 We consider the conceptual case has been demonstrated. The average expenses have been obtained from ABS GFS data and are likely to give an underestimate. Population

growth data and the assessment method are also reliable. As a result, we do not consider a discount necessary.

### ***Other mining related expenditure***

- 46 The two new assessments use broad indicators to measure State needs. In doing so, they are able to capture the needs of States whatever their industrial structure but still capture the higher costs incurred by mining States. We consider that the only expenditure for which a mining specific indicator is warranted is mining industry regulation. However, a separate assessment of these expenses using a mining specific indicator was not material. We assessed this expenditure with other industry regulation expenses based on the value of output for other industries which includes mining.
- 47 In relation to business development expenditure, we remain of the view that the nature of a State's economy does not determine how actively it attempts to develop its economy. All States spend on developing their industries and the nature of their economy will determine which industries are supported, but we do not consider that States with large or emerging mining sectors need to spend more. This issue is covered in more detail in Volume 2, Chapter 19 — Services to industry.
- 48 Western Australia and Queensland identified expenditure on industrial and community infrastructure in mining regions. While States with relatively large mining sectors have been experiencing rapid population growth, including in regional and remote towns, any expenditure on services and associated infrastructure is already recognised in the 2010 Review methodology. For example, the impact of mining development on State population growth and the associated needs for more schools and hospitals, as well as more teachers and hospital services, is recognised through the expenditure assessments. This is because, for example, State spending on schools is determined by the number and location of school children rather than the industry in which their parents are employed. We considered State views on the cost of under-utilised capital, opportunity cost and risk but concluded there are no reliable data for establishing the conceptual case or making an assessment. This issue is covered in more detail in Volume 2, Chapter 26 — Population growth.
- 49 There was some expenditure identified by mining States for which the current assessments may only partially recognise mining related needs but an adjustment to the current assessment proved neither reliable nor material. For example, in roads, we agree that not all mining related roads are included in our policy neutral measure of road length. However, we decided not to adjust our measure of road length to include additional roads related to mining because the best available data are neither reliable nor material.
- 50 ***Fly-in-fly-out workers.*** We considered if there were unrecognised needs due to fly-in-fly-out (FIFO) workers. We accept a community with a large proportion of FIFO

residents can have a different impact on the demand for State services than a similar sized community of permanent residents. However, we have no data to suggest they impose greater net costs than a permanent community or different costs, depending on whether they are a mining or other transient community, such as in a tourist town. Nor do we have evidence to show, in relation to fly-out communities, that FIFO workers have a different cost profile than other people. States were unable to provide such data either.

- 51 We consider unrecognised costs due to FIFO work practices are likely to arise because FIFO workers could be recorded as residents in one State but work and use services in another (the cross border effect). Or they might reside in one part of a State, but work and use services in another part of a State where the cost of service provision is markedly higher. We consider the latter is the most likely source of any additional cost of FIFO workers. However, while the cost of services provided to FIFO workers in remote areas may be higher than we assess, the range of services provided may be lower, as the mining companies provide some services. The net effect of this is difficult to determine without data and in its absence we consider any assessment of higher costs inappropriate.
- 52 We recognise there is anecdotal evidence which indicates FIFO work arrangements can have negative social impacts, or at least the potential to exacerbate existing problems. How these impact on State service demands in both the resident community and the work location is unclear. For example, some younger FIFO workers might impose higher policing costs in their fly-out times, given the strict behavioural standards imposed in mining operations, but their net cost is unclear.
- 53 We are not convinced FIFO workers give rise to duplication of infrastructure and service provision, as argued by Queensland. We consider fly-in communities to have a relatively stable population at any point in time, which determines the level of services required. Having a population of a certain size cycle through an area, rather than permanently living there, does not change the needs for State recurrent or capital expenditure.

**Table 3 Mining related expenditure issues raised by States, 2015 Review**

Issue	Reference	Commission response
<b>Capital costs.</b> Actual capital costs should be used instead of the recurrent cost disability proxy to measure infrastructure costs.	Volume 2, Chapter 21 — Infrastructure	We have based the capital cost disabilities on an average of the recurrent wage and location cost factors and the Rawlinsons construction costs indices.
<b>Intrastate migration.</b> The infrastructure assessments should recognise the impact of intrastate migration on State infrastructure provision.	Volume 2, Chapter 26 — Population growth	We have not made an assessment for the impact of intrastate migration on State infrastructure provision because the conceptual case is not convincing.
<b>Growth investment.</b> New asset values should be used to calculate the new investment required.	Volume 2, Chapter 26 — Population growth	We have not made an assessment because, on balance, the conceptual case is not clear and there is no reliable data to measure the relevant costs or the benefits arising from new assets.
<b>Underutilised capital, opportunity cost and risk.</b> The assessment should recognise the opportunity cost and risk linked to mining related activity and economic development more generally.	Volume 2, Chapter 26 — Population growth	We have not made an assessment because there are no reliable data for establishing the conceptual case or making an assessment.
<b>Housing for non-government service workers.</b> There should be recognition of Western Australia's spending to increase land supply and affordable housing in remote mining towns.	Volume 2, Chapter 26 — Population growth	We considered but did not assess any additional disabilities for State spending on affordable housing in remote communities. Population growth needs and regional costs are already assessed, and any additional assessment to capture the unique economic circumstances was unlikely to be material.
<b>Roads.</b> There is inadequate recognition of road maintenance and construction for mining related roads.	Volume 2, Chapter 17 — Roads	We have not adjusted our policy neutral measure of road length to include additional roads related to mining because the best available data are neither reliable nor material. Differences in road use are already captured.
<b>State specific remoteness costs.</b> The very high remote costs in Western Australia are not recognised in the location assessments.	Volume 2, Chapters 22 and 23 — Wage and Regional costs	We considered but did not assess a State specific regional loading for States with high regional wages. We consider the regional costs gradient adequately captures the higher costs faced by Western Australia in remote areas.
<b>Mining regulation.</b> There should be explicit recognition of mining industry regulation costs.	Volume 2, Chapter 19 — Services to industry	We have assessed these expenses with other industry regulation costs. We did not assess them in a separate component because the drivers of these expenses (size of the mining industry and number of mines) are not material across categories.

**Table 3 Mining related expenditure issues raised by States, 2015 Review (cont)**

Issue	Reference	Commission response
<b>Local government and community amenities.</b> There is inadequate recognition of support for local governments and community amenities in mining regions.	Volume 2, Chapter 20 — Other expenses	We have made an assessment for these expenses using population growth as the disability.
<b>Fly-in fly-out workers.</b> There is no recognition of the impact of fly-in/fly-out (FIFO) and drive in/drive out (DIDO) workers on services and infrastructure in mining regions.	See this chapter	The States were unable to provide reliable data to demonstrate the conceptual case for making an assessment.
<b>Planning and regulation costs for investment projects.</b> There is no recognition of the higher regulatory costs of investment projects in States with relatively high levels of investment including private sector mining investment.	Volume 2, Chapter 19 — Services to industry	We have made an assessment for these expenses using the level of private non-dwelling construction expenditure as the disability.
<b>Past policy influences.</b> The mining revenue assessment should recognise the contribution of past and present State policies on the development of revenue bases, for example, the North West Shelf.	See this chapter	We have decided not to adjust current mining revenue bases for past policy because we do not accept there have been previously unequalised expenditures and we do not consider there is sufficient evidence to conclude that State assistance has significantly affected mining revenue bases.

## Previously unequalised expenditure

- 54 Queensland and Western Australia have asked for the equalisation process to recognise that they incurred costs in developing their mining industries which were not accounted for at the time. Western Australia raised the particular case of the costs it incurred in the development of the North West (NW) Shelf which it considered to be essential to the project but have never been recognised while revenues from the project are subject to equalisation.
- 55 The Commission has considered past mining development expenditures in this and previous reviews and decided not to assess those expenditures. In part, that decision reflects conceptual issues, especially the merit of considering mining related expenditures in isolation from other industry development expenditures which may also have been incurred by States in the past. It also reflects practical issues, such as adjusting observed State expenditures to remove above average spending by individual States on past industry development. Such an adjustment is needed because, on policy neutrality grounds, above average spending should not form part of any adjustment to State revenues. Queensland conceded it would be difficult to

explicitly define the level of past unrecognised expenditure need or revenue derived from above average effort and it has so far been unable to do so.

- 56 It has also been difficult to consider such an assessment because States themselves have not been able to identify past expenses on mining or mining related activities in a comprehensive or consistent manner in this and recent reviews.
- 57 Despite not being able to make a material assessment of these expenditures for the reasons identified above we have been asked instead to make a broad judgment based allowance of their impact on State fiscal capacities, either through a discount of mining revenues or an explicit allowance to recognise past mining related expenditures.
- 58 We do not propose to make a judgment based allowance for several reasons:
- Conceptually HFE would only be improved if similar considerations were made for past expenditures made by other States which strengthened their revenue bases. As noted above, it would be impractical for us to do so.
  - We seek to equalise State fiscal capacities and it is unclear to what extent any past expenditures still affect the relative fiscal capacities of States in 2015-16 and beyond, especially as it has not been possible to identify data which suggests a material difference existed when those expenditures occurred.
  - There is no basis on which to decide an appropriate differential allowance across States especially for all relevant industry development expenditures.
- 59 With respect to the particular case of the NW Shelf, Western Australia considers the Commission should assess the net revenue it receives (by recognising its expenditure amortized over the life of the project) or alternatively, that none of the revenue should be assessed as the project would not have proceeded in the absence of the State's investment.
- 60 We have set out our views on the case for assessing past mining related expenditures above. In the Commission's view, they also apply to the suggestion of assessing only net revenues from the NW Shelf. In particular, we do not think it is possible to assess what was done in relation to this project in isolation from all that may, or may not, have been undertaken in relation to innumerable and similar projects across Australia in the past.
- 61 Having said this, we do not seek to debate Western Australia's position that the intervention they made played a critical role in the development of the NW Shelf. However, accepting Western Australia's alternate proposal would be to accept that without their intervention the NW Shelf would not have been developed or that revenues today would be significantly lower. For the reasons set out above, we are not able to accept such a view and doubt that it would ever be possible to reliably demonstrate how much lower today's revenues would be had the State's past intervention not occurred when it did, or taken a different form.

- 62 After giving full consideration to the matter, the Commission is of the view that revenue from the NW Shelf should continue to be part of the equalisation process.

## NATIONAL EDUCATION REFORM AGREEMENT

### Background

- 63 The terms of reference ask the Commission to:

... ensure that the GST distribution process will not have the effect of unwinding the recognition of educational disadvantage embedded in the National Education Reform Agreement (NERA) funding arrangements. The Commission will also ensure that no State or Territory receives a windfall gain through the GST distribution from non-participation in NERA funding arrangements.

- 64 NERA funding arrangements commenced on 1 January 2014.<sup>1</sup>

### Commission response

- 65 Our treatment of the Commonwealth NERA funding is based on our understanding of how Commonwealth funding for each State is determined.
- 66 In the 2014-15 budget, the Commonwealth announced changes to schools funding from 2018. We will need to discuss consequential changes to the methodology outlined below with the States and Commonwealth in subsequent updates when the new funding arrangements become effective, or if our terms of reference require it. Queensland said that the changes announced in the 2014-15 budget mean that the terms of reference relating to NERA can no longer be applied. We do not agree. We will ensure that our assessments do not unwind the recognition of educational disadvantage contained in the NERA payments until otherwise instructed by terms of reference.
- 67 Under the current NERA funding arrangements the Commonwealth is providing schools funding determined by a base amount per student and loadings for educational disadvantage for particular groups of students; for example, Indigenous students. Commonwealth funding of the base amounts varies among States and loadings are calculated as a percentage of this funded amount.

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<sup>1</sup> From January 2014, National Education Reform funding is referred to as Students First funding. We continue to refer to the payments as NERA funding since this is the terminology used in the terms of reference.

## ***Unwinding***

68 We consider unwinding occurs when the net financial impact of a Commonwealth payment on State budgets differs materially from the direct impact because of the way the equalisation process deals with the payment and its expenditure. Some unwinding occurs in the case of most payments unless terms of reference direct the Commission to ensure this does not occur.

### ***Scope of the no unwinding instruction***

- 69 In this case, we have been directed to ensure there should be no unwinding of measures of educational disadvantage embedded in funding arrangements. We consider that requires us to ensure the impact on State budgets of loadings for educational disadvantage contained in Commonwealth payments for both government and non-government is not unwound.
- 70 We consider the terms of reference contain no direction on how the equalisation process should deal with States' own funding of government and non-government schools, nor that part of the interstate distribution of Commonwealth payments which is not based on measures of educational disadvantage. The normal equalisation treatment applies in these areas.
- 71 Some States consider unwinding should have a broader meaning. Some consider the equalisation process should provide States with the capacity to apply the NERA educational loadings to States' own funding for schools (mirroring the support provided by the Commonwealth) and not to do so would unwind the loadings embedded in NERA funding arrangements. However, as States appear to remain free to fund schools with their own money on their own criteria, we do not consider NERA's recognition of educational disadvantage is 'embedded' in State own source funding and as a consequence we have limited the direction to Commonwealth payments.
- 72 Other States consider the Commonwealth has provided funding for disadvantage and the equalisation process does not need to do more in relation to States' own spending. Doing so would unwind the Commonwealth's intent. However, as Commonwealth and States' own funding of disadvantage appear to be complementary in NERA, we consider that equalisation applied to States own funding does not constitute unwinding.

### ***Relevance of the no windfall gain instruction***

73 We have concluded the 'no windfall gain' instruction is no longer relevant. This follows the December 2013 announcement of agreements between the Commonwealth, and the Queensland, Western Australia and Northern Territory

Governments. There is no longer any potential for windfall gains because the funding amounts for all States are determined on the same basis. No State disagreed.

### *Implications for the Schools assessment*

- 74 Commonwealth payments to States for non-government schools have no impact on the GST distribution because we assess that every State has to spend exactly what it receives from the Commonwealth. As a result, there is no impact on State fiscal capacities. We are, therefore, not unwinding any of the educational disadvantage embedded in the payments for these schools.
- 75 Our assessments are built so that the impact on State fiscal capacities of Commonwealth payments for government schools will be the difference between what States actually receive and what they would have received had the Commonwealth funds been distributed among States only on the basis of loadings for educational disadvantage. The difference reflects factors such as different base funding negotiated between the Commonwealth and States, which should be the subject of equalisation.
- 76 We consider this approach ensures the impact of funding for educational disadvantage on State budgets is not unwound by the GST distribution.
- 77 While we ensure that funding for educational disadvantage embedded in Commonwealth funding is not unwound, we recognise other cost influences affecting what States need to spend to deliver school services, such as the impact of interstate wage cost differentials. Victoria said this would result in some unwinding. We consider that recognising these cost differences does not unwind the impact of loadings for educational disadvantage because they are independent influences determining the allocation of a pool of untied funding.
- 78 Because we base our recommendations on historical data, to give effect to the no unwinding direction, we have modified the relevant historical data to reflect changed funding arrangements and the assessment approach outlined above. New South Wales said it would be simpler not to backcast the arrangements given the announced changes to funding from 2018. We agree it would be simpler but this would entail some unwinding.

## NATIONAL DISABILITY INSURANCE SCHEME

### Background

79 The terms of reference ask the Commission to:

...consider the most appropriate treatment of disability services during the transition to DisabilityCare Australia (the National Disability Insurance Scheme) and once the full scheme is operating nationally.

80 The process for implementation of the National Disability Insurance Scheme (NDIS) involves three phases: trials, transition and full implementation. All States have signed on to the NDIS and the timelines of the trial phase, transition periods and full implementation dates in each State have been agreed. The trial phase has already started. We currently expect that the transition phase will start in 2016-17 (the application year of a 2016 Update) and full implementation to be achieved by 2019-20.

### Commission response

83 We have adopted a different treatment of State disability services expenses in each phase, based on our current understanding of how NDIS will be implemented.

- In the trial phase, State expenses and associated Commonwealth payments have no impact on the relativities.
- In the transition phase, dual assessments of State expenses on disability services and NDIS contributions will be undertaken on the basis of State proportions of the total number of people eligible in a year to be covered by NDIS when fully operational. Other disabilities will continue to be recognised for existing disability services expenses but not in relation to the NDIS contributions.
- After full implementation, State NDIS contributions will be assessed on an actual per capita (APC) basis. The existing State disability services assessment will continue until it becomes immaterial.
- In both transition and full implementation phases we will treat any associated Commonwealth payments to States, excluding State draw-downs of the Medicare Levy from the DisabilityCare Australia Fund, as having an impact on the GST distribution.
- The changes in State service delivery and associated Commonwealth payments due to the NDIS will be backcast into the historical years to ensure this major change in Commonwealth-State arrangements reflects the circumstances in the application year.

- 84 We explain below why we have reached this position and address State concerns. If how the NDIS is implemented changes, we may need to adapt our proposals in updates, after consultation with the States and Commonwealth.

### *Trial phase*

- 85 The first stage of the implementation began in July 2013. As directed by the 2014 Update terms of reference (and consistent with the terms of reference for this review where treatments have previously been directed), we have treated the Commonwealth payments and expenses associated with the trials as having no impact on the relativities.

### *Transition phase*

- 86 During transition, disability services will be provided and funded in two separate ways: each State will make a contribution to the NDIS reflecting an agreed number of people covered by the NDIS in the State in the year and they will fund their own existing disability services for other State residents. The relative importance of the two service delivery methods will adjust over time as the coverage of NDIS and State contributions to it rise and their direct service delivery expenditures fall. In each transition year, the proportion of services provided through the NDIS is likely to differ State by State as they have different transition schedules. The ACT is expected to have taken on its eventual number of participants by the beginning of the transition phase, whereas other States will not do so until the end of the period.
- 87 To reflect the changing service delivery modes, the Commission has decided to introduce a 'dual' assessment approach, with concurrent assessments of State needs in relation to the NDIS and current disability services.
- State contributions to NDIS in a transition year will be assessed assuming that the NDIS provides the observed national average coverage of NDIS eligible populations in each State (the average transition).<sup>2</sup> Assessments will be based on a State's proportion of the total number of people eligible in a year to be covered by NDIS when fully operational. The alternative of using actual numbers of people covered in transition years, whether set out in the bilateral agreements or not, would not be policy neutral. For example, if a State were to move at a relatively fast rate towards full implementation, this would be considered a matter of policy choice which should not be taken into account in the equalisation process.
  - The existing disability services assessment for State spending on current State disability services has been modified. We have applied the assessment of NDIS

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<sup>2</sup> The question of whether this should be the assessment year or the year in which the relativities will apply (backcasting) is discussed below.

services to the existing disability services. Both services are now assessed in the same way. This is discussed further in Volume 2, Chapter 13 – Welfare.

- 88 We did not adopt a ‘switch’ approach, as suggested by New South Wales and South Australia. Under this approach, the current assessment would switch to an assessment of needs under NDIS arrangements at the point when the NDIS is judged to cover the majority of users or when it has been fully implemented in most States. South Australia considered this approach would better deal with the uncertainty as to when full implementation would happen and the unreliability of the current NDIS eligibility projections.
- 89 We have not adopted a ‘switch’ approach because this will not reflect what States are doing during the transition years. We consider the transitional approach is more flexible and will recognise what States will be doing, and for as long as necessary to get to full implementation, whenever that is. It is consistent with our approach to average policy.
- 90 We understand that there is still some uncertainty surrounding the estimates of the NDIS eligible population. However, we note considerable effort has been made to develop a comparable set of data on the numbers of potential users in each State. We consider this the best policy neutral measure of the level of disability in each State which exists at present and that it will continue to be refined.
- 91 We note the ACT’s concerns that it will be disadvantaged by its more rapid movement to the full scheme because it will have taken on its eventual number of participants by the beginning of the transition period. It argued for an actual per capita assessment during transition. However, while the ACT will incur relatively higher costs in moving from the existing disability services arrangements to the NDIS more quickly than the other States, it will be delivering a higher standard of service than the other States during the initial stages of transition.
- 92 Our assessment will not recognise these higher costs. However, the ACT’s share of the GST will allow it to deliver the same average level of service provided in all States. We note that while the Commonwealth encouraged all States to participate in trials of about 5 000, not all States committed to doing so; some opting not to participate at all; others opting to trial much smaller sites. This suggests the ACT’s commitment to the full scheme at the commencement of transition is the result of its policy choice.
- 93 We also note the ACT’s view that the supplementary terms of reference requiring that State drawdowns of the DisabilityCare Australia Fund have no impact on the GST relativities reinforces its view that an actual per capita assessment of all NDIS expenses is necessary to take account of differences between States in the pace, and hence cost, of the transition process. We do not consider this to be the case. The supplementary terms of reference require the Commission to ensure State

drawdowns have no impact on the GST relativities, but this has no implications for the rest of the assessment.

### **Full implementation**

- 94 When the NDIS becomes fully operational, anticipated to be in 2019-20, State contributions will change from payments which recognise the number of people covered by the scheme in each State to contributions based on State population shares at Census time. Because at that time, State policies will have no influence on their NDIS expenses, we have decided to assess State contributions APC.
- 95 In both transition and full implementation phases, we will treat any associated Commonwealth payments to States, excluding State draw-downs of the Medicare Levy from the DisabilityCare Australia Fund which have been quarantined by the terms of reference, as affecting State fiscal capacities and therefore as having an impact on the GST distribution. Commonwealth contributions to NDIS funding will have no effect on State budgets and will be ignored. Similarly, any purchases by the NDIS of State services would have no impact on the relativities.
- 96 It remains to be seen whether States will continue to operate their own disability services once the NDIS is fully operational. Western Australia, Tasmania and the ACT have indicated that there may be some residual service delivery expenses. We will continue the dual approach until the non-NDIS service provision assessment is no longer material. On current indications, this is likely to happen in 2019-20 – the year in which most jurisdictions are currently expected to have fully implemented the NDIS.

### **Backcasting**

- 97 The Commission has decided to backcast the introduction of the NDIS because it considers this to be a major change in Commonwealth-State financial relations and backcasting will improve the contemporaneity of the assessment.
- 98 This requires the State policies operating in the year GST shares are to be used to be retrospectively applied in the historical years used to calculate those shares. To do this, the Commission would require the prospective ratios of State NDIS and non-NDIS expenses in the application year. That data would need to be provided by States and based on their own expense forecasts.
- 99 With a dual system commencing in 2016-17, this would require the incorporation of such projections beginning in the 2016 Update. At that time, we will review the availability and reliability of the uptake and expenses projections. If data are not considered reliable, we will need to consider an alternative, such as using the data for the latest available year.

## TRANSPORT INFRASTRUCTURE

### Background

- 100 The terms of reference ask the Commission to have regard to the recommendations of the GST Distribution Review (October 2012) to:
- ... develop a new transport infrastructure assessment. This should include, if appropriate, a framework to identify payments for nationally significant transport infrastructure projects which should affect the relativities only in part and options for providing that treatment (Recommendation 6.1).
- 101 The GST Distribution Review report said the Commission's decision to equalise States' net financial worth in the net lending assessment imposed a constraint on the recognition of capital needs for subsidised public non-financial corporations (PNFCs). The report suggested the Commission review its approach so capital needs for subsidised PNFCs could be fully recognised.
- 102 The GST Distribution Review report also noted that, while all States supported the general principle of *including* Commonwealth payments for capital purposes in the equalisation process, there were concerns about the treatment of large payments for infrastructure purposes. It said that Commonwealth payments for road and rail infrastructure should not be treated differently. Therefore, it recommended only 50% of nationally significant payments for road and rail infrastructure be recognised in the equalisation process, because of their dual national and State purposes.

### Commission response

#### *A transport infrastructure assessment*

- 103 In this review, we considered developing a single transport infrastructure assessment. However, we decided it was more appropriate to separately recognise the differences among States driving investment in roads and urban public transport.
- 104 We consider the existing assessment method for investment in road infrastructure should continue unchanged, but be augmented by an assessment of urban transport investment. This will allow the different drivers of roads and urban transport infrastructure to be recognised in a transparent way. We do not consider there is a conceptual case for, or data to support, a separate assessment relating to other transport infrastructure, such as ports or freight rail.
- 105 While road related expenditure and investment are general government activities, the same is not true of urban transport which is provided by a mixture of PNFCs, the private sector and local governments (with general government subsidies) and directly by general government.

- 106 In this review, we have decided, for equalisation purposes, to treat all urban transport delivered by PNFCs as a general government activity. This is because a number of States have further integrated their urban transport services into their general government sectors and all services have strong similarities to the services provided by general government agencies, even when they are delivered by PNFCs. They are not fully commercial and depend on government funds to meet recurrent costs and pay for major investment; the services stem from social policy objectives; and government departments make the policy on service delivery and charges. This is unlike other transport PNFCs, such as ports or freight railways, which operate on a commercial basis and often return a dividend to the general government budget.
- 107 We have developed a new assessment of urban transport stock requirements which will be undertaken as a separate component of the investment assessment. The assessment is undertaken in the same way as other components of investment and recognises in a simplified way that:
- larger cities require more urban transport infrastructure per capita than smaller cities to deal with the transport task they face
  - urban population growth is an important driver of State investment in urban transport infrastructure
  - relative interstate differences in the cost of infrastructure affect investment requirements.
- 108 Details of the assessment are provided in Volume 2, Chapter 21 – Infrastructure.

### ***Nationally significant transport infrastructure projects***

- 109 The Commission has concluded it would be conceptually and practically difficult to develop and implement a framework to identify payments for nationally significant transport infrastructure projects. All States agreed that deciding which projects are nationally significant would be difficult, even arbitrary and contentious.
- 110 We were not attracted to using Infrastructure Australia's (IA's) list of priority projects to determine payments relating to projects of 'national significance'. IA undertakes technical assessments of projects submitted for inclusion on the list. A project is not only evaluated in terms of its strategic fit and how it addresses national infrastructure priorities; it must be economically viable (its benefits must outweigh its costs) and it must demonstrate it is deliverable (it has a clear and robust delivery plan). A number of States did not accept that the list included only projects of national significance. They argued the list could include projects which were of considerable benefit to only one State and could exclude projects of national significance which did not meet the other criteria.
- 111 South Australia and the ACT proposed criteria relating to spill over benefits to other States or where there are direct economic benefits extended to other States.

Queensland suggested a nationally significant rail project was one which would facilitate national economic growth and productivity gains in the long term.

- 112 We can see conceptually how identifying the ‘interstate spill over benefits’ of projects could form the basis of treating part of Commonwealth projects so that they have no effect on the GST distribution. However, we doubt we would be able to quantify the size of such benefits or apportion project expenditure to that outcome. No State was able to propose a methodology which would solve this problem.
- 113 In addition, we do not accept New South Wales’ suggestion that all infrastructure grants to the States might be treated as having no impact on the relativities or Western Australia’s proposal to apply a general discount to all State revenues, including Commonwealth payments. We do not consider these proposals to be consistent with HFE. Both appear too broad brush, capturing some projects of only State significance.

### *Treatment of Commonwealth payments for transport infrastructure*

- 114 The appropriate treatment of Commonwealth payments for transport infrastructure has been an issue of considerable interest to States.
- 115 We assess State investment in roads and urban transport based on factors such as the growth in population, road usage and city size. Commonwealth payments which fund this infrastructure reduce the investment we assess States need to make. In this way, they have an impact on the GST distribution.
- 116 However, there are national networks for roads and rail. We accept that projects relating to these may be, at least in part, in the national interest. We also note there is no relationship between State shares of the payments and the currently assessed State-based drivers of road and rail investment. Since the investment is intended to improve the national networks as a whole to facilitate national economic development and the interstate movement of passengers and freight, it is in part driven by benefits or needs in States other than those in which the investment is made.
- 117 That part of these Commonwealth payments should not affect the GST distribution. As in the 2010 Review, there are no data which allow us to apportion Commonwealth payments, even those earmarked for national networks into that part driven by national needs and that part driven by the needs in the State where the project is located. We have had to exercise judgment, believing that some recognition improves the HFE outcome. We have decided to retain the judgment we made in 2010 and treat 50% of these Commonwealth payments so they have no impact on the GST distribution.
- 118 In the 2010 Review, we applied this treatment to 50% of payments for projects affecting National Network Roads (NNR) only. In this review, we have continued to

apply that treatment to NNR payments but extended it to payments for projects on the National Rail Network. We implement the treatment by excluding 50% of the payments and the expenditure they fund.

- 119 While some States supported this approach, others argued it was not justified because the needs were assessed for these payments using measures of road length and use in each State and differences in city size and population growth. Others said if national needs were assessed in relation to NNR, they should be assessed more broadly. Not doing so, particularly in relation to rail, was said to distort investment decisions. Victoria said NNR funding should be subject to the same level of equalisation as Commonwealth rail funding. Queensland did not support extending the treatment to rail payments because nationally significant rail infrastructure cannot be identified reliably. Victoria said the Commission should examine each rail project to decide the extent to which the Commonwealth funding is affected by national considerations not captured in the State-based disability measures.
- 120 We do not consider it feasible to undertake our own examination of road and rail projects to determine the extent of national influence on each. We consider it more reliable and appropriate for us to use advice from the Department of Infrastructure and Regional Development on which payments relate to projects on the national road and rail networks. The Department has provided advice in the past in relation to projects relating to the national road network and will continue to do so. It is now providing advice on national rail network projects<sup>3</sup> and has recently identified relevant payments. We will also treat Commonwealth payments for roads identified in the supplementary terms of reference in the same way.
- 121 We do not consider that a similar approach should be extended to other Commonwealth payments for infrastructure because they do not have the same network features as road and rail. We consider the other investment assessments appropriately allow for the main factors driving on-going and relatively divisible investment needs of States (such as for schools and hospitals).
- 122 Attachment 2 of Volume 2 sets out the treatment of all transport infrastructure payments.

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<sup>3</sup> Most of the national rail network is owned or leased by the Australian Rail Track Corporation, which is a Commonwealth-owned company, but there are exceptions, such as the Sydney-Newcastle track and some track in Western Australia and Tasmania.

## INDIGENOUS STATUS

### Background

123 The terms of reference require us to ‘develop methods to appropriately capture the changing characteristics of the Indigenous population’. This was in response to concerns, raised by Western Australia and the Northern Territory, that in the 2011 Census, some people who had not previously identified as Indigenous were now doing so. It was not clear that both groups placed the same fiscal pressure on State governments.

### Commission response

124 In response, we have changed the way we assess the costs of providing services to Indigenous people.

125 Like non-Indigenous people, Indigenous people are not homogenous and different groups of Indigenous people use State services at different rates. To appropriately capture the characteristics of the Indigenous population, we consider it is necessary to identify attributes of Indigenous people that we can use to disaggregate them into those who use State services at a higher or lower than average rate. For example, those with a higher socio-economic status might use services less intensively.

126 Since the 2010 Review, we have used area based measures as our primary way of distinguishing socio-economic status. We classify different areas as high or low socio-economic status and use State administrative data to determine what States spend on services in these areas. We then use this to measure the national average spending on groups of different socio-economic status.

127 In the 2010 Review, we determined the socio-economic status of a region without distinguishing between its Indigenous and non-Indigenous residents. To do this we used the ABS Socio-Economic Indexes for Areas (SEIFA). The average status of each region was ascribed to both Indigenous and non-Indigenous residents. However, because Indigenous people generally represent a very small proportion of the population in any area, the socio-economic status of the Indigenous population does not make a significant contribution to the measured status of that area. Therefore, it may not be representative of the socio-economic status of the Indigenous population in each area.

128 In this review, we have decided to use a geographic socio-economic index designed specifically for Indigenous people, and another specifically designed for non-Indigenous people.

129 As a result, we determine a region’s Indigenous socio-economic status using an Indigenous specific indicator based on the socio-economic status of its Indigenous

residents. Separately, we determine the same region's non-Indigenous status using a non-Indigenous specific indicator, based on the socio-economic status of its non-Indigenous residents.

- 130 In this way we can better identify average State spending on Indigenous residents of different socio-economic status and average State spending on non-Indigenous residents of different socio-economic status.
- 131 After consulting with the States, we have decided to use the Indigenous Relative Socio-Economic Outcomes (IRSEO) index<sup>4</sup> to measure the socio-economic impact for the Indigenous population, and a non-Indigenous socio-economic index of areas (NISEIFA)<sup>5</sup> developed for the Commission by the ABS to measure the socio-economic impact of the non-Indigenous population. We are taking the same approach that we have used in the 2010 Review to the measurement of different levels of service provided to each group of Indigenous and non-Indigenous people. We have merely changed how we define such groups.
- 132 Because our Indigenous measure better captures where Indigenous people of different socio-economic status reside, we consider it will better capture how this changes over time, and within the constraints of available data, appropriately capture the changing characteristics of the Indigenous population.
- 133 Western Australia and the Northern Territory consider this to be a significant improvement to the way we measure Indigenous costs. Other States were more cautious, expressing concerns that it would add complexity; that the Indigenous socio-economic status index was a measure of advantage, not disadvantage; that it was constructed at too broad a level of geography; and that administrative data may not be reliable enough to allow a detailed disaggregation of the Indigenous population. However, all States agreed this is an appropriate approach to addressing the terms of reference requirement, given the short time frame for the review.
- 134 We agree that using two indexes increases complexity, particularly for analysis. It is also true that the Indigenous index is created by aggregating aspects of advantage rather than disadvantage and that the size of the geographic areas for which it is calculated can hide a level of heterogeneity. Despite these issues, using two indexes allows a better identification of how States spending varies with socio-economic status for both Indigenous and non-Indigenous residents (see Box 2). It makes a material difference compared with using the combined index.

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<sup>4</sup> IRSEO was developed by the Centre for Aboriginal Economic and Population Research (CAEPR). It is based on the same technique as SEIFA, but uses a reduced suite of variables and is calculated for Indigenous areas, rather than the much finer geography available for SEIFA.

<sup>5</sup> To complement IRSEO, we commissioned the ABS to produce a version of SEIFA using only the non-Indigenous population. NISEIFA uses the same variables as the SEIFA Index of Relative Socio-Economic Disadvantage, but is recalculated for the non-Indigenous population.

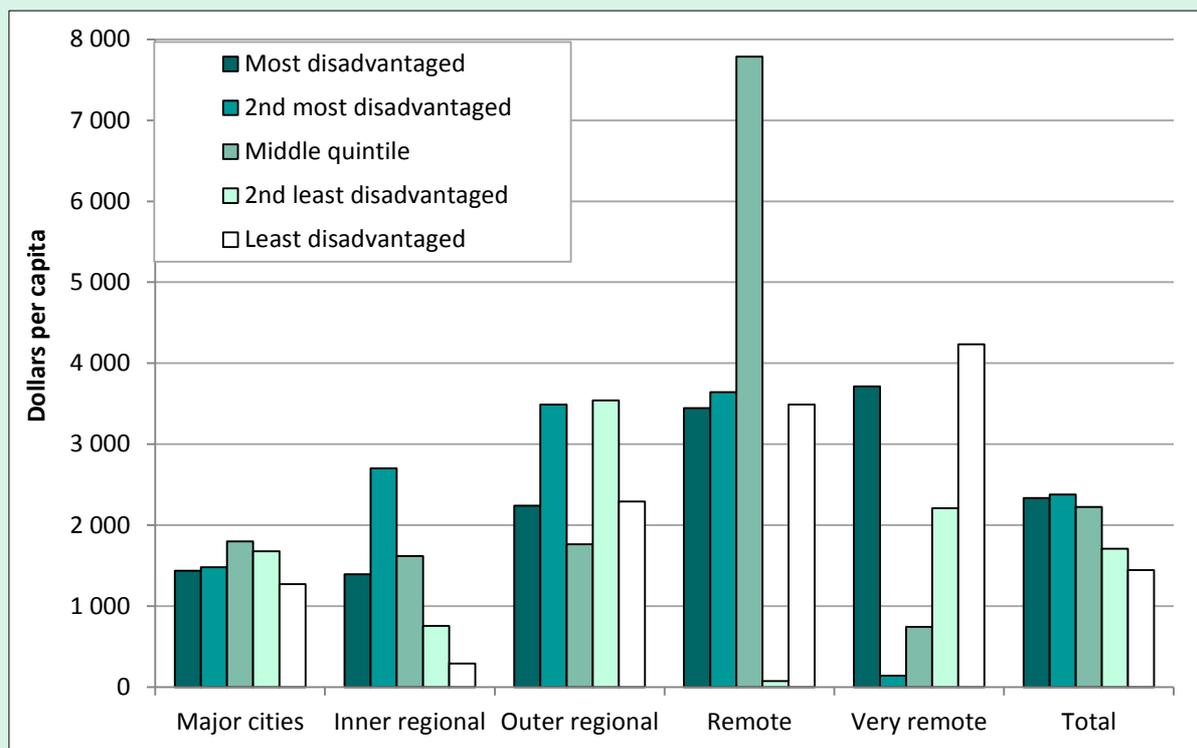
135 Following our guidelines, we would normally make all material adjustments that we can reliably make. Therefore, it would be difficult to justify not making a material change to improve the way we assess Indigenous characteristics.

**Box 2 Validation of IRSEO in inpatient services**

Using a combined index of socio-economic status (the ABS SEIFA indexes) shows a weak relationship between socio-economic status and per capita spending on Indigenous hospitalisation, as is shown in the figure below. For example, in major cities, Indigenous people in both the most disadvantaged and least disadvantaged quintiles have low per capita spending on hospital services. The relationship in inner regional areas is very different to that in outer regional areas.

In total, there is a general upward relationship. However it is very weak, indicating that SEIFA explains very little of the difference between Indigenous groups in their use of hospital services.

**Indigenous inpatient spending per capita by SEIFA and remoteness**



Source: Commission calculation using IHPA and ABS population data.

However, when we undertake the same analysis using an Indigenous specific measure of socio-economic status, we see a much stronger and more consistent relationship. Across non-remote regions, there is a strong relationship between IRSEO quintiles and hospital spending. This can be seen in the figure below.

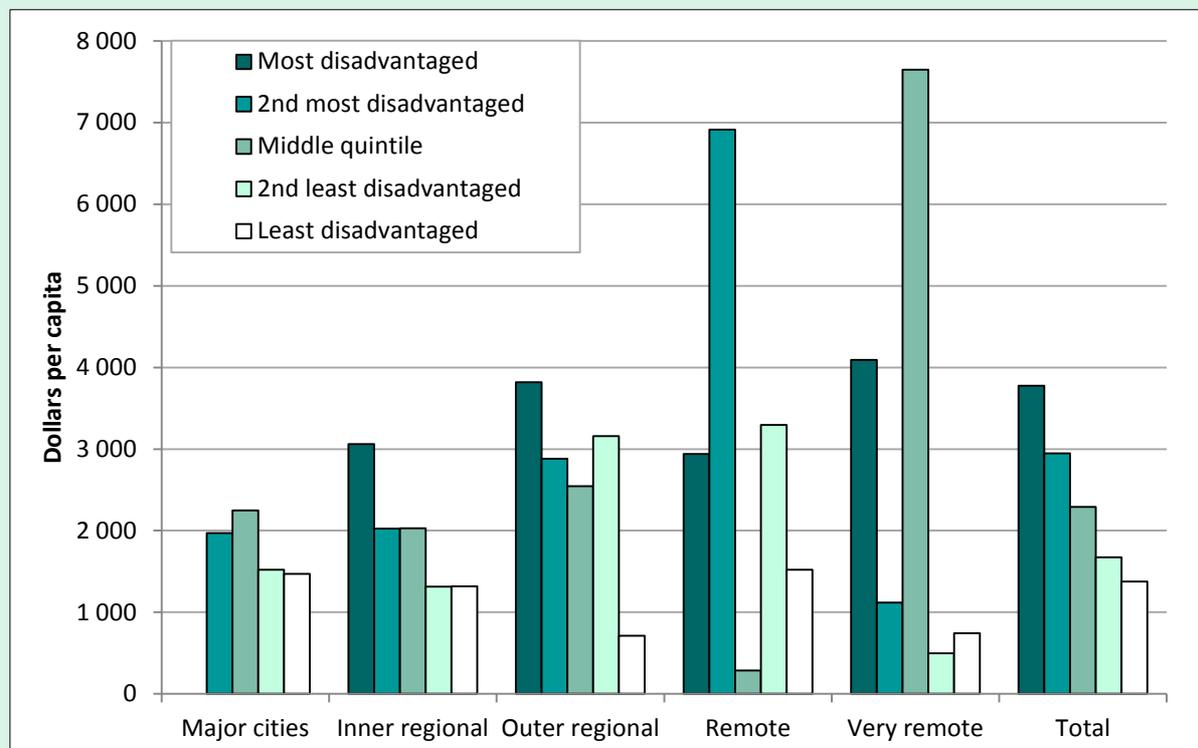
In remote Australia, the number of people in the least and 2nd least disadvantaged quintiles is very small, leading to greater volatility and we do not consider using the indexes in these regions is appropriate.

The Northern Territory considers that there is heterogeneity within the remote Indigenous population that we should capture. While we accept that such heterogeneity exists, we cannot measure it reliably.

For the non-Indigenous population, SEIFA scores are generally very closely related to NISEIFA scores, and the relationship with hospital spending is very similar using the two indexes. This is because the Indigenous population is generally a very small proportion of the total population.

Both indexes are reasonably robust in measuring differences in use of inpatient services in non-remote areas. However, neither index is particularly strong at explaining differences in inpatient spending per capita.

### Indigenous inpatient spending per capita by IRSEO and remoteness



Source: Commission calculation using IHPA and ABS population data.

**Conclusions.** In non-remote areas, separate indexes are highly effective at grouping Indigenous and non-Indigenous people into groups that reflect their use of hospital services. Using two indexes represents a significant improvement in defining comparable communities of Indigenous people in different States. However, in remote areas, these measures of socio-economic status add little.

136 Some States were concerned that the Indigenous population was too small to disaggregate reliably. However, using an Indigenous specific index, with equal Indigenous populations in each quintile, means that we have fewer very small Indigenous cells than using the combined index. The patterns shown in Box 2 indicate that the data are sufficiently reliable for our purposes. In categories where it does not

appear sufficiently reliable, we have aggregated groups to ensure we use data in a manner fit for our purposes.

- 137 The ACT is concerned with the use of geographic based measures of socio-economic status generally, but has not identified a viable alternative, or evidence of any bias from those assessments using it.
- 138 On balance, we consider using IRSEO, which is already available, meets the short timeframe for the review, is suitable for our purposes and improves how we capture the characteristics of the Indigenous population. However, we also consider it a priority to work with States to see if a better index can be found for our purposes in the future.

## Socio-economic profiles of States

- 139 Table 4 shows the socio-economic profile of Indigenous people in each State using a combined and an Indigenous specific index are quite different. While Tasmania has 2% of the most disadvantaged Indigenous people using a combined index, using an Indigenous specific index suggests it has none. Correspondingly, it had 2% of the least disadvantaged people using a combined index, but 6% using an Indigenous specific index.
- 140 The shares of the most disadvantaged Indigenous people in Western Australia and the Northern Territory increase considerably.

**Table 4 Distribution of Indigenous population by SEIFA and IRSEO**

Socio-economic quintile	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
SEIFA	%	%	%	%	%	%	%	%	%
Least disadvantaged	30.9	9.7	27.9	15.8	3.7	2.4	3.4	6.1	100.0
2nd least disadvantaged	31.5	8.4	30.8	13.7	5.0	4.4	0.7	5.6	100.0
Middle quintile	33.7	7.6	30.4	13.0	6.8	4.3	0.3	3.8	100.0
2nd most disadvantaged	37.0	7.2	28.0	12.4	6.8	4.5	0.1	4.1	100.0
Most disadvantaged	22.7	2.5	24.0	10.9	5.7	2.4	0.0	31.6	100.0
Total	31.1	7.1	28.2	13.2	5.6	3.6	0.9	10.3	100.0
IRSEO									
Least disadvantaged	33.6	17.8	29.8	2.5	2.3	6.5	4.5	3.1	100.0
2nd least disadvantaged	41.5	4.5	26.5	6.2	6.4	9.5	0.0	5.3	100.0
Middle quintile	24.3	8.8	40.3	17.8	3.3	1.0	0.0	4.5	100.0
2nd most disadvantaged	39.0	4.1	27.9	18.3	8.9	0.8	0.0	1.0	100.0
Most disadvantaged	17.0	0.0	16.8	21.6	7.0	0.0	0.0	37.5	100.0
Total	31.1	7.1	28.2	13.2	5.6	3.6	0.9	10.3	100.0

Source: ABS ERP and CAEPR.

- 141 As the non-Indigenous population has a very similar distribution to the total population, there is generally little difference in State non-Indigenous population shares when a combined or non-Indigenous specific index is used.

## MORE CONTEMPORANEOUS ASSESSMENTS

### Background

- 142 Western Australia raised issues relating to the contemporaneity of the assessment of iron ore revenues and its payments from the Commonwealth in relation to the North-West Shelf oil and gas reserves.
- 143 We consider this represents an additional main issue for this review.

### Consultation

- 144 This issue was raised late in the review processes after the Commission had issued its draft report. Given its significance, the Commission undertook special, additional consultations with States on the matters raised and possible options.
- 145 In both its submission on the draft report and during its Head of Treasury (HoT) meeting with the Commission, Western Australia raised the impact averaging historical data had on achieving contemporaneous HFE for volatile revenue assessments, in particular iron ore royalties. State views were initially sought in relation to this issue in HoTs discussions with the other States.
- 146 The Commission subsequently considered whether a different method to its usual lagged three year average approach may be more appropriate in some situations. The aim of any change would be to better reflect States' fiscal capacities in the application year (2015-16); that is, to be more contemporaneous and possibly achieve an improved equalisation outcome.
- 147 In December, the Commission provided Discussion Paper 2014-04 (*Significant Changes since the Draft Report*) to States, which included asking for comment on the issue raised by Western Australia and contemporaneity adjustments more generally.

### State views

- 148 New South Wales, Victoria, Queensland, South Australia and the ACT considered that it was too late in the review to properly address this issue. They said there were risks with changes that were partial and piecemeal, and that any improvements to contemporaneity should be undertaken on a comprehensive and considered basis, as part of the next review. Two States noted that as the HFE system is explicitly addressed in the terms of reference for the White Paper on Reform of the Federation,

major changes to the current HFE system should not be implemented in advance of this process.

- 149 Queensland, South Australia, Tasmania, ACT and the Northern Territory believe the lagged three year average assessments achieve HFE and provide the best balance between supporting principles, with some noting that this approach was the outcome of an extensive canvassing of this issue in the 2010 Review.
- 150 New South Wales, Victoria, Queensland and Tasmania said that any improvement in contemporaneity would come at the expense of one or more of the following:
- Reliability and practicality — as data are not available for the application year, including this year in the Commission’s assessment would entail it having to use projections or forecasts of State circumstances, and that these would be unreliable.
  - Simplicity — there would be grant design issues associated with using unaudited State provided data, and that in any case the use of forecasts and estimates would necessitate subsequent adjustments for actual outcomes to ensure that HFE is achieved.
  - Predictability of GST revenue — more contemporaneous assessments would lead to States having less certainty about their GST entitlements, increasing the volatility of GST revenue for all States and making budget management more difficult.
- 151 Queensland, South Australia and the Northern Territory did not consider the fall in iron ore prices to be an exceptional circumstance warranting a departure from the current lagged three year average approach. South Australia said that given the extraordinary growth in iron ore prices over the past decade, current price falls should be viewed more as a correction to what could be considered unsustainable growth. States noted that other revenues, such as stamp duties on conveyances, and some expenses, such as natural disaster costs, were also volatile. States also expressed a concern Western Australia benefitted from a non-contemporaneous assessment in the up-cycle swing and would benefit further if the Commission applied a contemporaneous assessment in the down-cycle. They said that there needed to be symmetry in treatment during both up and down cycles.
- 152 New South Wales, South Australia and the Northern Territory were concerned at the implications for HFE of any special treatment of particular revenues. If a change were to be made however, Queensland said the Commission could consider smoothing the GST impacts of particularly high revenue years over a longer time. South Australia said it would support further examination of a reduction in the averaging period to two years. The ACT said that any large changes for States under a new approach compared with the current approach should be phased in.
- 153 Western Australia disagreed. It argued the lags in the HFE system affect it more than other States. It pointed to big differences in fiscal capacity between the assessment

period and application year for both iron ore and its North West Shelf payment. It said these are sufficiently large to warrant a contemporaneous assessment.

154 Western Australia said that the benefits of a more contemporaneous assessment are that it:

- is consistent with achieving full HFE
- captures structural or long period cyclical shifts in a timely manner
- eliminates inefficient State budgeting due to fiscal illusion created by time lags
- allows HFE to stabilise rather than destabilise State finances (currently relativities often exaggerate revenue cycles)
- equitably shares revenue volatility, as well as revenues, across States.

## Commission response

### *The circumstances*

155 Western Australia's iron ore royalty revenue has grown from around \$465 million in 2004-05 to a projected \$3.8 billion in 2014-15, with a peak of \$5.3 billion in 2013-14. Figure 1 shows Western Australia's royalties during this time, along with its most recent projections for future years. During this time iron ore royalties have increased from 3% of Western Australian government revenues in 2004-05 to an estimated 14% in 2014-15.

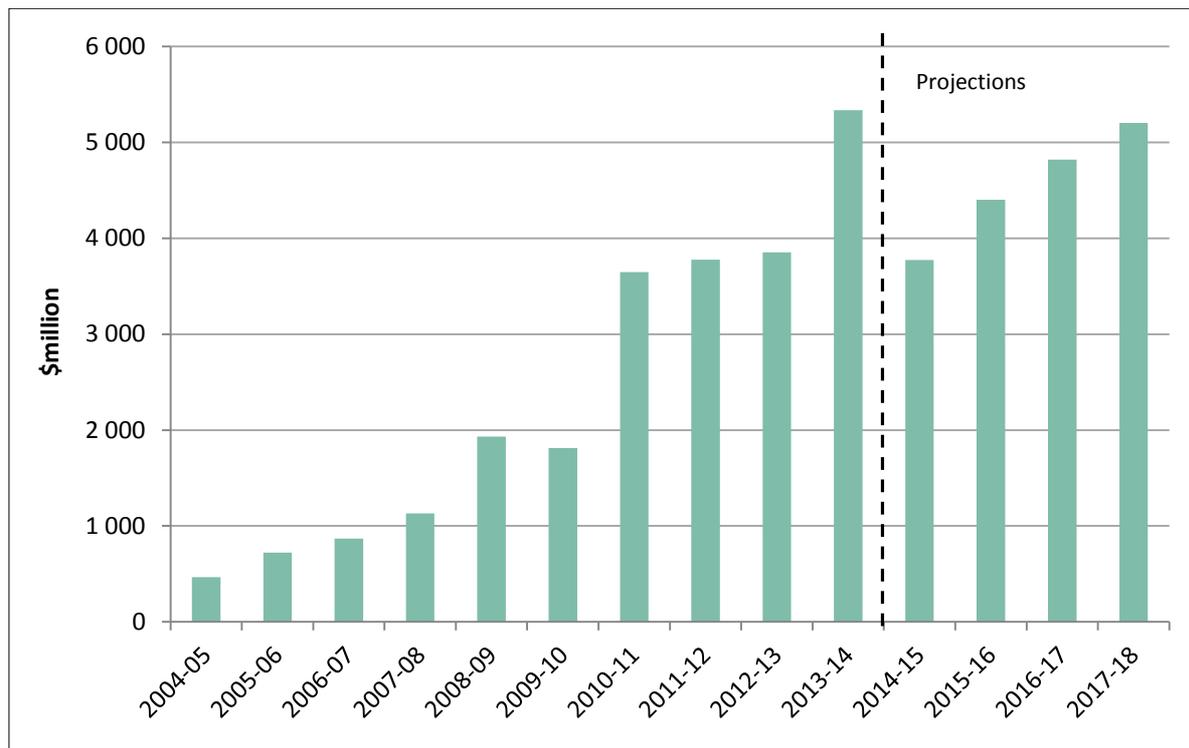
156 Western Australia has said that the change from growth to collapse in iron ore prices has shown that a lagged average approach to HFE can cause significant distortions in State budgeting when either sudden or gradual structural changes occur. It suggests that for the 2015 Review, a distribution based on prospective 2015-16 conditions would be preferable.

157 However, from Figure 1 we observe that the reduction in iron ore royalties from the high in 2013-14 is to a level consistent with the revenues from 2011-12 and 2012-13. We also observe that Western Australia projects a return to growth in iron ore royalties post 2014-15. In addition, we note that while iron ore prices have dropped substantially, increases in volumes and downward movements in the value of the Australian dollar may at least partially offset these price effects.<sup>6</sup>

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<sup>6</sup> Australian iron ore exports are forecast to increase from 678Mt in 2013-14 to 847Mt in 2015-16. Bureau of Resources and Energy Economics, *Resources and Energy Quarterly*, September 2014.

**Figure 1 Western Australia iron ore royalties, actual and projected from 2014-15**



Source: Statistics Digest, WA Department of Mines and Petroleum.  
Western Australia Mid-Year Financial Projections Statement, December 2014.

158 Table 5 shows our lagged three year average approach would assess Western Australia’s iron ore royalty capacity to be \$5.2 billion in 2015-16 (the application year), \$836 million (\$308 per capita), 19% above its latest projection.<sup>7</sup> A contemporaneous assessment could be based on Western Australia’s \$4.4 billion projection. Basing our iron ore assessment on this lower figure would reduce Western Australia’s assessed capacity and increase its GST distribution for 2015-16.

159 Western Australia’s North-West Shelf payments from the Commonwealth reached their apex in 2013-14 and are projected to decline from 2014-15. However, the per capita decline in the payment is much less than the projected decline in iron ore revenues. In the following section, we focus on iron ore. However, the discussion equally applies to the North-West Shelf payments and any other volatile revenues.

<sup>7</sup> Based on the Commission’s mineral by mineral assessment of mining royalties.

**Table 5 Comparison of Western Australia and Commission iron ore royalty data, actual, forecast and assessed**

	Assessment period			Assessed application year (a)	
	2011-12	2012-13	2013-14		
	\$m	\$m	\$m		\$m
2015 Review	3 708	3 767	5 328		5 238
Western Australia budget data	2011-12 Actual	2012-13 Actual	2013-14 Estimated actual	2014-15 Forward estimate	2015-16 Forward estimate
	\$m	\$m	\$m	\$m	\$m
December MYFPS	3 776	3 853	5 337	3 773	4 403
Difference	68	86	9		-836

(a) This is Western Australia’s assessed iron ore capacity for 2015-16 based on the lagged three year average 2015 Review assessment.

Source: Western Australia 2013-14 and 2014-15 Budget Papers, Budget Paper No 3, Table 17, Page 112. Western Australia 2014-15 Mid-Year Financial Projections Statement (MYFPS), Table 5, Page 13. Commission assessments for the 2015 Review.

### **The Commission’s approach and position**

- 160 The Commission’s only objective in recommending relativities is to achieve HFE. Our supporting principles for the development of assessment methods are always to be read in the light of that single objective. We also draw a distinction between the operation of HFE which relates to the fiscal capacities of States, based *inter alia* on a view of the average policy of States, and the budgetary circumstances of States, which reflect how their individual policy choices affect their revenues and expenditures. From an HFE perspective the GST distribution seeks to equalise fiscal capacities, not States’ budgetary circumstances which include their policy choices.
- 161 We have adopted a contemporaneity supporting principle which means that, bearing in mind our objective and other supporting principles such as policy neutrality and practicality, the distribution of GST provided to States in a year should reflect State circumstances in that year as far as possible. We consider that a three year lagged assessment is, at least in most circumstances, the most reliable practical approach to providing a reasonable estimate of State circumstances in the application year. In the June 2014 draft report, setting out our preliminary views, the Commission made reference to the limited exception to this principle, essentially in the case of backcasting major changes in Commonwealth-State financial arrangements, only where the change is reliably known. It noted the considerable difficulties in extending this approach beyond such cases.
- 162 In adopting as the basis for all assessments the data for three historical years, the Commission has accepted that fiscal equalisation is achieved over a run of years with a lag. While imperfect, this approach recognises that State fiscal capacity in any one

year must take account of the operation of the system over a run of years. In this case, the system has been highly favourable to Western Australia and will remain so under continual application of the current methodology. To make a change for any one State or one category without regard to the fiscal position over a run of years will, therefore, compromise HFE.

- 163 We recognise that there is a trade-off between contemporaneity and data reliability. However, we do not consider that State, or independent, forecasts of revenues in the application year are sufficiently reliable for us to use as the basis of the GST distribution. In recent years, the errors in these forecasts have been very large. For example, Western Australia's latest projections for its iron ore royalties are lower than its May budget by \$1.8 billion for both 2014-15 (a 33% reduction) and 2015-16 (a 29% reduction).<sup>8</sup> It is difficult to say to what extent this projection may change again, as well as what the actual outcome will be, as it is dependent upon the interactions of estimates for each of export volumes, movements in the iron ore spot price and movements in the Australian dollar.
- 164 An approach using such unreliable data raises a range of issues, including that it would almost certainly require consequent GST adjustments in future to compensate for errors. This could, itself, then undermine the contemporaneity of future years GST distributions. Box 3 describes how the current equalisation system addresses volatility.
- 165 The Commission also considered whether an alternative treatment would be more appropriate for a volatile revenue such as iron ore. For example, we considered whether a lagged five year average approach for iron ore revenues, which would provide additional smoothing, would be more appropriate. However, an analysis of this approach did not give us confidence that five year averaging would provide an unambiguously improved HFE outcome compared with three year averaging in all future circumstances. For example, five year averaging is less contemporaneous than three year averaging during a sustained trend, such as that contained in the Western Australian *Mid-Year Financial Projections Statement* for the years 2014-15 to 2018-19.
- 166 Finally, notwithstanding our consideration of alternative approaches, we are not convinced that the prospective difference between actual and assessed revenues of \$308 per capita is unusual. Over the last two decades, there have been 26 instances where the difference between a State's assessed fiscal capacity in the assessment period and application year exceeded \$308 per capita. With two exceptions, they relate to Western Australia and the Northern Territory. Most relate to mining revenues, although there were six instances in conveyance revenues. Most occurred during up-cycles (where the State benefitted from the lagged three year average

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<sup>8</sup> Western Australia, *Mid-Year Financial Projections Statement*, December 2014.

assessment), only eight occurred in down-cycles. In Western Australia's case, the difference has exceeded \$308 per capita in 15 of its last 21 mining assessments (to its benefit in all but two years in the mid-nineties).

- 167 On balance, we consider our priority is to achieve HFE, with contemporaneity being a supporting principle. Our view is that HFE is best achieved by assessing all aspects of State activity in the same way. To not do so risks the coherence of the system as a whole.

### **Box 3 Volatility and equalisation**

The current system bases its assessments on the average of the last three years for which final budget outcomes (and other relevant data) are available. To obtain an appropriate reflection of State shares of GST revenue in the application year, the assessment year data are indexed by the expected growth in the size of the GST pool. In the first instance, by taking an average of assessment years, the volatility of a revenue stream in any one of the three years is reduced. A spike or dip in a revenue stream in a year has a lagged one third effect on the relativities over three successive updates to relativities.

When there is not much volatility, the lagged three year average does well in forecasting the application year. However, by definition, the historical average will generally not recognise precisely cyclical movements occurring in the application year, or other spikes or dips.

As a result, the averaging approach may underestimate actual revenue outcomes in the application year and thereby provide more GST than a fully contemporaneous assessment would. However, as each year moves through, there will be compensating overestimates of actual revenue outcomes in the application year, thereby reclaiming previous overprovision of GST revenue. This process, of under and over estimating actual application year outcomes, is a desirable consequence of the averaging approach, and mitigates the need for any formal error corrections. It is an integral, if informal, part of the process of delivering HFE, albeit through a lagged process.

However, in any one year, different revenues and expenses may be over and under compensated, compared with a fully contemporaneous outcome. To the extent that different revenues may be counter-cyclical, this aspect of the system also acts to smooth volatility in GST outcomes. This balance would be at risk should different elements within the system be treated in different ways.

The lagged average approach is less contemporaneous when dealing with larger scale variations in trends (relative to the trend growth rate of the GST pool). Where revenues are trending upwards at an unusually fast pace, as in a mining boom, the lagged average approach routinely underestimates actual revenues in the application year. Conversely, the lagged average approach regularly overestimates actual revenues in the application year during a larger than average downward trend. However, to the extent that these developments are cyclical, rather than ongoing structural trends, the effects of the system in achieving HFE over time apply, irrespective of the relative amplitude of the cycle.

The three year lagged average approach also assists States with budget management, in that any State's GST revenue is not immediately subject to the volatile outcomes in other States. For example, while the equalisation system will see Queensland compensated by the other States for expenses incurred in addressing the natural disasters to which it has been subject, States do not bear this cost unexpectedly in the year in which the disasters occur. States can plan to absorb those costs through reductions in GST revenue as the relevant year moves through the equalisation system. States are well aware of this aspect of the HFE system and manage their budgets accordingly.

The table and graph below show Western Australia's actual iron ore royalties and the assessed iron ore royalties included in the GST distribution for that year from the commencement of the three year averaging in the 2010 Review. When the actual royalties exceed the assessed (a positive difference) Western Australia would have received more GST than it would have if fully contemporaneous assessments had been in place, while a negative difference means it would receive less. In 2015-16 the difference is estimated to be -\$836 million (\$308 per capita).

#### **Actual, projected and assessed Western Australian iron ore royalties**

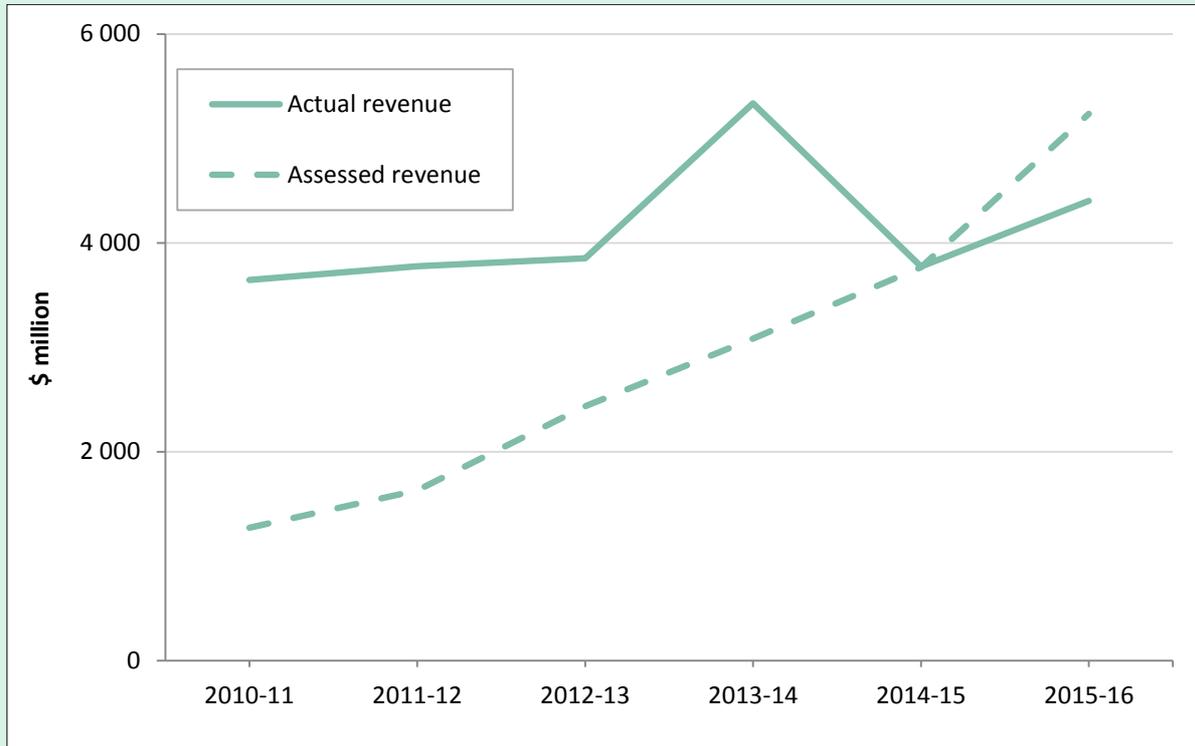
	Actual	Assessed	Difference
	\$m	\$m	\$m
2010-11	3 647	1 272	2 375
2011-12	3 776	1 630	2 146
2012-13	3 853	2 438	1 414
2013-14	5 337	3 084	2 253
2014-15 (a)	3 773	3 768	5
2015-16 (a)	4 403	5 238	-836

(a) Royalties for 2014-15 and 2015-16 are forecasts.

Source: Western Australia budget papers; Commission calculation.

The Commission estimates that over the mining boom, prior to the reduction in its iron ore royalty revenues in 2014-15, Western Australia received around \$7 billion additional GST revenue than it would have if fully contemporaneous assessments had been in place. The net impact on Western Australia would be affected by under or over adjustments in other revenues and expenditures.

### Actual, projected and assessed Western Australian iron ore royalties



In 2014-15 and 2015-16, when actual royalties are expected by Western Australia to return to levels of 2011-12 and 2012-13 before growing again, the HFE system acts to reduce this amount by about \$740 million (as Western Australia keeps its population share of assessed revenues). However, unless iron ore royalty revenues grow at low rates into the future, a significant part of that \$7 billion may remain as a net benefit to Western Australia. This reflects the fact that there is both a structural trend and a shorter term cycle affecting Western Australia's royalty revenues. While the equalisation system has redistributed significant parts of Western Australia's royalty revenues to the other States, the lags have provided it with a large and ongoing benefit.

## CHAPTER 3

### WHY STATE FISCAL CAPACITIES DIFFER

- 1 The fiscal positions of the States differ because of differences in their natural endowments, their economic, demographic and geographic circumstances and the policy choices they make. The Commission calculates what the fiscal capacities of the States would be if the policy differences were removed. We call these the assessed fiscal capacities of States and they are central to our recommended GST distribution. This distribution is designed to equalise the assessed fiscal capacities of the States.
- 2 This chapter identifies the influences that cause differences in the assessed fiscal capacities of the States. It provides insights into why, if policy differences were removed, States would be able to raise different amounts of revenue per capita and why they would need to spend different amounts to provide the same standard of service to comparable communities.

### HOW DIFFERENT ARE STATE FISCAL CAPACITIES?

- 3 Table 1 compares the equal per capita (EPC) distribution of the GST (the distribution States would receive if their fiscal capacities were the same) with the illustrative distribution of the 2015-16 GST based on our recommended 2015-16 relativities. Equalisation leads to \$6 858 million being redistributed, 40% of which is required by the Northern Territory. Box 1 shows an alternative way of showing the redistribution.

**Table 1 Equal per capita and illustrative GST distribution, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Equal per capita	18 200	14 234	11 525	6 425	4 050	1 224	942	599	
Illustrative	17 311	12 755	13 046	1 935	5 525	2 236	1 040	3 351	
Redistribution	-889	-1 479	1 521	-4 490	1 475	1 012	98	2 752	6 858
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Equal per capita	2 370	2 370	2 370	2 370	2 370	2 370	2 370	2 370	
Illustrative	2 254	2 123	2 682	714	3 233	4 328	2 617	13 252	
Redistribution	-116	-246	313	-1 656	863	1 958	248	10 883	284

Note: The total redistribution of \$6 858 million is the sum of the positive (or negative) items in the row.

Source: Commission calculation.

4 The overall assessed fiscal capacity of a State is influenced by differences in its assessed cost of providing services and infrastructure as well as its assessed capacity to raise revenue. The Commission also considers revenue to States via grants from the Commonwealth. A breakdown of the contribution of each of these is illustrated in two different ways in the following tables.

- Table 2 shows the per capita amount each State would need to spend to provide the average level of service and the per capita revenue (including borrowing) that could finance it if average policies were followed. The GST fills the gap between the amount a State needs to spend to deliver the average service, the revenue it could raise (and borrow) and the Commonwealth payments it receives.
- Table 3 shows the Commission's assessments of the per capita amounts above or below the national average each State needs to spend to deliver average services, and the differences in what revenue they can raise at average policy. These assessments reflect their assessed differences in fiscal capacity, which are removed by our recommended GST distribution.

**Table 2 Illustrative assessed budget, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ave
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Assessed expenses	8 981	8 505	9 636	10 163	9 487	10 323	8 825	20 286	9 308
Assessed investment	652	710	717	1 106	524	352	594	1 408	722
Assessed expenditure	9 632	9 215	10 353	11 269	10 011	10 675	9 419	21 694	10 029
Met through:									
Assessed net borrowing	880	893	896	934	868	849	892	895	892
Assessed revenue (a)	5 130	4 783	5 334	8 188	4 408	4 001	4 612	5 007	5 343
Total requirement for assistance	3 622	3 539	4 123	2 147	4 735	5 825	3 915	15 792	3 795
less Commonwealth transfers other than GST	1 368	1 415	1 440	1 433	1 502	1 498	1 298	2 540	1 425
GST requirement	2 254	2 123	2 682	714	3 233	4 328	2 617	13 252	2 370

(a) Assessed revenue includes the net balancing transactions.

Note: This table is derived by taking average State budgets in the assessment years (2011-12, 2012-13 and 2013-14) and projecting them to 2015-16.

Assessed net borrowing is shown without a negative sign. It is an alternative source of funds to meet a State's expenditure requirement.

Source: Commission calculation.

**Table 3 Illustrative difference from average fiscal capacity, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ave
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Average GST revenue	2 370	2 370	2 370	2 370	2 370	2 370	2 370	2 370	2 370
<i>plus assessed differences in:</i>									
Expenses	-327	-803	329	856	179	1 016	-482	10 978	0
Investment	-70	-12	-5	384	-197	-370	-128	686	0
Net lending	11	-2	-4	-42	23	42	-1	-3	0
Revenue	213	560	9	-2 845	935	1 342	731	337	0
Transfers other than GST	57	10	-15	-8	-77	-73	127	-1 115	0
Total assessed differences	-116	-246	313	-1 656	863	1 958	248	10 883	0
GST requirement	2 254	2 123	2 682	714	3 233	4 328	2 617	13 252	2 370

Source: Commission calculation.

##### 5 In summary:

- New South Wales and Victoria require a below average share of GST because they have economic and socio-demographic characteristics that lead to below average assessed use of State services by their State populations and lower assessed unit costs. These spending advantages are partly offset by their below average revenue raising capacities.
- Queensland has a demographic mix that includes relatively large Indigenous and remote populations to which it is more expensive to provide State services than to other people. It has also had to face above average costs due to the prevalence of natural disasters in recent years. This means it needs to spend above average amounts to provide the average level of service. It also has a slightly below average capacity to raise revenue. While it receives above average Commonwealth payments, above average GST is required to fund the bulk of its higher assessed service costs and low revenue capacity.
- Western Australia would incur the second highest expenditure per capita (including investment) to deliver the average suite of State services to its population. However, it would be able to fund an above average proportion of that expenditure from its own sources because it has a very high capacity to raise revenue. It, therefore, requires an amount of GST that is well below average to fund the remaining expenses.
- South Australia, Tasmania and the ACT require more GST per capita than average because they have a weaker capacity to raise their own revenues (that is, their assessed revenues are less than average). South Australia and Tasmania, also incur above average costs in providing the average level of services.
- The Northern Territory would incur the highest expenditure per capita to deliver the average level of service. Despite receiving the highest per capita amount of Commonwealth payments, its very high expenses and low revenue

capacity mean it requires over five times the average per capita GST to provide the average service.

**Box 1 Equalising to the strongest fiscal capacity**

Our standard approach to illustrating equalisation, as shown in Table 3, is to nominally allocate the entire GST pool equal per capita, and then add or subtract GST to reflect whether a State has an above or below average fiscal capacity.

Alternatively, the table below shows how each State’s share of the illustrative GST consists of an equalisation requirement (the amount required to bring each State to the fiscal capacity of the strongest State) and an EPC distribution of the remaining GST among all States. The only difference between these approaches is the way the distribution is presented.

Western Australia had the strongest fiscal capacity over the years 2011-12 to 2013-14. Every other State requires GST to raise its fiscal capacity to that of Western Australia — For example, Victoria would require an additional \$1 410 per capita and the Northern Territory \$12 539 per capita. After capacities are equalised, \$714 per capita remains for distribution to all States in 2015-16.

**Illustrative distribution of 2015-16 GST**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ave
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Equal per capita	714	714	714	714	714	714	714	714	714
Equalisation requirement	1 540	1 410	1 969	0	2 519	3 614	1 904	12 539	1 656
Per capita allocation	2 254	2 123	2 682	714	3 233	4 328	2 617	13 252	2 370

Source: Commission calculation.

**WHAT DRIVES DIFFERENT FISCAL CAPACITIES?**

- 6 Many factors cause a State to have above or below average fiscal capacity. These factors include mineral endowments, levels of business activity, real estate markets, population demographics and population dispersion. Table 4 illustrates how much each State’s assessed fiscal capacity differs from average due to each underlying driver. We explain why and how they affect individual States below.
- 7 More information presented on a State basis is provided in Volume 2, Attachment 5 – Main reasons for difference from EPC, State analysis.

**Table 4 Drivers of illustrative difference from EPC distribution of GST, 2015-16**

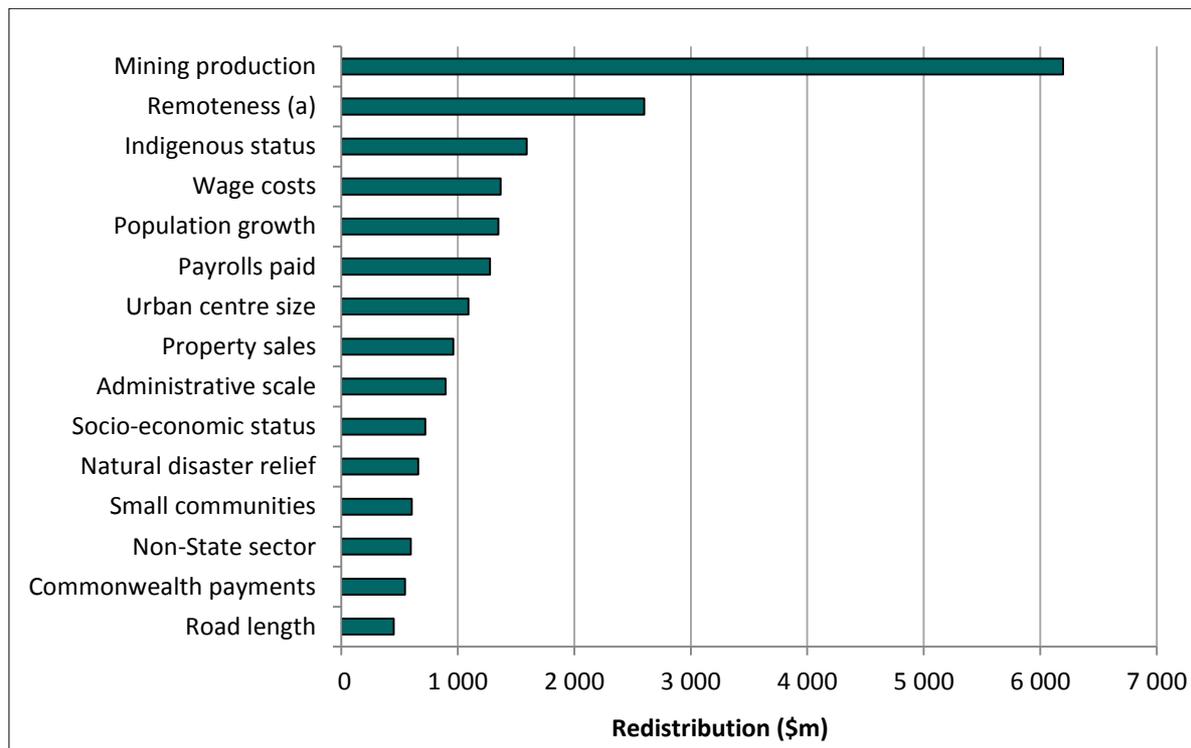
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>Effects of revenue raising capacity</b>									
Mining production	2 262	2 993	-274	-5 911	529	209	205	-12	6 197
Payrolls paid	-145	460	205	-1 114	387	208	-18	16	1 276
Property sales	-762	-25	247	-174	483	177	10	44	961
Land values	36	-122	-31	-269	229	81	53	23	422
Other revenue effects	247	60	-104	-246	-31	19	40	15	382
<b>Total revenue effects</b>	<b>1 638</b>	<b>3 366</b>	<b>43</b>	<b>-7 714</b>	<b>1 598</b>	<b>694</b>	<b>291</b>	<b>85</b>	<b>7 714</b>
<b>Effects of expenditure requirements</b>									
Socio-demographic features									
Remoteness and regional costs	-1 336	-1 113	696	508	130	377	-153	890	2 601
Indigenous status	-118	-1 298	594	190	-120	84	-55	722	1 591
Socio-economic status	376	-79	-64	-293	310	36	-210	-76	722
Other socio-demographic	-43	-368	326	-111	96	27	-35	108	557
Wage costs	348	-629	-464	842	-164	-111	84	93	1 368
Population growth	-737	-151	157	1 011	-268	-156	-37	181	1 349
Urban centre size	323	744	-563	25	-152	-211	-54	-112	1 092
Administrative scale	-443	-280	-173	42	118	225	237	273	896
Natural disaster relief	-216	-236	661	-75	-89	-25	-17	-3	661
Small communities	-311	-274	95	187	63	22	-19	238	605
Non-State sector	-332	-229	25	428	-35	62	59	21	595
Other expense effects	-476	-990	262	491	119	24	-43	613	1 510
<b>Total expense and investment effects</b>	<b>-2 965</b>	<b>-4 904</b>	<b>1 552</b>	<b>3 247</b>	<b>9</b>	<b>356</b>	<b>-243</b>	<b>2 948</b>	<b>8 112</b>
<b>Effects of Commonwealth payments</b>	<b>438</b>	<b>59</b>	<b>-74</b>	<b>-22</b>	<b>-132</b>	<b>-38</b>	<b>51</b>	<b>-282</b>	<b>547</b>
<b>Total</b>	<b>-889</b>	<b>-1 479</b>	<b>1 521</b>	<b>-4 490</b>	<b>1 475</b>	<b>1 012</b>	<b>98</b>	<b>2 752</b>	<b>6 858</b>

Note: For explanations of what each disability factor includes, please see the supporting information to this report located on the [Commission's website](https://www.cgc.gov.au/) (https://www.cgc.gov.au/).

Source: Commission calculation.

8 Figure 1 shows the main underlying drivers contributing to the GST distribution in the 2015 Review. Mining production, the effect of location on service use and unit cost (remoteness and regional costs) and Indigenous status are the three main causes of differences in assessed fiscal capacity.

**Figure 1 Main contributors to the redistribution of GST in the 2015 Review**



(a) Includes remoteness and regional costs.

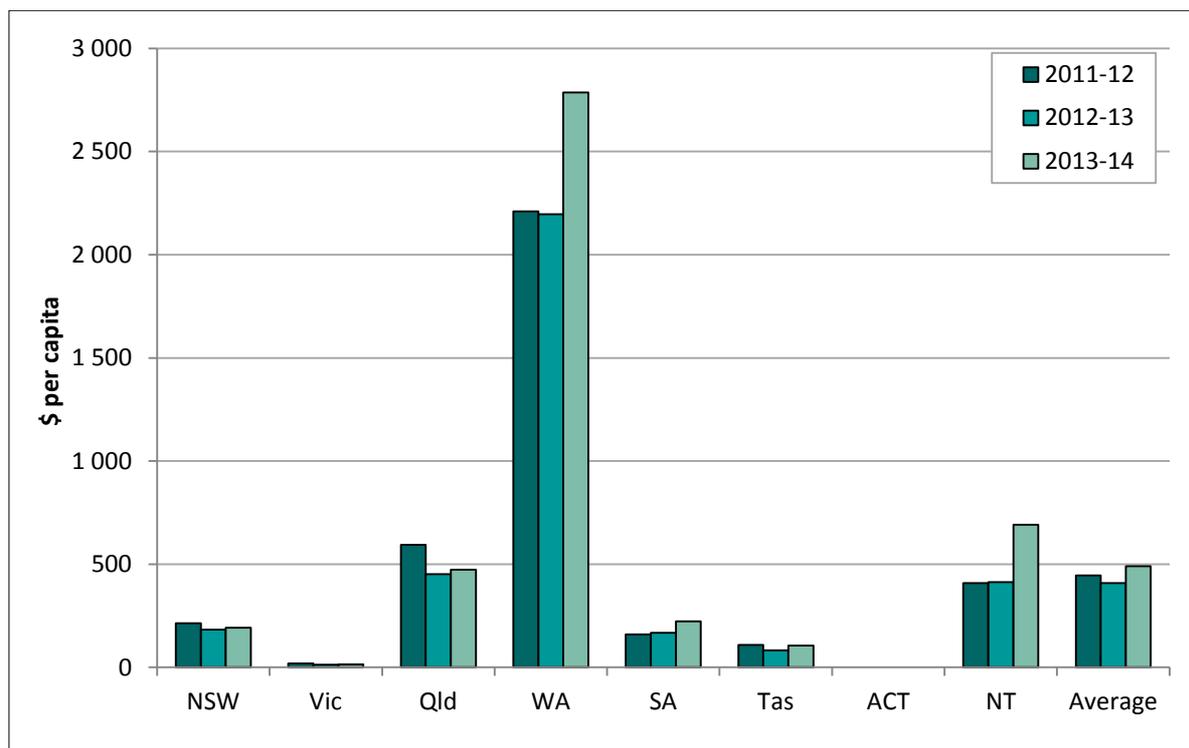
Source: Commission calculation.

## REVENUE

### Mining production

- 9 Mining is unevenly distributed between the States, much more so than all other revenue bases. Therefore, it is responsible for 80%, or \$6.2 billion of the \$7.7 billion redistributed due to differences in States' abilities to raise revenue. This is the largest single driver of differences in State fiscal capacities, even though only 9.7% of State own-source revenue was directly collected from mining during 2011-12 to 2013-14.
- 10 Given the value of mining production in 2011-12 to 2013-14, and the royalty rates States typically applied to different minerals, Western Australia had the capacity to earn 58% of the total revenue States received from this source even though it had only 11% of Australia's population in those years. Queensland also had the capacity to earn above average per capita revenue from mining, with 23% of mining royalty capacity and 20% of the population. Figure 2 illustrates the differences in capacity between the States.

**Figure 2 Assessed mining revenue, 2011-12 to 2013-14**



Source: Commission calculation.

## Other tax bases

- 11 The relative strength of individual tax bases over 2011-12 to 2013-14 has varied in the three most populous States. For example, New South Wales had relatively strong property sales, payroll tax and insurance bases, but a relatively weak motor vehicle registration base. Victoria had a below average payroll base, but its other bases were around average. Queensland had below average payroll and property sales bases, but its other bases were around average.
- 12 Excluding mining, overall tax bases in New South Wales were slightly stronger than average and those in Victoria and Queensland were weaker.
- 13 Western Australia had above average capacity to raise revenue across most of its tax bases.
- 14 With minor exceptions, all other States had below average revenue raising capacities across their tax bases.

## EXPENDITURE

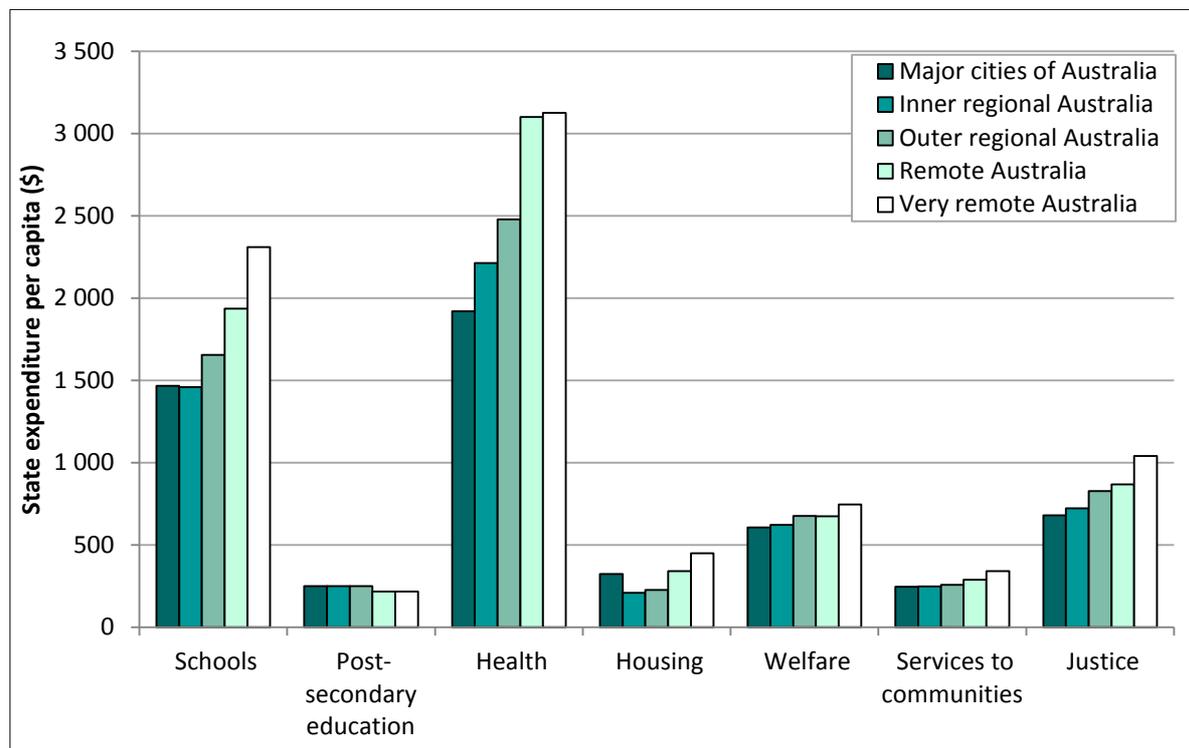
### Socio-demographic features

- 15 Our assessments take account of the effects on State expenses of many socio-demographic characteristics of State populations (such as Indigenous status, location, socio-economic status and age distribution). They can influence State expenses because of differences in how people with particular characteristics use services and also because of differences in the cost of delivering services to those people. We also take account of the effects of population growth on investment and net borrowing requirements.
- 16 The effect of each of these characteristics on the GST distribution depends on the number of people in the relevant group, their interstate distribution and the significance of the population characteristic in influencing State spending patterns.
- 17 Since socio-demographic characteristics often overlap (for example, Indigenous people are disproportionately represented in remote area populations and in the population with low socio-economic status), many calculations use demographic data that are cross-classified by these characteristics to avoid double counting. However, that means that estimates of the impact of individual characteristics depend on how the attribution process is undertaken. In our analysis, we have separated the impacts captured in socio-demographic disabilities from, for example, those captured in urban centre size and population growth disabilities. We have also needed to choose an order in which to undertake the socio-demographic composition analysis. While a different process would change the illustrative impacts, we are confident that the relative importance of different characteristics would not be significantly affected. We have also illustrated how different attributions can tell particular stories in a number of boxes.
- 18 Our estimates of the impact of socio-demographic characteristics on GST shares are also partial estimates because they include only the effects reflected in our calculations. For example, the lower employment rates for Indigenous people may mean States with more Indigenous people have lower payroll tax bases. However, this is not attributed to Indigenous status, but to the size of the payroll base.

### Remoteness and regional costs

- 19 Figure 3 shows that, across many categories, States spend in aggregate, \$2 700 more per capita in very remote areas than in major cities. This can be because people in remote areas use more services than people in accessible areas or because services in remote areas cost more to deliver than services in accessible areas.

**Figure 3 Standardised impact of remoteness and regional costs on average spend by category, 2013-14**

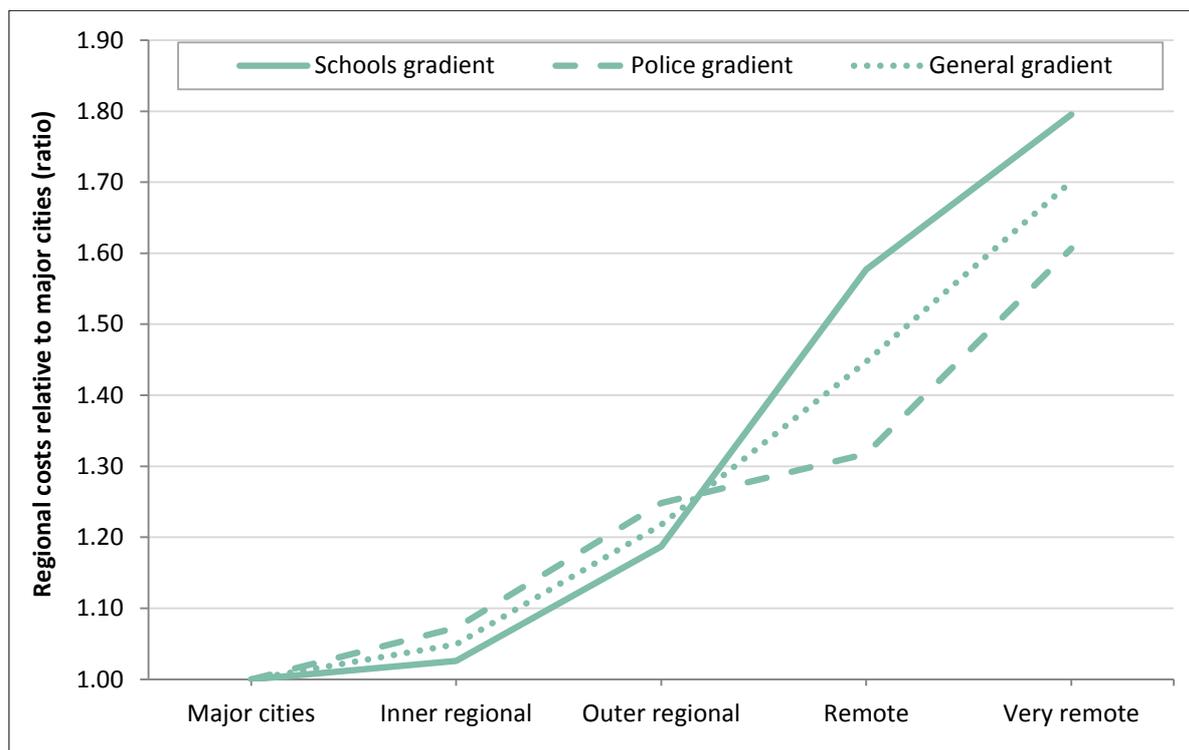


Note: Differences are those attributed to remoteness in socio-demographic composition and regional costs assessments. For example, the impact of larger Indigenous populations in remote areas has been excluded from this impact.

Source: Commission calculation.

- 20 In the assessment of the effects of the socio-demographic composition (SDC) of State populations (remoteness) on State expenses, we mainly capture the impact of differences in use. But this is not exclusively the case because for some categories, such as Health, the impact of use and unit costs are assessed together because of the available data.
- 21 In several categories, the regional costs assessment captures the higher costs in more remote areas. This is shown in Figure 4 and occurs because States offer higher wages, pay higher freight and communications costs, and sometimes provide housing and other subsidies in those areas.
- 22 As a result, States with more remote populations need more GST to deliver the same level of service. Table 5 shows the distribution of population by remoteness areas across States. It shows, for example, that New South Wales, Victoria and the ACT have a much larger share of the population in major cities and inner regional areas than their share of the total population and that Queensland, Western Australia and the Northern Territory have much larger shares of the population in remote and very remote areas than their shares of the total population. Western Australia also has a larger share of the population in major cities than its share of total population.

**Figure 4 Assessed regional cost gradient, 2013-14**



Note: To reflect uncertainty about the applicability of the general gradient, a medium level discount is applied (not reflected in the chart).

Source: Commission calculation.

**Table 5 Distribution of population across States by ABS remoteness areas**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	%	%	%	%	%	%	%	%	%
Major cities	33.7	26.9	17.7	11.9	7.5	0.0	2.3	0.0	100.0
Inner regional	33.9	26.0	22.4	5.4	4.3	7.9	0.0	0.0	100.0
Outer regional	21.5	11.9	33.1	9.1	9.7	8.0	0.0	6.6	100.0
Remote	9.5	1.4	24.7	32.3	14.1	2.5	0.0	15.5	100.0
Very remote	4.1	0.0	28.6	32.4	7.2	1.1	0.0	26.6	100.0
Total	32.0	24.8	20.1	10.9	7.2	2.2	1.6	1.0	100.0

Note: Under the ASGS, Tasmania and the Northern Territory are considered to have no major cities, as neither have cities with a population of more than 250 000 people.

Source: ABS.

- 23 Because the regional distribution of populations varies significantly between States, the remoteness and regional cost assessments have a large impact on the GST distribution, moving over \$1 billion from each of the less remote States of New South Wales and Victoria (and \$153 million from the ACT) to the more remote States, such as Queensland, Western Australia, Tasmania and the Northern Territory.
- 24 The impact of remoteness and regional costs in the context of other aspects of where people live is described in Box 2.

## Box 2 GST impact of where people live, 2015-16

Different aspects of where people live have different impacts on State spending, and on the distribution of the GST. It includes the impact of higher spending in more remote areas because of use and unit cost differences and the higher spending in large cities because they require more transport services than small cities.

The net impact of where people live moves GST from States with less dispersed populations to those with more remote populations. The table below shows how our assessments capture the main influences. It brings together different influences described separately in the main analysis.

### Different impacts on the GST of where people live across States, 2015-16 (a)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Remoteness	-1 336	-1 113	696	508	130	377	-153	890	2 601
Influence of remoteness in SDC	-802	-580	415	147	43	308	-129	599	1 512
Regional costs	-524	-525	287	274	89	105	-60	353	1 109
Location adjustment	-9	-7	-6	87	-2	-36	37	-63	124
Urban Transport – urban centre size (b)	323	744	-563	25	-152	-211	-54	-112	1 092
Small remote communities – utilities	-311	-274	95	187	63	22	-19	238	605
Urban/rural road length	-198	-219	97	192	51	-12	-21	110	450
Other (c)	43	-197	187	-60	-3	38	-42	33	301
<b>Total</b>	<b>-1 479</b>	<b>-1 059</b>	<b>512</b>	<b>852</b>	<b>89</b>	<b>214</b>	<b>-290</b>	<b>1 160</b>	<b>2 827</b>

(a) Unless specified, effects on investment are not included in this analysis

(b) Effects of urban city size on urban transport expenses and investment, excluding investment attributed to population growth.

(c) Includes student transport, non-urban transport and service delivery scale.

Source: Commission calculation.

The table shows that remoteness impacts are somewhat moderated by the transport services and infrastructure assessments, where residents of the largest cities like Sydney and Melbourne are assessed as requiring significantly more to be spent on them at average policy than residents of smaller cities or more remote areas.

The settlement pattern of a State also affects road networks, the extent to which subsidies for electricity and water are required (mainly for people living in small remote communities) and the costs of transporting students to school.

### Indigenous status

25 States spend significantly more per capita on Indigenous people than on non-Indigenous people.

26 Table 6 shows how much more States spent in 2013-14, on average, on an Indigenous person than on a non-Indigenous person. The main services that contribute to the overall higher cost of Indigenous people are justice and health services.

**Table 6 Estimated spending per capita on Indigenous and non-Indigenous people, 2013-14**

	Indigenous	Non-Indigenous	Difference	Ratio
	\$pc	\$pc	\$pc	
Schools	3 244	1 248	1 996	2.6
Post-secondary	500	241	259	2.1
Health	4 561	2 008	2 553	2.3
Housing	1 215	162	1 053	7.5
Welfare - family and child	2 001	130	1 871	15.3
Services to communities	387	71	316	5.5
Justice	3 415	623	2 792	5.5
<b>Total</b>	<b>15 323</b>	<b>4 483</b>	<b>10 840</b>	<b>3.4</b>

Note: Differences in the average spending on Indigenous and non-Indigenous people include differences in the age, remoteness, socio-economic status and other attributes between the two populations.

Source: Commission calculation.

- 27 These spending differences are accentuated by large differences in the distribution of the Indigenous population across States. States whose share of the Indigenous population is greater than their share of the total population, in particular the Northern Territory, Western Australia and Queensland, require significantly more GST to give them the national average capacity to provide services. The Northern Territory is at one extreme. It has 1% of the total population but 10% of the Indigenous population. Victoria is at the other extreme with 25% of the national population, but only 7% of the Indigenous population.
- 28 Overall, the differences in spending and in State shares of the Indigenous population redistribute about \$1.6 billion of GST, mainly from Victoria to Queensland and the Northern Territory.
- 29 It is not meaningful to compare the redistribution due to Indigenous status with the redistribution due to Indigeneity we published in previous updates. This is explained in Box 3.

### Box 3 Indigeneity and Indigenous status

In the 2014 Update, the 'Indigeneity moved' concept measured how different the redistribution would be if States spent the same per capita amount on Indigenous people as *comparable* non-Indigenous people. We can no longer calculate that concept because, unlike in the 2014 Update where we used a single index to measure the socio-economic status (SES) of Indigenous and non-Indigenous people, we now use separate indices.

Under the previous approach, an Indigenous person in the bottom SES quintile could be thought of as being comparable to a non-Indigenous person in the same quintile except for their Indigenous status. However, because the separate indices are now constructed in different ways, an Indigenous person in the bottom SES quintile of their distribution cannot meaningfully be compared to a non-Indigenous person in the bottom SES quintile of their distribution.

So, we have changed the way we measure the elements of socio-demographic composition. We calculate these elements in a stepwise manner.

- i The difference between an EPC assessment, and one that only contains Indigenous status as a disability is the redistribution attributed to Indigenous status.
- ii The difference between an assessment based on Indigenous status, and one that uses Indigenous status and remoteness areas is the redistribution attributed to remoteness.
- iii The difference between that assessment, and one in which the Indigenous population is also disaggregated by SES (measured using IRSEO) is attributed to Indigenous disadvantage.
- iv In the next step, we also disaggregate the non-Indigenous population by SES (measured using NISEIFA), and attribute this change to non-Indigenous disadvantage.
- v Finally, we include age in the disaggregation to measure the impact of age.

This approach means any interactions between elements are attributed to the first to be measured. For example, interactions between Indigenous status and remoteness are classified as Indigenous status. The redistribution attributed to each element is sensitive to the order in which we undertake the analysis, and this is somewhat arbitrary. However, this analysis is only used to illustrate the impacts of different influences on the GST distribution and does not change the overall distribution.

In some cases, it is partial. For example, we have been unable to disaggregate all socio-economic status influences into their Indigenous and non-Indigenous components because some information, such as the Indigenous status of concession card holders, is not available. The table below shows the illustrative impact of the elements of socio-demographic composition, measured in the way set out above.

### Illustrative redistribution from socio-demographic composition, 2015-16

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Remoteness and regional costs	-1 336	-1 113	696	508	130	377	-153	890	2 601
Indigenous status	-118	-1 298	594	190	-120	84	-55	722	1 591
Socio-economic status	376	-79	-64	-293	310	36	-210	-76	722
Non-Indigenous SES	350	-50	-34	-305	245	75	-179	-102	670
Indigenous SES	14	-45	-31	79	27	-60	-12	28	148
Other (a)	12	16	1	-66	38	21	-18	-2	87
Age	21	-167	181	-145	72	-15	23	30	326
Other (b)	-63	-202	145	33	24	42	-58	78	323
<b>Total</b>	<b>-1 121</b>	<b>-2 858</b>	<b>1 552</b>	<b>294</b>	<b>417</b>	<b>524</b>	<b>-453</b>	<b>1 644</b>	<b>4 431</b>

a) Includes SES, where Indigenous status is not separately assessed, for example, with concession card holders.

b) Includes the impact of student loadings embedded in Commonwealth funding of government schools (NERA or Students First funding), people with disabilities and household size.

Source: Commission calculation.

### Socio-economic status

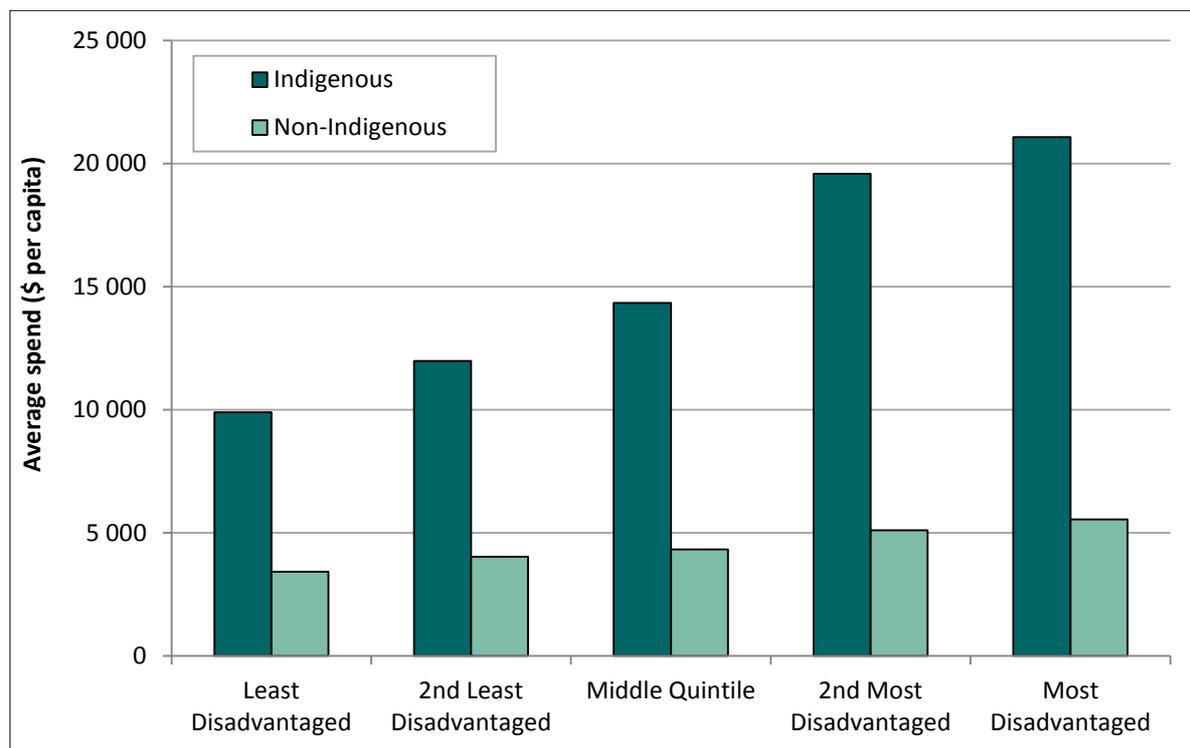
30 States spend more per capita on people of low socio-economic status than high. Figure 5 shows that this is true for both Indigenous and non-Indigenous residents, but the difference is larger for Indigenous residents. Recognising this moves \$806 million in GST to New South Wales, South Australia and Tasmania from the other States.

31 In this review, to better capture the changing characteristics of the Indigenous population, we have used Indigenous and non-Indigenous specific classifications of the Indigenous and non-Indigenous populations. As explained in Box 3, this has required a different approach to understand how the socio-economic status of the Indigenous and non-Indigenous populations affect the GST.

### Socio-economic status of Indigenous people

32 Figure 5 shows States spend twice as much on the most disadvantaged Indigenous people as on the least disadvantaged. This, and the different distribution of Indigenous socio-economic status among States, redistributes GST. Table 7 shows State shares of the total Indigenous population and by socio-economic status.

**Figure 5 State spending by Indigenous status and socio-economic status (a), 2013-14**



(a) Includes spending on schools, post-secondary education, health, housing, family and child welfare, services to communities and justice.

Note: Disadvantage measured using IRSEO and NISEIFA quintiles in all categories except housing, where equivalised income is used. Differences in spending between these groups can reflect differences in age, remoteness or other socio-demographic attributes.

Source: Commission calculation

**Table 7 State shares of Indigenous people by SES quintile, December 2013**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	%	%	%	%	%	%	%	%	%
Least disadvantaged	33.5	18.0	29.8	2.5	2.3	6.4	4.5	3.1	100.0
2nd least disadvantaged	41.4	4.5	26.6	6.3	6.4	9.5	0.0	5.4	100.0
Middle quintile	23.9	8.7	40.6	18.1	3.3	1.0	0.0	4.4	100.0
2nd most disadvantaged	38.9	4.1	27.8	18.5	9.0	0.8	0.0	1.0	100.0
Most disadvantaged	16.9	0.0	16.9	21.4	7.0	0.0	0.0	37.8	100.0
Total	31.0	7.1	28.3	13.2	5.6	3.6	0.9	10.2	100.0

Source: Commission calculation using ABS data request and IRSEO index.

33 As a result, while \$190 million is redistributed to Western Australia because it has a large Indigenous population, another \$79 million is redistributed because that Indigenous population is relatively disadvantaged. On the other hand, Tasmania receives \$84 million because it has the second largest proportion of Indigenous people. However, because its Indigenous population is relatively advantaged, the net impact is reduced to \$25 million (Box 3).

- 34 The Northern Territory receives significant redistributions due to both Indigenous status and remoteness. That is augmented by a small redistribution to reflect the socio-economic status of its Indigenous population. While the Northern Territory's Indigenous population is more disadvantaged than the Australian average, because a large proportion live in remote areas, which nationally are generally of low socio-economic status, much of its higher GST requirement is attributed to remoteness.

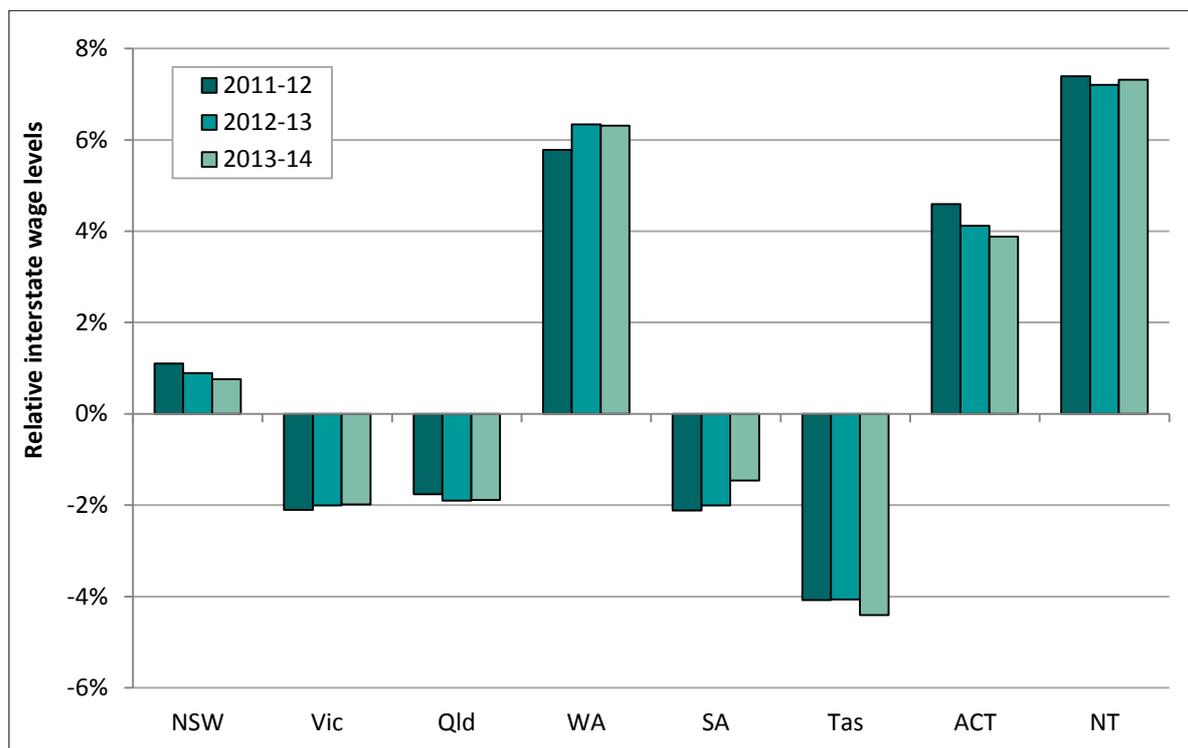
### *Socio-economic status of non-Indigenous people*

- 35 Western Australia, the ACT and Northern Territory have below average proportions of disadvantaged non-Indigenous people, leading to a redistribution towards the States with the largest proportions – New South Wales, South Australia and Tasmania.
- 36 While in past inquiries, we attributed significant amounts of the GST redistributed to Tasmania due to the relative disadvantage of its population, we now attribute much of that to the remoteness of Tasmania. Under the ABS remoteness classification, Tasmania has no population in the low cost major cities category; they are all in higher cost regional or remote areas. Similar to the Northern Territory's experience described in paragraph 34, Tasmania's non-Indigenous population is only slightly more disadvantaged than the Australian average for comparable levels of accessibility or remoteness.

### *Wage costs*

- 37 Interstate differences in the underlying wage pressures States face in paying their employees mean States incur different costs to provide the same level of services and acquire the associated infrastructure.
- 38 Our analysis shows a consistent picture of above average underlying wage levels in New South Wales, Western Australia, the ACT and the Northern Territory, and below average wages in Victoria, Queensland, South Australia and Tasmania. The wage levels for 2011-12 to 2013-14 are shown in Figure 6. The differences in wages between States are relatively small. However, because wage costs represent a large part of State budgets the resultant GST distribution to States with above average wage levels is relatively large.

**Figure 6 Relative wage levels, average of 2011-12 to 2013-14**



Source: Commission calculation.

39 Influences on State fiscal capacities do not always act in the same direction, and may act to at least partially offset each other in different assessments. For example, wage levels also influence the size of payrolls subject to payroll tax. States with above average wages mostly have an above average payroll tax base, which redistributes GST away from those States. Table 8 shows that, for most States, redistributions from payroll tax partially offset redistributions from wage levels.

**Table 8 Offsetting effects of payroll tax base and wage levels on GST distribution, 2015-16**

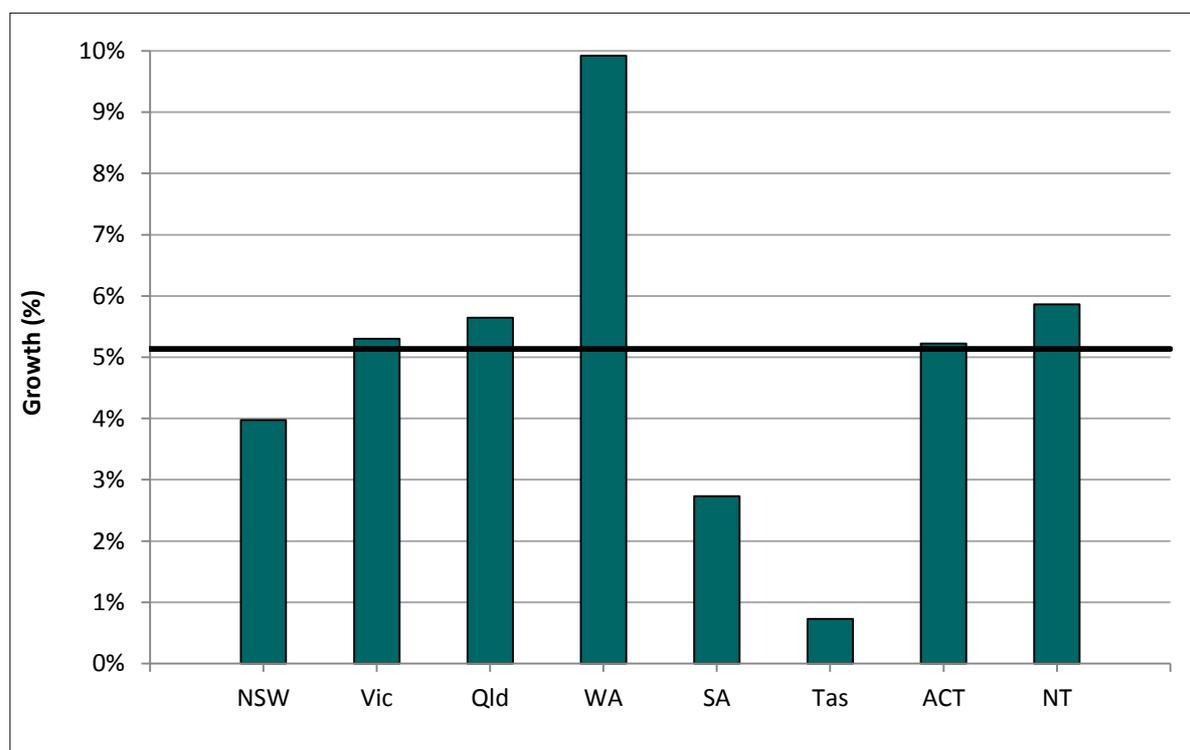
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Payrolls paid	-145	460	205	-1 114	387	208	-18	16	1 276
Wage costs	348	-629	-464	842	-164	-111	84	93	1 368
Combined	203	-169	-258	-272	223	98	67	109	700

Source: Commission calculation.

## Population growth

- 40 Figure 7 shows that over the assessment years of this review, average population growth was 5.1% but it varied from 0.7% in Tasmania to 9.9% in Western Australia. These differences move \$1.3 billion in GST to Queensland, Western Australia, and the Northern Territory (which have experienced well above average population growth in the last three years) and away from the other States.
- 41 Other things being equal, if States with above average population growth, particularly Western Australia, are to have average levels of infrastructure to provide services and average levels of debt, they need to invest and borrow at above average rates per capita. The net impact is to lower their assessed fiscal capacity and increase their GST shares.

**Figure 7** Population growth, December 2010 to December 2013



Source: ABS Estimated Resident Population, Cat. No. 3101.0.

## Urban transport - urban centre size

- 42 Data show that States spend more on providing urban transport services and associated infrastructure requirements in larger cities than in smaller ones. Table 4 shows that New South Wales and Victoria, each with a very large capital city and a number of other larger cities, require more GST (over \$1 billion) to deliver urban transport services, including infrastructure, at average levels. Other States (except Western Australia which requires a small above average amount) require less GST than an equal per capita amount to be able to deliver equivalent services.

## Administrative Scale

- 43 States with small populations have intrinsically higher per capita costs because the minimum functions of government have to be spread over a smaller number of residents. The administrative cost that would be incurred independent of population size has been estimated at \$243 million in 2013-14. This includes costs associated with:
- core head office functions of departments (for example, corporate services, policy and planning functions, but not all staffing and other resources delivering these functions)
  - services provided for the whole of the State (for example, the legislature, the judiciary, the Treasury, the revenue office, and a State museum but not all staffing and other resources delivering these services).
- 44 The minimum costs represent \$33 per capita in New South Wales but \$995 per capita in the Northern Territory. We, therefore, assess a weaker fiscal capacity in the less populous States, and a stronger fiscal capacity in the more populous States, leading to the redistribution of \$900 million in GST from New South Wales, Victoria and Queensland to the other States, as shown in Table 4.

## Natural disaster relief

- 45 Natural disaster relief expenses reflect the net cost to States of damage caused by natural disasters after receiving payments from the Commonwealth under the Natural Disaster Relief and Recovery Arrangements (NDRRA).
- 46 The large redistribution of GST to Queensland of \$660 million is due to the very large expenses Queensland has faced over the last few years, principally relating to the flood and cyclone events of 2011 and 2012. On the other hand, New South Wales' and Victoria's expenses in 2013-14 were more than offset by Commonwealth reimbursements for expenditure incurred in previous years.

## Small communities

47 States provide higher subsidies for water and electricity in small remote communities. States with above average proportions of their populations living in these centres, such as the Queensland, Western Australia and the Northern Territory, require more GST per capita to provide these subsidies at average levels. Table 9 shows State shares of the population living in these communities. Table 4 shows that \$605 million in GST is distributed from New South Wales, Victoria and the ACT to the other States to give equal capacity to deliver these services.

**Table 9 Estimated resident population in small remote communities, December 2011**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	%	%	%	%	%	%	%	%	%
Remote communities of 50-1000 people	5.6	1.8	28.4	25.9	13.3	4.6	0.0	20.5	100.0

Source: Commission calculation based on ERP from ABS data request.

## Non-State service provision

- 48 The non-State sector provides some health and education services similar to those provided by State governments. For example:
- people visit their general practitioner for conditions that they may have otherwise visited an emergency department
  - babies being born in a private hospital alleviates the need for care being provided in the public hospital system
  - parents sending school children to a private school alleviates the need for the State to provide a public school place.
- 49 If a State has an above average provision of these services by the non-State sector we consider it reduces the call on State services and improves the fiscal capacity of the State.
- 50 Western Australia and the ACT have a low level of non-State government health provision given their socio-demographic profile, and we assess this places greater pressure on their public systems, requiring more GST, as shown in Table 10.
- 51 Because some States have more private schools, more general practitioners and more private hospitals than others, the need for comparable State government services is reduced, requiring less GST.
- 52 Victoria, South Australia and the ACT have high levels of private schooling, and so require less GST. Conversely, there is a low level in Queensland, Tasmania and the Northern Territory, which have more public schooling, and hence require more GST.

**Table 10 Illustrative impact of non-State service provision, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Health									
Admitted patients	41	2	-96	45	-10	-15	33	0	121
Emergency departments	-23	-1	-3	20	2	1	4	0	28
Non-admitted patients	-83	8	-6	57	13	5	7	0	89
Community health	-334	-46	8	294	-1	27	65	-13	393
Total health	-399	-37	-99	416	5	18	109	-13	548
Schools	67	-191	124	11	-40	45	-50	34	281
Total	-332	-229	25	428	-35	62	59	21	595

Source: Commission calculation.

## Commonwealth payments

53 Payments from the Commonwealth affect State GST shares because they are available to fund assessed State expenses. States with above average per capita receipts need less GST to fund their services and States with below average per capita receipts require more. Table 11 shows that payments for schools, investment, services to communities and roads have the greatest impact on the GST distribution.

**Table 11 Revenue impact of Commonwealth payments, by category funded by payment, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Schools education	134	90	-161	30	9	-33	17	-87	280
Post-secondary education	-10	32	-10	-4	-4	-2	-1	-1	32
Health	66	20	9	-9	-15	1	-4	-67	96
Housing	3	1	1	1	1	0	0	-6	6
Welfare	4	5	5	5	-11	-2	2	-8	21
Services to communities	54	-44	85	43	-114	-26	7	-6	190
Justice	0	0	0	0	0	0	0	0	0
Roads	38	65	13	-28	0	-6	-29	-53	116
Transport	25	23	15	-74	7	2	1	1	74
Services to industry	-2	5	-7	4	1	-1	1	0	11
Other expenses	5	-2	4	2	-1	-1	0	-7	10
Investment	122	-136	-28	9	-5	31	55	-48	217
Total	438	59	-74	-22	-132	-38	51	-282	547

Source: Commission calculation.

54 New South Wales requires more GST because of below average receipts from a range of payments but mainly from schools and investment related payments. On the other hand, the Northern Territory needs less GST because of its above average receipts from most payments. The large payment to South Australia for services to communities (primarily Water for the future), is responsible for most of the GST redistributed away from it.

55 The payments with the largest impact are shown in Table 12.

**Table 12 Revenue impact of Commonwealth payments, by payment, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Nation building program - Investment - Rail	152	-242	105	44	-75	-5	13	8	322
Building Australia fund - Roads	-195	46	-74	77	73	38	35	0	269
National schools SPP - Government education	99	83	-134	36	13	-30	16	-83	247
Water for the future	52	-46	84	45	-114	-26	7	-3	189
Nation building program - Road maintenance	38	65	13	-28	0	-6	-29	-53	116
Remote Indigenous housing (a)	48	50	-26	-51	1	4	3	-30	107
Nation building plan for the future (b) - Rail	27	21	17	-75	6	2	1	1	75
Health and hospital fund	69	-10	-12	-33	1	-4	3	-12	72

(a) This payment has an impact from 2013-14 only.

(b) Building Australia Fund.

Source: Commission calculation.

56 Box 4 illustrates the relationship between State GST requirements and the proportion of those that are met by payments for specific purposes and the GST.

#### Box 4 Total Commonwealth assistance and equalisation

Spending and investing by States far exceeds the revenue they raise themselves. The difference is funded largely by payments from the Commonwealth — in the form of payments for specific purposes (such as education, health, skills and workforce development, housing, disability and infrastructure) as well as through the distribution of GST revenue.

Because different States have different expenditure requirements and different capacities to raise revenue, the total amount they each require to achieve equal fiscal capacities also varies.

The table below shows how much in total States need to receive from the Commonwealth, compared to the average of all States (across 2011-12 to 2013-14) to achieve fiscal equality. New South Wales, Victoria and Western Australia required less than the average per capita total Commonwealth funding assistance while Queensland, South Australia, Tasmania, the ACT and the Northern Territory required more than the average total Commonwealth funding assistance.

The table also shows the distribution of the payments for specific purposes and the GST requirement.

##### Relative Commonwealth funding assistance per capita, average 2011-12 to 2013-14

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ave
	%	%	%	%	%	%	%	%	%
Total commonwealth assistance (a)	95.3	94.0	107.8	59.9	123.0	147.3	103.7	386.0	100.0
Payments for specific purpose (b)	96.2	100.2	101.1	99.0	105.8	102.2	95.8	162.1	100.0
GST requirement	94.7	89.3	112.8	30.0	135.9	181.9	110.0	557.1	100.0

(a) The assessed total requirement for Commonwealth assistance is the average over the three assessment years, expressed as a proportion of the average.

(b) Includes national SPPs and NPPs.

Source: Commission calculation.

For example, Western Australia's substantially above average own-source revenue raising capacity means it has the lowest requirement for Commonwealth funding to meet its spending needs and achieve fiscal equalisation, at 60% of the national average. Western Australia received marginally below the average level of assessed payments for specific purposes from 2011-12 to 2013-14 and is assessed as needing only 30% of the average GST payment.

Put another way, Western Australia's strong revenue raising capacity means its payments for specific purposes cover 67% of its total assessed Commonwealth assistance, with its GST requirement making up the remaining 33%. In contrast, the Northern Territory's very high cost of delivering the average level of service means its well above average per capita payments for specific purposes meet less than 16% of its total assessed Commonwealth assistance, with the GST having to meet the remainder.

## MAIN FISCAL DIFFERENCES BY CATEGORY

57 State fiscal capacities vary by category of revenue and expenditure because the different drivers, discussed in the first part of this chapter, affect them differently. For example, differences in socio-economic status of State populations have a large impact in the Health category but no impact in the Services to industry category. Table 13 provides a summary of how the fiscal capacity of each State differs from equal per capita in relation to each revenue and expenditure category. Volume 2 explains how the Commission has measured differences in State fiscal capacities for each category, the main drivers for each and how they would cause each State to raise or spend more or less than the average if they all adopted average revenue raising and service delivery policies.

**Table 13 Contribution of each revenue and expenditure category to differences in fiscal capacity, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Payroll tax	-145	460	205	-1 114	387	208	-18	16	1 276
Land tax	36	-122	-31	-269	229	81	53	23	422
Stamp duty	-638	-9	198	-314	514	190	18	42	961
Insurance tax	-146	101	11	23	-36	26	14	8	183
Motor taxes	270	-57	-66	-128	-26	-20	18	9	297
Mining revenue	2 262	2 993	-274	-5 911	529	209	205	-12	6 197
Other revenue	0	0	0	0	0	0	0	0	0
<b>Total revenue</b>	<b>1 638</b>	<b>3 366</b>	<b>43</b>	<b>-7 714</b>	<b>1 598</b>	<b>694</b>	<b>291</b>	<b>85</b>	<b>7 714</b>
Schools education	-167	-1 014	516	279	-1	106	-86	367	1 268
Post-secondary education	-9	-60	4	28	0	2	8	26	69
Health	-531	-987	70	557	173	266	-68	518	1 586
Housing	-42	-115	19	38	23	10	-17	85	174
Welfare	26	-443	206	-72	38	79	-85	251	601
Services to communities	-407	-382	113	229	48	15	-25	410	814
Justice	-195	-635	188	238	-19	25	-47	444	895
Roads	-302	-284	150	289	79	-16	-51	135	653
Transport	277	345	-250	24	-118	-143	-62	-73	646
Services to industry	-145	-119	35	197	12	6	-17	32	281
Other expenses	-776	-670	479	226	5	153	288	294	1 446
Depreciation	-240	-459	68	288	66	21	-30	286	730
<b>Total expenses</b>	<b>-2 511</b>	<b>-4 823</b>	<b>1 599</b>	<b>2 320</b>	<b>307</b>	<b>525</b>	<b>-192</b>	<b>2 776</b>	<b>7 526</b>
Investment	-539	-71	-25	1 042	-337	-191	-51	174	1 215
Net borrowing	85	-9	-21	-115	39	22	0	-1	147
SPPs and NPPs	438	59	-74	-22	-132	-38	51	-282	547
<b>Total</b>	<b>-889</b>	<b>-1 479</b>	<b>1 521</b>	<b>-4 490</b>	<b>1 475</b>	<b>1 012</b>	<b>98</b>	<b>2 752</b>	<b>6 858</b>

## CHAPTER 4

# CHANGES IN THE GST DISTRIBUTION

## HOW HAS THE GST DISTRIBUTION CHANGED?

- 1 Table 1 shows the differences between the estimated GST distribution for 2014-15 and the illustrative distribution for 2015-16.

**Table 1 Distribution of the 2014-15 GST and the illustrative 2015-16 GST**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Estimated 2014-15	16 774	11 828	11 704	2 248	4 955	1 914	1 097	3 189	53 710
Illustrative 2015-16 (a)	17 311	12 755	13 046	1 935	5 525	2 236	1 040	3 351	57 200
Change caused by new:									
Population (b)	-34	26	24	32	-33	-26	1	10	0
Pool (c)	1 088	770	762	148	320	123	71	208	3 490
Fiscal capacities (d)	-517	131	556	-494	284	225	-129	-56	0
Total change (\$m)	537	927	1 342	-313	571	322	-57	161	3 490
Total change (\$pc)	70	154	276	-116	334	623	-143	638	145

- (a) Obtained by applying the 2015 Review relativities to estimated State populations for December 2015 and estimated GST revenue for 2015-16.
- (b) Effects on the distribution of 2014-15 GST revenue of using State populations for December 2015 instead of December 2014, with 2014 Update relativities.
- (c) Effect of applying the 2014 Update relativities to the estimated growth in GST revenue for 2015-16.
- (d) Effects on the distribution of the 2015-16 GST revenue of using the 2015 Review fiscal capacities instead of 2014 Update fiscal capacities.

Source: 2014-15 GST revenue and the December 2014 populations are taken from the *Australian Government Budget, Mid-Year Economic and Fiscal Outlook 2014-15*. December 2015 populations are obtained from the Commonwealth Treasury by special data request.

- 2 The two distributions differ for the following reasons:
- State populations have changed — the illustrative 2015-16 distribution is based on estimated State populations as at December 2015 whereas the 2014-15 distribution is based on populations for a year earlier. States shares of the total population differ slightly between these two dates and affect the total GST allocation for each State.
  - The size of the GST pool available for distribution has changed. Any growth in the pool is distributed among States using their relativities and population shares.

- The relativities used to distribute the GST have changed, reflecting changes in our assessed fiscal capacities of States — the illustrative 2015-16 distribution is based on the relativities recommended in this report whereas the 2014-15 distribution is based on relativities derived in the 2014 Update.<sup>1</sup>
- 3 Other estimates of the 2015-16 GST distribution are available, in particular, those in State budget forward estimates. We have not sought to comment on those estimates or their basis.
- 4 The Commission’s work affects only the changes in the relativities which we derive from assessed State fiscal capacities. Those changes are the subject of the rest of this chapter.

## CHANGES TO FISCAL CAPACITIES

- 5 Table 2 illustrates that there have been changes to both assessed revenue and expense requirements, with expense requirements being the largest driver of change in New South Wales, Queensland and the ACT. Changes in revenue requirements led to large changes in redistribution for Victoria and Western Australia.

**Table 2 Composition of change in assessed fiscal capacities since the 2014 Update**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Expense requirement	-489	-235	528	141	109	54	-65	-43	832
Investment requirement	-40	244	-250	269	-143	-86	-44	51	563
Net borrowing	204	-8	-66	-253	84	44	-7	2	334
Revenue capacity	-194	420	322	-703	104	57	4	-10	907
Commonwealth payments	3	-290	21	53	130	157	-17	-56	364
<b>Total change</b>	<b>-517</b>	<b>131</b>	<b>556</b>	<b>-494</b>	<b>284</b>	<b>225</b>	<b>-129</b>	<b>-56</b>	<b>1 196</b>

Note: The total change shown here is equivalent to the total change in fiscal capacities shown in Table 1. This total excludes the impact of change to populations and the GST pool.

Source: Commission calculation.

- 6 The rest of our analysis considers three influences that produce these changes in State requirements for GST:
- **Changes in methods.** The Commission reviews the methods used to allocate the GST about every five years. This report represents the findings of such a review and as a result illustrates the impact of major changes in method from those used in our 2014 Update.
  - **Revisions to data.** Sometimes States and other data providers revise and correct historical data that we have used in calculating relativities. The

<sup>1</sup> References to changes over time generally reflect the change over the assessment years, from 2010-11 to 2013-14. They are not intended to imply current or prospective movements.

Commission usually adopts the most current revised data and this affects the GST distribution.

- **Changes in circumstances.** State populations and economies change over time. To generate relativities for this report, we have used data for the period 2011-12 to 2013-14. Data for the 2014 Update covers 2010-11 to 2012-13. In generating the relativities for this report, we move a year forward in the three year frame of data used, effectively replacing 2010-11 data with 2013-14 data. This invariably produces changes in assessed fiscal capacities and relativities.

- 7 The impacts of these three types of change on the GST distribution are shown in Table 3.
- 8 Changes in State circumstances have been the major cause of the redistribution, largely because of the continuing growth of Western Australia’s assessed revenue raising capacity and Queensland’s spending on natural disaster relief (and the consequential impacts on other States). Changes in methods have also had a large impact on the GST of most States while data revisions have a less important impact for all States except New South Wales and Western Australia.

**Table 3 Source of change in assessed fiscal capacities since the 2014 Update**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Change to methods	-105	423	-186	-255	74	89	-93	53	639
Revisions to data	-157	-44	-45	202	58	-7	-47	40	300
Change in State circumstances	-254	-249	787	-441	152	144	10	-149	1 092
<b>Total</b>	<b>-517</b>	<b>131</b>	<b>556</b>	<b>-494</b>	<b>284</b>	<b>225</b>	<b>-129</b>	<b>-56</b>	<b>1 196</b>

Note: The redistribution is calculated as the sum of the positive (or negative) items in the row. The distinction between revisions to data and change to method is approximate, as some changes cannot be readily isolated from others.

Source: Commission calculation.

## IMPACT OF METHOD CHANGES

- 9 In the 2010 Review, the Commission undertook a complete and extensive evaluation of its methodology, leading to some large changes, such as a direct assessment of States’ infrastructure requirements. In this review, conducted over a shorter timeframe, we have adopted a more focussed approach. We have directed attention to areas where, in consultation with the States, we considered change may be most warranted. Changes have also been made where the terms of reference require it, State circumstances have changed, better data have become available or where our review of the evidence, including in State submissions, have persuaded us to do so.
- 10 The rest of this section briefly summarises the main changes, the impact of which is shown in Table 4. It also provides a comprehensive summary of the changes that

have occurred in each category and disability assessment since the 2010 Review.<sup>2</sup> Further details on the changes and the reasons for them can be found in the relevant chapters in Volume 2.

**Table 4 Major changes in methods on the illustrative GST distribution, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Urban transport (investment)	129	332	-275	90	-143	-78	-23	-32	551
Health	139	-98	57	-225	57	92	-31	9	354
Urban transport (net expenses)	103	208	-179	21	-20	-70	-23	-40	332
Net borrowing	183	3	-65	-219	68	36	-7	2	292
Welfare	51	31	20	132	-163	-46	25	-49	259
Mining	-13	19	154	-230	39	9	1	21	243
Commonwealth payments	-50	187	-29	-116	18	27	-13	-24	232
State-funded school education	-135	45	13	-68	99	26	-12	33	216
Other	-511	-304	119	361	119	91	-10	134	825
<b>Total method changes</b>	<b>-105</b>	<b>423</b>	<b>-186</b>	<b>-255</b>	<b>74</b>	<b>89</b>	<b>-93</b>	<b>53</b>	<b>639</b>

Note: The analysis shows the impact of the Commission introducing the method changes in the 2014 Update years. The redistribution is calculated as the sum of the positive (or negative) items in the row. Totals may not add due to rounding.

Source: Commission calculation.

#### 11 Changes to methods were required for several reasons:

- Our terms of reference asked us to review and make appropriate changes to some specific categories or disabilities. As a result, we have made changes to the way we assess mining revenue, schools, welfare, urban transport infrastructure, Indigenous status and some Commonwealth payments.
- Changes in Commonwealth-State relations. Changes to Commonwealth funding for schools and health was one motivation for our changes to the assessment of State schools and health expenses. The changes we made to our welfare assessment reflect changes in responsibility for aged and disability care.<sup>3</sup>
- A review of the scope of State general government services. This resulted in us bringing the operations of housing and transport public non-financial corporations (PNFCs) into the general government sector, with resultant changes to the State budget data we use and the assessments for housing, urban transport and their associated infrastructure. Box 1 summarises the impact of these changes.
- Improvements in data availability. These resulted in major method changes, particularly for health, where Independent Hospital Pricing Authority (IHPA)

<sup>2</sup> The Commission usually does not make changes in methods between reviews. Minor changes since the 2010 Review have been discussed in past update reports and are not addressed here.

<sup>3</sup> Further changes will also occur when the National Disability Insurance Scheme enters its transition phase, probably in the 2016 Update.

data enabled a more direct assessment of health needs and schools, where the availability of the Australian Curriculum, Assessment and Reporting Authority (ACARA) dataset allowed us to better estimate the drivers of State expenses. It also substantially changed our estimates of regional cost gradients affecting State expenses.

## Urban transport investment

- 12 A new assessment of urban transport investment has been introduced. This recognises that States need different quantities of urban transport infrastructure and the costs of that infrastructure vary across States. In particular, the assessment recognises larger cities need more infrastructure per capita to deliver the more complex transport systems they require, such as rail networks.
- 13 Because the Commission considers the provision of urban transport services are more like general government services than commercial enterprises, we have consolidated the provision of urban transport services by general government and their PNFCs. This facilitated the development of the new assessment.
- 14 The new assessment also responds to Clause 2 (c) of our terms of reference which asks us to have regard to the recommendations of the final report of the *GST Distribution Review* to develop a new transport infrastructure assessment, including, if appropriate, a framework to identify payments for nationally significant infrastructure projects which should affect the relativities only in part (Recommendation 6.1). We have not developed a framework to identify payments for nationally significant infrastructure projects but have decided 50% of payments relating to projects on the national road and rail networks, as advised by the Department of Infrastructure and Regional Development, will not impact on the relativities.
- 15 The new urban transport infrastructure assessment redistributes \$551 million to New South Wales, Victoria and Western Australia, away from the other States. The changed treatment of Commonwealth rail payments is discussed in the section on Commonwealth payments.

## Box 1 Treating urban transport and housing as general government activities

The Commission decided to treat urban transport and housing as general government activities because they have strong similarities to the services provided by General Government agencies, even when they are delivered by State public non-financial corporations (PNFCs).

This decision had a number of implications for the assessments as shown in the table.

- **The assessments of recurrent expenditures.** They are based on the net expenses for urban transport and housing (including depreciation) instead of State subsidies to the providers.
- **The investment assessment.** Now includes the effects of population growth and State specific drivers (such as the effect of city size on urban transport and income, Indigenous status and remoteness on housing) on the infrastructure required to provide the services.
- **The net borrowing assessment.** Is affected by the reduction in State financial assets brought about by the removal of State equity in urban transport and housing corporations.

### GST effects of treating urban transport and housing as general government activities

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>Expenses (a)</b>									
Urban transport	87	204	-157	12	-29	-67	-15	-36	303
Housing and its depreciation	-9	-25	3	10	5	2	-4	18	38
<b>Investment assessment</b>									
Urban transport	129	332	-275	90	-143	-78	-23	-32	551
Housing	-75	-35	17	101	-21	-12	-1	27	144
<b>Net borrowing</b>	183	3	-65	-219	68	36	-7	2	292
<b>Total</b>	314	479	-477	-7	-120	-118	-50	-22	793

(a) GST effects for expenses differ from those shown in Table 4 because method changes unrelated to the treatment of these expenses as general government activities is excluded from this table.

Source: Commission calculation.

## Health

16 A single Health category has been created that combines expenses from all health services. We adopted this approach when we noted a strong similarity in the assessment approach, data sources and the services being provided in the different health components.

17 We have also developed a more direct method of assessment for each health component which recognises the main drivers of expenses as the socio-demographic profile of State populations and the impact of the private sector. In the last review,

non-admitted patient and community health expenses were assessed using a subtraction method to take account of differences in the socio-demographic profile of States which lead to differences in spending and how non-State services provided a substitute for State service provision. The direct method assesses the impact of the private sector by calculating a non-State sector adjustment that relates to the proportion of expenses that are assessed as substitutable.

- 18 Data on the impact of the socio-demographic composition of State populations are now sourced from IHPA. We consider that these data provide us with a more accurate estimate of the net cost for each population group. The 2010 Review assessment used data from the Australian Institute of Health and Welfare (AIHW).
- 19 With the move to a direct method of assessment, health expenses are now assessed net of user charges, which is consistent with our assessment of the socio-demographic spending net of user charges.
- 20 These changes have redistributed \$354 million away from Victoria, Western Australia and the ACT to the other States.

### Urban transport (net expenses)

- 21 For the purposes of HFE, we have treated the provision of urban transport services, including those provided through PNFCs, as a general government function. This is because they are not commercial operations and the States are responsible for delivering them, deciding the level of services, setting the revenues to be collected and meeting deficits. The scope of the assessment has changed to cover urban transport net operating expenses instead of subsidies as in the 2010 Review.
- 22 This change has redistributed \$332 million to New South Wales, Victoria and Western Australia, away from the other States.

### Net borrowing

- 23 Our decision to treat the provision of urban transport and housing services as general government activities has a consequential impact on this assessment.
- 24 Because we now treat the assets and liabilities of PNFCs providing those services as State assets and liabilities our measure of State financial worth has moved from showing States as having net financial assets to having net debt.
- 25 States with faster growing populations are now seen as being able to borrow more (at average per capita debt levels) than States with more stable populations because each new resident can acquire new debt. This reduces those States' need for GST revenue relative to States with slower growing populations and GST has been redistributed from the growth States of Queensland, Western Australia and the ACT to the other States.

- 26 The changed treatment of housing and urban transport reduced our concerns that the assessment may not capture some disabilities and we reduced the discount from 25% in the 2010 Review to 12.5%.

## Welfare

- 27 The assessment of welfare services has been changed mostly because of changes in Commonwealth-State responsibilities.
- 28 All States, other than Western Australia, have passed responsibility for aged care services and disability services for older people to the Commonwealth. We have decided that, as this is no longer a State function, it should no longer affect any States' fiscal capacities. To comply with the terms of reference, under average policy, we have assessed Western Australia's expenses as equal to an imputed level of Commonwealth funding. There is no impact on its fiscal capacity.
- 29 We will also change our disability services assessment to reflect the introduction of the National Disability Insurance Scheme (NDIS). As the NDIS comes into effect, we will assess States' expense streams separately. States will be contributing to the NDIS and continuing to provide some services directly to people with a disability. State contributions to the NDIS in a transition year will be assessed according to their shares of the total number of people eligible to be covered by the NDIS in that year if the scheme were fully operational. We now also use the same shares of the NDIS eligible population in each State for our assessment of existing disability services.
- 30 Because we consider the implementation of the NDIS a major change in Commonwealth-State relations if suitable data are available, we will backcast the change, probably from the 2016 Update. Only the change to the way we assess existing disability service expenses has an impact on the 2015-16 relativities.
- 31 Minor changes have been made to the way family and child welfare and other general welfare have been assessed. A more direct assessment of disabilities has been undertaken using more reliable administrative and other data.
- 32 The changes have moved \$259 million from South Australia, Tasmania and the Northern Territory to the other States.

## Mining revenue

- 33 We have replaced the two-tier mining assessment with a mineral by mineral approach. The mineral by mineral approach involves separately assessing a mineral if it is material to do so. This approach results in separate assessments for seven minerals, including iron ore, coal and petroleum. We intend to continue to assess each of these seven minerals separately until the next review. However, we will monitor any changes States might make to their revenue raising policies, and any changes in capacity to ensure this assessment approach remains appropriate.

- 34 The terms of reference constraint in past updates, requiring iron ore fines to be included with low royalty rate minerals, no longer operates in this review. As a result, the actual royalty rate for iron ore is now applied to their value of production.
- 35 Queensland and Western Australia have been most affected by these changes which have worked in opposite directions. The change in the assessment approach redistributed GST from Queensland to Western Australia. The removal of the constraint has moved GST from Western Australia to all the other States. The net impact of the two changes has been to move \$243 million GST, mostly from Western Australia to the other States.

## Commonwealth payments

- 36 Due to major changes in Commonwealth-State financial relations, and how our terms of reference have told us to respond to those changes, we have changed the backcasting of the major payments affecting school education, health and aged care. For more information on the backcasting arrangements for these payments see the relevant expense assessment chapters (Schools education, Health, and Welfare).
- 37 Terms of reference also required us to ensure 50% of selected Commonwealth payments for major roads not affect the relativities. We have changed the treatment of those that were paid in the assessment years.
- 38 We also decided 50% of Commonwealth rail infrastructure payments for projects on the national rail network should not affect the GST distribution. This change treats national network rail payments on the same basis as national network roads payments. This change in treatment between the 2014 Update and 2015 Review increased Victoria's assessed GST distribution because it received an above average share of those rail infrastructure payments in the assessment years. The opposite is the case for most other States.
- 39 Overall, the changes to the treatment of Commonwealth payments moved \$232 million of GST to Victoria, South Australia and Tasmania from the other States.

## Schools education

- 40 We have a new and more reliable method using ACARA data for estimating the spending States undertake on students from different socio-economic groups, geographic regions and school sectors.
- 41 We have also moved to actual enrolments as our broad measure of use for all age groups because State policy influences on enrolments are now considered minimal. In the 2010 Review, we calculated an average policy neutral number of pre- and post-compulsory students.

- 42 To comply with the National Education Reform Agreement (NERA) instruction in the terms of reference to avoid unwinding the recognition of educational disadvantage embedded in the NERA funding arrangements, we have created a separate component for Commonwealth funding for government schools. We have assessed expenses based on the average School Resourcing Standard (SRS) amount for government students in each State. We have also assessed NERA funding for non-government schools in a way that does not affect the GST distribution.
- 43 These changes increased the GST shares for Victoria, Queensland, South Australia, Tasmania and the Northern Territory and decreased the shares for New South Wales, Western Australia and the ACT, due to the partially offsetting effects of the move to actual enrolments and the combined effects of new Indigenous, remoteness and non-government student loadings.

## Socio-demographic composition

- 44 There have been two main changes to the way we capture the impact on State expenses of differences between the States in the socio-demographic composition of State populations in this review.
- We have used ABS remoteness areas instead of the State based Accessibility/Remoteness Index of Australia (SARIA) to better capture the differences in the impact that remoteness has on State spending. The same approach has been adopted in the regional cost assessment. The most significant impact is that we now consider New South Wales to be more accessible, as Newcastle and Wollongong are now classified as major cities, while Tasmania and the Northern Territory are less accessible as their capitals are no longer classified as major cities.
  - Instead of the ABS Socio-Economic Indexes for Areas (SEIFA), we have used area-based measures of socio-economic status specific to Indigenous and non-Indigenous people. The most significant changes have been to recognise that the Northern Territory's non-Indigenous population is less disadvantaged than indicated in the past, Tasmania's Indigenous population is significantly less disadvantaged and Western Australia's Indigenous population is significantly more disadvantaged.
- 45 It has been difficult to disentangle the impact of these changes from other data and method changes between the 2014 Update and the 2015 Review. As it would be potentially misleading to report this partial impact, we have not done so.

## Summary of changes to assessments

- 46 Table 5, Table 6 and Table 7 summarise the changes in methods for each revenue, expense and capital category and to disabilities used across a range of categories.

**Table 5 Summary of method changes in revenue categories between 2010 and 2015 Reviews**

Category	Method changes
Land tax	<ul style="list-style-type: none"> <li>• Metropolitan improvement levies, the property part of fire and emergency services levies and conveyance duty replacement ACT general rates are combined and are assessed equal per capita (EPC).</li> <li>• The assessment method for land taxes levied on a landholder basis is unchanged.</li> </ul>
Stamp duty	<ul style="list-style-type: none"> <li>• The stamp duty on the transfer of motor vehicles assessment has been included in this category.</li> <li>• Expenses and duty concessions relating to first home owners (such as First Home Owners Bonus Payments) have been moved from this category to Housing.</li> <li>• The land rich adjustment for Tasmania has been discontinued because it is not material.</li> </ul>
Insurance tax	<ul style="list-style-type: none"> <li>• The assessment method is unchanged</li> <li>• Revenue from fire and emergency services levies imposed on insurance premiums have been moved to this category and assessed using the insurance tax base instead of EPC.</li> <li>• Revenue from workers' compensation insurance was moved to the Other revenue category.</li> </ul>
Motor taxes	<ul style="list-style-type: none"> <li>• The assessment method is unchanged, but the stamp duty on the transfer of motor vehicles assessment has been moved to the Stamp duty category. Revenue from fire and emergency levies on motor vehicles has been included in this category.</li> </ul>
Mining revenue	<ul style="list-style-type: none"> <li>• This category is assessed on a mineral by mineral basis with separate assessments of iron ore, coal, gold, onshore oil and gas, copper, bauxite and nickel.</li> <li>• Previous restrictions in terms of reference on the assessment of revenues from iron ore fines no longer apply.</li> </ul>
Other revenue	<ul style="list-style-type: none"> <li>• The assessment method is unchanged.</li> <li>• Revenue from fire and emergency services levies have been moved from this category to the Land tax, Insurance tax and Motor taxes categories.</li> <li>• Revenue from workers' compensation insurance was moved from the Insurance category to this category.</li> </ul>

**Table 6 Summary of method changes in expense categories between 2010 and 2015 Reviews**

Category	Method changes
Schools education	<ul style="list-style-type: none"> <li>• The assessment uses actual enrolments as a broad measure of use for all age groups but with an adjustment to the distribution of students in pre-Year 1.</li> <li>• Regression analysis based on ACARA data is used to directly estimate cost weights for Indigenous status, SES, SDS, non-government students and remoteness. We are now using the socio-demographic characteristics of non-government students rather than assuming they have the same socio-demographic characteristics as government students.</li> <li>• The assessment of expenditure of Commonwealth NERA funding for government schools is based on the average SRS amount for government students in each State to avoid unwinding the recognition of educational disadvantage embedded in the NERA funding arrangements.</li> </ul>
Post-secondary education	<ul style="list-style-type: none"> <li>• Vocational education and training expenses have been moved from Services to industry to this category.</li> <li>• The assessment recognises non-remote people from low socio-economic backgrounds use post-secondary education services more.</li> <li>• The differential use and cost of people who do not speak English at home is no longer assessed.</li> <li>• Expenses are now assessed net of user charges.</li> <li>• The general regional costs gradient is used to assess remoteness costs instead of State provided data.</li> </ul>
Health	<ul style="list-style-type: none"> <li>• There is a single Health category and a direct method of assessment is used for all components instead of the previous subtraction method. The impact of the private sector is assessed using non-State sector adjustments.</li> <li>• Category expenses are assessed net of user charges because we have data on net expenses incurred on different socio-demographic groups.</li> <li>• Data on the use and cost of State health services are sourced from IHPA instead of the AIHW.</li> </ul>
Welfare	<ul style="list-style-type: none"> <li>• New child protection unit record data are used which improves the reliability of the family and child welfare services assessment.</li> <li>• As the Commonwealth has taken over State responsibilities in the areas of aged care services and disability services for older people, needs relating to welfare-related aged care services, including for Western Australia, are assessed EPC.</li> <li>• During the NDIS transition period, we are adopting dual disability services assessments — one for NDIS services and one for existing disability services delivered under the National Disability Agreement. Both NDIS and existing disability services are assessed using the population eligible for NDIS.</li> <li>• All concessions other than transport concessions are included in the general welfare component and assessed using the number of concession card holders. The remainder of general welfare services are assessed using the relative State proportions of people in the bottom quintile of the ABS's 2006 Census SEIFI adjusted for changes in the relative proportions of State populations with a health care card or pensioner concession card between the 2006 and 2011 Censuses.</li> </ul>

**Table 6 Summary of method changes in expense categories between 2010 and 2015 Reviews (cont)**

Category	Method changes
Welfare (cont)	<ul style="list-style-type: none"> <li>The changes in Commonwealth-State arrangements affecting this category and associated Commonwealth payments are, or will be, backcast as required.</li> </ul>
Housing	<ul style="list-style-type: none"> <li>The category covers PNFC and general government expenses and revenue.</li> <li>Gross expenses are assessed using Census data on households in social housing cross-classified by income, Indigenous status and location instead of Commonwealth pensioner numbers classified by Indigenous status.</li> <li>Assessed rents are calculated by applying average rents paid by the different household groups to assessed households.</li> <li>First home buyer grants, bonuses and stamp duty concessions are consolidated in the Housing category and are assessed EPC.</li> <li>The Remote Indigenous Housing NPP will impact on the relativities from 2013-14.</li> </ul>
Services to communities	<ul style="list-style-type: none"> <li>A utilities subsidies assessment has been introduced, distinguishing between common subsidies provided to all users and subsidies principally provided to residents in smaller and isolated communities where costs are higher. The latter is assessed using the proportion of population living in small remote and very remote communities. The former is assessed EPC.</li> <li>Small communities cover those with population between 50 and 1 000 instead of 200 to 1 000.</li> <li>The impact on expenses of water availability and quality is no longer assessed.</li> <li>A new definition of discrete Indigenous communities has been adopted.</li> </ul>
Justice	<ul style="list-style-type: none"> <li>Assessment method unchanged but data on Indigenous and SES use rates have been updated.</li> <li>Sex is no longer assessed and age groups have changed.</li> </ul>
Roads	<ul style="list-style-type: none"> <li>The assessment method is unchanged but data have been revised.</li> </ul>
Transport	<ul style="list-style-type: none"> <li>The category covers urban transport PNFC expenses and revenue as well as general government expenses and revenues, resulting in an increase in total expenses.</li> <li>The regression model used to estimate net assessed expenses has been refined.</li> <li>A regional cost assessment has been added to the non-urban expenses assessment, which is otherwise unchanged.</li> </ul>
Services to industry	<ul style="list-style-type: none"> <li>Mining user charges have been netted off the relevant expenses.</li> <li>Vocational education and training expenses are no longer included in this category but in Post-secondary education.</li> <li>The 12.5% discount to the expense weights for this assessment has been removed.</li> <li>The general regional costs gradient has been used to derive a regional costs factor to apply to regulatory expenses.</li> <li>Regulation of investment projects is assessed using the level of private non-dwelling construction activity.</li> </ul>
Other expenses	<ul style="list-style-type: none"> <li>The impact of cultural and linguistic diversity on State expenses is no longer assessed.</li> <li>Administrative scale, native title and land rights and some national capital assessments have been relocated from other categories.</li> <li>Capital grants to local governments are assessed using population growth, not population shares.</li> </ul>

**Table 6 Summary of method changes in expense categories between 2010 and 2015 Reviews (cont)**

Category	Method changes
Infrastructure	<ul style="list-style-type: none"> <li>• An assessment is made of PNFC and general government infrastructure used in providing urban transport and housing.</li> <li>• Factors affecting recurrent service use but which do not affect infrastructure requirements are explicitly excluded from the infrastructure calculations and the 12.5% discount has been removed.</li> <li>• Capital cost disabilities are measured as the average of capital cost indices derived from Rawlinsons construction indices and the recurrent wage and location cost factors, which are themselves affected by some method changes.</li> </ul>
Net borrowing	<ul style="list-style-type: none"> <li>• Infrastructure assets of urban transport and housing PNFCs are excluded from State net financial asset bases.</li> <li>• The 25% discount on this assessment has been reduced to 12.5% because the new treatment of housing and urban transport assets has reduced the possibility that not all non-policy influences on net borrowing requirements are assessed.</li> </ul>

Note: Acronyms used in this table are spelt out in the relevant attachments.

Source: Commission decisions.

**Table 7 Summary of method changes in common disabilities between 2010 and 2015 Reviews**

Category	Method changes
Regional costs	<ul style="list-style-type: none"> <li>• Remoteness is assessed on the basis of ABS remoteness areas rather than SARIA.</li> <li>• Regional costs gradient in schools is calculated as part of a regression of school costs.</li> <li>• For categories other than Justice, where a regional cost disability is assessed, the general gradient has been applied, this is the average of the police and schools gradient, discounted by 25%.</li> </ul>
Wage costs	<ul style="list-style-type: none"> <li>• The assessment method is unchanged but will be reviewed once the ABS releases a replacement for the SET data currently used in the assessment.</li> </ul>
Location adjustment	<ul style="list-style-type: none"> <li>• A separate assessment is not undertaken but the regional costs assessment, through the move to ABS remoteness areas from SARIA, with a location adjustment, allows needs for Western Australia, Tasmania, the ACT and the Northern Territory to be recognised.</li> </ul>
Service delivery scale	<ul style="list-style-type: none"> <li>• Output from the regression analysis of the ACARA data has been used to assess service delivery scale disabilities in Schools education.</li> <li>• The assessment of service delivery scale for housing and community health expenses, as well as for all Welfare services with the exception of family and child services, has ceased.</li> </ul>
Indigenous status	<ul style="list-style-type: none"> <li>• Where we use a geographic measure of socio-economic status, we use the Indigenous specific IRSEO, and non-Indigenous specific NISEIFA measures where appropriate. In the 2010 Review, we used a generic SEIFA to measure relative disadvantage for both Indigenous and non-Indigenous people. This change has been applied in the Health, Post-secondary education, Welfare and Justice categories.</li> </ul>
Cultural and linguistic diversity	<ul style="list-style-type: none"> <li>• Cultural and linguistic diversity is no longer assessed.</li> </ul>

Note: Acronyms used in this table are spelt out in the relevant attachments.

Source: Commission decisions.

## REVISIONS TO DATA

47 In every inquiry we revise data to ensure that we use the latest available data to reflect our best measure of State circumstances. We incorporate revisions made by ABS and other data providers to the datasets we use. In addition to this, we have updated some data not available annually. Finally, in this review, we have identified a number of better data sources.

48 Table 8 shows the main impacts of revisions to data.

**Table 8 Effect of data revisions on the illustrative GST distribution, 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Roads investment	-177	-121	44	225	-14	-15	-16	75	344
Payrolls paid	-6	68	-23	0	-8	3	-35	2	73
Land tax	12	-25	-42	4	55	-2	-1	-1	72
Student transport	30	28	-18	-14	2	-4	9	-33	69
Other	13	34	-23	-28	26	8	6	-35	86
<b>Total</b>	<b>-157</b>	<b>-44</b>	<b>-45</b>	<b>202</b>	<b>58</b>	<b>-7</b>	<b>-47</b>	<b>40</b>	<b>300</b>

Source: Commission calculation.

49 Two major changes affected the roads investment assessment, moving GST mainly from New South Wales and Victoria to Western Australia and the Northern Territory.

- Using State data on asset values, we revised our estimate of the proportion of States assets (other than urban transport assets) attributed to roads from 30% to 50%. This increased the importance of roads in the investment assessment.
- Based on a mixture of State and National Transport Commission (NTC) data, we have revised up the share of roads investment on rural roads from 10% to 40%, increasing the importance of the rural roads investment assessment.

50 Revisions to ABS payroll data for the 2010-11 to 2012-13 years have affected States' measured fiscal capacities. There was a large downward revision for Victoria and smaller downward revisions for Tasmania and the Northern Territory. This reduced their share of payrolls, and hence revenue capacity, and increased their GST share. There were upward revisions for other States, particularly the ACT, which increased their shares of payrolls and their revenue capacity, which consequently reduced their GST shares.

51 Five States revised land value data previously provided to the Commission. There were large upward revisions to Victorian and Queensland data and downward revisions to data for New South Wales, Western Australia and South Australia. These revisions increased the assessed capacities of Victoria and Queensland and reduced the assessed capacities of the latter three States.

- 52 In the Schools category, we have updated the average distance travelled by rural students for the student transport assessment using data from the 2011 Census. Previous estimates were based on data from the 1996 Census. This redistributed \$69 million mainly from Queensland, Western Australia and the Northern Territory and mainly to New South Wales and Victoria.

## CHANGES IN STATE CIRCUMSTANCES

- 53 This section describes the main impacts resulting from changes in State circumstances since the 2014 Update. The 2014 Update used data for the three year period 2010-11 to 2012-13. The review uses data for 2011-12 to 2013-14 so we are effectively measuring the impact of removing 2010-11 data and replacing it with 2013-14 data on our assessments. Table 9 show the major changes in State circumstances.

**Table 9 Effect of major changes in circumstances, 2010-11 to 2013-14**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Commonwealth payments	53	-477	50	169	112	129	-4	-32	514
Mining revenue	116	50	282	-410	-24	4	3	-21	455
Natural disaster relief	-184	-231	419	9	1	-10	-1	-4	429
Property sales	-295	191	2	-25	78	20	25	5	320
Payrolls paid	25	133	-10	-155	-1	20	6	-18	184
Population growth	13	52	-57	44	-39	-31	-17	35	144
Other change in circumstances	18	34	101	-72	24	11	-1	-115	187
<b>Total change in circumstances</b>	<b>-254</b>	<b>-249</b>	<b>787</b>	<b>-441</b>	<b>152</b>	<b>144</b>	<b>10</b>	<b>-149</b>	<b>1 092</b>

Source: Commission calculation

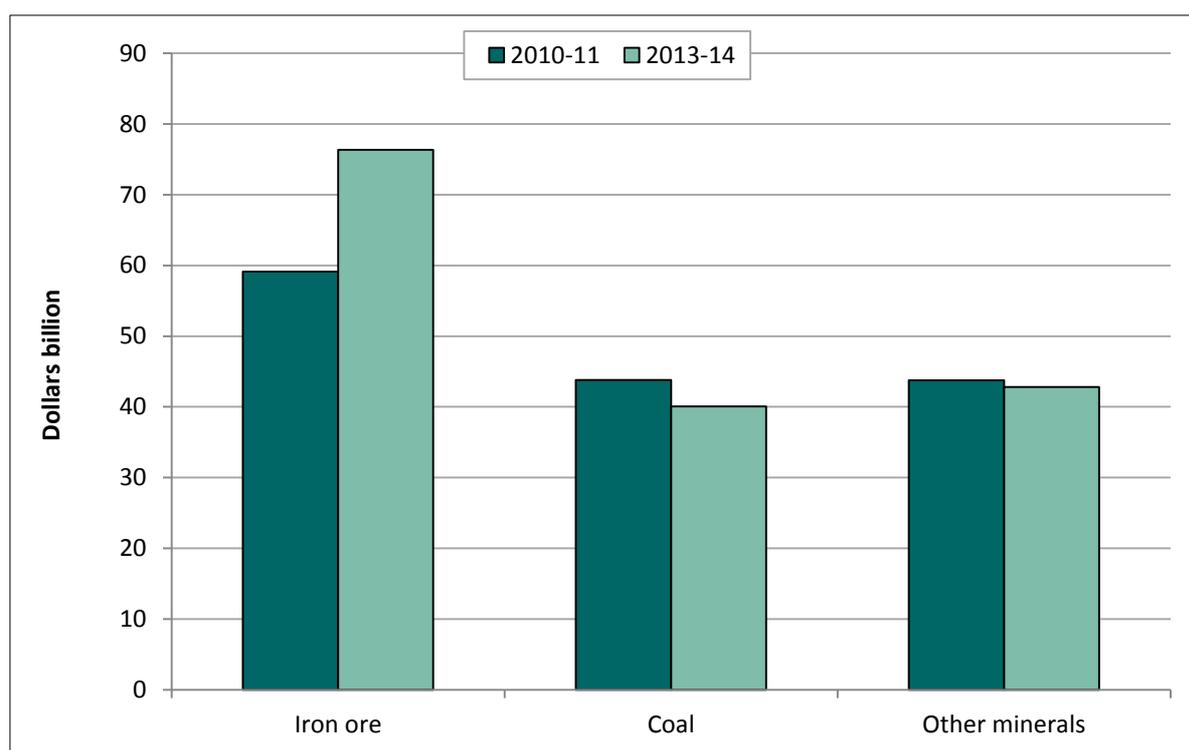
### Commonwealth payments

- 54 Between 2010-11 and 2013-14, there were changes in the amounts paid and the interstate distribution of some payments for specific purposes, especially payments for transport infrastructure and health services, which had repercussions for the GST distribution. In particular, Victoria received an above average increase in road and rail infrastructure payments which led to a reduction in its assessed GST distribution.
- 55 More information on the changes arising from the assessment of individual Commonwealth payments are in the supporting information available on the [Commission's website](https://www.cgc.gov.au/) (https://www.cgc.gov.au/).

## Mining revenue

- 56 The mining revenue assessment typically produces large redistributions due to the uneven distribution of mining activity between the States and the large movements that can occur from year to year in the value of mining production. In this review, these have led to a redistribution of a further \$455 million of GST revenue.
- 57 While the total value of mineral production increased significantly between 2010-11 and 2013-14, rates of growth varied between minerals. Strong export demand resulted in large increases in iron ore production (29%) and prices (50%) over the period. This significant increase in the value of iron ore production strengthened the revenue raising ability of iron ore producing States (mainly Western Australia) and reduced their GST share. In contrast, the value of coal production in 2013-14 was 9% lower than in 2010-11.
- 58 Figure 1 shows that the value of iron ore production increased strongly between 2010-11 and 2013-14, while the value of coal production and other minerals declined modestly.

**Figure 1 Mining value of production, selected minerals, 2010-11 and 2013-14**



Source: State and ABS data.

- 59 Within the major coal producing States, production in New South Wales grew 1% over the period, increasing its assessed revenue raising capacity. However, Queensland production volume declined by 15%. This lowered Queensland's value of

production, decreasing its assessed revenue raising capacity and increasing its GST share.

## Natural disaster relief

- 60 There has been a sharp increase in the natural disaster relief expenses (net of Commonwealth assistance) for Queensland in 2013-14 compared with 2010-11, leading to increases in its GST share. Its expenses principally relate to the flood and cyclone events of 2011 and 2012. On the other hand, New South Wales and Victoria expenses in 2013-14 were more than offset by Commonwealth reimbursements paid or payable for expenditure incurred in previous years.

## Stamp duty

- 61 The change in the GST impact between 2014 Update and this review was \$320 million. The largest effects were seen in New South Wales, Victoria and South Australia.
- 62 Cycles in property markets can lead to substantial changes from year to year and State to State, which can have marked impacts on State revenue capacities. The current inquiry has been no exception. Most States experienced growth in the value of property transferred. New South Wales and Western Australia experienced above average growth, which reduced their GST share. Victoria and the Northern Territory experienced growth, but less than the average. Their GST shares increased. The other three States experienced a decline in the value of property transferred. Their GST shares also increased.
- 63 The strongest growth was in New South Wales, while the ACT showed the weakest trend in its property market between 2010-11 and 2013-14. Overall value of transactions per capita increased for New South Wales, Queensland and Western Australia, by 36%, 21% and 24%. They fell in South Australia, Tasmania and the ACT, by 5%, 2% and 8% respectively (Figure 2).

**Figure 2 Growth in per capita conveyance transactions, 2010-11 to 2013-14**



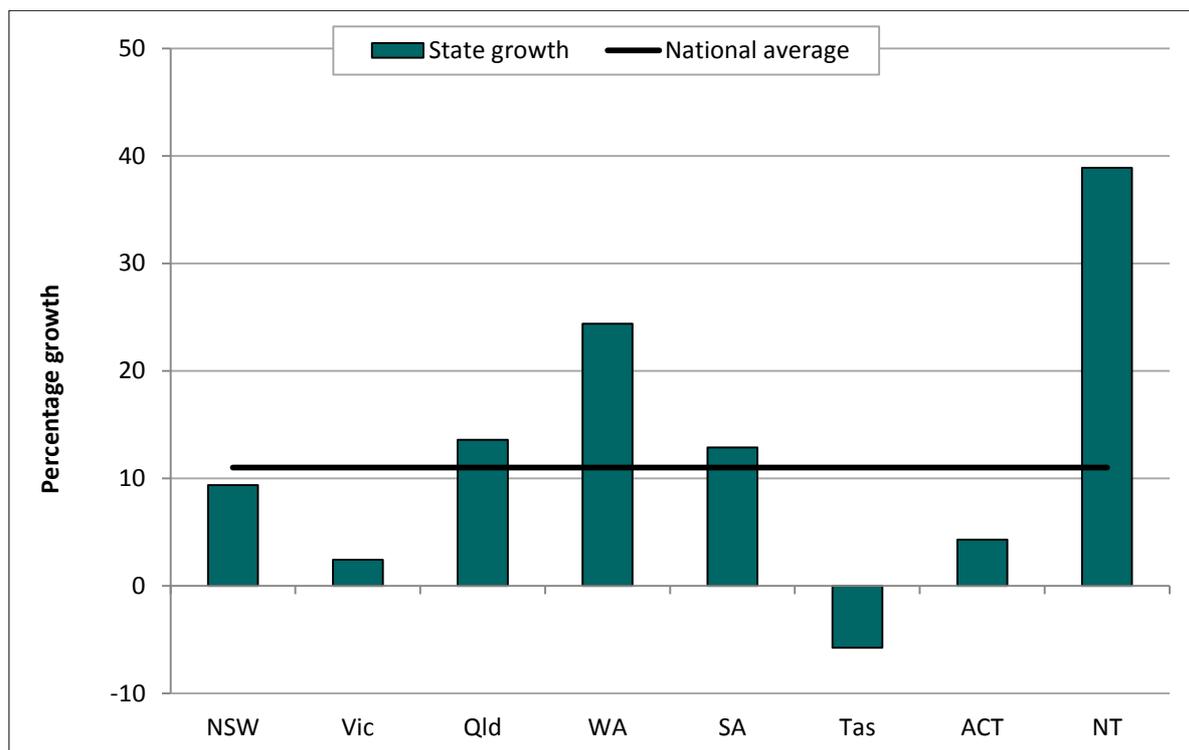
Note: Data are adjusted to account for differences in the scope of duty.

Source: Commission calculation.

## Payroll tax

- 64 Changes in State capacities to raise payroll tax redistributed \$184 million in GST revenue. The redistribution was mainly driven by differences across States in the rate of growth of taxable private sector payrolls between 2010-11 and 2013-14.
- 65 Figure 3 shows the growth in per capita taxable private sector payrolls between 2010-11 and 2013-14. Western Australia and the Northern Territory had significantly faster than average growth. This increased their ability to raise payroll tax and reduced their GST share.

**Figure 3 Growth in per capita taxable private sector payrolls, 2010-11 to 2013-14**



Source: Commission calculation.

## Population growth

- 66 Interstate differences in population growth affect the GST distribution through the Commission’s assessments of State requirements to invest in infrastructure and financial assets. The largest of these effects is on investment, where the Commission aims to provide each State with the capacity to invest in the infrastructure it needs to provide the average level of services to its residents. In doing so, it recognises that States with faster population growth will need to invest more per capita than average.
- 67 The population growth rates of the States have changed over the period covered by this review. Table 10 shows population growth in 2013-14 in Western Australia is about as much above the average as it was in 2010-11. Victoria and the Northern Territory have moved to be about 10% above average and New South Wales has increased to be only 10% below the average. Queensland’s growth decreased to the average, the ACT fell below the average and the other States fell further below.
- 68 These changes in relative growth rates had major effects on the investment assessment and consequently on State GST requirements. They increased the GST requirements of States whose relative population growth rose and reduced them for the States whose relative growth declined.

**Table 10 Population growth rates 2010-11 and 2013-14**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ave
Population growth rates (a) (%)									
2010-11	1.1	1.4	1.6	2.4	0.9	0.7	1.9	1.1	1.4
2013-14	1.5	1.9	1.7	2.8	0.9	0.3	1.6	1.9	1.7
Growth relative to average									
2010-11	0.8	1.0	1.1	1.7	0.6	0.5	1.4	0.8	1.0
2013-14	0.9	1.1	1.0	1.7	0.5	0.2	0.9	1.1	1.0

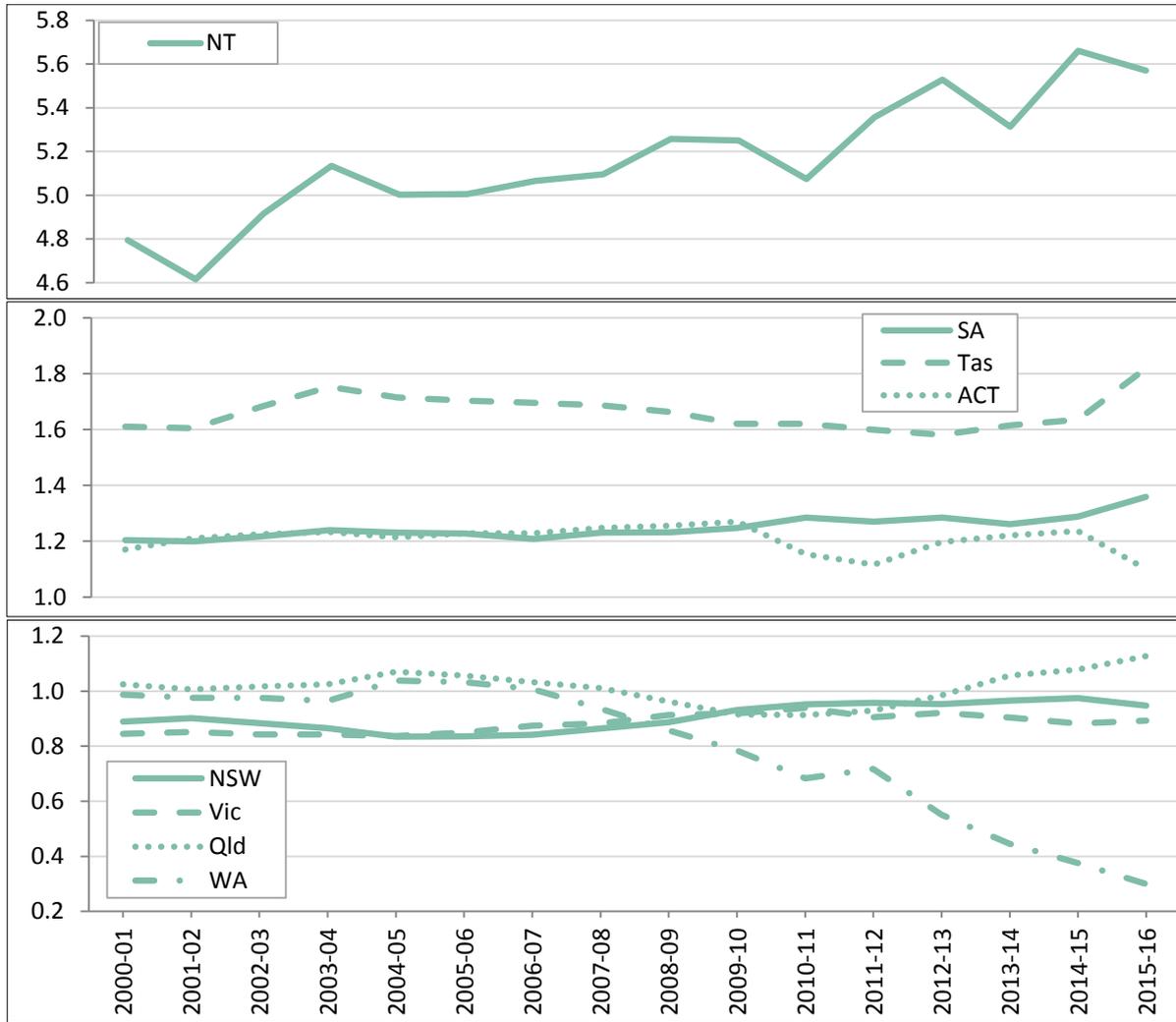
(a) These are growth rates between State estimated resident populations at December in each year.

Source: Commission calculation based on ABS estimated resident populations.

## RELATIVITIES OVER TIME

- 69 Because the relativities reflect measured differences in State fiscal capacities, they change over time, as State circumstances change, and as the Commission adapts its methods.
- 70 Figure 4 and Table 11 show that, since the introduction of the GST in 2000-01, the relative fiscal capacities of the States have changed. These measured capacities reflect changing State economic, demographic and geographic circumstances, changing average State and Commonwealth policies and the impact of method reviews in 2004, 2010 and 2015.
- 71 Over that period, the Northern Territory's assessed relative fiscal capacity deteriorated while that of Western Australia's strengthened. In the case of the Northern Territory, this primarily reflects the faster rate of growth of national State expenses than the GST pool. As a result, a greater proportion of the pool is required to fund the Northern Territory's high expenditure needs. Western Australia's strengthened fiscal capacity reflects the growth in revenue capacity flowing from its mining industry.

**Figure 4**      **Relativities used for distributing the GST, 2000-01 to 2015-16**



Note: The relativities are derived on the basis of a pool comprising GST revenue only.  
 Source: Commission calculation.

**Table 11**      **Relativities used for distributing the GST, 2000-01 to 2015-16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2000-01	0.889	0.845	1.025	0.987	1.204	1.610	1.171	4.794
2001-02	0.902	0.852	1.006	0.976	1.200	1.605	1.211	4.615
2002-03	0.884	0.842	1.017	0.976	1.217	1.682	1.226	4.916
2003-04	0.865	0.842	1.025	0.965	1.240	1.753	1.234	5.135
2004-05	0.835	0.836	1.070	1.038	1.230	1.715	1.214	5.003
2005-06	0.836	0.849	1.057	1.033	1.227	1.704	1.228	5.005
2006-07	0.842	0.875	1.033	1.008	1.208	1.696	1.229	5.065
2007-08	0.864	0.882	1.011	0.936	1.231	1.687	1.247	5.096
2008-09	0.887	0.913	0.962	0.858	1.232	1.663	1.256	5.258
2009-10	0.932	0.919	0.916	0.785	1.247	1.620	1.271	5.251
2010-11	0.952	0.940	0.913	0.683	1.285	1.621	1.153	5.074
2011-12	0.958	0.905	0.929	0.717	1.271	1.599	1.116	5.357
2012-13	0.953	0.921	0.985	0.551	1.285	1.581	1.198	5.528
2013-14	0.966	0.904	1.056	0.446	1.262	1.615	1.221	5.314
2014-15	0.975	0.883	1.079	0.376	1.288	1.635	1.236	5.661
2015-16	0.947	0.893	1.128	0.300	1.359	1.819	1.100	5.571

Note: The relativities prior to 2010-11 were calculated based on a five year moving average of annual assessments. Since the 2010 Review, the Commission has calculated the relativities based on a three year moving average of annual assessments.  
Prior to 2009-10, the pool was a combined pool of GST revenue and health care grants. This table is derived on the basis of a pool comprising GST revenue only.

Source: Commission calculation.

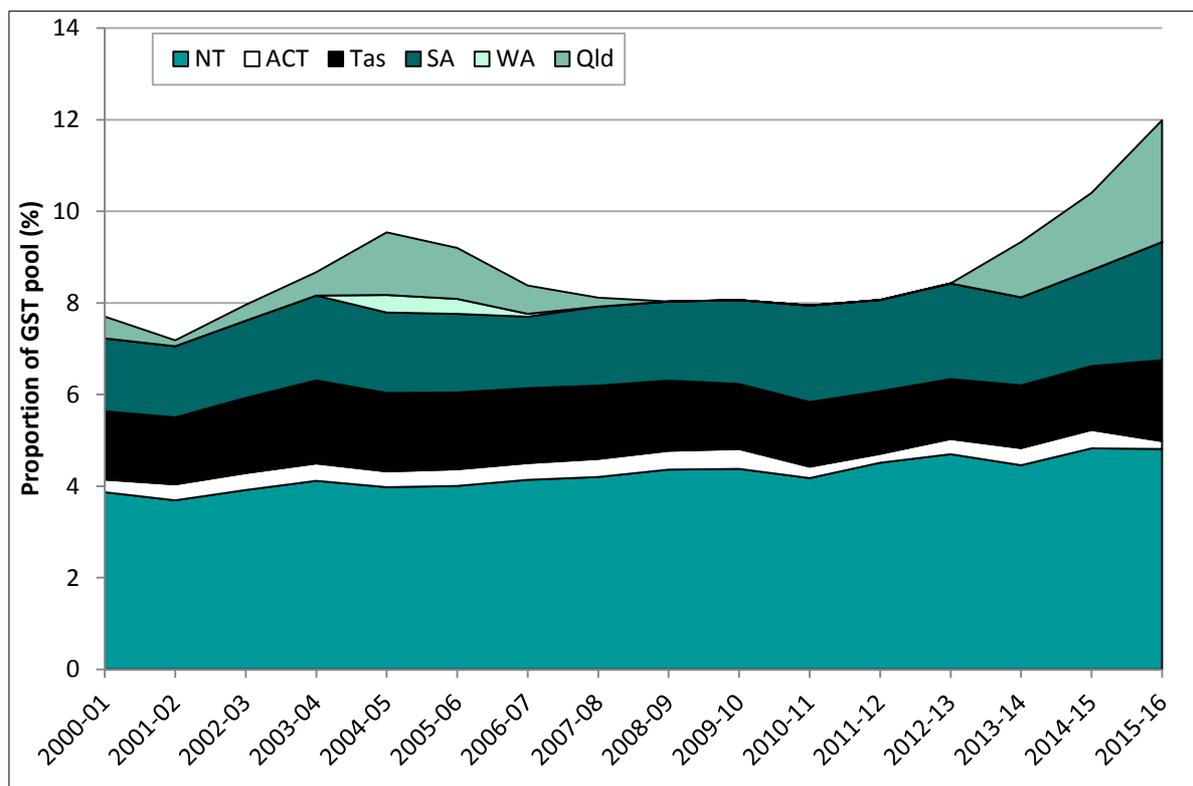
## Size of the equalisation task

- 72 The size of the equalisation task — bringing the States to equality — is determined by the variation in their initial fiscal capacities. As they diverge, more GST is required to achieve equality.
- 73 The process of distributing GST revenue can be thought of in two ways:
- GST revenue is first distributed on a population basis, raising the fiscal capacity of all States equally. Then there is a redistribution to achieve equality — from States with above average capacity to those with below average capacity. The size of this redistribution is a measure of the equalisation task. We measure it as the proportion of GST redistributed.
  - GST revenue is first distributed to bring the initial fiscal capacities of all States to that of the strongest. The remaining GST is then distributed equally among all States. The GST required to achieve the first step is a measure of the equalisation task; the proportion of GST required to achieve equalisation.
- 74 These two measures highlight different aspects of the equalisation task. The first identifies the aggregate transfer from States with above average fiscal capacities. The

second identifies the difference between the strongest State and the average of the others. Taken together they show how the equalisation task is evolving.

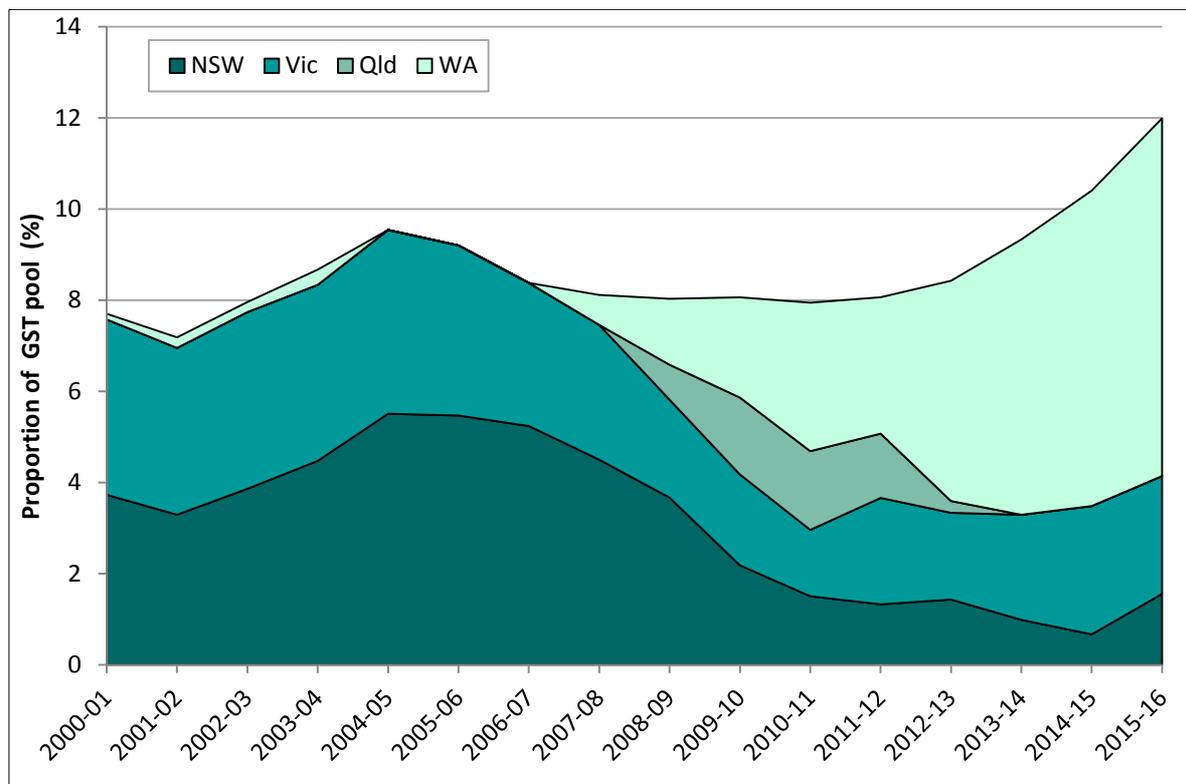
- 75 Figure 5 shows that the proportion of GST redistributed to the States with below average fiscal capacities has increased in recent updates, including in this review.
- 76 The four less populous States have about 12% of Australia’s population and receive about 21% of the GST. This is the highest proportion of the GST pool going to these States since the introduction of the GST. Their fiscal capacities are becoming relatively weaker, in part, the result of weaker revenue bases (as a group, their mining royalty capacity is low), smaller shares of Commonwealth revenue and, for the Northern Territory, higher cost of services.
- 77 Adding Queensland’s fiscal requirement to those of the four less populous States means that 12% of the GST pool is now required to achieve fiscal equalisation.

**Figure 5 Proportion of the GST redistributed to States with below average fiscal capacities, 2000-01 to 2015-16**



- 78 Figure 6 shows that an increasing proportion of the redistribution originates from Western Australia, reflecting the rapid strengthening of its relative fiscal capacity.

**Figure 6 Proportion of the GST redistributed from States with above average fiscal capacities, 2000-01 to 2015-16**



Note: The redistribution is derived on the basis of a pool comprising GST revenue only.

Source: Commission calculation.

79 Considering the second measure reveals a different aspect of the equalisation task.

80 From 2000-01 to 2007-08, around 14% to 17% of the pool was needed to lift States to the capacity of the strongest State (first Victoria and then New South Wales). In 2008-09, Western Australia became the fiscally strongest State. As it has become progressively stronger over the last five years, this measure of the size of the equalisation task has increased from 14% of the pool in 2008-09 to 70% in 2015-16. This highlights how one State's capacity far exceeds that of the others.

81 Neither measure perfectly captures the totality of how the equalisation task has evolved over time. Taken together they show:

- the size of the equalisation task to address needs of the less populous States together has been increasing slowly over time
- because Queensland's fiscal capacity fluctuates around the average, it sometimes adds to and sometimes moderates the equalisation task
- the task of equalising the other States to 'catch up' with Western Australia, the strongest State, has grown significantly, and grew again in this review.

## CHAPTER 5

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### QUALITY ASSURANCE FOR THE 2015 REVIEW

- 1 The terms of reference for the 2015 Review ask the Commission to ‘ensure robust quality assurance processes’ (clause 1c) are adopted in preparing assessments. This chapter sets out the quality assurance (QA) processes we applied in this review to comply with this requirement.
- 2 The QA processes applied in this review are based on those used in the 2010 Review. In the 2010 Review, the Commission’s terms of reference included a specific requirement to improve QA processes. This was the first time such a requirement was included in the Commission’s reference. The Commission responded to this requirement in 2010 by reviewing, improving and formalising many of the QA processes that it had used in the past as well as adopting some new measures such as external audits.
- 3 We re-examined and refined the 2010 QA processes, in consultation with States, before adopting them for the 2015 Review. Ultimately, our approach aims to ensure assessment methods are:
  - conceptually sound
  - based on robust and reliable data
  - built using consistently applied principles
  - implemented without error.
- 4 We wanted to provide stakeholders with confidence in the results we produce.
- 5 The QA approach for the review was detailed in a QA Strategic Plan and a QA Action Plan, which are available on the [Commission’s website](https://www.cgc.gov.au/) (https://www.cgc.gov.au/). The main elements are shown in Box 1.

## Box 1

The main elements of the Commission's QA approach for the 2015 Review are:

- establishing equalisation principles
- developing a work program for the review in consultation with States
- using formal assessment guidelines aimed, among other things, at developing 'assessments which were simple and consistent with the quality and fitness for purpose of the available data' (terms of reference clause 1(b)) to assist the Commission's decision making
- facilitating the best assessments possible by identifying, developing and using the best data available
- using external experts and consultants as appropriate to provide input into our assessment approaches and methods
- using a robust and auditable calculation system, with appropriate controls, in which to build our assessments and calculate State GST relativities
- performing internal and external audits and error checks of calculations to find and correct any errors
- reporting of decisions, methods and results in a transparent way so that stakeholders can understand clearly what we have done and why
  - including provision to key stakeholders of the calculations behind our recommended relativities.

Important parts of the implementation are:

- ensuring staff are trained in QA requirements and processes
- consulting States throughout the review process to guide both the work undertaken and decisions made, including:
  - the provision of a comprehensive draft report
  - advice on significant changes following the draft report, consistent with the requirements of the terms of reference
- engaging external consultants/auditors:
  - to review the Commission's decision making processes
  - to check calculations
  - to check compliance with QA processes.

## IMPLEMENTATION

6 The current review has been undertaken in a limited timeframe. Terms of reference were received in June 2013 and December 2014, with a report due by February 2015. We prepared a draft QA plan and consulted States about it. The plan was finished in April 2014 although we had commenced implementing some aspects of it before then. For example, experience in past reviews had shown a clear work program and

the development of the principles and guidelines for the conduct of the review would be important. We therefore commenced early consultation with States on those matters.

- 7 Table 1 shows the timing of key QA events. It does not, however, provide details of all consultations undertaken even though those consultations were an important QA activity, also required by the terms of reference. Attachment 7 provides details of all discussion papers, position papers and reports issued by the Commission, submissions received from States and other consultation opportunities.
- 8 We consider these QA activities comply with the requirements of the QA Strategic and Action Plans. This includes compliance with the requirement in the plans to 'provide advice to States on any major method changes in assessments between the draft and the final report' and the requirement in Clause 9 (a) of the terms of reference to consult with States on them.
- 9 We note that in January and February 2015, two States raised the question of whether the Commission would provide further advice on other changes it proposed to make to methods following the November 2014 position paper on Significant changes since the draft report. However, we did not consider this possible because we were still considering State responses to that position paper to finalise our response to the terms of reference.
- 10 States were advised of this position in a letter from the Chairman to the ACT Under-Treasurer, dated 28 January 2015, copied to all States.
- 11 The rest of this chapter provides information on the outcomes of the more important QA activities.

**Table 1**      **Timing of key QA activities during the 2015 Review**

Date	Event
2010 to June 2013	Data working party activities to improve available data
June 2013	Receipt of terms of reference for the review Work program agreed with States
October 2013	Commission defined equalisation objectives and principles Draft QA Strategic Plan and Action Plan sent to States for comment Proposed assessment guidelines sent to States for comment
January 2014	State submissions on Draft QA Strategic Plan, Action Plan and proposed assessment guidelines received
April 2014	QA Strategic Plan and Action Plan finalised and published on the Commission's website
June 2014	Commission's draft report for the review (including its assessment guidelines) provided to States
August 2014	External consultant reported on econometric modelling used in Wage costs, Schools and Transport assessments
November 2014	Position paper on significant changes since the draft report issued External consultants reported on aspects of the Health assessment
December 2014	Receipt of supplementary terms of reference Further consultation on those and the contemporaneity issue raised by Western Australia Internal checking of calculations
January 2015	Review by Commission of consistency of assessments and their ability to capture differences in State fiscal capacities External checking of calculations External consultant reported on a review of the Commission's decision making processes External auditor of compliance with QA processes reported
February 2015	Final decisions made by Commission Final report provided to Treasurer after extensive editing, proof reading and number checking
After release of report to States by Treasurer	Assessment system and additional information to be made available to States on-line

## Data quality improvements

- 12 To facilitate better assessments, consistent with the quality and fitness for purpose of the available data, we initiated a program to identify and develop suitable datasets. All States supported this program.
- 13 A Data Working Party was established soon after the 2010 Review to guide the work. This group, which consisted of State and Commission staff members, dealt with data issues for updates as well as possible data issues for a future review. It identified assessments where new or improved data might become available and existing

datasets that could be improved. Several sub-groups were set up to examine individual datasets. For example, one was established to look at data on drivers of water and electricity subsidies.

- 14 The Data Working Party met in August 2010, July 2011 and August 2012.<sup>1</sup> Once the review was established, it was more efficient and less demanding on States for data issues to be dealt with as part of the normal Commission engagement with States on assessments. The short timeframe for the review also meant it was more efficient, and acceptable to the States, to follow a process which began from the 2010 Review methods rather than adopt the top-down, 'clean slate' approach of past reviews. In this way, we were able to build on the extensive work from the 2010 Review on data quality and fitness and maximise the time available to deal with new and previously unresolved data issues in this review.
- 15 We identified improved data in three main areas for this review.
- The first was Schools where we have used a rich and robust dataset from the Australian Curriculum and Reporting Authority (ACARA) which include information on the cost of providing school services to different population groups.
  - The second was Health where we now use data from the Independent Hospital Pricing Authority (IHPA) instead of the Australian Institute of Health and Welfare (AIHW) to determine the cost of providing services to different population groups. This has improved the robustness of our assessments, particularly for emergency department and other non-admitted patient services.
  - The third data improvement has been to adopt a new way of measuring disadvantage in the Indigenous population by using an Indigenous specific index of socio-economic status (the Indigenous Relative Socio-Economic Outcomes (IRSEO) Index). We use this together with an equivalent measure for the non-Indigenous population (the Non-Indigenous Socio-Economic Index for Areas (NISEIFA)) which the ABS produced for us. We consider these indices better capture the heterogeneity of Indigenous and non-Indigenous populations in each State.
- 16 Schools, Health and Indigenous services are major areas of expenditure for States so improvements to the relevant data will markedly improve the equalisation outcome.

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<sup>1</sup> Some sub-groups, especially the administrative scale sub-group, continued their work and consultation until an assessment approach for the relevant area became more settled.

17 Data improvements were also made in the following areas.

- The Welfare assessment now uses child protection data drawn from a new AIHW unit record collection, new data on disability services recipients and more appropriate data (the ABS's Socio-Economic Index for Individuals) to measure factors affecting State expenses.
- The Housing assessment now uses a more direct measure of public housing users and costs obtained from ABS Census data.
- The main drivers of water and electricity subsidies are better understood, although more questions and further data requirements have subsequently arisen.
- The way we identify small communities has been refined and a new measure for remote Indigenous communities has been adopted in the Services to communities assessment.
- The definition of urban areas used in the Roads and Roads investment assessments has been improved.
- The Transport assessment now uses updated data and an improved regression model on how urban size is related to costs.
- The improved data on Schools have flowed through to improve our measure of regional cost differences and service delivery scale for some other services.
- We have adopted the ABS remoteness areas (ARIA) classification to measure how costs vary with increasing remoteness, replacing a custom measure previously developed for the Commission (SARIA). This will improve our ability to measure costs in capital cities of less populous States, notably Tasmania and the Northern Territory. It also enables greater access to ABS data since ARIA is ABS's standard remoteness geography.

## External advice and checking

18 Consultants were engaged to advise on methodological issues for some assessments.

19 An expert econometrician was engaged to examine the regression models we constructed for the Schools, Wage costs and Transport assessments. The consultant found the approaches we took were sound, although limitations were recognised for the transport analysis due to the small dataset size. The consultant's work resulted in substantial improvements to the Schools data regression.

20 Two external consultants were engaged to advise on the impact health services provided by the non-State sector have on the demand for State government health services (referred to as substitutability). We considered their findings in our determination of the levels of substitutability within each health component.

21 The reports of the econometrician and health consultants were provided to the States for comment and to help them prepare submissions on the relevant

assessments. The reports are also available on the [Commission's website](https://www.cgc.gov.au/) (https://www.cgc.gov.au/).

- 22 As in recent updates, external consultants were engaged in the late stages of the review, shortly before we finalised the relativities, to check the calculations used to generate our recommended relativities. Before the external checkers undertook their work, an extensive series of internal checks and sign-offs were completed. Our checking processes cover the entire chain of the calculations leading to the relativities, starting by checking the raw data back to their sources.

## External audit of the Commission's decision making processes

- 23 As another part of the quality assurance process, we engaged an independent external consultant, who was previously a State Auditor-General, to consider whether we had followed due process in reaching our decisions in this review.
- 24 He examined the decision making processes, but not the appropriateness of the decisions themselves, in the following priority issues for the review:
- mining revenue
  - treatment of NDIS arrangements
  - urban transport infrastructure assessments
  - treatment of Indigenous status.
- 25 He also reviewed decision making processes for the health assessment and whether discounting has been done consistently.
- 26 His review covered the processes used in reaching decisions for the draft report, the processes following the draft report (including those leading to the Commission's Position Paper 2014-04 – *Significant Changes since the Draft Report* circulated to States in November 2014) and the processes to be followed in finalising the report.
- 27 He reached the following overall conclusion.
- Based on the review activity undertaken as outlined in this report, I conclude that the Commission followed due process in relation to decisions and assessments I have examined. I also conclude:
- The documents prepared by Commission staff and the documentation of Commission decisions that I reviewed were of a good standard and provided a structured and logical view of the processes followed by the Commission in making the assessments included in the Draft Report of the 2015 Review distributed in August 2014 and in the Commission position paper on Significant Changes since the Draft Report which was circulated to States in November 2014.
  - The Commission provided opportunities for input to be provided by the States at appropriate stages of the review process.

- The submissions and materials provided by the States were available for consideration by the Commission and the Commission meeting agenda papers prepared by Commission staff appropriately represented the content of those State submissions.

The audit conclusion is unqualified in its assessment of all decision areas and issues examined.

- 28 In commenting on the use of discounting, he concluded a materially consistent approach was applied across assessment areas. He also suggested additional disclosure of the reasons for discounts in Commission reports may assist in assuring States discounting has been done consistently. We have aimed to provide such additional reasoning in this report.
- 29 The consultant's report is available on the [Commission's website](https://www.cgc.gov.au/) (<https://www.cgc.gov.au/>).

## Review of all assessments

### *Individual category and factor assessments*

- 30 In January 2015, we undertook a final check of assessments to ensure they reliably captured material differences in State fiscal capacities within the limits of available data. We also considered whether assessments had been undertaken in a consistent way across categories.
- 31 As a result of this process, we made a number of judgment based adjustments to assessments to improve horizontal fiscal equalisation (HFE) outcomes, including the following.
- Adjustments were made to the regional costs assessments to ensure all costs were appropriately recognised, given the change from the SARIA to ARIA remoteness classification and the removal of the non-wage costs assessment. The Commission considered this adjustment was necessary to recognise that the ARIA classification, just like its predecessor, was not perfect and did not fully recognise the cost differences faced by different State capitals.
  - To split roads capital spending into its urban and rural components, a two thirds/one third blend of data provided by the States and the National Transport Commission was adopted. We had concerns about both datasets, given the large differences between them. However, we had more confidence in the State provided data because they were based on an urban/rural definition which more closely complied with the definitions used in the roads assessments. For this reason we gave more weight to those data. Further work needs to be done to ensure the same definition is used by States in providing these data and to ensure the data are collected on a consistent basis across States.

- 32 Among other checks, we confirmed that the remoteness classification had been used consistently across categories to achieve the best and most reliable estimate of HFE possible with the data available and that appropriate estimates of substitutability had been adopted in the Health assessment.

### ***The use of discounting in assessments***

- 33 In determining its assessment methods, the Commission may adopt discounting or other case specific adjustment processes to deal with instances where there is a conceptual case for including an influence which differentially affects State fiscal capacities, but where the measure of that influence is affected by imperfect data or methods. In such instances, the Commission must choose between letting the data influence the GST distribution in proportion to its quality or ignoring the data completely. It considered a better HFE outcome is achieved by partially recognising the disability, consistent with the confidence it has in its measurement. This is consistent with its assessment guidelines. Decisions on whether an assessment will include a discount or other adjustment are made on a case by case basis as each assessment is considered.
- 34 However, to ensure a consistent approach to when discounts and other adjustments are made and their size has been adopted, the Commission reconsidered all of them towards the end of the review. That reconsideration covered the discounts and adjustments it had previously decided to make; those States sought but it had previously decided not to make; and assessments where it had previously decided discounts or adjustments were not required. This process led to revisions to some discounts and adjustments. We now consider a materially consistent approach has been applied to discounting and other adjustments in our assessments.

### **External audit of staff compliance with quality assurance processes**

- 35 We also engaged another external consultant to check whether Commission staff followed the quality assurance processes in this review. That consultant reviewed the Commission's quality assurance documents, surveyed staff to determine their knowledge of the quality assurance processes and requirements and their compliance with them and reviewed all quality assurance documentation, including the data return matrix, selected staff summaries of States submissions (with details of how issues raised were to be dealt with), calculation checking logs and Commission meeting minutes.
- 36 The consultant found that, in all material aspects, Commission staff had been compliant with quality assurance processes for conducting the 2015 Review set out in Commission documentation and that the 2015 Review has been conducted in accordance with the Commission's internal quality assurance processes. She noted that, while there had been some minor instances of non-compliance at the time of

her audit, compliance was particularly strong in the areas of considering States' views, applying assessment guidelines and handling data requests and returns.

- 37 The consultant's report is available on the [Commission's website](https://www.cgc.gov.au/) (<https://www.cgc.gov.au/>).

## Conclusion

- 38 We conclude that, in preparing assessments, we have used robust quality assurance processes as required by the terms of reference (clause 1c). However, no quality assurance process can guarantee 100% accuracy in outcomes. Despite the diligent use of the procedures and processes set out in the QA Strategic and Action Plans, there may still be undetected errors in calculations or omissions in transparently explaining Commission decisions.