

CHAPTER 9

LOCAL ROADS FUNDING

1. Under the current Act, Local Roads grants are paid under Section 12 as ‘additional funding for local government’. Although usually referred to as ‘identified road grants’, and allocated between LGBs based on road needs, they are untied in the hands of the receiving LGB.

2. This chapter looks at the methods used by LGGCs to allocate Local Roads assistance. It summarises the different LGGCs’ approaches and provides some comparisons of the outcomes of their distribution methods.

Background

3. Local government spends about \$2.4 billion¹ or around 24 per cent of its funds on local roads. Although local roads comprise around 84 per cent of Australia’s road length, they represent only 24 per cent of national road use².

4. At the 1990 Special Premiers’ Conference, the Commonwealth and the States agreed on a hierarchy of responsibilities for roads in Australia. The Commonwealth is responsible for the National Highway and roads of national importance, the States for State Highways and arterial roads, and local government for local roads. From July 1991, Commonwealth grants to local government for local roads were untied and provided as a separate component under the (amended) 1986 Act.

5. Under the 1986 Act, the Local Roads grants were to be absorbed into the General Purpose grants from 1 July 1995 and all General Purpose grants were to be distributed between States on an equal per capita basis. In the review of the *Local Government (Financial Assistance) Act 1986*, the Australian Urban and Regional Development Review (AURDR) was asked to report on whether the separate calculation of roads funding and General Purpose funding should continue or, if not, how the roads funds should be distributed.

1 Outlays on Transport and Communication by local government, Table 22 of ABS Government Finance Statistics (5512.0), 1997–98.

2 Austroads 1997, *Road Facts '96*, p18. Road use is measured in million vehicle kms travelled.

6. The AURDR recommended against absorbing the Local Roads grants into the General Purpose grants, although it recognised that the separate allocation of roads funds distorted the achievement of horizontal fiscal equalisation³. It argued that, because of the proposed change in the method of distributing the grants between States to an equal per capita basis, absorbing the grants would lead to much greater disruption than a continuation of the current funding methods.

7. In 1999–2000, the Commonwealth provided \$390 million to LGBs as Local Roads grants. This is equivalent to around \$21 per capita or \$610 per kilometre of local road. It represented about 15 per cent of the funds LGBs spent on maintaining local roads. Under the current Act, the quantum of the Local Roads grants grows at the same rate as the General Purpose grants — that is, it is maintained in real per capita terms.

8. The distribution of Local Roads grants between States is based on historical shares and is the same as that which applied under the previous tied grant arrangements. The original basis for this distribution is now not known. Table 9-1 shows length of local roads and the allocation of Local Roads grants by States for 1999–2000. Table 9-2 gives the States' per capita and per kilometre relativities for the Local Roads grants.

Table 9-1 THE DISTRIBUTION OF LOCAL ROADS GRANTS, 1999–2000

	Local road length	Local Roads grants	Share of Local Roads grants	Share of population	Share of local road length
	km	\$m	%	%	%
New South Wales	142 159	113.0	29.0	33.8	22.3
Victoria	125 318	80.6	20.6	24.9	19.6
Queensland	144 104	73.2	18.7	18.5	22.6
Western Australia	121 351	59.7	15.3	9.8	19.0
South Australia	74 732	21.5	5.5	7.9	11.7
Tasmania	14 076	20.7	5.3	2.5	2.2
Northern Territory	14 491	9.2	2.3	1.0	2.3
Australian Capital Territory	1 848	12.5	3.2	1.6	0.3
Total	638 079	390.7	100.0	100.0	100.0

Source: Department of Transport and Regional Services and unpublished LGGCs' data.

3 Macklin J. 1994, *Financing Local Government: A review of the Local Government (Financial Assistance) Act 1986*, AURDR, p115.

Table 9-2 COMPARATIVE MEASURES OF LOCAL ROADS GRANTS, 1999–2000

	Grants per capita	Grants per km ^(a)	Per capita relativities	Per kilometre relativities
	\$pc	\$ per km		
New South Wales	17.78	797	0.8576	1.3023
Victoria	17.20	643	0.8296	1.0497
Queensland	21.02	508	1.0141	0.8296
Western Australia	32.37	492	1.5615	0.8040
South Australia	14.42	287	0.6954	0.4692
Tasmania	43.97	1 471	2.1209	2.4023
Northern Territory	47.84	632	2.3077	1.0315
Australian Capital Territory	40.63	6 780	1.9600	11.0716
Total	20.73	612	1.0000	1.0000

(a) Uses total length of local roads rather than lane length.

Source: Department of Transport and Regional Services.

9. The *Local Government (Financial Assistance) Act 1995* does not place any conditions on the way LGGCs distribute Local Roads grants to LGBs, except through the National Principles. The National Principle is that:

The identified road component of the financial assistance grants should be allocated to local government bodies as far as practicable on the basis of the relative needs of each local governing body for road expenditure and to preserve its road assets. In assessing road needs, relevant considerations include length, type and usage of roads in each local governing area.

10. The National Principle thus states that there are two aspects LGGCs are to take into account when allocating Local Roads grants — relative needs and preservation of assets. There is no requirement to allocate the funds on the basis of horizontal equalisation.

11. There are two different approaches followed by LGGCs. One uses a simple formula, taking into account such factors as an LGB's share of road length and population and appears to have been derived from the models in use before the funds were untied. The other approach used is an asset preservation model.

12. In Western Australia, South Australia and Tasmania, a relatively small proportion of the grant is reserved for funding major road works. These projects are selected by LGGCs based on submissions from LGBs, and usually with advice from third parties.

13. A description of the approaches used by the LGGCs follows.

New South Wales

14. The allocation model is:
- (i) 27.54 per cent is allocated to local roads in urban areas (LGBs in the Sydney, Newcastle and Wollongong Statistical Divisions) and then to LGBs on the basis of:
 - 5 per cent based on share of bridge length;
 - 57 per cent based on share of road length; and
 - 38 per cent based on share of population.
 - (ii) 72.46 per cent is allocated to local roads in rural areas and then to LGBs on the basis of:
 - 7 per cent based on share of bridge length;
 - 74.4 per cent based on share of road length; and
 - 18.6 per cent based on share of population.

There is an added condition that a rural LGB's allocation cannot decline by more than 10 per cent of the previous year's entitlement.

Victoria

15. The Victorian LGGC recently reviewed its Local Roads grant model and intends introducing a revised approach in 2001–02.

16. Under the revised approach, Local Roads grants will be allocated based on the 'average annual life-cycle costs' of each LGB's local road network. Roads will be categorised into sealed roads, formed and surfaced roads, and natural surfaced roads.

17. Key determinants of grants will be road length and traffic volumes. The method will include factors (such as freight, climate, materials availability and whether or not roads are strategic routes) which have an impact on road costs.

18. For each LGB, the LGGC will:
- (i) determine the total length of each road;
 - (ii) determine traffic volumes for each road;
 - (iii) apply disability factors — freight loading, climate, materials, reactive sub-grades and strategic routes;
 - (iv) apply the average annual life cycle costs for each road; and

Chapter 9

- (v) combine these assessments to obtain the annual estimated road expenditure need for the LGB.

19. A separate assessment will be made for bridges.

20. Until 1998–99, a portion of the Local Roads grants was made available as Special Impact Funding for specific road maintenance and construction projects that benefited Aboriginal communities. The Victorian LGGC considered submissions from LGBs and received advice from Aboriginal Affairs Victoria. In 1998–99, \$332 500 was allocated as Special Impact Funding to five Victorian LGBs.

Queensland

21. For Queensland LGBs, the allocation model is:

- (i) 62.85 per cent in proportion to road length; and
- (ii) 37.15 per cent in proportion to population.

Western Australia

22. For Western Australia, 93 per cent of the funds are distributed according to an asset preservation model and the remaining 7 per cent are allocated annually for special projects. One third of the special projects funds are for roads serving Aboriginal communities and two thirds for major bridge works. The Aboriginal Roads Committee advises the LGGC for the Aboriginal road projects, and the Main Roads Department provides advice on bridge projects.

23. The asset preservation model assesses the cost of maintaining an LGB's road network. It takes into account annual and recurrent maintenance costs, and the costs of reconstruction at the end of the useful life of a road. It recognises:

- (i) the different needs of urban and rural roads;
- (ii) the costs associated with different types of roads (sealed, gravel and formed roads); and
- (iii) the impact of different use on these roads.

24. The model calculates annual asset preservation expenditure needs for a particular work activity (for example, resealing) for an LGB by the formula:

$$\text{annual expenditure need} = \text{unit cost per km} \times \text{frequency factor} \times \text{road length}$$

where

unit cost per km is the cost of maintaining the particular road type at the minimum standard for that work activity;

frequency factor reflects how often the work is carried out (for example, if every 15 years, then the frequency factor is 1/15); and

road length is the length of road of the particular type in the LGB area.

25. The annual cost of road work activities is calculated for each LGB and summed to obtain the LGB's total asset preservation expenditure needs. The Local Roads grants are allocated to LGBs on the basis of their total asset preservation expenditure needs.

South Australia

26. In South Australia, the LGGC allocates 85 per cent of the funds based on a simple formula. For metropolitan LGBs, it determines allocations by an equal weighting for population and road length. For non-metropolitan LGBs, it determines allocations by an equal weighting for population, road length and LGB area.

27. The remaining 15 per cent of the Local Roads grants are used for special Local Roads grants with these funds distributed following submission of proposals by LGBs. Recommendations on proposals are provided by the Local Roads Advisory Committee.

28. The South Australian LGGC is currently reviewing its Local Roads grants methodology.

Tasmania

29. The Locals Roads grants are distributed as follows.

- (i) Road preservation component — 66.5 per cent based on relative road expenditure needs as determined using an asset preservation model.
- (ii) Bridge expenditure component — 28.5 per cent based on relative bridge deck areas for concrete and wooden bridges, but not culverts.
- (iii) Special needs component — 5 per cent allocated to LGBs with an above average proportion of rural unsealed roads, based on relative length of rural unsealed roads.

30. The Tasmanian LGGC uses a modified version of the 'Mulholland' asset preservation model to assess road expenditure based on each LGB's road assets. The approach used focuses on the maintenance and re-construction of existing road assets.

31. For each LGB, the LGGC:

- (i) determines the total length of each road category (sealed and unsealed, urban and rural);

- (ii) applies performance standards to determine the length of road that will undergo each maintenance and re-construction activity each year in order to preserve the existing road structure;
- (iii) applies disability factors — climate, drainage, material, soil, terrain, traffic and cost factors are applied to re-construction; and climate, traffic and cost factors are applied to maintenance;
- (iv) applies State-wide average costs per kilometre for each activity; and
- (v) combines cost estimates across road categories and activities to obtain the annual estimated road expenditure need for the LGB.

Northern Territory

32. The local roads component is distributed according to weighted road lengths, with the weights as follows.

Table 9-3 LOCAL ROAD WEIGHTS, NORTHERN TERRITORY

Type of Road	Weight
Sealed, kerbed and guttered	10.0
Sealed	8.0
Gravel	4.0
Cycle path	2.0
Formed	1.0
Flat bladed track	0.4

33. Municipal councils in the Northern Territory cover a relatively small proportion of the total area of the Territory and Aboriginal Community councils are not usually given responsibility for a large area. Therefore, some local roads are not allocated to an LGB. These roads are maintained under a ‘roads trust’ with the funds managed by the Local Government Association of the Northern Territory.

Summary

34. Table 9-4 compares the indicators used by the LGGCs to distribute Local Roads funds.

Table 9-4 INDICATORS USED TO DISTRIBUTE LOCAL ROADS GRANTS

Indicator	NSW	Vic	Qld	WA	SA	Tas
Population	Yes	Yes	Yes	Yes	Yes	No
Road length	Yes	Yes	Yes	Yes	Yes	Yes
Area	No	No	No	No	Yes	No
Bridge indicator	Yes	No	No	Yes	No	Yes
Urban - rural split	Yes	Yes	No	Yes	Yes	Yes
Special needs	No	Yes	No	Yes	Yes	Yes
Road surface type	No	Yes	No	Yes	No	Yes
Asset preservation	No	No	No	Yes	No	Yes
Freight indicator	No	No	No	Partial	No	Yes

Source: ARRB Transport Research and NIEIR 1999, *Review of Distribution Arrangements for Local Roads Funding in Victoria: Accompanying Paper* with corrections as noted in the 1998–99 Local Government National Report.

Comparison of Grant Outcomes Between States

35. Table 9-5 shows the range of road relativities for LGBs within each State. As expected, for most States there is a much lower variation for the per kilometre relativities than there is for per capita relativities. For those States that distribute the Local Roads grants using a simple formula of population and road length, the range of per capita relativities tends to be greater than for those that use asset preservation models to allocate the grants.

Table 9-5 LOCAL ROADS RELATIVITIES FOR LOCAL GOVERNING BODIES, 1999–2000 GRANTS

	Per capita relativities		Per km relativities	
	Minimum	Maximum	Minimum	Maximum
New South Wales	0.2135	33.1691	0.6594	2.8787
Victoria	0.2552	9.2096	0.3544	3.7904
Queensland	0.3928	68.2242	0.3808	6.9717
Western Australia	0.0157	6.5308	0.4587	6.7155
South Australia	0.4154	23.2301	0.3511	19.2576
Tasmania	0.3542	8.5481	0.6457	1.9540
Northern Territory	0.3667	8.0689	0.0695	10.5691

Source: 1998–99 Local Government National Report and unpublished LGGCs' data.

36. Table 9-6 shows the average grant per kilometre for each State by each category of LGB in the Australian Classification of Local Government (ACLG). There are limitations in using this table for comparing Local Roads grant outcomes across States. Categories may not reflect groupings of LGBs that have similar 'road needs' within and between States.

37. However, the table does show some very large differences between States for some categories. For instance, for the Urban Capital City category, the average grant per kilometre varies between \$1070 in Victoria to \$3302 for Perth, yet this is one category where the 'road needs' might be expected to be fairly similar across States. Given the different approaches used to allocate Local Roads grants, such variations between States are not unexpected.

Table 9-6 AVERAGE ROADS GRANT PER KILOMETRE AND ACLG CATEGORY, 1999–2000 (\$ per km)

Category	NSW	Vic	Qld	WA	SA	Tas	NT	All States
Urban Capital City	1 704	1 070	1 635	3 302	1 304	2 192	3 253	1 762
Urban Developed Small	1 664	2 000	–	1 509	2 421	–	–	1 605
Urban Developed Medium	1 721	1 079	1 952	1 432	1 303	–	–	1 485
Urban Developed Large	1 653	1 115	–	1 325	1 264	–	–	1 264
Urban Developed Very Large	1 640	1 123	1 565	1 392	–	–	–	1 347
Urban Regional Small	1 031	442	530	799	650	1 763	681	628
Urban Regional Medium	1 084	513	807	750	–	2 738	–	776
Urban Regional Large	1 107	901	1 053	–	–	–	–	985
Urban Regional Very Large	1 348	1 113	1 552	–	–	–	–	1 338
Urban Fringe Small	–	679	481	1 118	1 377	1 185	3 300	693
Urban Fringe Medium	1 121	769	707	1 072	601	–	–	867
Urban Fringe Large	1 152	1 306	1 080	1 155	–	–	–	1 182
Urban Fringe Very Large	1 354	937	941	1 298	1 022	–	–	1 134
Rural Significant Growth	–	662	440	746	–	1 435	–	624
Rural Agricultural Small	544	–	328	374	155	511	–	341
Rural Agricultural Medium	582	–	343	450	131	1 166	–	426
Rural Agricultural Large	608	240	375	478	193	1 353	–	418
Rural Agricultural Very Large	651	424	398	439	216	1 548	1 857	488
Rural Remote Extra Small	–	–	329	252	200	–	458	314
Rural Remote Small	–	–	327	330	–	–	446	358
Rural Remote Medium	525	–	327	285	101	–	479	331
Rural Remote Large	541	–	337	447	–	–	–	414
All Categories	796	543	507	492	287	1 469	669	574

Source: Department of Transport and Regional Services, unpublished data.

CHAPTER 10

OTHER GRANT SUPPORT

1. The National Principle dealing with Other Grant Support requires LGGCs to treat other relevant grant support provided to LGBs to meet their expenditure needs by the inclusion approach.

2. This Principle does not clarify what other relevant grant support means nor what the inclusion approach means. This chapter discusses:

- what the Other Grant Support Principle means and how it should be implemented;
- why it should be implemented in that way;
- why the Other Grant Support Principle should be applied to all of a State's Local Roads grants and the implications if it is not; and
- the grant distribution implications of implementing the Other Grants Support Principle.

3. While this chapter uses Local Roads grants as the example, the conclusions apply to all Commonwealth and State grants provided to LGBs and which they use to finance their expenditure requirements.

What the Other Grant Support Principle Means

4. Equalisation principles require an assessment of how much each LGB is able to raise from all of the revenue sources available to it. Equalisation principles require the LGGCs to make a comprehensive assessment of needs. One aspect of a comprehensive assessment of needs is that an assessment should be made of all expenditure and all revenue.

5. The Other Grant Support Principle is an instruction to LGGCs on how to treat other assistance received by LGBs — grants provided by the Commonwealth or the State — which they use to finance their expenditure requirements. It tells them to treat grant assistance like any other source of revenue and to take it into account when assessing the overall financial capacity of each LGB.

6. An implication of this approach is that there would be no distinction, in the assessment approach used by LGGCs, between revenue raised from an LGB's own taxes and charges and revenue it receives from another sphere of government – although, there may be differences in methods used to assess revenue capacities. Assessing taxes and charges but omitting grant assistance would not produce a comprehensive assessment of needs.

7. Implementing the Other Grant Support Principle requires LGGCs to include in their assessments, all expenditure LGBs incur in providing services and to treat all of that expenditure in the same way. Parts of the expenditure should not be treated differently simply because they are financed by a grant from the Commonwealth or State. Omitting expenditure would be inconsistent with a comprehensive assessment of needs.

8. The crucial issue is the presumption that the grant assistance finances expenditure in an area where the LGGC makes an assessment of expenditure need. If it does, the grant assistance should be treated in the same way as other local government revenue — the LGGC should make an assessment of each LGB's capacity to obtain revenue from it. However, some of the expenditure financed by the other assistance is in an area that is not subject to an LGGC assessment. For example, most LGGCs do not make an assessment of capital expenditure. If the grant assistance was used to finance capital expenditure, it should not be treated in the same way as other local government revenues. In this case both the capital expenditure and the grant assistance would be excluded from LGGCs' assessments — neither would be subject to an LGGC's assessment of need.

How the Other Grant Support Principle Should be Implemented

9. LGGCs use one of two equalisation models:

- the Balanced Budget model; or
- the Direct Assessment model.

10. The Other Grants Support Principle would be implemented differently within each model.

11. ***The Balanced Budget Model.*** This model is based on an assessment of standardised expenditures and revenues. In general, an LGB's grant requirement is equal to its assessed standardised expenditure less its assessed standardised revenue. The Other Grant Support would be implemented in this model by:

- (i) making a gross assessment of standardised expenditures — that is, all expenditure on the function would be subject to an LGGC's expenditure assessment regardless of how the expenditure was financed; and
- (ii) making a separate assessment of revenue capacity — the Commonwealth Grants Commission would deem an LGB's capacity to raise revenue from the grant as being equal to the actual level of grant it received.

12. ***The Direct Assessment Model.*** This model is based on an assessment of expenditure and revenue allowances. In general, under this model an LGB's grant requirement is equal to the sum of its assessed allowances. The Other Grant Support would be implemented in this model by:

- (i) making a gross assessment of expenditure allowances — that is, all expenditure on the function would be subject to an LGGC's expenditure assessment regardless of how it was financed; and
- (ii) making an assessment of an other grant support allowance — the Commonwealth Grants Commission would assess an LGB's other grant support allowance as the difference between its population share of the assistance paid to all LGBs and its actual share.

Why the Other Grant Support Principle Should be Implemented in this Way

13. Implementing the Other Grant Support Principle in this way is consistent with equalisation principles because it applies a consistent approach to the assessment of:

- (i) expenditure need; and
- (ii) revenue capacity.

14. All expenditure is treated in the same way. How a particular expenditure is financed has no bearing on how needs associated with it are assessed. Thus the same assessment method would be applied to all road expenditure even though parts of that expenditure are financed from:

- General Purpose grants;
- Local Roads grants; and
- rate revenue.

15. All revenue is treated in the same way. It is brought within LGGCs' assessments and an assessment of capacity is made.

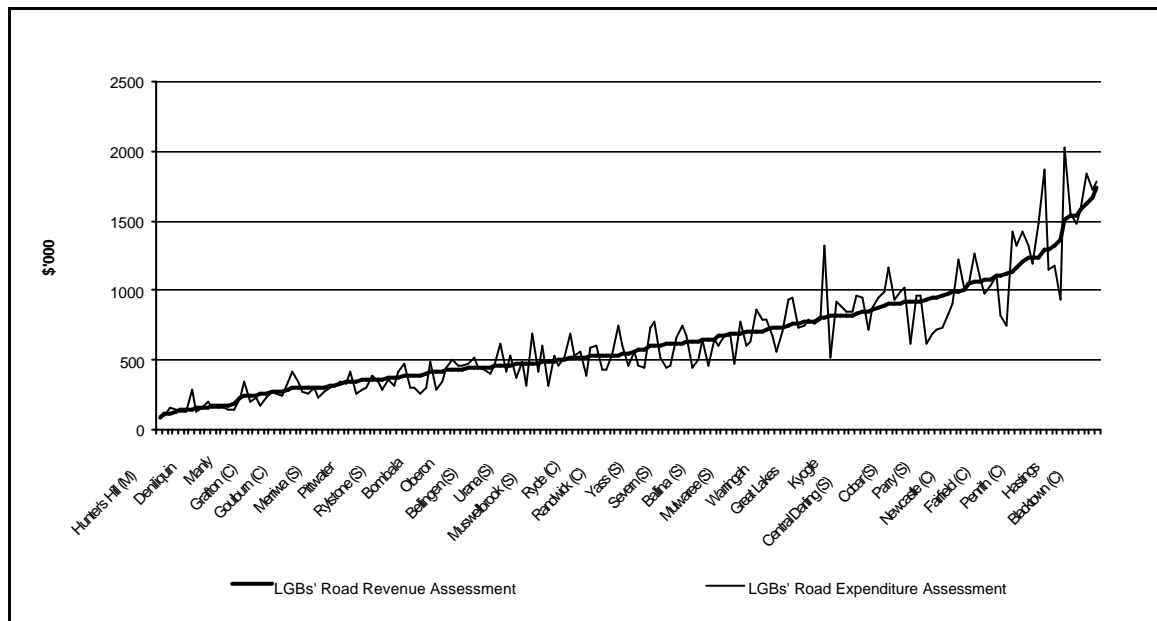
16. To implement the Other Grant Support Principle in a different way would be inconsistent with equalisation principles. At present, LGGCs implement this Principle in different ways. For example, some of them exclude the expenditure financed by grants and the grants themselves from their assessment processes (they do this by making an assessment of road expenditure and then discounting that assessment by the proportion financed by Local Roads grants). Two observations can be made about this approach:

- (i) it is equivalent to excluding the expenditure financed by Local Roads grants from LGGCs' assessments. This approach means that expenditure needs would not be assessed for road expenditure if that expenditure was financed from Local Roads grants but needs would be assessed if that expenditure was financed by different revenues;

- (ii) if the same disabilities are assessed for expenditure and revenue (as would be the case if the same assessment methods were applied to the expenditure and the revenue), this approach would produce the same grant allocations as implementing the Other Grant Support Principle in the way intended. That is, in these circumstances, discounting assessed expenditures would not affect an LGB's grant allocations.

17. For each State, the following charts compare each LGB's road revenue and road expenditure assessments. The charts were prepared by applying both assessments to the total Local Roads pool¹. If the two lines lie one on top of the other, it means that expenditure needs are the same as revenue needs for every LGB. In these circumstances, the two sets of needs offset one another and applying the Other Grant Support Principle (in the way intended) would have no effect on grant allocations.

Figure 10-1 COMPARISON OF LGBS' ROAD REVENUE AND ROAD EXPENDITURE ASSESSMENTS — NEW SOUTH WALES, 1999–2000



1 In each case, the assessed road revenue is equal to the amount of Local Roads grants actually received. The road expenditure assessment was obtained by applying an LGB's share of total assessed road costs to the amount of the Local Roads pool.

Figure 10-2 COMPARISON OF LGBs' ROAD REVENUE AND ROAD EXPENDITURE ASSESSMENTS — VICTORIA, 1999–2000

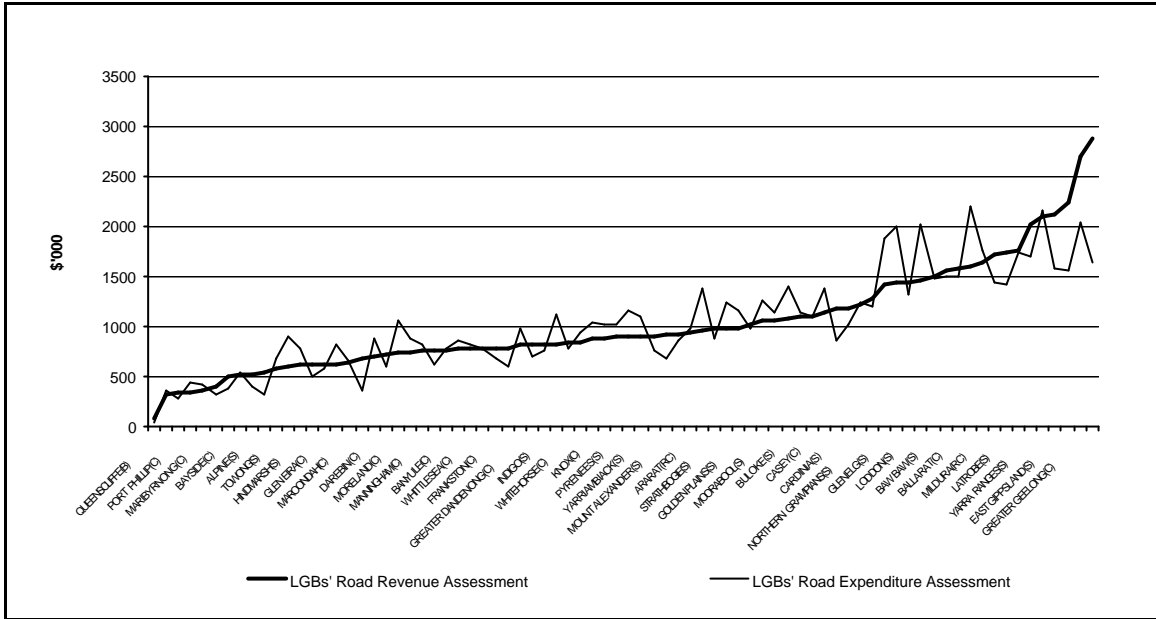


Figure 10-3 COMPARISON OF LGBs' ROAD REVENUE AND ROAD EXPENDITURE ASSESSMENTS — QUEENSLAND, 1999–2000

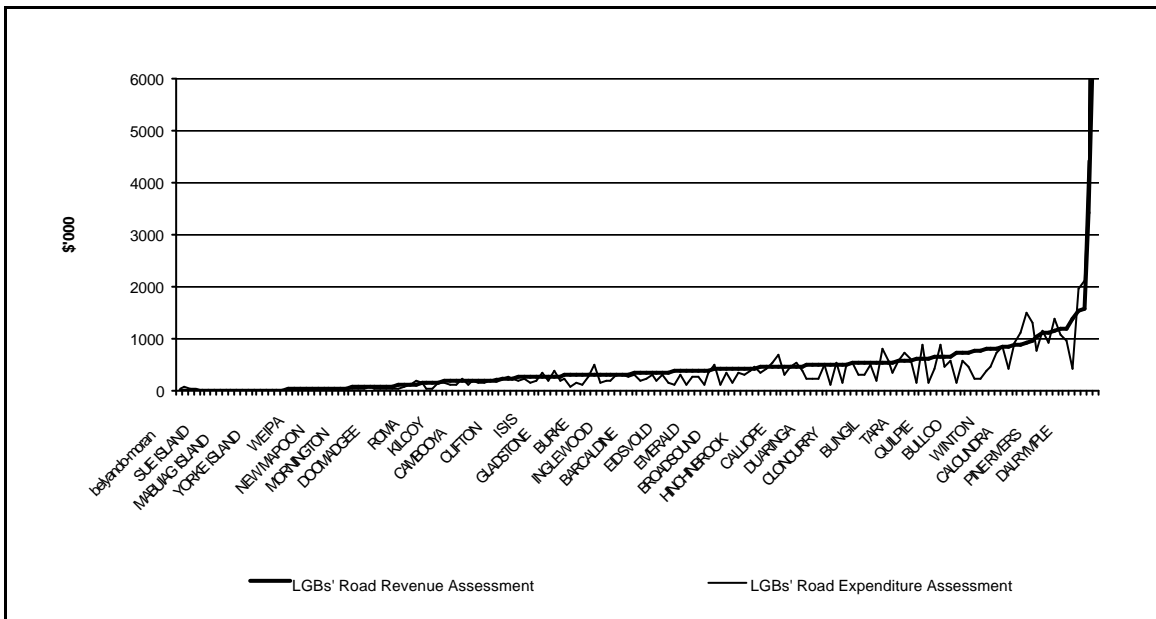


Figure 10-4 COMPARISON OF LGBS' ROAD REVENUE AND ROAD EXPENDITURE ASSESSMENTS — WESTERN AUSTRALIA, 1999–2000

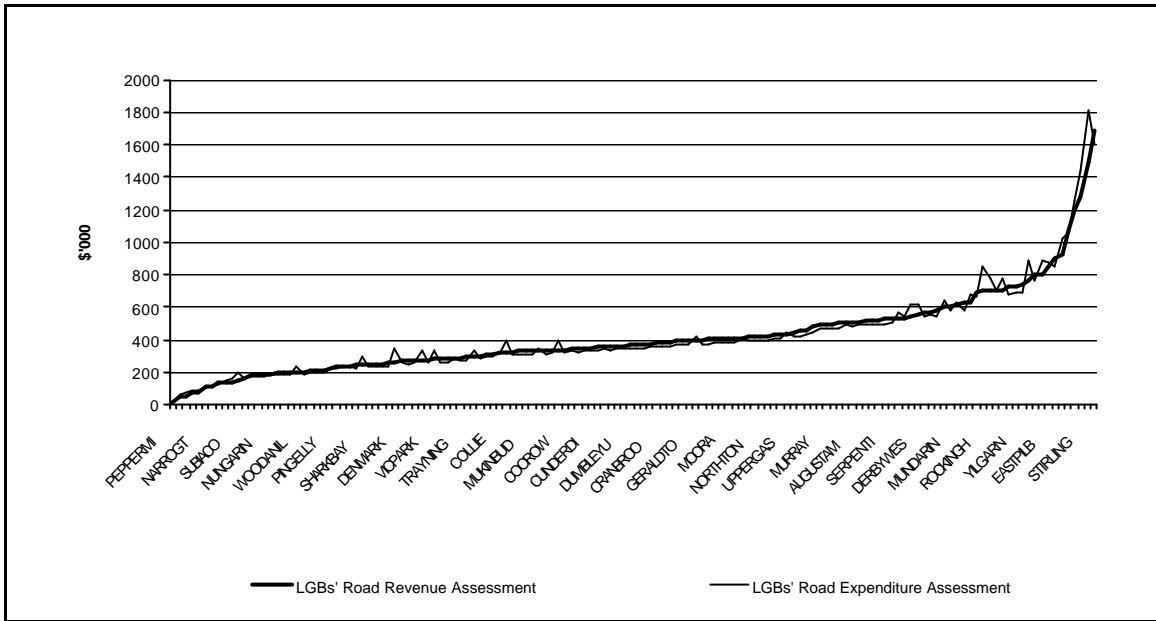


Figure 10-5 COMPARISON OF LGBS' ROAD REVENUE AND ROAD EXPENDITURE ASSESSMENTS — SOUTH AUSTRALIA, 1999–2000

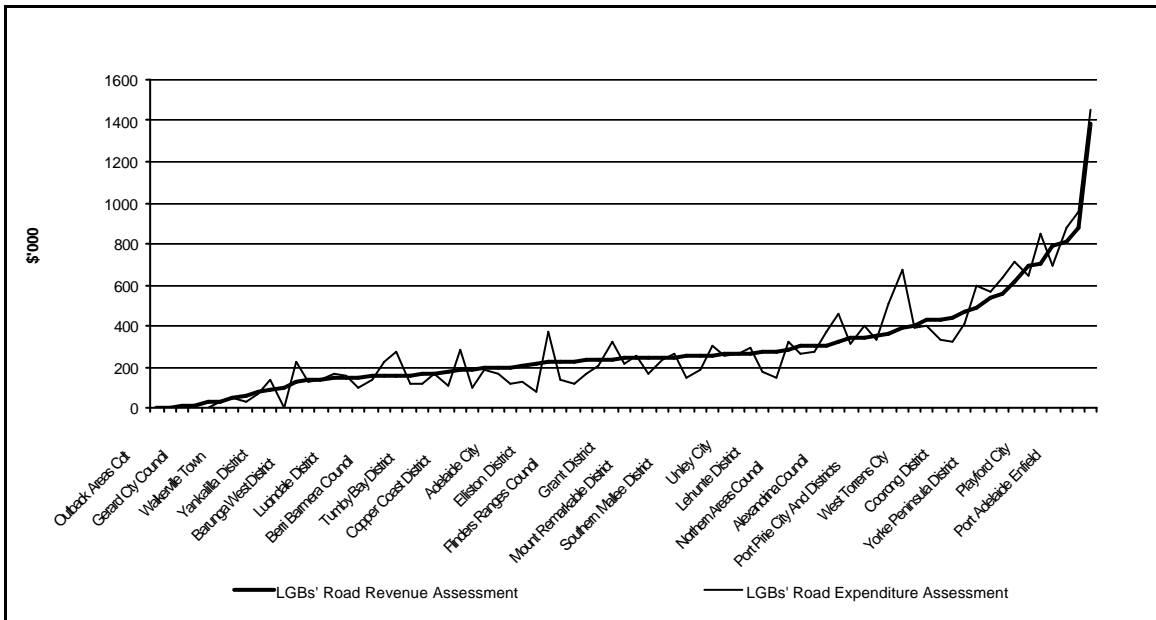


Figure 10-6 COMPARISON OF LGBS' ROAD REVENUE AND ROAD EXPENDITURE ASSESSMENTS — TASMANIA, 1999–2000

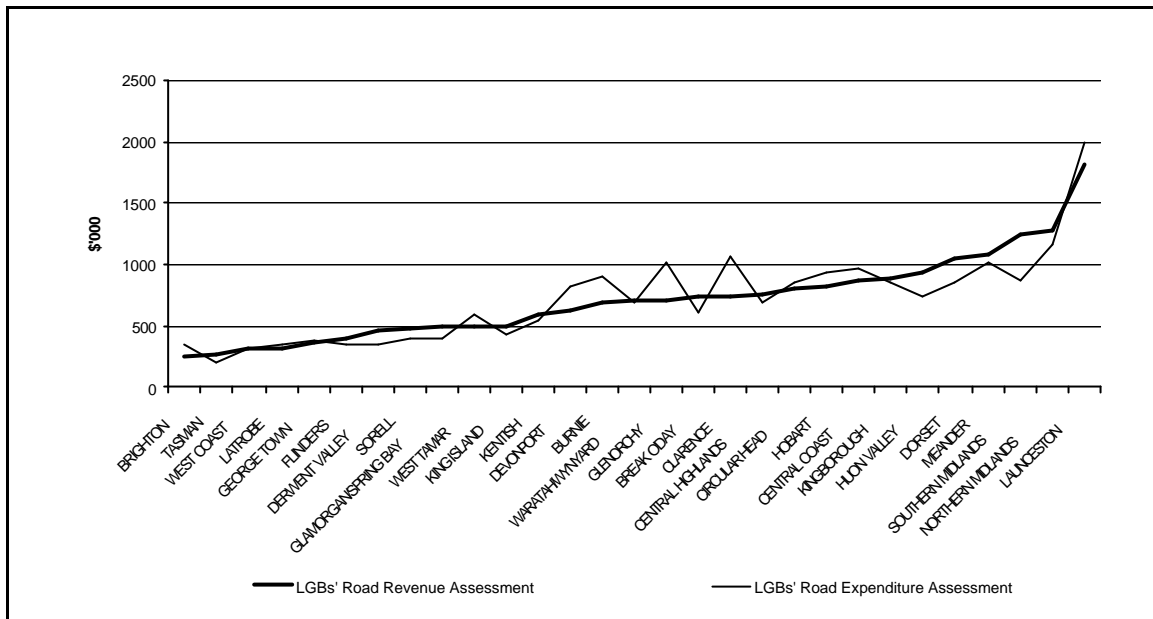
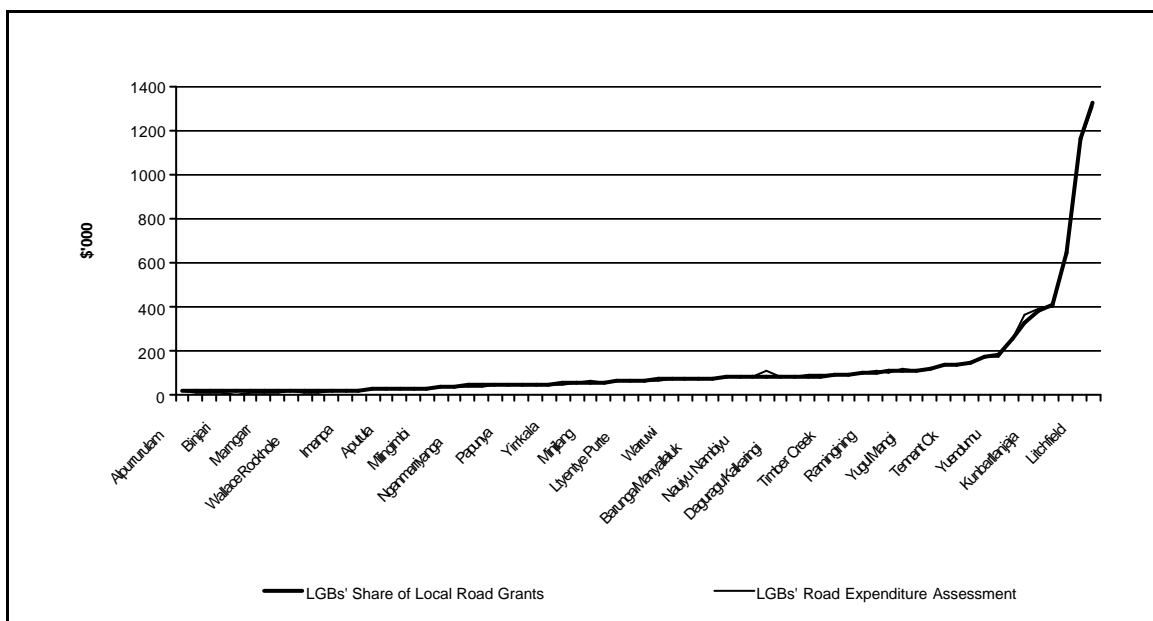


Figure 10-7 COMPARISON OF LGBS' ROAD REVENUE AND ROAD EXPENDITURE ASSESSMENTS — NORTHERN TERRITORY, 1999–2000



18. In none of the States do the two lines lie one on the other, although it is very close for the Northern Territory. This suggests that in no State is the road expenditure assessment method identical to the road revenue assessment method. This means that the two approaches (Other Grant Support and discounting) produce different LGBs' grant allocations.

19. Applying the Other Grant Support in the way proposed provides increased (reduced) financial assistance grants to LGBs which have a share of assessed road expenditure that is greater (less) than their share of assessed road revenue (their share of Local Roads grants). The discounting assessed expenditure approach does not recognise differences in needs associated with road expenditure and road revenue and consequently the two approaches lead to different grant allocations. How the Other Grant Support Principle is implemented is therefore important.

Why the Other Grant Support Principle Should Be Applied to all of an LGB's Local Roads Grant and the Implications if it is not

20. Local Roads grants are a revenue source that LGBs use to finance their roads expenditures. For that reason, the Other Grants Support Principle should be applied to Local Roads grants.

21. Some LGGCs apply the Other Grant Support Principle to only part of their Local Roads grants. Reasons for this approach vary but include:

- the Local Roads grants are untied and can be spent on functions that are not included in the equalisation budget; and
- a portion of the Local Roads grants are used to finance specific roads (or bridge) needs and the road expenditure assessment method does not take account of these special needs.

22. The first reason appears to be about seeking the 'right' balance between the expenditure and revenue sides of the equalisation budget. The Commonwealth Grants Commission would address the problem of balance by extending the scope of the equalisation budget to ensure that the assessment of road expenditures and road revenues is comprehensive.

23. With the agreement of their LGBs, some LGGCs use a portion of the Local Roads pool to finance specific road needs (for example, roads to Indigenous communities, bridges etc). Provided the expenditure financed by that portion of the Local Roads grants is omitted from the road expenditure assessment, it is appropriate to apply the Other Grant Support Principle only to the balance of the Local Roads grants². If, however, the expenditure associated with the specific road needs is included in the road expenditure assessment, the Other Grant Support Principle should apply to all of the Local Roads grants.

24. If the Other Grant Support Principle is not applied to the Local Roads grants some expenditure and some Local Roads grants would be omitted from the equalisation process. This creates the potential that for some LGBs, their share of the omitted Local Roads grants may be insufficient to finance their share of the omitted roads expenditure. This would not be consistent with the purpose of providing an equitable level of services.

² If special road expenditure needs have been separately assessed and if they are separately financed by a portion of the Local Roads grants, both the expenditure and revenue would have been equalised and do not need to be equalised again.

The Grant Distribution Implications of the Other Grant Support Principle

25. Table 10-1 shows the grant implications if the Other Grant Support Principle is applied to all of the Local Roads pool. The calculations are based on information obtained from LGGCs.

Table 10-1 GRANTS REDISTRIBUTION OF APPLYING OTHER GRANT SUPPORT TO ALL STATES

	NSW	Vic	Qld	WA	SA	Tas	NT	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Amount redistributed	42.9	15.7	10.4	0.0	0.3	0.0	0.0	69.3
Grants available (GPGs and LRGs)	411.3	299.4	235.9	146.0	91.1	42.7	18.1	1 244.5
Percentage change (%)	10.4	5.2	4.4	0.0	0.3	0.0	0.0	5.6

26. These grant changes occur because some LGGCs do not currently implement the Other Grant Support Principle in the way proposed and if they were to change their methods, it would lead to changes in grant allocations.

27. The LGGCs apply the Other Grants Support Principle in different ways:

- Northern Territory implements the Principle broadly in the way proposed;
- Queensland, Western Australia, South Australia and Tasmania implement the Principle broadly in the way proposed. They apply the Principle to the bulk of Local Roads grants but omit a portion of them — Queensland omits 30 per cent, South Australia 15 per cent, Tasmania 5 per cent, and Western Australia 7 per cent; and
- New South Wales and Victoria use the discount approach and effectively omit Local Roads grants and the expenditure it finances from their assessments.

Conclusions

28. The Other Grants Support Principle requires that a consistent approach be taken to expenditure and revenue assessments. Expenditure should not be treated in a different way merely because it has been financed by grant assistance. Grant assistance should not be treated differently to other revenues simply because it is a grant.

29. If implemented in this way, the Other Grant Support Principle requires:

- (i) a gross expenditure assessment — the assessment should be based on all roads expenditure by the LGBs, thus the same assessment method should be applied to the expenditure financed by the grant as is applied to related expenditure; and

- (ii) a gross revenue assessment — the grant assistance should be included as a revenue source and an assessment made of it.

30. If the two assessment methods are identical, the proposed method of applying the Other Grant Support Principle will not give rise to changes in LGBs' grant allocations. But if the two assessments are different applying the Other Grant Support in the way proposed will provide increased (reduced) financial assistance grants to LGBs whose share of assessed road expenditure is greater (less) than their share of the Local Roads grants.

Table 10-2 MAJOR FEATURES OF LOCAL ROADS ASSESSMENT METHODS

	Local Roads Grant		General Purpose Grant	How do LGGCs implement the Other Grant Support Principle?	Is the LGGC's approach consistent with the Other Grant Support Principle?
	Main Feature	Additional Features	Assessment Method		
NSW	Population, road length and bridge length.	Fixed percentage of pool for Sydney, Newcastle and Wollongong. Other LGBs share rest.	A version of the Mulholland asset preservation model.	Uses the discount expenditure approach. It applies a discount factor to its assessed road allowances.	No.
Vic	Asset preservation model. Roads are classified according to location and traffic use. Standard costs per road length are assumed for each road type and road length and disabilities are applied.	Special needs assessments are funded from the pool.	Factor assessment method. LGB's share of standard is calculated as road expenditure times LGB's share of road lengths. Other road disabilities are then applied. Method subject to review this year.	Uses the discount expenditure approach. It applies a discount factor to its road assessments.	No.
Qld	Population and road length.	None.	A version of the Mulholland model asset preservation model.	Uses the Other Grant Support approach but omits 30 per cent of Local Roads grants because these grants are untied and can be used to finance some of the 30 per cent of all expenditures that are not assessed.	Partially. Yes for the 70 per cent included, no for the 30 per cent omitted.
WA	Asset preservation model.	7 per cent of the pool is set aside for special projects (bridges and roads serving Indigenous communities).	Asset preservation model.	Uses the Other Grant Support approach but omits 7 per cent of Local Roads grants because it uses these grants for special purposes.	Yes — if the roads expenditure financed by the 7 per cent is also omitted.

Table 10-2 MAJOR FEATURES OF LOCAL ROADS ASSESSMENT METHODS (continued)

	Local Roads Grant		General Purpose Grant	How do LGGCs implement the Other Grant Support Principle?	Is the LGGC's approach consistent with the Other Grant Support Principle?
	Main Feature	Additional Features	Assessment Method		
SA	Population, road length and, for non-metropolitan LGBs, area.	15 per cent of pool is set aside for special roads projects. Remaining pool is split between metropolitan and non-metropolitan based on population and road length.	Factor assessment method. LGB's share of standard is calculated as road expenditure times LGB's share of population. Factors assessed for material haulage, soil type, rainfall and drainage and applied to LGB's share of road lengths.	Uses the Other Grant Support approach but omits 15 per cent of Local Roads grants because it uses these grants for special purposes.	Yes — if the roads expenditure financed by the 15 per cent is also omitted.
Tas	Asset preservation model.	5 per cent of the pool is allocated based on special needs (unsealed rural roads). The remaining pool is split between an asset preservation model (66.5 per cent) and bridge deck area (28.5 per cent).	Asset preservation model. No allowance for bridge deck area or special needs.	Uses the Other Grant Support approach but omits 5 per cent of Local Roads grants because it uses these grants for special purposes.	Yes — if the roads expenditure financed by the 5 per cent is also omitted.
NT	Factor assessment method. Cost weights applied to road length.	Minimum grant of \$20 000. Local Government Association of the Northern Territory receives roads funding for some of the unincorporated area.	Factor assessment method. Cost weights applied to road length. There is no minimum assessment.	Uses the Other Grant Support approach.	Yes.

CHAPTER 11

DISTRIBUTION MODELS

1. In this chapter we discuss the following issues:
 - (i) what is a distribution model?
 - (ii) are there different types of distribution models?
 - (iii) does the choice of model matter?
 - (iv) what distribution models do the LGGCs use?
 - (v) should the distribution models produce the same answers? and
 - (vi) what is the implication of the three pool arrangement for LGGC models?

What is a Distribution Model?

2. LGGCs uses a variety of assessment methods to quantify an LGB's level of advantage or disadvantage across each area of expenditure and revenue. A distribution model is the means by which all of these assessments are combined to calculate an LGB's overall level of advantage or disadvantage.

3. A distribution model is only required for the allocation of the Relative Need pool. An LGB's share of this pool should reflect its assessments of advantage/disadvantage across all areas of expenditure and revenue. An important feature of a distribution model is that it does not, of itself, distort an LGB's share of the Relative Need pool.

Are there Different Types of Distribution Models?

4. There are two types of distribution models and they are closely related. The first type measures an LGB's financial capacity as the difference between its assessed costs of providing services and its assessed revenue. An LGB's financial capacity is then compared with the financial capacity of the average LGB to determine whether it has an overall advantage of disadvantage.

5. The second type measures an LGB's financial advantage or disadvantage in each area of expenditure and revenue. It does this by comparing its assessed costs of providing services (its assessed revenue) to the average LGB's assessed cost of providing services (revenue raising capacity). The LGB's overall advantage or disadvantage is calculated by summing across all areas of expenditure and revenue.

Does the Choice of Model Matter?

6. So long as the distribution model does not distort an LGB's share of the Relative Need pool, the choice of model does not matter.

7. The Commonwealth Grants Commission (the Commission) has two ways of presenting its distribution model. Its 'standardised' presentation is based on the first type of model and its 'needs' presentation is based on the second type of model. Both presentations deliver the same assessments of financial capacity, so that the choice of presentation does not matter.

What Distribution Models do the LGGCs Use?

8. LGGCs use one of two models:

- (i) Balanced Budget — based on the approach of assessing the overall level of disadvantage; or
- (ii) Direct Assessment — based on the approach of assessing the level of disadvantage in each area of expenditure and revenue.

9. Table 11-1 shows the differences in the distribution models used by each LGGC.

Table 11-1 DIFFERENCES IN THE DISTRIBUTION MODEL USED

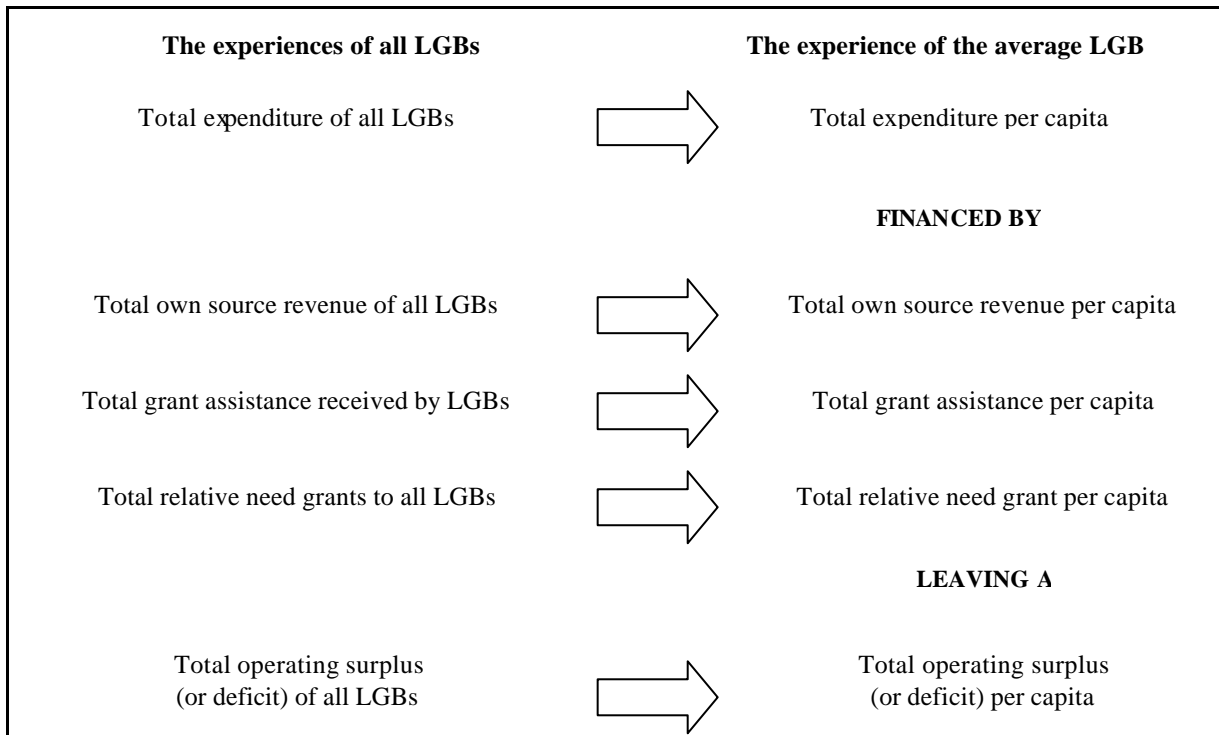
State	Model used
New South Wales	Direct Assessment Model. Separate assessment for Lord Howe Island, Silverton and Tibooburra.
Victoria	Balanced Budget Model. Assistance for natural disaster relief taken out of the pool.
Queensland	Balanced Budget Model. Separate assessment for the Deed of Grant in Trust councils.
Western Australia	Balanced Budget Model.
South Australia	Direct Assessment Model. Separate assessment for the Outback Areas Community Development Trust (\$105 per capita) and five Indigenous Communities (\$204 per capita).
Tasmania	Balanced Budget model.
Northern Territory	Balanced Budget model.

10. The Commission's 'standardised' presentation is very much like the Balanced Budget Model but differs by one term. Its 'needs' presentation is very much like the Direct Assessment Model but it too differs by one (albeit different) term. The Balanced Budget and Direct Assessment Models as used by LGGCs do not produce the same assessments of financial capacity figure for each LGB. If the missing terms were included, they would. These missing terms are discussed later in this chapter.

11. *The Balanced Budget Model.* Five LGGCs use the Balanced Budget approach (Victoria, Queensland, Western Australia, Tasmania and the Northern Territory). Their models are based on making an assessment of each LGB's costs of providing services and its capacity to raise revenue (including its capacity to obtain other grant assistance).

12. As these assessments are subsequently compared to the average LGB, it is worthwhile commenting on the experience of the average LGB. Figure 11-1 shows how the experience of the average LGB is determined.

Figure 11-1 THE AVERAGE LGB



13. There are a number of important implications that arise from Figure 11-1. They include:

- (i) the average experience is the population weighted average of the experiences of all LGBs;
- (ii) the experience of an individual LGB can be different from experience of the average LGB — if it is better than the average LGB it is advantaged and if it is worse than the average LGB it is disadvantaged;
- (iii) if there are disadvantaged LGBs there must also be advantaged LGBs (and vice versa);
- (iv) all expenditures and revenues should be taken into account (including grant assistance);
- (v) the average operating surplus (or deficit)¹ is taken into account — because this reflects the reality of local government; and
- (vi) the net financial capacity of the average LGB is zero — because expenditure is exactly offset by own source revenue, grant assistance, relative need assistance and the average operating surplus (or deficit).

¹ In the Commission's distribution model this operating surplus (or deficit) is called the standard budget result.

14. If an individual LGB is disadvantaged, it means that it requires more Relative Need grants than the average LGB (the average LGB receives a per capita share of Relative Need grants). For the disadvantaged LGB to have a net financial capacity of zero, it requires more than a per capita share of Relative Need grants. Similarly, if an LGB is advantaged, it requires less than a per capita share of Relative Need grants.

15. The Act defines a form of horizontal equalisation that is about identifying advantaged and disadvantaged LGBs and bringing all the disadvantaged LGBs up to the financial position of the average LGB. This means that the task of the LGGCs is to calculate, for each disadvantaged LGB, the level of Relative Need grants that it requires to balance its assessed costs and assessed revenues. This level of grants would leave it with a net financial capacity of zero. If this is the intention, this type of distribution model can be respecified as:

Relative Need grant	<i>equals</i>	assessed costs of providing services
	<i>plus</i>	assessed average operating surplus/deficit
	<i>less</i>	assessed revenue
	<i>less</i>	actual receipt of other grant assistance.

16. This chapter assumes there are sufficient funds in the Relative Need pool to bring the disadvantaged LGBs up to the financial position of the average LGB. Chapter 14 deals with the actual situation when there is insufficient assistance.

17. To be consistent with this approach, LGGCs using the Balanced Budget model would calculate an LGB's financial capacity by assessing:

- (i) what it would cost it to provide the standard level of services, for each service provided by LGBs — these assessments are called standardised expenditure;
- (ii) what it would cost it to provide the average operating surplus/deficit;
- (iii) how much it could raise if it applied the standard rate of tax or charge, for each tax or charge raised by LGBs — these assessments are called standardised revenue;
- (iv) how much of its expenditure needs is financed by grants from the Commonwealth and/or State — its actual receipt of other grant assistance; and
- (v) the difference between an LGB's standardised costs under (i) and (ii) and its assessed revenue under (iii) and (iv) — its per capita shortfall before the distribution of Commonwealth equalisation assistance.

18. These per capita shortfalls represent the level of Relative Need grants that would be required to bring an LGB up to the financial position of the average LGB (that is, to leave it with a net financial capacity of zero). Some LGBs can have a negative shortfall, this would occur if their assessed revenues exceeded their assessed costs. Such LGBs would not require a Relative Need grant.

19. *The omitted term.* The Balanced Budget Model used by the LGGCs does not include an assessment of the operating surplus/deficit. This omission would not matter if, collectively, LGBs' budgets were in balance. In reality, LGBs' budgets are not in balance and this variable should be included to correctly imitate the reality of how LGBs finance their expenditure.

20. The operating surplus/deficit variable acts to reduce the volatility of the distribution model. For example, if a new area of expenditure is introduced into the model two things happen:

- total expenditure would increase — the average LGB's expenditure per capita would increase; and
- the operating surplus would decrease by exactly the same amount — the average LGB's operating surplus per capita would decrease.

21. The outcome of these two changes is that the net financial capacity of the average LGB does not change, it remains zero.² If the operating surplus/deficit term is omitted, then the net financial capacity of the average LGB would increase in line with the increased expenditure. Omitting the operating surplus/deficit term implies that changes in the scope of equalisation (which expenditures and revenues are assessed) can have two effects on an LGB's assessed shortfall through:

- (i) its disability assessment — how different is its disability in the new area of expenditure (or revenue) different from the average disability; and
- (ii) the movement in the financial capacity of the average LGB.

22. If the missing term were included, the second effect would not arise. Changing the scope of equalisation would only affect an individual LGB's assessed shortfall to the extent that its disabilities in the new area of expenditure (or revenue) were different from the average LGB's disability. That is, an LGB's share of Relative Need grants would only increase if, through no fault of its own, it faced higher than average costs or raised lower than average revenue.³ This is the current Commission practice.

2 An individual LGB's assessed shortfall can change if its assessed costs per capita in the new expenditure area are different to the average cost per capita.

3 If the missing term is excluded, an LGB's share of Relative Need grants would increase for every dollar of assessed costs and reduce for every dollar of assessed revenue.

23. Excluding the missing term changes the threshold level at which an LGB is deemed to be advantaged. If the term is omitted, the threshold level depends on the amount of expenditure and revenue that are assessed. If the term is included, the threshold level depends on the amount of the Relative Need pool.

24. *The Direct Assessment Model.* Two LGGCs use the Direct Assessment approach (New South Wales and South Australia). Their models are based on making an assessment of the level of disadvantage in each area of expenditure and revenue and summing over all areas of expenditure and revenue.

25. In each area of expenditure (or revenue) an individual LGB's assessment is compared to the average LGB. As Figure 11-1 showed, the average experience is the population weighted average of the experiences of all LGBs. The Direct Assessment Model calculates an individual LGB's level of disadvantage (or advantage) for each area of expenditure and revenue (including other grant assistance).

26. The implications discussed earlier also apply to the Direct Assessment Model.⁴ That is:

- (i) the average experience is the population weighted average of the experiences of all LGBs;
- (ii) the experience of an individual LGB can be different to the experience of the average LGB — if its experience is better than the average LGB it is advantaged and if it is worse than the average LGB it is disadvantaged;
- (iii) if there are disadvantaged LGBs there must also be advantaged LGBs (and vice versa); and
- (iv) all expenditures and revenues should be taken into account (including grant assistance); and
- (v) the net financial capacity of the average LGB is zero — because expenditure is exactly offset by own source revenue, grant assistance, relative need assistance and the average operating surplus (or deficit).

27. If an individual LGB is disadvantaged, it means that it requires more assistance than the average LGB (the average LGB receives a per capita share of Relative Need grants). For the disadvantaged LGB to have a net financial capacity of zero, it requires more than a per capita share of Relative Need grants. Similarly, if an LGB is advantaged, it requires less than a per capita share of Relative Need grants.

4 One difference is that distribution models of this type do not explicitly show an assessment of the average operating surplus (or deficit). The reason is because needs are usually not assessed for this variable (every LGB is given the average LGB's experience). Since needs have been assessed for all expenditures and revenues, assessing needs for the operating surplus/deficit would be double counting.

28. The Act's definition of horizontal equalisation attempts to bring all the disadvantaged LGBs up to the financial position of the average LGB. Thus, the task is to calculate the level of Relative Need grants that would balance a disadvantaged LGB's assessed expenditures and assessed revenues (leave it with a net financial capacity of zero). If this is the intention, this type of distribution model can be respecified as:

Relative Need grant	<i>equals</i>	an equal per capita share of Relative Need grants
	<i>plus</i>	expenditure needs
	<i>plus</i>	revenue needs
	<i>plus</i>	other grant assistance needs.

29. Expressed in this way, this distribution model will produce the same financial capacity assessments as the Balanced Budget distribution model.

30. ***The omitted term.*** The LGGCs that use the Direct Assessment Model leave out the equal per capita share of grants available term. If they do this, their distribution model will produce different assessments of financial capacity to that produced by the Balanced Budget Model — they would be different for every LGB by the equal per capita amount.

Should LGGCs' Distribution Models Produce the Same Answer?

31. Currently, the LGGCs' distribution models do not produce the same assessments of LGBs' financial capacity. If they were respecified to include omitted terms they would produce the same answers. There are two issues relating to question of whether the distribution models should produce the same answer:

- (i) do the models as currently specified distort the allocations of Relative Need grants? and
- (ii) are the distortions large?

32. The omission of these terms do distort the assessments of financial capacity. They change the threshold level at which an LGB is deemed to be disadvantaged and eligible to receive a Relative Need grant. Chapter 14 provides an example which demonstrates this point for the Direct Assessment model.

33. Some LGGCs have examined the issue and found the distortions to be small.

What is the Implication of the Three Pool Arrangement for LGGCs' Models?

34. Two of the modified arrangements proposed in the report are to:

- (i) have three separate pools of assistance;
 - a Per Capita pool;
 - a Local Roads pool;
 - a Relative Need pool; and
- (ii) through the Other Grant Support Principle, take account of the receipt of Per Capita and Local Roads grants in the assessment of Relative Need grants.

35. The Relative Needs pool would be 70 per cent of the size of the previous General Purpose pool. The remaining 30 per cent (the Per Capita pool) would be treated as other grant assistance. This change in treatment would not change the net financial capacity of the average LGB — it would still be zero — but it would change the proportion of the assessed shortfall that is financed by Relative Need grants.

36. Since the Per Capita grants are distributed on a population basis, the change reduces every LGB's assessed shortfall by the same per capita amount. This reduces the Relative Need grants that they require to place them in the same financial position as the average LGB. The Relative Need pool also reduces by the same per capita amount.

37. It is difficult to conclude what the implications might be for the grants of individual LGBs. In the absence of the other changes proposed by the Commission:

- (i) it is likely that advantaged LGBs would remain advantaged and be ineligible for a Relative Need grant;
- (ii) borderline disadvantaged LGBs might be pushed into being advantaged and thus become ineligible for a Relative Need grant; and
- (iii) severely disadvantaged LGBs would most likely remain disadvantaged and be eligible for a Relative Need grants.

38. The implications for the three pool arrangement for the grants to individual LGBs are likely to be smaller than some of the other changes proposed by the Commission, including:

- applying the Other Grant Support Principle to all grants;
- assessing all revenues and expenditures;
- assessing the needs of all population groups (especially Indigenous people); and
- assessing advantage as well as disadvantage.

TECHNICAL APPENDIX — SCOPE OF EQUALISATION

39. LGGCs do not include all the activities of the LGBs in their State. Table 11-2 summarises the areas included or omitted from LGGCs' assessments.

40. In some cases the limited coverage is by choice. For example, the Tasmanian LGGC said that it wishes to wait until it has resolved the issue of depreciation before expanding the coverage to revenues other than general rates. In some cases, LGGCs have said that expanding the coverage of revenues (eg to include parking fees and fines) would create work without any benefit — it would increase the revenue capacity of minimum grant LGBs and make them 'minimum grant LGBs to a greater degree'.

Does The Scope of Equalisation Matter?

41. The choice of scope matters because some LGBs have disadvantages (and others advantages) in the areas that are omitted. The disadvantages of these LGBs are not being fully addressed. The decision to limit the scope of equalisation means these LGBs will have to finance these disadvantages from their own sources. This is a different treatment to disadvantages in areas included in the scope of equalisation, because disadvantages in these areas are being financed (at least in part) by Relative Need grants.

42. Two examples brought to the Commission's attention during State consultations were:

- the increase in the use of agency arrangements by Commonwealth and State governments; and
- the withdrawal, by the Commonwealth and State, of service provision in some areas on economic grounds.

43. These changes appear to have impacted most on rural and remote LGBs. These LGBs have been left with the decision of whether or not to provide the withdrawn services themselves (for example, the provision of assistance to retain rural doctors, bank services etc)⁵. If these changes are occurring in functions that are outside LGGCs' existing scopes of equalisation, the rural LGB receives no additional assistance to enable them to take on the added burden.

44. It is for reasons such as this that Commission's practice is to review the scope of its equalisation budget at regular intervals. For example, Roads was brought into its standard budget for the first time in 1993 and Depreciation was brought into its budget in 1999.

5 It is possible that some of the additional costs arise as a result of a rural LGB's decision to provide an above standard service.

Table 11-2 DIFFERENCES IN THE SCOPE OF EQUALISATION

Function	NSW	Vic	Qld	WA	SA	Tas	NT
Expenditure							
Administration	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Law, order & public safety	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Education, health and welfare	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Community amenities	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recreation and culture	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Transport:							
- airports	Yes	Yes	Yes	Yes	Yes	No	No
- buses	No	No	No	Yes	Yes	Yes	No
- other transport	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Building control	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Garbage	No	Yes	No	No	No	Yes	Yes
Water	No	No	No	No	No	Yes	No
Sewerage	No	No	No	No	No	Yes	No
Electricity	No	No	No	No	No	No	No
Capital	No	No	Yes	Yes	No	No	No
Depreciation	No	No	No	Yes	No	No	No
Debt servicing	No	No	No	No	No	No	No
Entrepreneurial activity	No	No	No	No	No	No	No
Agency arrangements	No	No	No	No	No	No	No
Revenue							
Rate revenue	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Operation subsidies	No	No	No	No	Yes	No	Yes
Garbage charges	No	Yes	No	No	No	No	No
Water charges	No	No	No	No	No	Some	No
Sewerage charges	No	No	No	No	No	Some	No
Airport charges	No ^(a)	No	Yes	No	No	No	No
Parking fees and fines	No	No	Yes	No	No	No	No
Other user charges	No	Yes	Yes	Yes	No	No	No

(a) This is not treated as a separate function, the charges are deducted from the relevant expenditure category.

CHAPTER 12

MEASURING EXPENDITURE NEED

Expenditure Equalisation

1. Expenditure equalisation is about identifying needy LGBs and measuring the extent of their ‘need’ — the differential costs of service provision (either positive or negative) over which LGBs have no control. Expenditure equalisation requires cost influences that affect either unit delivery costs or levels of demand to be measured.

2. The size of expenditure need depends on three things:

- (i) the size of the category standard;
- (ii) the proportion of the standard affected by the relevant cost influence;
and
- (iii) the extent of the cost influence.

3. This chapter examines each of these in turn. It also presents information on the key drivers of the present expenditure equalisation assessments undertaken by the LGGCs.

Calculating Category Standards

4. The Commonwealth Grants Commission (the Commission) defines standard expenditure in the same way for all categories. It is total national expenditure by the States, divided by total population.

5. The LGGCs calculate expenditure standards in different ways. Table 12-1 summarises them. The different approaches can impact on expenditure assessments. For example, calculating a standard using road lengths is different to calculating it using population. This has implications for the Direct Assessment approach which calculates expenditure allowances as the difference between standardised and standard expenditure. Changing the method of calculating the standard (using road length or number of properties instead of population) changes the assessed expenditure allowance. It also results in expenditure allowances, within the assessment for an individual LGB, that are not compatible with one another — this is one reason why the Commission’s practice is to calculate all of its expenditure standards using the one basis (population).

Table 12-1 HOW LGGCS ASSESS EXPENDITURE STANDARDS

State	Method
New South Wales	Expenditure per total number of units for the State as a whole. Number of units can be population, properties or road length. Extreme values (outliers) are omitted.
Victoria	Expenditure per total number of units for the State as a whole. Number of units can be population, properties or road length.
Queensland	Services function: For mainstream LGBs , expenditure per capita plus an expenditure per LGB ^(a) . For Indigenous LGBs, expenditure per capita ^(b) . Roads function: Expenditure per road length.
Western Australia	Standard calculated using regression analyses — different equations for different categories.
South Australia	Expenditure per total number of units for the State as a whole. Number of units can be expenditure ^(c) , population, properties, new developments, or road length.
Tasmania	Expenditure per capita for the State as a whole.
Northern Territory	Expenditure per capita for the State as a whole.

- (a) The expenditure per capita and expenditure per LGB amounts are determined after regression analysis.
- (b) The expenditure per capita amount is not State expenditure divided by State population. It is different from the expenditure per capita amount used for mainstream LGBs.
- (c) This allows the South Australian LGGC to use its uniform approach to achieve an actual per capita assessment.

Calculating the Proportion of the Standard Affected by the Cost Influence

Terminology:
 A Commission disability factor measures a cost disability relative to the average Australian experience. Calculating factors in this way has a number of benefits:

- * the average Australian factor is 1.0000;
- * the Commission’s factors centre around one;
- * when the factors are applied to standard expenditure they produce per capita standardised expenditures that centre around the standard; and
- * for a given category and year, the sum of standardised expenditures for all States equals the sum of their actual expenditures.

A Commission disability is a factor minus one. Calculating disabilities in this way has a number of benefits:

- * the Commission’s disabilities centre around zero;
- * when the disabilities are applied to standard expenditure they produce per capita expenditure needs that centre around zero; and
- * for a given category and year, the sum of expenditure needs for all States equals zero.

6. For each cost influence, the Commission’s practice is to consider the proportion of expenditure that is affected by it. The purpose of this step is to relate the influence to the expenditure that it affects.

Example:

If an LGB faces a cost disadvantage of 20 per cent but the disadvantage affects only 5 per cent of the category expenditure, its category disability is only 1 per cent ($0.20 * 0.05$).

7. Since expenditures are aggregated into categories it is important to differentiate the expenditure affected by the cost influence from expenditure that is not affected by it. If the level of disadvantage is applied to all expenditure within the category, the assessment of expenditure may be inflated.

8. Some LGGCs do not appear to make this distinction. For example, the Tasmanian approach appears to be to decide whether or not a dispersion disability applies in a category, if it does, the same disability is used as that in all other cases where a dispersion disability is considered relevant. This would only be appropriate if, for those categories:

- (i) all category expenditure was affected by the dispersion influence in the same way; or
- (ii) the proportion of category expenditure affected by dispersion was the same for each category and the assessed dispersion factor had been discounted to reflect this proportion.

9. The last point touches on a separate issue. From a measurement perspective, it does not matter whether the discount is determined as a separate element of the factor calculation process or whether factors are discounted before being applied to total expenditure (the Commission uses both approaches). What does matter is that the cost influence is related to the expenditure that it affects.

Calculating the Size of the Cost Disability

10. The differential costs of service provision can be assessed directly or (through the use of factors) indirectly. Although there are some examples of the direct approach (Victoria's assessment of natural disaster expenditure for example), most LGGCs prefer the indirect approach. Table 12-2 sets out how they assess expenditure factors (that is, how they implement the indirect approach).

11. There are three concerns with LGGCs' approaches to assessing expenditure factors. They may:

- (i) implicitly introduce a disability (through either of two different mechanisms);
- (ii) measure disabilities that do not exist; and
- (iii) not measure disabilities that do exist.

Table 12-2 HOW LGGCs ASSESS EXPENDITURE DISABILITIES

State	How an LGB's disabilities are calculated
New South Wales	Disabilities are not centred around 1.0. The minimum disability is 1.0. Disabilities are combined by addition. All LGBs with a value less than or equal to the State value receive the minimum disability. Disabilities are calculated as the ratio of LGB's value to State average value for the relevant measure. The disability is then weighted to reflect its significance in terms of its likely cost impact. An isolation disability is assessed for non-Sydney LGBs.
Victoria	Disabilities are combined additively. Disabilities are not centred around 1.0. Disabilities are capped (minimum of 1.0, maximum of either 1.5 or 2.0). Disabilities are not weighted to reflect their significance in terms of their likely cost impact. A weight is applied but it is calculated as one divided by the number of disabilities assessed for the relevant function.
Queensland	For the Services function, disabilities are additive (except for an isolation disability). Minimum disability is usually 1.0 (but for one disability it is possible to have a value less than 1.0). Disabilities are assessed for each component ^(a) and weighted to reflect their component's significance relative to total Service expenditure. They are not weighted to reflect their significance in terms of the likely cost impact on their component. For the roads function, an asset preservation approach is used to determine a factor. Five functions (aerodromes, other transport, agriculture and forestry, urban storm water drainage, parking) are assessed by the actual per capita method.
Western Australia	Disabilities are additive (except for location disability). Minimum disability of 1.0. Disability is not weighted to reflect its significance in terms of its likely cost impact.
South Australia	Disabilities are multiplicative. Disabilities are centred around 1.0. Disabilities have only been calculated for six road and two stormwater functions. Needs for functions are aggregated and assessed in the Other Needs assessment. These are based on an assessed dollar amount for each disability.
Tasmania	Disabilities are additive. Disabilities are not centred around 1.0. Minimum disability is 1.0. The value of a disability is the same regardless of the function to which it is applied. Disabilities are not weighted to reflect their significance in terms of their likely cost impact.
Northern Territory	Disabilities are multiplicative. Disabilities are not centred around 1.0. Minimum disability is 1.0. The value of a disability is the same regardless of the function to which it is applied. Disabilities are not weighted to reflect their significance in terms of their likely cost impact. Only five disabilities are assessed.

(a) There are separate components for education, health, welfare, garbage, street lighting, community amenities, recreation and sport, libraries, building control, community/regional development, public infrastructure and general public services.

12. ***Implicitly introducing a disability — use of regressions.*** Two States use regression analyses to calculate expenditure standards. The resultant regression equations include a constant term, implying that each LGB faces a fixed cost in providing the relevant service. This approach will produce the 'correct' assessment of expenditure needs if:

- (i) the LGGC thinks scale economies exist; and
- (ii) the regression equation produces a fixed cost assessment (the scale factor) of the size intended by the LGGC.

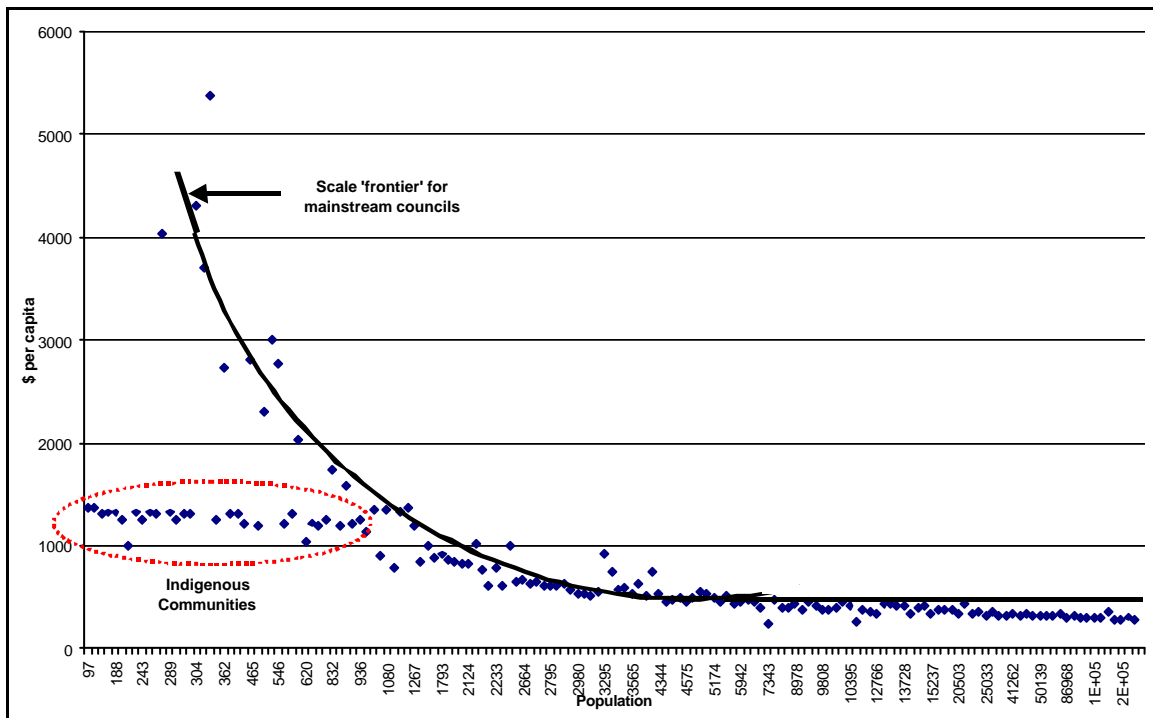
13. In at least one case, the fixed cost assessment exceeds an individual LGB's total actual expenditure.

Examples:
 The constant term for the Services function assessed by the Queensland LGGC was \$650 000 in 1999–2000. That is, each LGB was assumed to face fixed costs of \$650 000. 119 of the 160 Queensland LGBs had Services expenditure less than \$5 million. This implies a scale disability of 13 per cent or more for all of these LGBs. Scale redistributes \$131 million in Queensland, compared with \$212 million for Roads.

Western Australia has different fixed costs for different functions. The largest are \$95 000 for General Governance (Administration) and \$72 000 for Recreation and Culture.

14. There are two potential problems with the regression approach. First, it has the potential to introduce a scale disability into the assessments. Figure 12-1 plots the standardised Services expenditure per capita assessed by the Queensland LGGC, against population. The chart demonstrates that a scale-type assessment has been introduced. The key driver information presented later in this chapter confirms that this scale-type influence has a large effect on the mainstream LGBs' assessments.

Figure 12-1 STANDARDISED SERVICES EXPENDITURE PER CAPITA, QUEENSLAND, 1999–2000



15. Second, the regression approach can ‘hide’ the relationship between disabilities. Because the regression equation’s dependent variable is actual expenditure, it is difficult to know which non-policy variables (disabilities) have been captured by the regression equation. Layering disabilities on top of the regression equation could lead to double counting.

16. These concerns do not invalidate the use of regressions. They raise practical concerns about integrating a regression equation within an assessment framework.

17. *Implicitly introducing a disability — different basis of comparison.* An earlier section discussed how using different bases of comparison (road length, number of properties, population) can produce different category standards.

18. Whether this distorts assessments of LGBs’ advantage/disadvantage or not depends on how LGGCs assessed factors. The following example shows that if factors are assessed without regard to the basis of comparison then assessments are distorted.

Example:

Suppose that total expenditure is \$1 million; there are 10,000 people, 5,000 properties and 100 km of road. The average expenditures using the three different bases of comparison are: \$100 per capita; \$200 per property; or \$10,000 per km of road. Applying a disability of 10 per cent produces expenditure needs of \$10 per capita; \$20 per property; or \$1,000 per km of road. However, if the factor was related to population (the additional cost of providing services to Indigenous people) it is likely to have been calculated on the basis of population. It would be appropriate to apply that factor to a standard based on population (\$100 per capita) but not to standards based on property numbers or lengths of road.

19. One option for LGGCs is to calculate all their financial standards and their factors on one basis. While the Commission’s practice is to base them on population, LGGCs could use any basis so long as it is used consistently for both factors and financial standards. In the rest of this section it is assumed that factors have been assessed on the basis of population but that financial standards have been assessed on different bases.

20. One can move between the different bases of comparison by introducing a new disability. For example, one could start with per capita standards and by introducing a new disability (equal to the ratio of an LGB’s properties per capita compared to the State average properties per capita) one could transform these standards into standards on a per property basis. This means that standards on a per property basis are equivalent to the combination of a per capita standard and a new disability. It brings into question the validity of combining assessments that have different bases of comparison. If all standards were mandated on a per capita basis, the only way that the existing standardised assessments could be obtained would be if new factors were introduced in each of the categories that are currently assessed on a basis other than population¹. It is for this reason that a different basis of comparison is equivalent to introducing a new factor.

1 The new factor would be calculated as the ratio of an LGB’s properties (or road length) per capita compared to the State’s average properties per capita.

21. There are two inherent problems with the use of different bases of comparison, although only the second has an impact on grant outcomes.

22. First, if the assessments are converted to a per capita basis by introducing a new factor as described above, the new factor can turn out to be a large key driver of LGBs' expenditure assessments. At the moment, the importance of this factor is hidden within the assessment process and it is not receiving any critical evaluation.

23. Second, the Direct Assessment Model effectively assesses expenditure allowances by subtracting standard expenditure from standardised expenditure. The choice of the basis of comparison determines the size of the standard expenditure. In rural areas, for example, road lengths are larger than population numbers which are larger than property numbers. Compared with per capita standards, per road length standards are lower (so assessed expenditure allowances are larger) and per property standards are higher (so assessed expenditure allowances are smaller). This means that different bases of comparison produce expenditure allowances that are not compatible. This problem could be overcome if both standardised expenditure and standardised revenue were expressed in the same terms. The Commission's practice is to express all expenditure and revenue standards on a per capita basis.

24. ***Measuring disabilities that do not exist.*** Expenditure equalisation is about measuring the extent to which individual LGBs face unavoidable costs of service provision. These assessments should reflect the actual costs faced by LGBs. There are two practices that appear to be inconsistent with this approach.

- (i) Some LGGCs assess factors that produce standardised expenditures that total to more than total actual expenditure.
- (ii) Most States do not appear to weight their disabilities to reflect the expenditure to which they relate².

25. The Commission's practice is to assess its factors so that:

- (i) the average factor is 1.0000; and
- (ii) the sum of standardised expenditures equals the sum of actual expenditures. The category has the same weight in the grant calculations as it does in the standard budget.

26. An advantage of this approach is that it ensures that cost disadvantages are matched by cost advantages. In its inquiries, the advantages of States assessed to have a factor below one are exactly offset by the disadvantages of States assessed to have a factor above one.

27. A requirement for ensuring that the sum of standardised expenditures equals the sum of actual expenditures is for the average State factor to be 1.0000. The following example demonstrates this.

2 For example, two States determine values for disability factors (dispersion for example) and the same factors are applied to a number of categories. This suggests that they do not take account of how much of the expenditure in the category is affected by dispersion.

Example:

Under the Commission's approach, the per capita standard expenditure would equal State expenditure divided by State population.

In the absence of any cost influences, each LGB would be assessed to have a factor of one and the average State factor would also be one.

An individual LGB's standardised expenditure would be assessed as the product of the per capita standard expenditure (it would be assumed to be able to provide the average level of service at the standard cost) and its population. The sum of standardised expenditure for all LGBs would, therefore, be equal to total (actual) expenditure.

28. The implication of this example is that if the average State factor is one, total standardised expenditure will sum to total actual expenditure. The opposite is also true. If the average State factor is not one, the sum of standardised expenditures will not be equal to the sum of actual expenditures.

29. The problem that this causes can be illustrated by considering the Tasmanian assessments.

Example:

The following lists total actual expenditure and standardised expenditure for each expenditure function for Tasmania for 1999–2000:

	Actual	Standardised
General Administration	\$49.5 million	\$71.4 million
Health, Housing and Welfare	\$7.7 million	\$9.6 million
Protection of the Environment	\$26.9 million	\$34.2 million
Recreation and Culture	\$39.5 million	\$52.5 million
Community and Regional Development	\$23.0 million	\$29.7 million
Law, Order and Public Safety	\$2.3 million	\$2.5 million
Sewerage	\$23.7 million	\$28.8 million
Water	\$48.2 million	\$57.5 million
Other	\$9.7 million	\$9.9 million
Roads	\$85.9 million	\$110.3 million
Total	\$316.5 million	\$406.2 million

Source: Tasmania State Grants Commission, *Annual Report for 1999–00*, Appendices 9 and 10.

30. The difference between total actual and total standardised expenditures arises because Tasmania assesses every LGB with a factor of one or above. If a factor of one for every LGB produces standardised expenditures that sum to total actual expenditure, a factor of one or more for every LGB must produce standardised expenditures that sum to more than total actual expenditure.

31. The example shows that the effect is different for different functions. The conclusion is that Tasmania's approach to measuring and applying disabilities is resulting in the General Administration function being given too great a weight in its grant calculations. This problem occurs only in expenditure assessments. It leads to an imbalance between expenditure and revenue assessments.

32. The second practice was discussed earlier. If LGGCs do not relate their disabilities to the expenditure they affect, they will erroneously inflate expenditure needs.

33. Expenditure equalisation is about assessing the extent of cost advantage and cost disadvantage. Expenditure needs should reflect the differential effect of the unavoidable cost influences faced by LGBs. This is not achieved if disabilities are not weighted to reflect the proportion of category expenditure that they affect.

34. *Not measuring disabilities that do exist.* The Commission's practice is to assess expenditure needs for advantaged and disadvantaged States. LGGCs do not assess the same degree of disadvantage for all disadvantaged LGBs, but some assess a minimum factor of 1.0 which implies that all advantaged LGBs experience the same degree of advantage³. Clearly, this is not the case.

35. If a cost influence exists, it is likely to affect LGBs differently — some LGBs will have to spend more than the State average per capita to provide the average level of service while others will be able to provide it but spend less than the average. If LGBs' factors are limited to being one or above, it is the equivalent to saying that no LGB needs to spend less than the State average per capita. If the average State factor is to be 1.0, some LGBs must be above 1.0 (experience a cost disadvantage) and others must be below 1.0 (experience a cost advantage)⁴. If factors are limited to 1.0 or above, it means that the State factor cannot be 1.0 and it also means that expenditure needs are not being assessed for LGBs that experience cost advantages.

36. These problems exacerbate the problem of the amount of needs assessed by LGGCs exceeding the amount of assistance available. They mean that the extent of factoring back is greater than it needs to be.

Conclusion

37. The LGGCs are trying to measure 'need' — to identify needier LGBs. The problems identified are in the implementation of this objective.

38. The LGGCs should consider whether:

- (i) their assessment approach reflects the purpose of the assessment of expenditure need — to identify the expenditure advantage and disadvantage; and
- (ii) their assessment approach on the expenditure side (including the basis of comparison) is influencing grant outcomes.

3 The minimum grant requirement effectively places a floor on an LGB's share of the General Purpose pool. However, this requirement has nothing to do with how equalisation assessments should be calculated.

4 The Commission assesses an overall expenditure relativity of less than one for New South Wales, Victoria and Queensland because it believes that they can provide the standard level of service at less than the standard cost but by differing amounts.

KEY DRIVERS OF CURRENT EXPENDITURE ASSESSMENTS

39. The differential costs of service provision can be assessed directly or (through the use of factors) indirectly.

40. An advantage of the direct approach is that the effect of the assessment (the amount it redistributes in dollars) is explicitly shown. If the indirect approach is used, information is not readily available about:

- how much is being moved by a factor; and
- whether the movements are in line with actual costs.

41. How much a factor redistributes depends on:

- its size (larger factors move more per capita than smaller factors);
- how it is combined with other factors (multiplying factors creates interactions which can magnify the effect of a factor⁵);
- the proportion of the category expenditure it affects; and
- the standard to which they are applied — larger standards move more per capita than smaller standards.

42. The Commission's practice is to calculate the redistribution attributable to each factor (and category). It uses this information as a check on the assessment — to gain an appreciation of whether it moves grants in the way that is expected.

43. The next two sections set out the amount each category (and factor) redistributes. The amounts shown are the total amount of grant redistribution for the LGBs as a whole. These were calculated by comparing the category (or factor) with an equal per capita distribution. Grant redistributions were calculated for each individual LGB but are not shown. The total redistribution figure in each table is not the sum of the individual category (or factor) results, it is calculated by comparing all assessments (either category or factor) with an equal per capita distribution. For this reason, it is possible for the sum of individual categories (or factors) to exceed the total redistribution.

44. Each of the LGGCs could provide the individual LGB's information with their annual report. It would help LGBs to identify the main drivers (movers) of their grant share⁶. This type of analysis could also be useful to the LGGCs themselves. It could provide a check on the assessment.

5 Interactions can be positive or negative. They arise whenever elements are multiplied or divided. Interactions make it more difficult to calculate the effect of a factor but in some circumstances they are a better approximation of reality (when influences compound with one another multiplying them gives a more realistic answer than adding them).

6 This would enable LGBs to query whether the redistribution (for a particular category or factor) bore any relation to the costs they actually face.

45. The assessment models and methods of each LGGC vary in terms of complexity and the number of categories and factors they assess. Table 12-3 shows the number of categories and disability factors that each LGGC assesses to determine the grant share of the LGBs.

Table 12-3 NUMBER OF EXPENDITURE CATEGORIES AND DISABILITY FACTORS ASSESSED

	NSW	VIC	QLD	WA	SA	Tas	NT
Categories	21	20	11 ^(a)	8	18	12	6
Disability factors	45	21	15	20	7	17	9

(a) Queensland LGGC shows seven expenditure categories, but the Services category has eight sub-components. For this analysis their five effort positive (actual per capita) categories have been combined and treated as one category, and the eight sub-components of the Services category have been treated as separate categories.

46. The next sections present the key categories and disabilities that move the grant share of LGBs in each State from an equal per capita share.

47. Earlier in this chapter it was pointed out that a number of LGGCs calculated category standards using different bases of comparison. The analysis has followed the suggested approach of assessing standard expenditure as total expenditure divided by total population. It has, therefore, introduced a factor called Units of Measurement to adjust for these different bases of comparison. It must be stressed that this is not a factor that LGGCs have assessed, its introduction enables the calculation of category standards on a per capita basis while still producing the standardised expenditures assessed by LGGCs. As concluded earlier, using different bases of comparison is equivalent to introducing a new factor.

48. The Units of Measurement factor also captures the effect of using regression equations within the assessment process. It measures the difference between the standard calculated using the regression equation and a standard assessed on an equal per capita basis. Again, this is not a factor that the LGGCs have assessed. Its introduction enables the category standards to be calculated on a per capita basis while still producing the standardised expenditures assessed by LGGCs.

49. The Units of Measurement factor thus captures the effect of:

- (i) Units of Use influences — the use of properties or road length rather than population to calculate expenditure standards; and
- (ii) Flag Fall (Fixed Costs) influences — the constant terms in regression equations.

**KEY DRIVERS OF EXPENDITURE ASSESSMENTS,
BY CATEGORY**

New South Wales.

50. The New South Wales LGGC assesses 21⁷ categories of expenditure. Table 12-4 shows that four categories account for almost three quarters of the total redistribution. The category with the largest redistribution is the Roads category with \$185.9 million (27 per cent) of the total redistribution.

Table 12-4 KEY DRIVERS, BY CATEGORY, NEW SOUTH WALES

Category	Amount of	Amount of	Share of Total ^(a)
	Redistribution	Redistribution	
	\$m	\$pc	%
Administration	89.0	14.0	12.7
Aerodromes	7.1	1.1	1.0
Aged Person's Services	2.6	0.4	0.4
Animal Control	1.1	0.2	0.2
Building Control	5.2	0.8	0.7
Cemeteries	1.2	0.2	0.2
Children's Services	3.3	0.5	0.5
Community Services	13.9	2.2	2.0
Cultural Facilities	8.8	1.4	1.3
Fire Control and Emergency Services	32.9	5.2	4.7
Health and Safety	17.0	2.7	2.4
Libraries	22.6	3.6	3.2
Noxious Plants and Pest Control	10.7	1.7	1.5
Planning	29.2	4.6	4.2
Recreation	130.9	20.7	18.7
Street and Gutter Cleaning	15.4	2.4	2.2
Storm Water Drainage and Flood Control	111.7	17.6	15.9
Street Lighting	10.1	1.6	1.4
Roads	185.9	29.3	26.5
Isolation Allowance	15.0	2.4	2.1
All Categories	701.8	110.5	

(a) Percentages do not add to 100.

Source: Information provided by New South Wales LGGC.

7 New South Wales has three separate Roads categories. For this analysis, these categories have been combined and treated as one category. Isolation Allowance is an additional allowance calculated for some LGBs, not an expenditure category.

Victoria

51. The Victorian LGGC assesses 20 expenditure categories, including three categories of road maintenance. Table 12-5 shows the key category drivers in the Victorian distribution model. Almost 60 per cent of the total redistribution is accounted for by two categories: Heritage, Culture and Recreation moving \$151.4 million (31 per cent); and Local Sealed Roads moving \$126.8 million (26 per cent).

Table 12-5 KEY DRIVERS, BY CATEGORY, VICTORIA

Category	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
Public Safety, Law and Order	17.8	3.8	3.7
Family Services	33.0	7.1	6.8
Family Services – Fees and Charges	1.6	0.3	0.3
Health and Welfare	25.9	5.6	5.3
Aged Services	55.1	11.8	11.3
Community Services	65.8	14.1	13.5
Heritage, Culture and Recreation	151.4	32.5	31.1
Heritage – Fees and Charges	0.0	0.0	0.0
Local Sealed Roads	126.8	27.2	26.0
Local Formed and Surfaced Roads	54.1	11.6	11.1
Local Natural Roads	1.7	0.4	0.4
Footpaths, Kerbs and Channels	8.3	1.8	1.7
Traffic Management	17.3	3.7	3.5
Traffic Management – Fees and Fines	0.0	0.0	0.0
Street Lighting	27.5	5.9	5.7
Aerodromes	1.7	0.4	0.4
Street Beautification	3.5	0.7	0.7
Sanitation	39.5	8.5	8.1
Street Cleaning	13.3	2.9	2.7
Environment Protection, Drainage	14.1	3.0	2.9
All Categories	487.1	104.5	

(a) Percentages do not add to 100.

Source: Information provided by the Victorian LGGC.

Queensland

52. The Queensland LGGC assesses 11⁸ categories including Roads. As is shown in Table 12-6, the Roads category accounts for almost 60 per cent of the total redistribution, it redistributes \$212.1 million (about 57 per cent).

Table 12-6 KEY DRIVERS, BY CATEGORY, QUEENSLAND

Category	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
Education, Health, Welfare, Housing and Public Order	15.7	4.5	4.2
Garbage	49.4	14.3	13.4
Street Lighting	5.8	1.7	1.6
Community Amenities	41.0	11.9	11.1
Libraries	5.9	1.7	1.6
Building Control	14.2	4.1	3.8
Public Infrastructure	28.5	8.3	7.7
General Public Services	42.4	12.3	11.5
Roads	212.1	61.4	57.3
Effort Positive	78.8	22.8	21.3
Other Expenditure (NEC)	24.2	7.0	6.5
All Categories	370.0	107.1	

(a) Percentages do not add to 100.

Source: Information provided by Queensland LGGC.

8 Queensland LGGC shows seven expenditure categories, but the Services category has eight sub-components. For this analysis their five effort positive (actual per capita) categories have been combined and treated as one category, and the eight sub-components of the Services category have been treated as separate categories.

Western Australia

53. The Western Australian LGGC assesses eight expenditure categories, including Roads. The amount of redistribution is the least of the six States. The majority of the redistribution is accounted for by the Transport (including Roads) category, redistributing \$51.7 million (84 per cent).

Table 12-7 KEY DRIVERS, BY CATEGORY, WESTERN AUSTRALIA

Category	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
Community Amenities	8.3	4.4	13.5
Education, Health and Welfare	3.6	2.0	5.9
Law, Order and Public Safety	5.3	2.9	8.7
Recreation and Culture	28.7	15.4	46.9
General Governance (Administration)	11.9	6.4	19.4
Building Control	1.0	0.5	1.6
Capital Works	2.5	1.3	4.0
Transport (Roads)	51.7	27.8	84.3
All Categories	61.3	32.9	

(a) Percentages do not add to 100.

Source: Information provided by the Western Australian LGGC.

South Australia

54. The South Australian LGGC assesses 18 categories, including five separate road categories. Table 12-8 shows the key drivers of the total redistribution at the category level. Most of the redistribution is accounted for by three road categories, which redistribute \$96.0 million (73 per cent), and the Other Needs category, which moves \$36.9 million (28 per cent).

Table 12-8 KEY DRIVERS, BY CATEGORY, SOUTH AUSTRALIA

Category	Amount of	Amount of	Share of Total ^(a)
	Redistribution	Redistribution	
	\$m	\$pc	%
Public Buses	2.4	1.6	1.8
Animal and Plant Control	2.9	2.0	2.2
Garbage	5.5	3.7	4.1
Aged Care	2.8	1.9	2.1
Families and Children	0.5	0.3	0.4
Health Inspection	2.4	1.6	1.8
Libraries	3.9	2.7	3.0
Sport Recreation and Culture	5.7	3.8	4.3
Sealed Roads – Urban	16.6	11.2	12.5
Sealed Roads – Non Urban	36.5	24.7	27.5
Unsealed Roads – Urban	1.1	0.7	0.8
Unsealed Roads – Non Urban	42.9	29	32.3
Unformed Roads	0.2	0.1	0.1
Storm Water Construction	4.1	2.8	3.1
Storm Water Maintenance	1.9	1.3	1.4
Emergency Services	2.5	1.7	1.8
Planning and Building Control	3.4	2.3	2.5
Other Needs	36.9	25.0	27.8
All Categories	132.9	89.9	

(a) Percentages do not add to 100.

Source: Information provided by South Australian LGGC.

Tasmania

55. The Tasmanian LGGC assesses 12 expenditure categories including one for roads. Table 12-9 shows that three categories account for more than 60 per cent of the total redistribution. Roads is the main cost driver, redistributing \$24.4 million (26 per cent), followed by General Administration (\$21.9 million, 23 per cent) and Recreation and Culture (\$13.5 million, 14 per cent).

Table 12-9 KEY DRIVERS, BY CATEGORY, TASMANIA

Category	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
General Administration	21.9	46.5	23.1
Law, Order and Public Safety	0.2	0.3	0.2
Health, Welfare and Housing	4.5	9.6	4.8
Protection of the Environment	8.3	17.7	8.8
Community and Regional Development	7.1	15.1	7.5
Recreation and Culture	13.5	28.7	14.3
Water	9.3	19.8	9.8
Sewerage	5.3	11.2	5.5
Other	0.2	0.3	0.2
Roads	24.4	51.7	25.7
Allowances – Rural GP	0.1	0.2	0.1
Allowances – Other	0.0	0.1	0.0
All Categories	94.9	201.1	

(a) Percentages do not add to 100.

Source: Information provided by the Tasmania LGGC.

Northern Territory

56. The Northern Territory LGGC assesses six expenditure categories including one for roads. Table 12-10 shows that two categories account for more than 90 per cent of the total redistribution. General Administration redistributes \$10.8 million (48 per cent), followed by Transport (\$10.2 million, 45 per cent) and Human Services (\$3.0 million, 13 per cent).

Table 12-10 KEY DRIVERS, BY CATEGORY, NORTHERN TERRITORY

Category	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
Amenities	1.7	8.8	7.5
General Administration	10.8	56.5	48.3
Human Services	3.0	15.4	13.2
Libraries	1.8	9.2	7.9
Recreation	1.5	7.8	6.7
Transport	10.2	53.1	45.4
All Categories	22.4	116.9	

(a) Percentages do not add to 100.

Source: Information provided by the Northern Territory LGGC.

KEY DRIVERS OF EXPENDITURE ASSESSMENTS, BY FACTOR

57. This section shows that there does not appear to be a common definition of need across the LGGCs.

58. In its State inquiries, the Commission's practice of assessing factors is to use one of two approaches:

- (i) a general method; or
- (ii) a category specific method.

59. Common influences (scale, input costs, dispersion) are assessed by general methods. The same method is applied in all categories, only the proportion of category expenditure that is affected by the factor changes. Other influences are assessed by category specific methods. The common influences account for about two thirds of the total expenditure redistribution. The other influences are those which have much smaller impacts across all States or have large effects but for only one or two States or categories.

60. A similar approach (or at least outcome) was expected from the analysis of LGGCs' methods. That is, a few major influences would account for the majority of the redistribution and minor influences would account for the balance. From the Commission's consultations, the major influences were expected to be:

- diseconomies of scale;
- the dispersion of the population;
- non-resident use;
- for urban LGBs, maintenance of infrastructure; and
- for rural LGBs, the effect of declining populations and the effect of 'picking up' services that other spheres of government have ceased to provide.

61. These do not appear to figure prominently in any of the LGGCs' assessments. Aside from the Units of Measurement factor, the largest influence in New South Wales is the Drainage Index disability (11 per cent). Scale and Socio-economic Composition account for around 30 per cent of the redistribution in Victoria. Isolation and Non-resident Use account for 30 per cent of the Queensland redistribution. Location accounts for almost a quarter of the Western Australian redistribution. Most of South Australia's redistribution is within the Other Needs category. Scale is largest for Tasmania (24 per cent) followed by Worker Influx (11 per cent).

62. The tables in this section indicate that LGGCs assess a myriad of small disabilities.

New South Wales

63. The New South Wales LGGC assesses 45⁹ disability factors. Only three of them move more than \$30 million (4 per cent of the total redistributed). Units of Measurement (which is not explicitly assessed by it, but is implied by the way it assesses category standards) accounts for about 15 per cent of the redistribution, followed by the Drainage Index, which redistributes \$77 million (11 per cent).

9 New South Wales LGGC does not assess a Units of Measurement factor, a Roads factor or an Isolation Allowance factor. These factors have been introduced for the analysis.

Table 12-11 KEY DRIVERS, BY FACTOR, NEW SOUTH WALES

Factor	Amount of	Amount of	Share of Total ^(a)
	Redistribution	Redistribution	
	\$m	\$pc	%
Aboriginal and Torres Islander	2.4	0.4	0.3
Aged Persons	4.6	0.7	0.7
Age Structure	12.9	2.0	1.8
Beach Lifesaving Activity	12.7	2.0	1.8
Building Activity	1.2	0.2	0.2
Bushfire Expenditure	21.5	3.4	3.1
Climate Measure	11.4	1.8	1.6
Development Activity	5.5	0.9	0.8
Drainage Index	77.4	12.2	11.0
Economies of Scale	26.2	4.1	3.7
Environmental Sensitivity	5.4	0.9	0.8
Flood Boats	0.6	0.1	0.1
Flood Prone Buildings	5.8	0.9	0.8
Food Premises	7.1	1.1	1.0
Duplication of Halls	1.1	0.2	0.2
Heritage	3.6	0.6	0.5
Infestation	1.3	0.2	0.2
Level Measure	0.4	0.1	0.1
Net Expenditure	7.2	1.1	1.0
Non-English Speaking Background	22.1	3.5	3.2
Non-Resident Borrower	8.5	1.3	1.2
Non-Residential Urban Property	5.0	0.8	0.7
Non-Resident Use	19.2	3.0	2.7
Non-Residential Property	0.3	0.1	0.0
Non-Urban Measure	19.8	3.1	2.8
Occupation	0.5	0.1	0.1
One Parent	0.9	0.1	0.1
Other	21.3	3.4	3.0
Pensioner Benefit	5.1	0.8	0.7
Pensioner	0.0	0.003	0.0
Duplication of Playing Fields	6.1	1.0	0.9
Duplication of Pools	5.7	0.9	0.8
Population Distribution	18.1	2.9	2.6
Population Growth	5.7	0.9	0.8
Population Measure	1.0	0.2	0.1
Pre-School Children	1.1	0.2	0.2
Public Toilets	3.8	0.6	0.5
Regional Centre	4.1	0.6	0.6
Sparsity	1.4	0.2	0.2
Student	1.3	0.2	0.2
Terrain	0.2	0.03	0.0
Units of Measurement	107.2	16.9	15.3
Urban Density	23.9	3.8	3.4
Urban Fire	9.3	1.5	1.3
Vandalism	0.2	0.03	0.0
Youth	3.6	0.6	0.5
Roads	185.9	29.3	26.5
Isolation Allowance	15.0	2.4	2.1
All Factors	701.8	110.7	

(a) Percentages do not add to 100.

Source: Information provided by the New South Wales LGGC

Victoria

64. The Victorian LGGC has 21¹⁰ disabilities. Most of the total redistribution is accounted for by seven of them. The key drivers are Units of Measurement, redistributing \$195.3 million (40 per cent), Scale \$104.6 million (22 per cent) and Socio-economic Status \$98.0 million (20 per cent).

Table 12-12 KEY DRIVERS, BY FACTOR, VICTORIA

Factor	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
Aboriginality	7.0	1.5	1.4
Aged	12.8	2.7	2.6
Age of Infrastructure	10.0	2.1	2.0
Area of Council	3.6	0.8	0.7
Climate	0.2	0.0	0.0
Drainage	8.8	1.9	1.8
Duplication	11.0	2.4	2.3
Expenditure	28.4	6.1	5.8
Growth	18.0	3.9	3.7
Isolation	31.0	6.7	6.4
Sealed Roads	59.1	12.7	12.1
Formed Roads	8.5	1.8	1.8
Natural Roads	0.1	0.0	0.0
Population Density	2.9	0.6	0.6
Regional Centre	19.7	4.2	4.0
Retail Employment	9.0	1.9	1.8
Scale	104.6	22.4	21.5
Single Parent Families	14.4	3.1	3.0
Socio-economic Status	98.0	21.0	20.1
Traffic Density	36.6	7.9	7.5
Units of Measurement	195.3	41.9	40.1
Urbanisation	7.5	1.6	1.5
All Factors	487.1	104.5	

(a) Percentages do not add to 100.

Source: Information provided by Victorian LGGC.

10 Victoria LGGC does not assess a Units of Measurement factor. It has been introduced for this analysis.

Queensland

65. The Queensland LGGC assesses 15¹¹ disability factors. Only three move more than \$19 million (5 per cent of the total redistributed) and the three of them account for more than 60 per cent of the total redistribution. Units of Measurement (this captures the influence of the constant term in Queensland’s regression approach to assessing category standards) is the biggest cost driver, redistributing \$131.4 million (36 per cent of the total redistributed).

Table 12-13 KEY DRIVERS, BY FACTOR, QUEENSLAND

Factor	Amount of	Amount of	Share of Total ^(a)
	Redistribution	Redistribution	
	\$m	\$pc	%
Climate	2.0	0.6	0.5
Demography	17.7	5.1	4.8
Housing	1.0	0.3	0.3
Isolation	64.0	18.5	17.3
Major Industry	0.6	0.2	0.2
Non-residents	31.0	9.0	8.4
Population Growth	7.1	2.1	1.9
Proximity	2.5	0.7	0.7
Reduced Service Requirement	3.6	1.0	1.0
Regional Role	3.5	1.0	0.9
Units of Measurement	131.4	38.0	35.5
Security	2.3	0.7	0.6
Tip Problems	5.1	1.5	1.4
Urban Scatter	17.3	5.0	4.7
Urban Standards	17.8	5.2	4.8
Road	212.1	61.4	57.3
Effort Positive assessments	78.8	22.8	21.3
Other Expenditure (NEC)	24.2	7.0	6.5
Total Expenditure	370.0	107.11	

(a) Percentages do not add to 100.

Source: Information provided by Queensland LGGC.

11 Queensland LGGC does not assess a Units of Measurement factor, a Roads factor or an Effort Positive factor. These factors have been introduced for the analysis.

Western Australia

66. The Western Australian LGGC assesses 20¹² disabilities. Units of Measurement and Location are the major drivers. Together, they move about \$65 million (108 per cent) of the total redistribution.

Table 12-14 KEY DRIVERS, BY FACTOR, WESTERN AUSTRALIA

Factor	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
Units of Measurement (includes Adjusted Population)	41.9	22.5	68.4
Location	24.5	13.1	39.9
Population Dispersion	3.8	2.1	6.2
Tourism	7.6	4.1	12.5
Socio-economic Disadvantage	8.4	4.5	13.7
Health Special	0.2	0.1	0.3
Terrain	0.7	0.4	1.1
Hobby Farms	0.7	0.4	1.1
Cyclone	0.1	0.1	0.2
Aboriginal Environmental Health Allowance	0.5	0.3	0.9
Size/Shape	0.9	0.5	1.4
Climate	4.4	2.4	7.2
Coastal	1.0	0.5	1.6
Development	0.8	0.4	1.3
Drainage	1.0	0.5	1.6
Salinity/Landcare	0.3	0.1	0.4
Population Increase	2.5	1.3	4.0
Environmental Assessments	1.2	0.7	2.0
Heritage	1.2	0.6	2.0
Water Supply	1.6	0.8	2.6
Transport (Roads)	51.7	27.8	84.3
Total Expenditure	61.3	32.9	

(a) Percentages do not add to 100.

Source: Information provided by the Western Australian LGGC.

12 Western Australian LGGC does not assess a Transport (Roads) factor. It has been introduced for the analysis.

South Australia

67. The South Australian LGGC assesses seven¹³ factors. The key drivers are Units of Measurement (reflecting the different approach to assessing category standards) and Other Needs, which account for 75 per cent and 26 per cent of the total redistribution respectively.

Table 12-15 KEY DRIVERS, BY FACTOR, SOUTH AUSTRALIA

Factor	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
Units of Measurement	99.2	67.1	74.6
Cost Relativity Index (CRI)	6.8	4.6	5.1
Duplicated Facilities	1.3	0.9	1.0
Indigenous People	1.0	0.7	0.7
Isolation	3.7	2.5	2.7
Non Resident	2.9	2.0	2.2
Socio Economic	1.0	0.6	0.7
Other	34.7	23.5	26.1
Total Expenditure	132.9	89.9	

(a) Percentages do not add to 100.

Source: Information provided by South Australian LGGC.

13 South Australian LGGC does not assess a Units of Measurement factor. It has been introduced for the analysis.

Tasmania

68. The Tasmanian LGGC assesses 17 disability factors. Three factors account for about 60 per cent of the total redistribution. The Roads factors account for \$24.4 million (26 per cent of the total redistributed), Scale accounts for \$22.6 million (24 per cent) and Worker Influx \$10.7 (11 per cent).

Table 12-16 KEY DRIVERS, BY FACTOR, TASMANIA

Factor	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
Absentee Population	5.7	12.0	6.0
Unemployment	1.1	2.3	1.1
Age profile	0.9	2.0	1.0
Worker Influx	10.7	22.6	11.2
Climate	0.2	0.4	0.2
Day Tripper	3.3	7.1	3.5
Population Dispersion	4.5	9.5	4.7
Isolation	4.1	8.6	4.3
Population Decline	0.1	0.3	0.1
Population Growth	1.5	3.1	1.5
Tourism	6.6	14.0	7.0
Regional Responsibility	5.7	12.0	6.0
Scale	22.6	47.8	23.8
Equivalent Tenements	3.5	7.5	3.7
Roads factors	24.4	51.7	25.7
Allowances Rural GP	0.1	0.2	0.1
Allowances Other	0.0	0.1	0.0
All Factors	94.9	201.1	

(a) Percentages do not add to 100.

Source: Information provided by the Tasmanian LGGC.

Northern Territory

69. The Northern Territory LGGC assesses nine disability factors. Two factors account for about 70 per cent of the total redistribution. The Roads factor accounts for \$8.7 million (39 per cent of the total redistributed) and the Aboriginality factor accounts for \$7.4 million (33 per cent). Two other factors, Units of Measurement \$4.6 million (21 per cent) and Isolation Works \$3.8 million (17 per cent), are also large drivers.

Table 12-17 KEY DRIVERS, BY FACTOR, NORTHERN TERRITORY

Factor	Amount of Redistribution	Amount of Redistribution	Share of Total ^(a)
	\$m	\$pc	%
Isolation Administration	2.0	10.5	9.0
Isolation Works	3.8	19.6	16.7
Dispersion	0.6	3.0	2.5
Aboriginality	7.4	38.6	33.0
Growth	1.5	7.6	6.5
Other Amenities	0.0	0.0	0.0
Other Libraries	0.5	2.5	2.1
Other Recreation	0.0	0.0	0.0
Roads Factor	8.7	45.2	38.7
Units of Measurement	4.6	24.1	20.6
All Factors	22.4	116.9	100.0

(a) Percentages do not add to 100.

Source: Information provided by the Northern Territory LGGC.