WALGA
WORKING FOR LOCAL GOVERNMENT

Report on Local Government
Road Assets & Expenditure
2016/17

WALGA

WORKING FOR LOCAL GOVERNMENT

Acknowledgements

A special note of appreciation is extended to Dr Chris Berry, Roads Consultant, for compiling this report. WALGA also wishes to thank Main Roads WA and all Local Governments for providing road and expenditure data used in this publication.

Furthermore we would also like to acknowledge with much appreciation the assistance of the recently retired Mr Clive Shepherd, for all his work preparing this report from 1991 to 2017.

Photographs:

Front Cover:

Footbridge, Koombana Bay Redevelopment, Bunbury

East Coolup Bridge, Meelon

Safe Active Street, Bayswater

Photography by Audra de Pina
Cloud9-teen Photography

Contents

Appendices

Statistics in Appendices 5 to 14 are sorted in Regional Road Groups

Statistics in Appendices 15 to 20 are sorted in groups of Local Governments each having similar characteristics

McMahon Road Bridge, North Dandalup

Treendale Bridge works, Australind / Millbridge - construction, photo courtesy Main Roads WA

Treendale Bridge works, Australind / Millbridge - almost complete, photo courtesy Shire of Dardanup

Foreword

The community expects transparency and accountability in how public funds are spent by all levels of Government. In Local Government, communities are encouraged to actively engage in determining the types and levels of service they require and ultimately fund. This report contributes to an informed discussion about the level of investment in road infrastructure by providing an overview of expenditure on the Local Government managed road network.

At a strategic level all Local Governments are required to develop long term financial plans linked to asset management plans that set out how assets will be managed over their life-cycle. Local Governments also publish financial ratios that provide the community with information about the condition of assets and whether sufficient investment is being applied to infrastructure renewal and replacement programs to maintain service levels over time. The benchmarking and comparisons between Local Governments and regions highlighted in this report should be considered in conjunction with these measures.

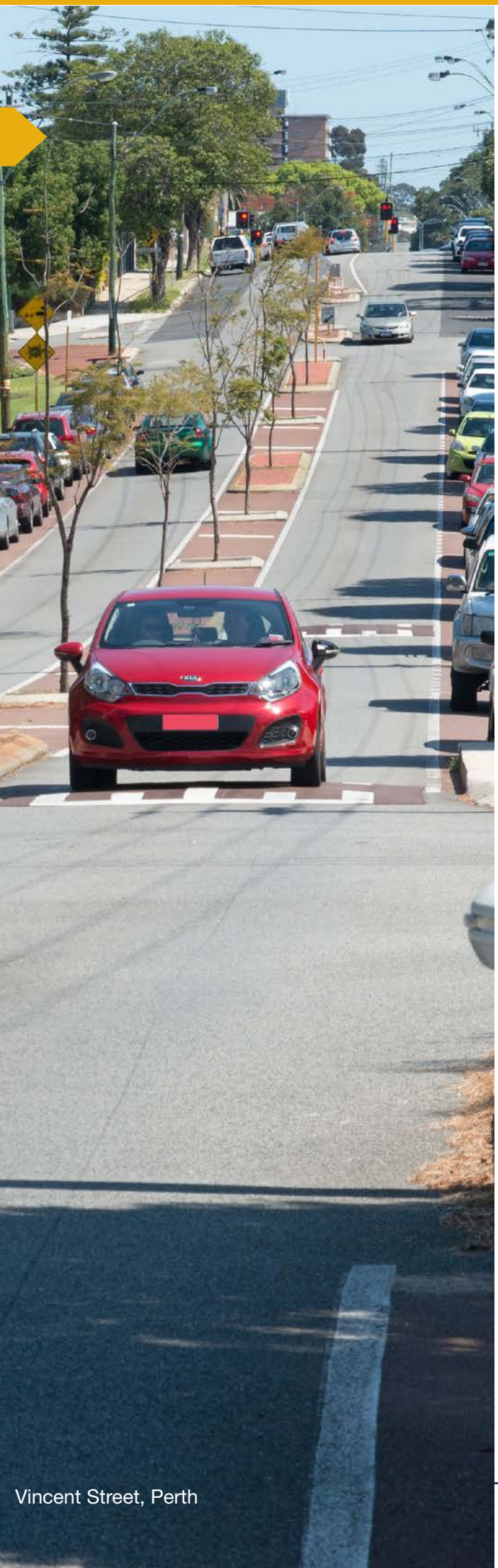
Across Western Australia roads dominate the asset portfolio of most Local Governments. This report provides an overview of the $904 million investment by Local Governments on the local road network in 2016/17. This was a $35 million (4%) increase compared with the previous year. Local Government funds contributed $448 million (49.4%) of the total expenditure, an increase of $35.4 million compared with the previous year. A $15.4 million decrease in expenditure of Commonwealth funds, as the temporary increase in Roads to Recovery and Federal Black Spot programs came to a conclusion, was partly offset by an increase in expenditure of funds from State sources, including funding through the WA Natural Disaster Recovery and Relief Arrangements that contributed to the cost of repairs following floods and bushfires. Six percent of total investment in roads in 2016/17 was to repair flood damage.

Expenditure in 2016/17 included nearly $26 million to build new, upgraded or replacement bridges. Major projects were a new traffic bridge in Mandurah and a bridge over the Gascoyne River at Gascoyne Junction. $10 million was invested in preservation of existing bridges. Although this is a significant increase on previous years, it equates to just 0.67% of the $1.49 billion replacement value of bridges on Local Government roads and highlights the continuing challenge to ensure these critical and high risk assets continue to meet the transport needs of our communities.

This report adds to a series that have been published for over twenty years and introduces some long term trend information adjusted for changes in the costs of maintaining roads.

Acknowledging the on-going demand on Local Government officers I would like to thank all for providing accurate and timely data to enable this analysis and report to be completed.

Cr Lynne Craigie
President



Vincent Street, Perth

Conclusions 2016-17 Report

1. Local Government is responsible for 127,708 kilometres of local roads of which 31% are sealed. Excluding Forestry and National Park roads, the Local Government roads make up 86.5% of the WA road network. Local Government roads have a replacement value of $25.11 billion as at 30 June 2017.
2. The written down value of the road network is $15.11 billion. The National Local Roads Data System uses the percentage of written down value over replacement value as a National Performance Measure of the state of the road network. It is 60% for local roads compared to 64% for State highways and main roads in WA.
3. In 2016-17 the total expenditure on local roads was $904.3 million, $35.34 million more than in 2015-16. Despite a reduction in Federal funds, there was an increase of $34 million in expenditure from own-source revenue and an increase of $19 million in State funds.
4. In the five years 2012-13 to 2016-17 total road expenditure increased by 17.8% from $767.6 million to $904.3 million.
5. The estimated cost of maintaining WA's road network in its current condition in 2016-17 was $691.8 million. Local Governments spent $575.5 million on road preservation, a shortfall of $116.3 million.
6. The $116.3 million shortfall in 2016-17 was $8.8 million more than in 2015-16 and $13.6 million greater than in 2012-13.
7. State wide, Local Government provided 49.4% of its total road expenditure from its own resources. The Commonwealth Government provided 26.8%, the State Government 22.6%, excluding funds allocated for expenditure by Main Roads WA. Various private sources contributed 1.2% of the total road expenditure.
8. Metropolitan Local Governments receive about a quarter of Federal and State funds while non Metropolitan Local Governments receive about three quarters.

9. Over the whole State, Local Governments would have to spend 26% of their estimated revenue capacity to make up the difference between their road preservation needs and the road grants they receive for preservation. In 2016-17 Local Governments spent 21.6% of their revenue capacity on roads.

10. Local Governments in the Metropolitan Region have to spend only 10% of their estimated revenue capacity to make up the difference between their road preservation needs and the road grants they receive for preservation. In 2016-17 they spent 22% of their revenue capacity, twice the required percentage. Because of their high revenue capacity their roads are in a better state than roads elsewhere.

11. Local Governments in the Wheatbelt North and Wheatbelt South Regions have the lowest capacity in the State to satisfy their road needs. These two Local Government regions would have to spend 87% and 101% respectively of their entire estimated revenue capacity on road preservation to make up the difference between their road preservation needs and the road grants they receive for preservation. In 2016-17 they were able to spend only 20% of their revenue capacity, about 20% of the required percentage. Because of their low revenue capacity their roads are in a worse state than roads elsewhere.

12. Every measure considered in this report leads to the conclusion that current funding arrangements do not properly recognise the road needs of the Wheatbelt South and Wheatbelt North Regions. Roads in these two regions are in a worse state than roads elsewhere. The analysis suggests that these regions have the lowest preservation performance, the oldest roads in the State, the poorest performance in road asset consumption and as mentioned above the lowest capacity to fund their road needs.

13. Expenditure on maintenance and renewal of the existing road network ($629.2 million in 2016-17) has increased 14.8% in the five years from 2012-13 to 2016-17. Expenditure on upgrading and expansion ($275.1 million in 2016-17) has increased by 25.3% since 2012-13.

14. Road preservation expenditure for each class of local road varies considerably. Each road category has different expenditure needs.

ROAD PRESERVATION EXPENDITURE PER KILOMETRE OF ROAD 2016-17

Regional Road Group	Built Up Areas	Outside Built Up Areas		
	Sealed Roads $ per Lane km	Sealed Roads $ per Lane km	Gravel Roads $ per km	Formed Roads $ per km
Gascoyne	12,040	1,820	2,035	6
Goldfields Esperance	11,661	2,879	1,901	663
Great Southern	10,634	2,684	2,439	647
Kimberley	18,991	2,004	2,408	3,267
Metropolitan	10,683	2,603	13,553	12,236
Mid West	12,581	1,882	5,656	1,369
Pilbara	14,109	923	1,723	962
South West	8,249	2,325	2,943	884
Wheatbelt North	8,039	2,060	1,753	544
Wheatbelt South	7,189	1,748	1,448	247
STATE	**10,553**	**2,218**	**2,503**	**847**

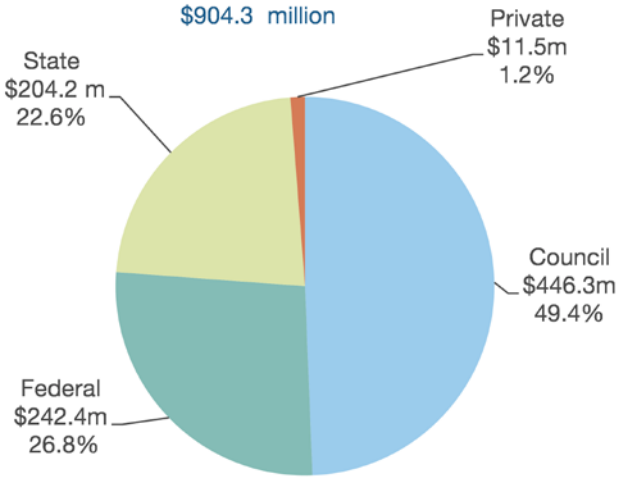
Important statistics are presented graphically in the following pages.

Important Statistics

1. Sources of Local Government road funds

Total funding for Local Government roads was $904.3 million in 2016-17, an increase of $35.4 million from the previous year. Local Governments provided 49.4% of their total road expenditure from their own resources (Figure 1). The Federal funds include $121.04 million of Roads to Recovery funds and $9.2 million of Federal Blackspot funds. The State funds include $21.03 million of Royalties for Regions and $9.36 million of Blackspot funds.

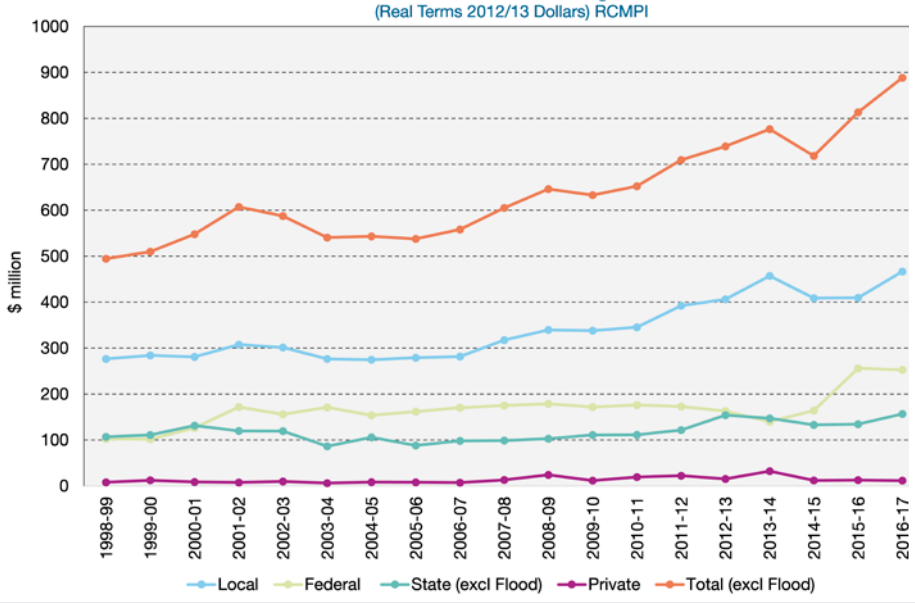
Figure 1
Sources of Local Government Road Funds 2016-17
$904.3 million



Excludes funds allocated to Local Government roads for expenditure by Main Roads WA.

Road funding levels for the past 20 years are presented in Figure 2. Note that funding has been indexed to 2012/13 dollars using the BITRE Road Construction Cost Index (RCMPI). The contribution of all sectors to the road funding task has increased over the long term. Local government's contribution has increased significantly over the past 20 years. State Government contributions have increased too, in generally a flatter trajectory. The increase in Commonwealth funding in 2001-2 reflects the introduction of the Roads to Recovery program, with the increased funding from 2015-16 being particularly evident.

Figure 2
Sources of Road Funding
(Real Terms 2012/13 Dollars) RCMPI

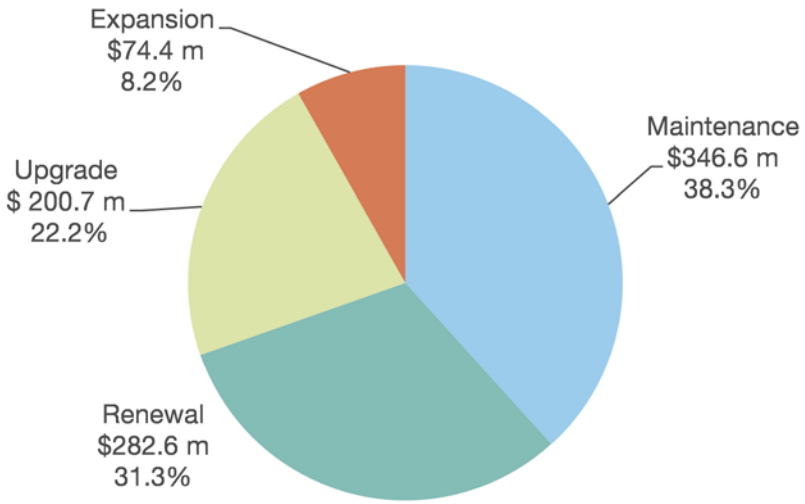


2. Expenditure on maintenance, renewal, upgrade and expansion

Expenditure on upgrading and capital expansion accounts for more than a quarter of total road expenditure (Figure 3). This level of expenditure on upgrading and capital expansion is expected to continue to meet the needs of new development and increased traffic.

The $282.6 million spent on renewal in 2016-17 represents about 1.13% of the Current Replacement Value of the State's local road infrastructure. This is much less than the 1.5% [based on a road life of 60 to 75 years] that sealed road infrastructure wears in a year and the 5% [based on a road life of 20 years] of unsealed road infrastructure that wears in a year.

Figure 3
Local Government Road Expenditure 2016-17
$904.3 million



Road expenditure includes bridges and $53.7 million flood damage

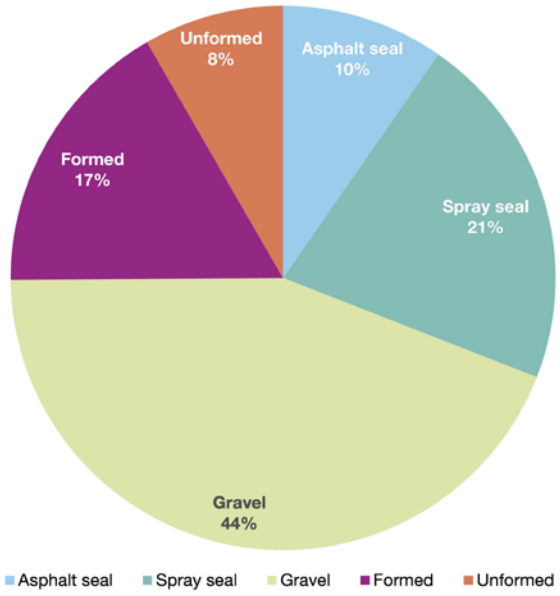
Falls Road, Serpentine

3. Type of roads

Local Government is responsible for 127,708 kilometres of roads representing 86.5% of the State's road network.

Only 31% of local roads are sealed. The remaining 69% (88,182 kilometres) have a gravel or natural surface.

Figure 4
Types of Local Government Roads in WA 2016-17
(Total Length 127,708km)

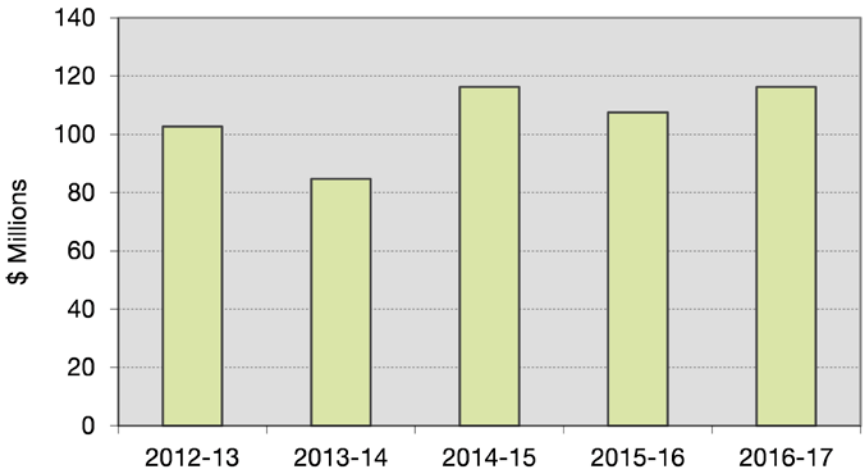


4. Shortfall between road preservation needs and expenditure

Excluding expenditure on repairing flood damage ($53.67 million), Local Governments spent $575.5 million on road preservation. This is $116.25 million below the $691.8 million required to maintain roads at their current condition (Figure 5). The $116.25 million shortfall in 2016-17 is $8.76 million more than in 2015-16 and $12.3 million greater than in 2012-13.

It is clear that the Local Government sector in WA does not have the financial resources required to fully maintain its road network and to keep up with its road improvement needs.

Figure 5
Shortfall Between Preservation Need And Expenditure

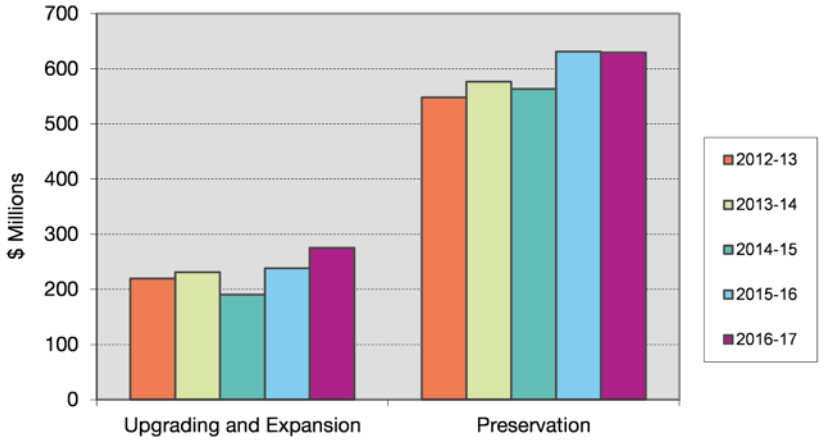


The shortfall has increased from $107.5 million in 2015-16 to $116.25 million in 2016-17 and is $13.6 million more than in 2012-13

5. Expenditure on road preservation and capital upgrading and expansion

Expenditure on road preservation has increased by 14.8% over the five years from 2012-13 to 2016-17 (although it was slightly less in 2016-17 than in 2015-16) while expenditure on upgrading and capital expansion has increased by 25.4% (Figure 6).

Figure 6
Expenditure Trends



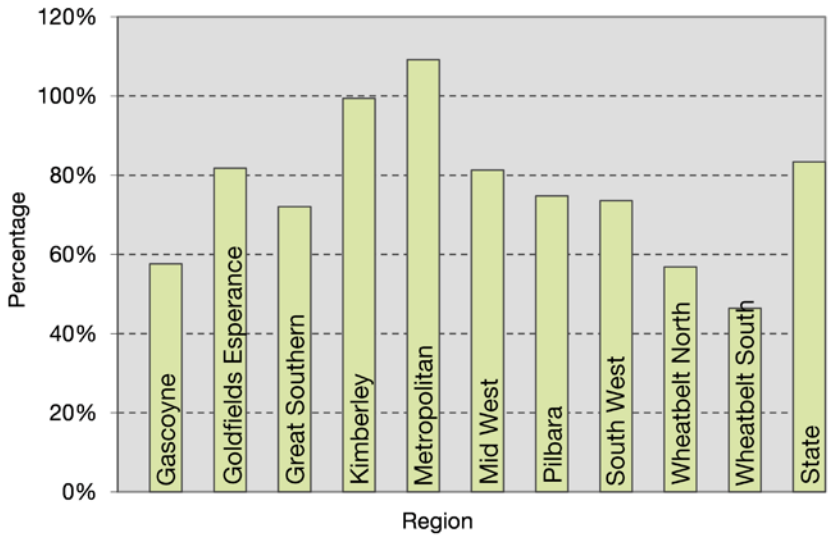
6. Road preservation performance

Road preservation performance is the percentage of the amount spent on road preservation over the amount that should have been spent to maintain roads at their current condition (Figure 7).

Overall State Performance is 83%, which means that Local Governments spent 83% of the amount required to maintain their roads at their current condition. However, this performance is overly influenced by the Metropolitan Region which had a very high performance of 109%. When the Metropolitan Region is excluded, the average performance for the non-metropolitan regions is 69%.

The preservation performance varies widely between the regions from 109% for the Metropolitan Region to 46% for the Wheat Belt South Region and 57% for the Wheat Belt North Region.

Figure 7
Road Preservation Performance
2016-17



Tony di Scerni Pathway, Maylands

7. Capacity to fund road preservation needs and Local Government road expenditure from its own resources

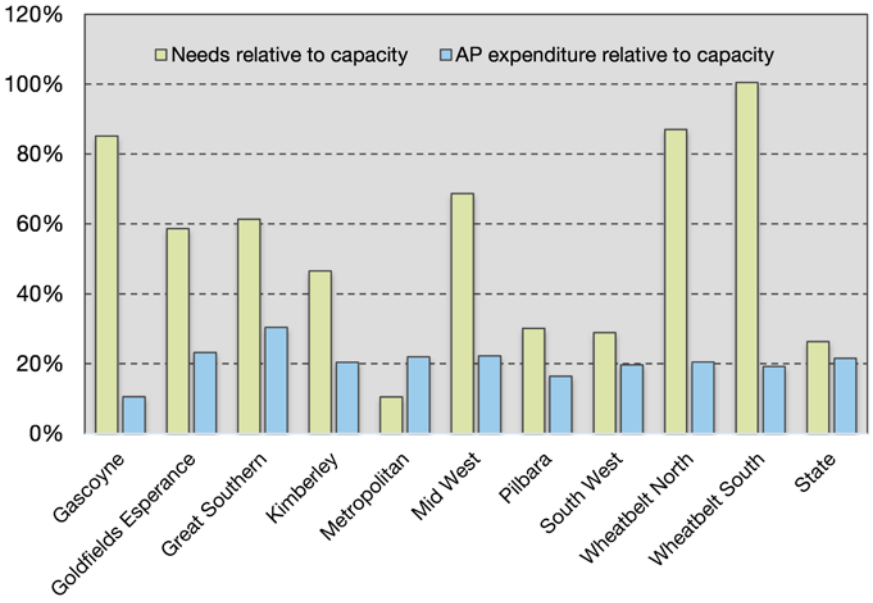
Over the whole State, Local Governments would have to spend 26% of their estimated revenue capacity from their own resources to make up the difference between their road preservation needs and the road grants they receive for preservation. In 2016-17 Local Governments spent 22% of their estimated revenue capacity on road preservation, much less than the required 26%.

The percentage that Local Governments would have to spend varies widely between the regions (Figure 8, green columns) from 10% for the Metropolitan Region to 101% for Wheatbelt South.

Local Government expenditure on roads from its own resources, expressed as a percentage of estimated revenue capacity (Figure 8, blue columns), averages 21.6% for the State and ranges from 10.6% for the Gascoyne Region to 30.3% for the Great Southern Region.

Figure 8 also highlights the differences in the capacity of Local Governments to meet their road preservation needs. Local Governments in the Wheatbelt South Region would have to spend 101% of their revenue capacity to meet their road preservation needs, but were able to spend only 19%. Local Governments in the Metropolitan Region would have to spend only 10% of their revenue capacity to meet their preservation needs, but spent 22%.

Figure 8
Percentage Revenue Capacity required to meet net Preservation Needs compared to Actual percentage

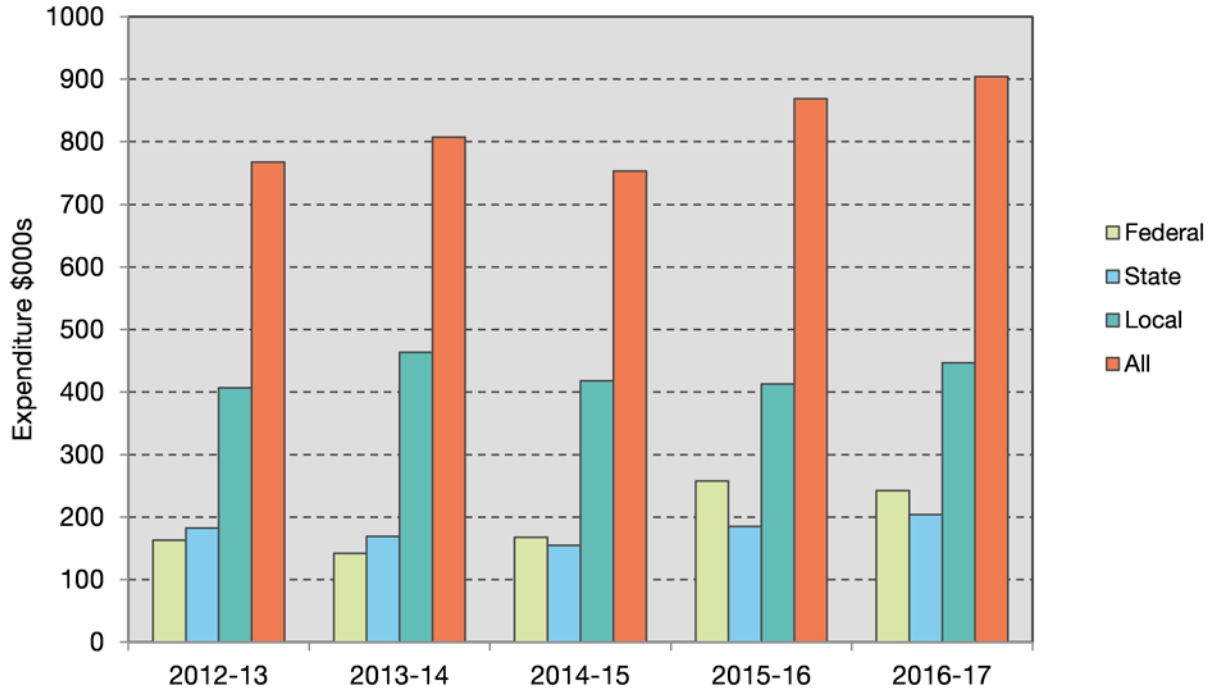


8. Total Local Government road expenditure 2012-13 to 2016-17

Figure 9 shows that:

- Total funding increased by 17.8% between 2012-13 and 2016-17, and was $35.4 million more than in 2015-16.
- Local Government funds increased by 9.9%, between 2012-13 and 2016-17; funding in 2016-17 was $34 million more than in 2015-16.
- Federal road grants increased by 48.6% over the last five years.
- State Government grants increased by 11.9% over the last five years.

Figure 9
Federal State and Local Government Funds



State Government Grants exclude funds allocated to Local Government Roads for expenditure by Main Roads WA

Middlesex Road Bridge, Middlesex, Manjimup

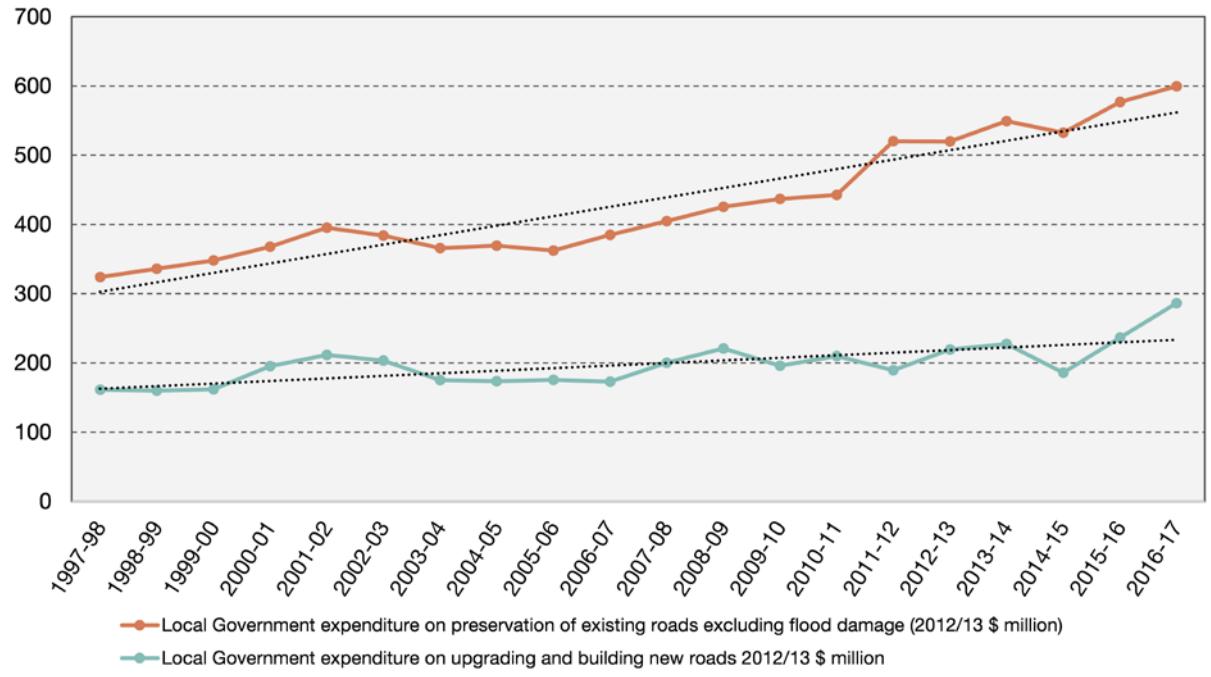
The Esplanade Lookout, Geraldton

9. Growth in expenditure 20 years 1997-2016

Figure 10 shows the expenditure trend over twenty years 1997-98 to 2016-17. Note that funding has been indexed to 2012/13 dollars using the BITRE Road Construction Cost Index (RCMPI).

Expenditure on both preservation, and upgrade and expansion, have increased significantly over the long term. Expenditure on preservation has increased 185%, from $324m to $600m over the period. Expenditure on upgrade and expansion of the network has increased similarly (178%), from $161m to $286.5m.

Figure 10
Expenditure on Roads by Purpose
Real $million 2012/13 RCMPI



Report on Local Government Road Assets and Expenditure 2016-17

1. Introduction

This report is a comprehensive assessment of Local Government road assets and expenditure in Western Australia. It discusses the Replacement Value and Written Down Value for all Local Government roads and bridges and compares current expenditure levels with the amount needed to maintain Local Government roads at their present condition.

The report is based on expenditure statistics provided by Local Governments. All 137 Local Governments in Western Australia provided expenditure statistics for this report. Two Local Governments had difficulty in providing the information and could only provide estimates.

The report covers funds that are under the direct control of Local Governments and are spent by them. Funds allocated to Local Government roads for expenditure by Main Roads WA are not included in this report.

The report covers all Local Government roads, bridges, culverts, footpaths and dual use paths. The road asset valuations include traffic management devices, kerbs, footpaths, verge improvements and drainage within the road reserve. They do not include the value of land.

2. The reporting system

The reporting system used in this report is based on three asset related values:

Replacement value is the current cost of replacing the road assets. It provides a datum from which the consumption of roads can be assessed.

Written down value is the current value after allowing for depreciation. The difference between replacement value and written down value represents the amount consumed.

Required preservation expenditure is the estimated cost of maintaining roads at their current condition. It provides a datum against which actual expenditure performance can be compared.

Estimates of replacement cost were based on road inventory data from Main Roads WA and road costs from the WA Local Government Grants Commission. Estimates of written down value were based on road age data obtained from Main Roads WA.

The unit costs used in estimating the current replacement value and the required preservation expenditure are provided in Appendix 1. The standards are provided in Appendix 2 and the formulae used in the valuations are provided in Appendix 3.

New Mandurah Traffic and Pedestrian Bridge, former bridge in background

The statistics presented in this report in Appendices 5 to 14 are grouped into the ten Local Government Regional Road Groups that are responsible for recommending allocations of State funds to the State Road Funds to Local Government Advisory Committee. This provides the Regional Road Groups with key information for use in their consideration of road funding issues.

The Regional Road Groups are not suitable for benchmarking because of the wide diversity in the Local Governments in each Road Group. For example, the City of Greater Geraldton is in the same Regional Road Group as the Shire of Murchison. To provide better information for benchmarking, another set of statistics is presented in Appendices 15 to 20 in which Local Governments are grouped into six groups each made up of Local Governments with broadly similar characteristics. The City of Greater Geraldton is grouped with other South West country Cities and Towns and the Shire of Murchison is grouped with other pastoral shires.

The six groups of Local Governments with similar characteristics are:

- Metropolitan Local Governments
- South West Country Cities and Towns (including Mandurah)
- Agricultural Local Governments with large towns
- Pastoral and Mining Local Governments with large towns
- Agricultural Local Governments without large towns
- Pastoral and Mining Local Governments without large towns.

3. Local Government roads

Local Government is responsible for 127,708 kilometres of roads representing 86.5% of the State's road network (excluding roads in forestry areas and National Parks). An important feature of the Local Government road network is that only 31% of the roads are sealed. A total of 88,182 kilometres have a gravel or natural surface. Many of the roads are in remote parts of the State, often far from the Local Government depot. The Shire of Menzies, for example, is responsible for roads 800 kilometres from its depot.

TABLE 1: LOCAL ROAD STATISTICS 30 JUNE 2017

Road Lengths - Kilometres

Region	Asphalt Seal	Sprayed Seal	Gravel	Formed	Unformed	Total
Gascoyne	12	513	1,593	1,620	477	4,215
Goldfields Esperance	201	1,318	7,367	3,830	5,109	17,824
Great Southern	191	2,877	7,490	1,590	338	12,485
Kimberley	10	623	1,896	881	1,442	4,852
Metropolitan	10,242	3,424	206	54	23	13,949
Mid West	166	2,886	7,807	4,678	1,412	16,949
Pilbara	164	540	3,047	1,534	695	5,981
South West	1,277	4,811	3,728	652	155	10,624
Wheatbelt North	64	6,415	12,924	3,741	647	23,791
Wheatbelt South	14	3,777	10,051	2,849	346	17,037
STATE	**12,342**	**27,184**	**56,109**	**21,430**	**10,643**	**127,708**

Total road length has increased by 1.7% over the last ten years. Growth in the network has not been consistent across all regions. The metropolitan network has grown by 14.8%, while four regions have had minor reductions. Statistics for individual Local Governments are provided in Appendices 5 to 14. Road area statistics are provided in the appendices for sealed roads. Reliable area statistics for unsealed roads are not available.

Montessori Place cycleway, Kingsley

Local Governments are responsible for bridges on local roads. A bridge is defined as a structure with a clear opening in any span of greater than three metres measured between the faces of abutments. Bridge statistics are presented in Table 2. The number of bridges has reduced in recent years, as older bridges are replaced by culverts where possible, particularly in the South West and Wheatbelt.

TABLE 2: LOCAL GOVERNMENT BRIDGE STATISTICS 30 JUNE 2017

Region	Number of Bridges	Bridge Area - Square Metres				
		Concrete and Steel	Timber with concrete overlay	Timber without concrete overlay	Foot Bridges	All Bridges
Gascoyne	1	3,849	0	0	0	3,849
Goldfields Esperance	4	892	0	0	0	892
Great Southern	73	917	8,980	1,640	654	12,191
Kimberley	12	2,544	0	0	0	2,544
Metropolitan	131	20,457	9,439	1,030	1,349	32,276
Mid West	21	4,476	0	230	0	4,705
Pilbara	23	4,566	0	0	0	4,566
South West	282	15,925	30,008	5,492	278	51,703
Wheatbelt North	113	7,760	13,093	2,714	0	23,567
Wheatbelt South	242	7,124	16,430	6,682	181	30,417
STATE	**902**	**68,510**	**77,950**	**17,787**	**2,462**	**166,709**

Bridge statistics for individual Local Governments are provided in Appendices 5 to 14.

TABLE 3: FOOTPATHS AND DUAL USE PATHS 30 JUNE 2017

Length - Kilometres

Region	Bitumen and Concrete Footpaths	Dual Use Paths	Gravel Footpaths	All
Gascoyne	35	41	19	95
Goldfields Esperance	403	165	29	597
Great Southern	221	123	25	369
Kimberley	117	85	4	206
Metropolitan	7,243	3,411	64	10,717
Mid West	92	202	74	369
Pilbara	165	205	0	369
South West	878	780	103	1,761
Wheatbelt North	264	106	130	501
Wheatbelt South	134	51	49	234
STATE	**9,552**	**5,168**	**498**	**15,218**

Footpath and dual use path statistics for individual Local Governments are included in Appendices 5 to 14.

Riverdale Road works Harvey

Footpath statistics are reviewed every two to three years. The statistics in Table 3 were obtained in 2016.

Each year new roads are constructed, gravel roads are sealed, formed roads are gravelled and unformed roads are upgraded to a formed standard. Some roads are reclassified as State roads and some are closed. Changes in the road network since 2012-13 are shown in Table 4.

TABLE 4: CHANGES IN THE LOCAL ROAD NETWORK 5 YEARS 2012-13 TO 2016-17

Road Lengths - Kilometres

Type of Road	2012-13	2016-17	Increase %
Sealed roads in built up areas			
- Asphalt seals	11,249	12,342	9.7%
- Sprayed seals	3,777	3,716	-1.6%
Sealed roads outside built up areas			
- Sprayed seals	22,542	23,468	4.1%
Gravel roads	53,912	56,174	4.2%
Formed roads	24,506	21,365	-12.8%
Unformed roads	12,009	10,643	-11.4%
ALL ROADS	**127,995**	**127,708**	**-0.2%**

Changes in bridge statistics since 2012-13 are shown in Table 5.

TABLE 5: CHANGES IN BRIDGE STATISTICS 5 YEARS 2012-13 TO 2016-17

Bridge Area - Square metres

Type of Bridges	2012-13	2016-17	Change %
Number of bridges	938	902	-3.8%
Concrete and steel bridges	64,749	68,510	5.8%
Timber bridges with concrete overlay	74,038	77,950	5.3%
Timber bridges without concrete overlay	24,104	17,787	-26.2%
Foot bridges	2,416	2,462	1.9%
ALL BRIDGES	**165,307**	**166,709**	**0.8%**

The number of bridges has reduced in recent years, as older bridges are replaced by culverts where possible. The area of timber bridges with concrete overlay has increased by 5.3% in the last five years. This is the result of a long standing policy of strengthening old timber bridges with concrete overlays to increase their serviceable life.

Changes in path statistics since 2012-13 are shown in Table 6.

TABLE 6: CHANGES IN FOOTPATH AND DUAL USE PATHS STATISTICS 5 YEARS 2012-13 TO 2016-17

Path Lengths - Kilometres

Type of Path	2012-13	2016-17	Increase %
Bitumen and concrete footpaths	8,868	9,552	7.7%
Gravel footpaths	536	498	-7.1%
Dual use paths	3,987	5,168	29.6%
ALL PATHS	**13,391**	**15,218**	**13.6%**

4. Overview of Local Government Road Assets and Expenditure

An overview of Local Government road assets and expenditure for the State is provided in Table 7.

TABLE 7: LOCAL GOVERNMENT ROAD ASSETS AND EXPENDITURE: 5 YEARS 2012-13 TO 2016-17

	2012-13	2013-14	2014-15	2015-16	2016-17
Replacement value **$ billions**	$22.99	$23.71	$24.07	$26.24	$25.11
Written down value **$ billions**	$13.27	$13.73	$13.93	$15.31	$15.11
Required preservation expenditure **$ millions**	$622.62	$641.66	$660.64	$688.50	$691.79
Local Government expenditure on preservation of existing roads excluding flood damage **$ millions**	$519.9	$556.95	$544.31	$581.01	$575.54
Local Government expenditure on flood damage **$ millions**	$28.2	$19.80	$19.12	$49.85	$53.67
Local Government expenditure on upgrading and building new roads **$ millions**	$219.4	$230.7	$189.99	$238.09	$275.08
Total Local Government road expenditure $ millions	**$767.6**	**$807.4**	**$753.41**	**$868.95**	**$904.3**

This table does not include State funds allocated to Local Government roads for expenditure by Main Roads WA.

Total expenditure (excluding flood damage) increased by $31.5 million in 2016-17. This is discussed in Section 9.

The replacement value has decreased from $26.24 billion reported in 2015-16 to $25.11 billion because of a correction in the length of longitudinal pipe drains. The 2015-16 report was based on ROMAN data provided by Main Roads. New data provided by local governments indicates that this data is overstated because it wrongly assumes that drains run the entire length of the road, whereas in most cases they exist on only part of the road. Data obtained through the Road Information survey is more accurate because local governments are required to provide the actual lengths of the pipe drains.

5. Replacement and written down value

Local Government roads in WA had a replacement value of $25.11 billion as at 30 June 2017.

TABLE 8: REPLACEMENT VALUE JUNE 2017

$ Billions

Road type	Replacement Value
Sealed roads in built up areas	13.48
Sealed roads outside built up areas	6.15
Gravel roads	3.32
Formed roads	0.67
Bridges	1.49
TOTAL	**25.11**

The replacement value of the sealed roads in built up areas includes footpaths and dual use paths.

The written down value is the current value after allowing for depreciation. The standards used in calculating the written down values are provided in Appendix 2.

The written down value of $15.11 billion is 60% of the replacement value of $25.11 billion. The percentage of written down value over replacement value is a National Performance Measure termed: 'state of the road asset' or the 'remaining service potential'. This ratio is referred to as the Asset Consumption Ratio in the Western Australian Department of Local Government and Communities publication "Asset Management – Framework and Guidelines". The State average of 60% is less than the 64.2% rating for State highways and main roads in WA [Main Roads WA, February 2018], and comparable to the 61% rating for local roads in 1997-98.

Replacement and written down values for each of the ten regions are provided in Table 9. The table suggests that roads in the Metropolitan Region are in a better state (road state factor 73%) than in all other regions, while roads in the Wheatbelt North (43%) and Wheatbelt South (44%) are in worse state than elsewhere. The State Total road state factor (60%) is an improvement on 2016 (58%).

A ratio of less than 50% indicates an aging network. The Western Australian Department of Local Government and Communities publication "Asset Management – Framework and Guidelines" notes that a ratio of 60% indicates an adequate level of service. A ratio of over 75% indicates potential over investment.

TABLE 9: REPLACEMENT AND WRITTEN DOWN VALUE 30 JUNE 2017

$ Millions

Regional Road Group	Replacement Value	Written Down Value	State of the Road Asset
Gascoyne	433.54	261.75	60%
Goldfields Esperance	1,207.20	610.58	51%
Great Southern	1,509.03	731.46	48%
Kimberley	585.64	302.12	52%
Metropolitan	11,146.38	8,153.90	73%
Mid West	1,627.36	913.70	56%
Pilbara	713.90	359.20	50%
South West	3,369.14	1,811.27	54%
Wheatbelt North	2,680.70	1,157.94	43%
Wheatbelt South	1,833.64	804.31	44%
TOTAL	**25,106.53**	**15,106.22**	**60%**

State of the road asset data for individual Local Governments is provided in Appendices 5 to 14.

6. Road asset consumption

The Australian Local Government Association has developed a National Performance Measure for road asset consumption. The measure is calculated by dividing the depreciation expense by the depreciable amount. The lower the percentage, the better the performance. See Appendix 3 for the formulae used in calculating road asset consumption.

Bicycle Crossing, Cedric Street, Stirling

Road asset consumption for the ten regions is given in Table 10. The State average is 2.5%. The Metropolitan Region has the best performance of 1.7%, while the Goldfields Esperance Region and the Mid West have a poor performance (3.7%). The Gascoyne (3.6%) and Wheatbelt North and South (3.5%) are also poorly performing.

Road asset consumption for the years 2012-13 to 2016-17 is provided in Table 31 in section 15. The State average of 2.5% has decreased slightly from 2.6% in 2012-13 indicating that road assets are being consumed at a slightly lower rate than in 2012-13.

TABLE 10: ROAD ASSET CONSUMPTION 2016-17

$ Millions

Regional Road Group	Depreciable Amount	Annual Depreciation Expense	Performance
Gascoyne	342.37	12.41	3.6%
Goldfields Esperance	926.85	33.94	3.7%
Great Southern	1,168.49	38.69	3.3%
Kimberley	465.05	15.88	3.4%
Metropolitan	9,709.99	162.25	1.7%
Mid West	1,223.99	44.53	3.6%
Pilbara	571.93	18.28	3.2%
South West	2,851.42	69.13	2.4%
Wheatbelt North	2,052.95	72.13	3.5%
Wheatbelt South	1,412.83	48.83	3.5%
STATE	**20,725.87**	**516.07**	**2.5%**

Performance data for individual Local Governments is provided in Appendices 5 to 14

7. Expenditure on Local Government roads and bridges

In 2016-17 total spending on local road infrastructure was $904.3 million. This is $35.4 million more than in the previous year. While as expected the Federal funds declined by $15.7 million on the previous record high figure, the overall increase in expenditure is largely due to an increase of $34.0 million in Local Government own source revenue contributions and an increase of $19.0 million in State funds. The increase in State funds is due to an increased allocation to road projects and an increase in Royalties for Regions grants. There has also been a $3.8m increase in funding for flood damage.

Over the five years 2012-13 to 2016-17 total road expenditure has increased by 17.8% from $767.6 million to $904.3 million.

2016-17 is the third year of the Federal Government's 2015-16 to 2018-19 five year Roads to Recovery Program which was to provide $307.2 million for local roads in WA. In the 2015-16 Commonwealth budget this allocation was increased to $468.9 million. Under current policy 7% of these funds are reserved for bridges and access roads to remote indigenous communities.

TABLE 11: SOURCES OF ROAD FUNDS 2012-13 TO 2016-17

$ Millions

Source	2012-13	2013-14	2014-15	2015-16	2016-17	Total 5 Years	Change over 5 years
Local governments' own funds	406.4	463.6	417.9	412.6	446.3	2,146.7	9.9%
Federal	163.1	142.2	167.8	258.1	242.4	973.6	48.6%
State	182.4	169.1	155.1	185.2	204.2	895.9	11.9%
Private	15.7	32.6	12.6	13.1	11.5	85.4	-28.8%
TOTAL	**767.6**	**807.4**	**753.4**	**868.9**	**904.3**	**4,101.7**	**17.8%**

Note that State Government grants exclude funds allocated to Local Government roads for expenditure by Main Roads WA.

Table 11 includes Roads to Recovery, Royalties for Regions and Black Spot funds. A more detailed breakdown of these funds is shown in Table 12.

TABLE 12: ROADS TO RECOVERY, ROYALTIES FOR REGIONS AND BLACKSPOT FUNDS 2012-13 TO 2016-17

$ Millions

Year	Roads to Recovery	Royalties for Regions	Black Spot Federal	Black Spot State	Black Spot Total
2012-13	50.48	12.37	6.01	11.33	17.34
2013-14	54.12	15.37	6.49	11.28	17.77
2014-15	44.13	5.91	5.01	10.43	15.44
2015-16	131.82	16.71	12.05	9.92	21.97
2016-17	120.85	21.03	9.06	9.36	18.43
TOTAL	**401.40**	**71.37**	**38.61**	**52.32**	**90.93**

The sources of road funds for 2016-17 for the ten Regional Road Groups are listed in Table 13.

TABLE 13: SOURCES OF LOCAL GOVERNMENT ROAD EXPENDITURE 2016-17

$ Thousands

Regional Road Group	Federal	State	Private	Local Government	Total
Gascoyne	4,679	11,053	34	1,901	17,667
Goldfields Esperance	17,584	12,459	40	18,423	48,506
Great Southern	18,604	14,345	1	22,183	55,133
Kimberley	8,255	4,940	0	7,636	20,831
Metropolitan	63,209	47,435	8,614	290,831	409,799
Mid West	32,287	36,281	96	18,438	87,102
Pilbara	9,704	6,613	127	12,516	28,960
South West	32,546	35,244	2,511	44,909	115,210
Wheatbelt North	33,272	20,604	23	19,293	73,192
Wheatbelt South	22,282	15,205	13	10,422	47,922
TOTAL	**242,422**	**204,179**	**11,459**	**446,552**	**904,322**
PERCENTAGE	**26.8%**	**22.6%**	**1.2%**	**49.4%**	**100.0%**
Metropolitan Total	63,209	47,435	8,614	290,541	409,799
Metropolitan %	26.1%	23.2%	75.2%	65.1%	45.3%
Rural Total	179,213	156,744	2,845	155,721	494,523
Rural %	73.9%	76.8%	24.8%	34.9%	54.7%

Note: This table excludes expenditure on local roads by Main Roads WA. Statistics for individual Local Governments are provided in Appendix 21.

Beresford Foreshore Project, Geraldton

The main points that can be drawn from Table 13 are:

- Local Government provided $446.5 million from its own resources. This is 49.4% of all Local Government road expenditure.
- The Federal Government provided $242.4 million, or 26.8 % of all Local Government road expenditure. These funds include Roads to Recovery funds, Black Spot funds and road component grants allocated through the WA Local Government Grants Commission.
- The State Government provided $204.2 million, or 22.6 % of all Local Government road expenditure. State funds include Royalties for Regions grants and Black Spot funds.

8. Classification of road expenditure

The reporting procedure classifies road expenditure into expenditure on maintenance, capital renewal, capital upgrade and capital expansion. These are defined as follows:

Maintenance – expenditure which maintains the asset but does not increase its service potential or life e.g. repairing potholes, grading an unsealed road.

Capital Renewal – expenditure which increases the service potential or extends the life of a road, e.g. resealing a sealed road, resheeting a gravel road.

Capital Upgrade – expenditure on upgrading an existing asset to provide a higher level of service, e.g. widening a road pavement or bridge, providing a second carriageway or replacing a bridge with one having a greater traffic capacity.

Capital Expansion – expenditure on extending the road infrastructure network, e.g. constructing a new road or bridge.

Preservation is the sum of maintenance and capital renewal.

Explanation of the terms **maintenance, capital renewal, capital upgrade** and **capital expansion** and also **road types** are provided in Appendix 4.

Table 14 compares the expenditure on maintenance and renewal and upgrading and expansion for the five years 2012-13 to 2016-17. Expenditure on maintenance and renewal has increased by 15.0% in the five years between 2012-13 and 2016-17 while expenditure on upgrading and expansion has increased by 25.4%.

Almost $11 billion has been expended by Local Governments in the 20 years since 1997-98, including $7.5 billion on maintenance and renewal. It also includes $3.3 billion on upgrades and new roads as the network continues to expand and improve across the State.


South Perth foreshore

TABLE 14: EXPENDITURE ON MAINTENANCE, RENEWAL, UPGRADING AND CAPITAL EXPANSION

$ Millions

	2012-13	2013-14	2014-15	2015-16	2016-17	Change (2012-13 to 2016-17)
Maintenance and renewal of existing roads	548.1	576.7	563.4	630.9	629.21	14.8%
Upgrading and capital expansion	219.4	230.7	190.0	238.1	275.08	25.4%
Total expenditure	**767.6**	**807.4**	**753.4**	**868.9**	**904.29**	**17.8%**
% upgrading and capital expansion	28.6%	28.6%	25.2%	27.4%	30.4%	6.2%

The percentage change is between 2012-13 and 2016-17. Expenditure on maintenance and renewal includes repair of flood damage. Data for individual Local Governments are provided in Appendices 5 to 14.

Expenditure on upgrading and capital expansion accounts for more than a quarter of total road expenditure. This level of expenditure on upgrading and capital expansion is expected to continue to meet the needs of new development and increased traffic. Expenditures on maintenance, capital renewal, capital upgrade and capital expansion for the ten regions are listed in Table 15.

TABLE 15: CLASSIFICATION OF ROAD EXPENDITURE 2016-17

$ Millions

Region	Maintenance	Renewal	Upgrade	Expansion	Total
Gascoyne	3.73	3.83	0.33	9.78	17.67
Goldfields Esperance	20.16	17.61	10.28	0.46	48.50
Great Southern	23.13	20.68	8.24	3.08	55.13
Kimberley	7.86	10.50	1.78	0.69	20.83
Metropolitan	165.28	109.38	92.16	42.98	409.80
Mid West	32.99	40.58	11.64	1.88	87.10
Pilbara	10.91	8.80	7.21	2.03	28.96
South West	41.18	25.46	37.87	10.70	115.20
Wheatbelt North	26.22	29.54	16.61	0.80	73.18
Wheatbelt South	15.13	16.24	14.59	1.96	47.92
STATE	**346.59**	**282.62**	**200.71**	**74.37**	**904.29**
PERCENTAGE	**38.3%**	**31.25%**	**22.2%**	**8.2%**	**100.00%**

Statistics for individual Local Governments are provided in Appendices 5 to 14.

The Metropolitan Region accounted for 57.8% ($43 million) of the $74.37 million expenditure on road expansion while the South West ($10.7 million) accounted for 14.4%. This reflects the strong population growth and economic activity in these regions. The high expansion expenditure in the Gascoyne region is attributable to a Royalties for Regions funded project to build a new bridge system over the Gascoyne River in the Shire of Upper Gascoyne.

The $282.6 million spent on renewal in 2016-17 represents about 1.13% of the Current Replacement Value of the State's local road infrastructure. This is much less than the 1.5% [based on a road life of 60 to 75 years] that sealed road infrastructure wears in a year and the 5% [based on a road life of 20 years] of unsealed road infrastructure that wears in a year.

Local Governments should consider the whole of life costs when making decisions about sealing rural roads. The whole of life cost for a sealed rural road is typically $8,491 a kilometre a year compared to $2,468 for a kilometre of gravel road. [WA Local Government Grants Commission Asset Preservation Model 2016-17].

9. Flood damage

In 2016-17 a total of $53.67 million was spent on repairing flood damage. This compares with $28.2 million in 2012-13, $19.8 million in 2013-14, $19.1 million in 2014-15 and $49.85 million in 2015-16. The councils with the largest expenditures on flood damage in 2016-17 included Cue, Meekatharra and Sandstone, together accounting for 31% of flood damage expenditure ($15.6m) (Table 16).

TABLE 16: LARGEST EXPENDITURES ON FLOOD DAMAGE 2016-17

$ Millions

Local Government	Flood Damage Expenditure
Cue	6.57
Meekatharra	5.12
Sandstone	3.91
Mount Magnet	3.85
Murchison	3.42
Dalwallinu	3.37
Greater Geraldton	3.25
Gnowangerup	1.87
Katanning	1.86
Carnamah	1.57
East Pilbara	1.47
Jerramungup	1.47
Esperance	1.46
Perenjori	1.33
Narembeen	1.31
Yalgoo	1.07
Broomehill Tambellup	1.02

10. Required expenditure on preservation

One objective of this report is to see if road expenditure on preservation is keeping up with road preservation needs. Road preservation is the sum of road maintenance and capital renewal. It does this by comparing actual expenditure on road preservation in a year with the estimated amount needed to maintain the roads at their current condition in that year.

Estimates of the amount needed to maintain roads at their current condition would ideally require comprehensive road condition data. As this is not available, the estimates have been made using standards derived through consultation with Local Government engineers. The standards are for reconstructing and resealing sealed roads and resheeting gravel roads. The costs and standards used in this report are listed in Appendices 1 and 2.

The estimated cost of maintaining Western Australia's local road network in its current condition (the Status Quo cost) during the 2016-17 financial year was $691.79 million.

A comparison of the estimated required preservation expenditure with actual expenditure shows how well Local Governments are meeting their road preservation requirements. Excluding expenditure on repairing flood damage, Local Governments spent $575.5 million on road preservation. This is $116.2 million below the $691.8 million required to maintain roads at their current condition.

TABLE 17: SHORTFALL BETWEEN THE REQUIRED EXPENDITURE ON PRESERVATION AND ACTUAL EXPENDITURE

$ Thousands

Year	Required Expenditure on Preservation	Actual Expenditure	Shortfall
2012-13	622,616	519,944	102,672
2013-14	641,658	556,947	84,710
2014-15	660,637	544,305	116,332
2015-16	688,497	581,010	107,487
2016-17	691,788	575,542	116,247
Increase 5 years	15.7%	16.2%	13.2%

The $116.2 million shortfall in 2016-17 is $8.76 million more than in 2015-16 and $13.6 million greater than in 2012-13.

It is clear that the Local Government sector in WA does not have the financial resources required to fully maintain its road network and to keep up with its road improvement needs. This position has been evident since this form of reporting was introduced in 1993. The reasons why most Local Governments do not have sufficient funds to meet their road preservation needs is discussed in Section 10.

The percentage of actual expenditure on preservation over the required expenditure is a measure of preservation performance. Table 18 compares actual expenditure with the required preservation expenditure and shows the preservation performance for the ten regions.

Table 18 does not include the cost of repairing flood damage. Flood damage is excluded from the estimated required expenditure on preservation because it cannot be estimated due to its unpredictable nature. It is therefore also excluded from the actual expenditure.

Table 18 shows the preservation performance of the Regions. Overall, the State's performance is 83% which means that Local Governments spent 83% of the amount required to maintain their roads in their current condition. However, this is greatly influenced by the very high performance of the Metropolitan Region. For the non-metropolitan regions the performance is only 69%.

The preservation performance varies widely between the regions. The Metropolitan Region achieved the highest performance of 109%, indicating that it spent 9% more than required to maintain its roads at their current condition. It has maintained a high performance since these records were introduced in 1993.

Despite high preservation performance in the Metropolitan Region, road lengths reconstructed and resealed are less than indicated by the expected road life in Table 21. This is because work reported as preservation includes some upgrading.

The Goldfields Esperance, Kimberley, Mid West and Pilbara Regions achieved performances of more than 75%. According to this data, the Wheatbelt North and Wheatbelt South Regions had the lowest performances of 57% and 46% respectively.

Gibson Street road works, Mandurah

TABLE 18: REQUIRED EXPENDITURE ON PRESERVATION AND ACTUAL EXPENDITURE 2016-17

$ Thousands

Regional Road Group	Required Expenditure on Preservation	Actual Expenditure on Preservation	Preservation Performance
Gascoyne	12,892	7,423	58%
Goldfields Esperance	42,546	34,793	82%
Great Southern	49,954	35,980	72%
Kimberley	17,526	17,426	99%
Metropolitan	252,488	274,447	109%
Mid West	53,399	43,413	81%
Pilbara	22,855	17,079	75%
South West	89,172	65,607	74%
Wheatbelt North	89,494	50,889	57%
Wheatbelt South	61,464	28,487	46%
TOTAL	**691,789**	**575,542**	**83%**

Preservation performance for individual Local Governments is provided in Appendices 5 to 14.

Changes in preservation performance between 2012-13 and 2016-17 are set out in Table 19.

In 2012-13 the rural regions had a preservation performance of 66%; this increased to 69% in 2016-17. The Metropolitan Region decreased from 116% to 109%. This latter decrease was largely responsible for the decrease in the State preservation performance from 84% to 83%.

TABLE 19: PRESERVATION PERFORMANCE

Regional Road Group	2012-13	2016-17	Change
Gascoyne	78%	58%	-20%
Goldfields Esperance	86%	82%	-4%
Great Southern	65%	72%	7%
Kimberley	71%	99%	28%
Metropolitan	116%	109%	-7%
Mid West	61%	81%	20%
Pilbara	83%	75%	-8%
South West	70%	74%	4%
Wheat Belt North	59%	57%	-2%
Wheat Belt South	53%	46%	-7%
TOTAL	**84%**	**83%**	**-1%**
Metropolitan	116%	109%	-7%
Non Metropolitan	66%	69%	3%

11. Capacity to fund road preservation needs

The variations in performance are largely due to the varying capacity of Local Governments to raise the additional funds needed to make up the difference between their road preservation needs and the road grants they receive for preservation. To a lesser extent, they are also due to the priority that Local Governments give to the preservation of roads in the allocation of funds under their control.

A comparison of Local Governments' road preservation needs with their revenue raising capacity provides useful insight into the ability of Local Governments to finance their road preservation needs. In making this comparison net preservation needs are used. These are the amounts required to maintain roads at their current condition, less the road grants that Local Governments receive for road preservation. These grants comprise the identified Federal road grants, 63% of the Roads to Recovery grants [1], State direct grants, and that portion of the State road project grants allocated to preservation.

[1] State wide 63% of the Roads to Recovery funds have historically been allocated to maintenance and renewal.

Revenue capacity is made up of the Financial Assistance Grants (FAGs) and Local Governments' own revenue capacity as assessed each year by the WA Local Government Grants Commission. The Commission assesses each Local Government's revenue capacity taking into account residential, commercial and industrial rates in urban areas, and agricultural, pastoral and mining rates in rural areas, as well as investment revenue. The assessments are made by developing models of average capacity based on actual revenues together with data on valuations, number of assessments or leases etc.

For this analysis, Local Governments' revenue capacity is taken to be the sum of the Financial Assistance Grants and the Grants Commission's assessments of revenue capacity. The revenue capacity provides a datum against which a Local Government's road preservation needs can be compared. Over the whole State, Local Governments would have to spend 26% of their estimated revenue capacity to make up the difference between their road preservation needs and the road grants they receive for preservation. In 2016-17 they spent 22% of their estimated revenue capacity on roads, being both maintenance and renewal, and upgrades and capital expansion. When the net road preservation needs are compared with revenue capacity for the regions, it is found that the burden of maintaining roads varies greatly between the regions as shown in Table 20.

TABLE 20: PERCENTAGE OF REVENUE CAPACITY REQUIRED TO MEET NET PRESERVATION NEEDS COMPARED TO ACTUAL EXPENDITURE PERCENTAGE

Region	Percentage of Revenue Capacity Required to Meet Net Road Preservation Needs	Total Road Expenditure (from own resources) as % of Revenue Capacity
Gascoyne	85%	11%
Goldfields Esperance	59%	23%
Great Southern	61%	30%
Kimberley	47%	20%
Metropolitan	10%	22%
Mid West	69%	22%
Pilbara	30%	16%
South West	29%	20%
Wheatbelt North	87%	20%
Wheatbelt South	101%	20%
STATE	**26%**	**22%**

Statistics for individual Local Governments are provided in Appendices 5 to 14.

Theoretically, every region (except Wheatbelt South) has enough revenue capacity to fully fund the preservation of their road network. However, Local Governments also need to fund and administer a broad range of other community service requirements, as well as upgrade and expand their road networks, so ultimately there are insufficient funds available to fully meet the needs of maintaining and preserving the road network.

The table shows that Local Governments in Wheatbelt South would have to spend 101% of their total revenue capacity to make up the difference between their road preservation needs and the road grants they receive for preservation. They were able to spend only 20% of their total revenue capacity on roads. Local Governments in the Metropolitan Region would have to spend only 10% to preserve the road network at the current standard; their total road expenditure accounted for 22% of revenue capacity.

The large differences in the table explain some of the variations in the preservation performance in Table 18. These differences indicate that the current grant arrangements do not properly reflect the differing road expenditure needs of the regions.

12. Analysis of asset renewal performance

The current rates of reconstructing and resealing sealed roads and resheeting gravel roads have been analysed using data provided by Local Governments.

TABLE 21: RENEWAL OF ROADS WITHIN BUILT UP AREAS

Treatment	Lane km Treated	% Treated each year	Implied Life Years	Estimated Life Years
Metropolitan Region				
- Reconstruction of sealed roads	45.7	0.19%	536.8	75
- Resealing	549.2	2.24%	44.7	15 to 30
Outside Metropolitan Region				
- Reconstruction of sealed roads	79.1	0.84%	118.5	60
- Resealing	474.8	2.99%	20.5	12 to 15

For the reconstruction of roads, the implied life is the number of years roads have to last given the percentage reconstructed each year. For example, if 1% is reconstructed each year the implied road life would be 100 years. For resealing, the indicated life is the number of years the seal would have to last given the percentage resealed each year.

TABLE 22: RENEWAL OF ROADS OUTSIDE BUILT UP AREAS

Treatment	Length Treated	% Treated each year	Implied Life Years	Estimated Life Years
Reconstruction of sealed roads	453 lkm	1.1%	92.4	60
Resealing of sealed roads	1469 lkm	3.5%	28.4	12 to 15
Resheeting of gravel roads	2192 km	4.2%	24.0	20

lkm = lane kilometres

The implied life is considerably higher than the estimated life for all road categories. The estimated life was obtained from available data and consultation with Main Roads and Local Government engineers. Essentially this means that Local government collectively are not renewing sufficient lengths of road each year.

13. Road age

Main Roads records road ages for all sealed local roads in WA. Ages are recorded separately for pavements, sprayed seals and asphalt seals. The summarised data is presented in Table 23. Road ages are used in calculating the written down values in this report.

TABLE 23: AGES OF SEALED LOCAL ROADS 2017

Region	Roads in Built Up Areas				Roads Outside Built up Areas		
	Length km	Pavement Age Years	Sprayed Seal Age Years	Asphalt Seal Age Years	Length km	Pavement Age Years	Sprayed Seal Age Years
Gascoyne	101	30	14	11	424	19	12
Goldfields Esperance	451	34	23	23	1,068	26	21
Great Southern	500	32	23	24	2,567	32	19
Kimberley	211	38	22	12	422	30	16
Metropolitan	11,185	40	22	22	2,481	30	21
Mid West	485	28	16	15	2,566	22	14
Pilbara	418	36	29	24	286	26	22
South West	1,963	32	23	15	4,125	31	21
Wheatbelt North	501	35	23	16	5,978	37	22
Wheatbelt South	234	41	28	17	3,557	34	20
Estimated road life		60-75	15-20	20-25		55	15-20
Optimal age		30-37.5	7.5-10	10-12.5		27.5	7.5-10

Ages for individual Local Governments are provided in Appendices 5 to 14


Mandurah foreshore path

The road ages provided by Main Roads and are based on historical records, some of which are very old. The optimal ages in Table 23 have been taken as half the expected serviceable life. For example the expected serviceable life of a sprayed seal is 15-20 years so the optimal age is taken as 7.5-10 years. This limits the maximum age to the serviceable life of 15 to 20 years.

The pavement ages of roads in built up areas is close to the optimal range. It must be noted, however, that some Local Government have much higher ages than the averages in the table. For example the average age for the City of Perth is 51 years and for the City of Vincent 60 years compared to the Metropolitan average of 39 years in the table.

The asphalt and sprayed seal ages for roads within built up areas are much higher than the optimal ages. The pavement ages for roads outside built up areas is close to the optimal ages except for the Wheatbelt North and South Regions. The sprayed seal ages for roads outside built up areas in these two regions are much higher than the optimal ages.

14. Sustainability of sealed roads

The Australian Local Government Association has developed a National Performance Measure for the sustainability of sealed road assets. The performance measures for the ten regions are presented in Table 24.

The performance measure is calculated by dividing the annual preservation expenditure by the annual life cycle cost. The higher the percentage, the better is the performance.

The state-wide performance is 69.1%, a drop on the previous year (70.9%), and five years ago (72% in 2012-13). The Metropolitan Region is spending 82.5% of its annual life cycle cost. The worst performing regions, according to this data, are Wheatbelt South (48.0%) and Midwest (52.6%).

TABLE 24: SUSTAINABILITY OF SEALED ROADS 2016-17

$ Thousands

Region	Annual life cycle cost	Annual Preservation Expenditure	Performance
Gascoyne	7,000	3,682	52.6%
Goldfields Esperance	19,016	15,447	81.2%
Great Southern	26,658	18,497	69.4%
Kimberley	12,104	8,439	69.7%
Metropolitan	171,867	141,755	82.5%
Mid West	21,277	11,795	55.4%
Pilbara	14,053	10,570	75.2%
South West	60,020	30,827	51.4%
Wheatbelt North	46,311	26,429	57.1%
Wheatbelt South	27,894	13,401	48.0%
STATE	**406,200**	**280,842**	**69.1%**

Performance data for individual Local Governments are provided in Appendices 5 to 14.

15. Road condition surveys

Road condition data is an essential requirement in road management. Good progress has been made in collecting this data in the past few years as shown in Table 25. The table shows the length of sealed roads for which road condition data is now available. Local Governments now have access to current road condition data for almost three quarters of their sealed local roads.

TABLE 25: PERCENTAGE OF SEALED ROADS SURVEYED IN THE PRECEDING 5 YEARS

Percentage by Length

Regional Road Group	Percentage Surveyed				
	2013	2014	2015	2016	2017
Gascoyne	62	60	44	46	46
Goldfields Esperance	60	14	38	35	35
Great Southern	35	48	72	71	70
Kimberley	64	62	75	75	73
Metropolitan	78	82	81	84	72
Mid West	57	51	70	67	62
Pilbara	100	43	94	92	100
South West	84	81	82	74	74
Wheatbelt North	50	54	62	86	86
Wheatbelt South	54	47	59	66	62
STATE	**65**	**64**	**71**	**75**	**71**

Source: RAMM database 19 July 2017

Note data excludes 14 non RAMM subscriber Local Governments

16. Road expenditure from Local Governments' own resources

Expenditure on roads from Local Governments' own resources comprises:

- Council rates
- Loan funds
- Funds from Accumulated Reserves; and
- General Purpose Grants received from the WA Local Government Grants Commission.

Expenditure on roads from a Local Government's own resources is an important indicator of the priority the Local Government places on its road needs.

The Western Australian Local Government Association (WALGA) uses a measure of Local Government road expenditure effort in which a Local Government's own expenditure is expressed as a percentage of its revenue capacity (see section 10). Local Governments' revenue capacity is taken to be the sum of the Financial Assistance Grants and the Grants Commission's assessments of revenue capacity. This notional measure of revenue capacity provides a datum against which a Local Government's own road expenditure can be compared.

Table 26 shows the road expenditure effort for the ten Regional Road Groups using this measure and compares Local Governments' own expenditure with total road expenditure.

Koombana Bay Foreshore redevelopment, Bunbury

TABLE 26: LOCAL GOVERNMENT ROAD EXPENDITURE 2016-17

Regional Road Group	Total Local Government Road Expenditure ($ Millions)	Road Expenditure from Local Governments' Own Resources			
		Road Expenditure ($ Millions)	% of Total Road Expenditure	% of Councils' Revenue Capacity	Expenditure per person ($)
Gascoyne	17.67	1.90	10.8%	10.6%	192
Goldfields Esperance	48.51	18.42	37.7%	23.2%	317
Great Southern	55.13	22.18	40.2%	30.3%	355
Kimberley	20.83	7.64	36.7%	20.4%	197
Metropolitan	409.80	290.83	71.0%	21.9%	148
Mid West	87.10	18.44	21.2%	22.2%	326
Pilbara	28.96	12.52	43.2%	16.4%	191
South West	115.21	44.91	39.0%	19.7%	156
Wheatbelt North	73.19	19.29	26.4%	20.4%	374
Wheatbelt South	47.92	10.42	21.7%	19.2%	467
TOTAL	**904.32**	**446.55**	**49.4%**	**21.6%**	**171**

Statistics for individual Local Governments are provided in Appendices 5 to 14.

The main points that can be drawn from Table 26 are:

- Local Governments provided 49.4% of their road expenditure from their own resources.
- Local Government expenditure from its own resources averaged 21.6% of the Local Government revenue capacity over the State.
- Local Governments in the Metropolitan Region provided 71.0% of their total road expenditure from their own resources. It is because of this high expenditure effort by Metropolitan Local Governments that their roads are in a better state than roads elsewhere.
- The Metropolitan Region accounts for $290.8 million or 65.1% of the total amount of $446.55 million spent from Local Governments' own resources.

Local Governments with the highest and lowest road expenditure effort in each group are listed in Table 27.

More detail is included in Appendix 21.

TABLE 27: LOCAL GOVERNMENT ROAD EXPENDITURE EFFORT FROM OWN RESOURCES

Local Governments with the highest and lowest road expenditure effort in each group, sorted according to the percentage of revenue capacity spent on roads. Road expenditure includes both maintenance and renewal, and upgrades and capital expansion. Not every local government is listed.

Regional Road Group		Local Government	% of Revenue Capacity
Gascoyne	Highest	Upper Gascoyne	33
		Exmouth	8
	Average		11
		Shark Bay	7
	Lowest	Carnarvon	3
Goldfields Esperance	Highest	Esperance	33
		Kalgoorlie Boulder	28
		Wiluna	27
		Leonora	26
	Average		23
	Lowest	Ngaanyatjarraku	14
		Laverton	13
		Coolgardie	10
		Menzies	8
		Dundas	**0**
Great Southern	Highest	Gnowangerup	51
		Ravensthorpe	49
		Jerramungup	46
		Cranbrook	36
	Average		30
	Lowest	Katanning	22
		Kojonup	22
		Woodanilling	**0**
Kimberley	Highest	Broome	30
	Average		20
	Lowest	Derby West Kimberley	16
		Wyndham East Kimberley	16
		Halls Creek	8
Metropolitan	Highest	Swan	43
		Subiaco	41
		Nedlands	40
		Perth	34
		Gosnells	30
	Average		22
	Lowest	Bayswater	15
		Cockburn	14
		Mosman Park	13
		Wanneroo	12
		Cottesloe	7

TABLE 27 CONTINUED: LOCAL GOVERNMENT ROAD EXPENDITURE EFFORT FROM OWN RESOURCES

Local Governments with the highest and lowest road expenditure effort in each group, sorted according to percent of revenue capacity spent on roads. Not every local government is listed.

Regional Road Group		Local Government	% of Revenue Capacity
Mid West	Highest	Sandstone	67
		Three Springs	37
		Chapman Valley	36
		Cue	36
		Carnamah	35
	Average		22
	Lowest	Northampton	13
		Mount Magnet	11
		Yalgoo	10
		Morawa	5
Pilbara	Highest	Port Hedland	22
		Karratha	18
	Average		16
	Lowest	Ashburton	16
		East Pilbara	8
South West	Highest	Nannup	65
		Harvey	28
		Dardanup	27
		Augusta Margaret River	27
	Average		20
	Lowest	Mandurah	13
		Murray	12
		Boddington	12
		Waroona	11
		Collie	8
		Bridgetown Greenbushes	6
Wheatbelt North	Highest	Goomalling	75
		Victoria Plains	46
		Moora	34
		Chittering	34
		Northam	34
		Koorda	31
	Average		20
	Lowest	Yilgarn	9
		Dalwallinu	8
		Dowerin	5
		Mount Marshall	3
		Wyalkatchem	3
		Trayning	**0**
Wheatbelt South	Highest	Narembeen	36
		Narrogin (S)	35
		Wandering	32
		Williams	28
		Corrigin	28
	Average		19
	Lowest	Lake Grace	12
		Kondinin	12
		Quairading	10
		Wagin	9
		Bruce Rock	7
		Wickepin	1

Some key observations on Local Government expenditure from its own resources are:

- Expenditure averaged 21.6% of Local Government revenue capacity over the State.
- Goomalling (74.8%), Sandstone (67.4%) and Nannup (65.1%) expended the highest proportion of their notional revenue capacity on roads.
- 57 Local Governments spent more than the average (21.6%), while 77 spent less than the average.
- 23 Local Governments spent less than half the average (10.8%) of their revenue capacity on roads.

Three local governments did not spend any of their own-source revenue on roads. The Roads to Recovery Program requires Local Governments to maintain their own road expenditure effort. The State Road Funds to Local Government Advisory Committee is concerned when some Local Governments lower their previous good expenditure record. In such circumstances WALGA discusses the matter with the Local Governments concerned.

Table 28 presents Local Governments' total road expenditure between 2012-13 and 2016-17 for each of the Regional Road Groups. Expenditure for the State increased by 9.9% from $406.4 million in 2012-13 to $446.55 million in 2016-17. However, the expenditure in 2016-17 was $17 million less than the peak expenditure year of 2013-14.

TABLE 28: TOTAL ROAD EXPENDITURE FROM LOCAL GOVERNMENTS' OWN RESOURCES 2012-13 to 2016-17

$ Thousands

Region	2012-13	2013-14	2014-15	2015-16	2016-17	5 year Change
Gascoyne	5,654	3,514	2,607	2,594	1,901	-66.4%
Goldfields Esperance	20,211	22,610	20,929	16,867	18,423	-8.8%
Great Southern	16,851	19,483	15,540	13,984	22,183	31.6%
Kimberley	6,289	7,133	6,433	5,285	7,636	21.4%
Metropolitan	264,311	299,160	265,473	279,111	290,831	10.0%
Mid West	16,895	19,252	20,921	19,244	18,438	9.1%
Pilbara	10,542	13,183	12,633	10,716	12,516	18.7%
South West	39,455	44,681	45,621	37,542	44,909	13.8%
Wheatbelt North	17,488	24,104	16,735	16,970	19,293	10.3%
Wheatbelt South	8,678	10,472	11,067	10,240	10,422	20.1%
STATE	**406,374**	**463,592**	**417,929**	**412,553**	**446,552**	**9.9%**

The change is calculated over the 5 years 2012-13 to 2016-17. Statistics for individual Local Governments for the ten years 2007-08 to 2016-17 are provided in Appendix 21.

Greenbushes-Grimwade Road, Grimwade

17. Expenditure by class of road

Each class of road has its own expenditure needs. Table 29 shows the actual expenditure per kilometre for each class of road for each of the Regional Road Groups. This information is useful for benchmarking purposes.

Local Governments provided expenditure data for bridges on local roads (Table 30). The expenditure is mainly sourced from Commonwealth Financial Assistance Grants (FAG) Special Project allocations and Roads to Recovery grants and Main Roads grants. The expenditure on preservation comprises major maintenance and rehabilitation projects.

TABLE 29: EXPENDITURE PER KILOMETRE OF ROAD 2016-17

Regional Road Group	Built Up Areas	Outside Built Up Areas		
	Sealed Roads $ per Lane km	Sealed Roads $ per Lane km	Gravel Roads $ per km	Formed Roads $ per km
Gascoyne	12,040	1,820	2,035	6
Goldfields Esperance	11,661	2,879	1,901	663
Great Southern	10,634	2,684	2,439	647
Kimberley	18,991	2,004	2,408	3,267
Metropolitan	10,683	2,603	13,553	12,236
Mid West	12,581	1,882	5,656	1,369
Pilbara	14,109	923	1,723	962
South West	8,249	2,325	2,943	884
Wheatbelt North	8,039	2,060	1,753	544
Wheatbelt South	7,189	1,748	1,448	247
STATE	**10,553**	**2,189**	**2,503**	**847**

Expenditure per kilometre is calculated by dividing the total preservation expenditure on a road category by the length of roads in the category. Statistics for individual Local Governments are provided in Appendices 5 to 14.

TABLE 30: EXPENDITURE ON LOCAL GOVERNMENT BRIDGES 2016-17

Regional Road Group	Preservation $	Upgrade and Expansion $	Total $
Gascoyne	0	9,783,000	9,783,000
Goldfields Esperance	0	0	0
Great Southern	895,000	561,000	1,456,000
Kimberley	237,000	0	237,000
Metropolitan	2,583,000	695,000	3,278,000
Mid West	212,000	8,000	220,000
Pilbara	11,000	0	11,000
South West	4,799,000	14,613,000	19,412,000
Wheatbelt North	215,000	58,000	273,000
Wheatbelt South	1,072,000	229,000	1,301,000
STATE	**10,024,000**	**25,947,000**	**35,971,000**

Statistics for individual Local Governments are provided in Appendices 5 to 14.
The expenditure on preservation is made up of major repairs and reconstruction.
It does not include routine maintenance for which information was not available.

The expenditure of $10 million on bridge preservation is 0.67% of the current replacement value of $1.492 billion for Local Government bridges in the state.

The bridge expenditure for 2016-17 includes two large projects. The State Government and City of Mandurah provided $51.8 million for the replacement of the Old Mandurah Traffic Bridge. The City of Mandurah's contribution to the costs of the bridge, which was constructed by Main Roads Western Australia, was $10.2 million. The project was due for completion in 2017/18. The second large bridge was a Royalties for Regions funded project to build a new low-level bridge system over the Gascoyne River at Gascoyne Junction in the Shire of Upper Gascoyne. The total budgeted cost of $10.945 million was financed by Royalties for Regions ($9.045 million), the Commonwealth Roads to Recovery Program ($0.95 million), and $951,000 from the Shire of Upper Gascoyne.

18. National performance measures

The Australian Local Government Association has developed eight national performance measures. These are presented in Table 31 for five years 2012-13 to 2016-17.

TABLE 31: NATIONAL PERFORMANCE MEASURES WA

	Performance Measure	2012-13	2013-14	2014-15	2015-16	2016-17
A	State of road asset – service potential remaining %	58.0	58.0	58.0	58.0	60.0
B	Expenditure on roads and bridges $ millions	$767.6	$807.4	$753.4	$868.9	$904.3
C	Expenditure on sealed roads $ per km	$11,206	$11,766	$11,093	$11,768	$11,814
D	Expenditure on unsealed roads $ per km	$1,480	$1,425	$1,639	$2,094	$1,963
E	Road asset consumption	2.6%	2.6%	2.5%	2.4%	2.5%
F	Sustainability sealed roads	70.4%	72.4%	67.7%	70.9%	68.5%
G	Road safety sealed roads – fatalities per 1000 km per year	2.11	1.89	1.99	1.81	2.13
H	Road safety unsealed roads – fatalities per 1000 km per year	0.13	0.13	0.15	0.06	0.13

The formulae used in calculating the WA performance measures are explained in Appendix 3. An explanation of the measures is given below:

A. State of the road asset reflects the service potential remaining. This measure is calculated by dividing the written down value by the replacement cost. WALGA has used this indicator in all its road asset and expenditure reports. It is discussed in section 5.

B. Expenditure on Local Government roads and bridges $ millions - compares total road expenditure for the States.

C. Expenditure on sealed roads $ per km - WALGA uses this measure [Table 29], but expresses it in $ per lane kilometre. This is a more accurate measure than the Australian Local Government Association (ALGA) measure of $ per kilometre because it takes account of road width.

D. Expenditure on unsealed roads $ per km. [Table 29]

E. Road asset consumption - this is the annual depreciation expense divided by the depreciable amount. The depreciation expense is the systematic allocation of the depreciable amount over its useful life. The depreciable amount is the current replacement cost less residual value.

F. Sustainability of sealed roads - this is the sum of annual maintenance and renewal expenditure divided by the life cycle cost. Life cycle cost is the average annual asset consumption represented by the annual depreciation expense plus current road maintenance expenditure.

G. Road Safety - fatalities per 1000 km of sealed local roads. Fatalities, obtained from Main Roads WA - Asset Geo-spatial Information Branch, divided by the length of sealed local roads.

H. Road Safety - fatalities per 1000 km of unsealed local roads. Fatalities, obtained from Main Roads WA - Asset Geo-spatial Information Branch, divided by the length of unsealed local roads.

19. Bridge age and condition

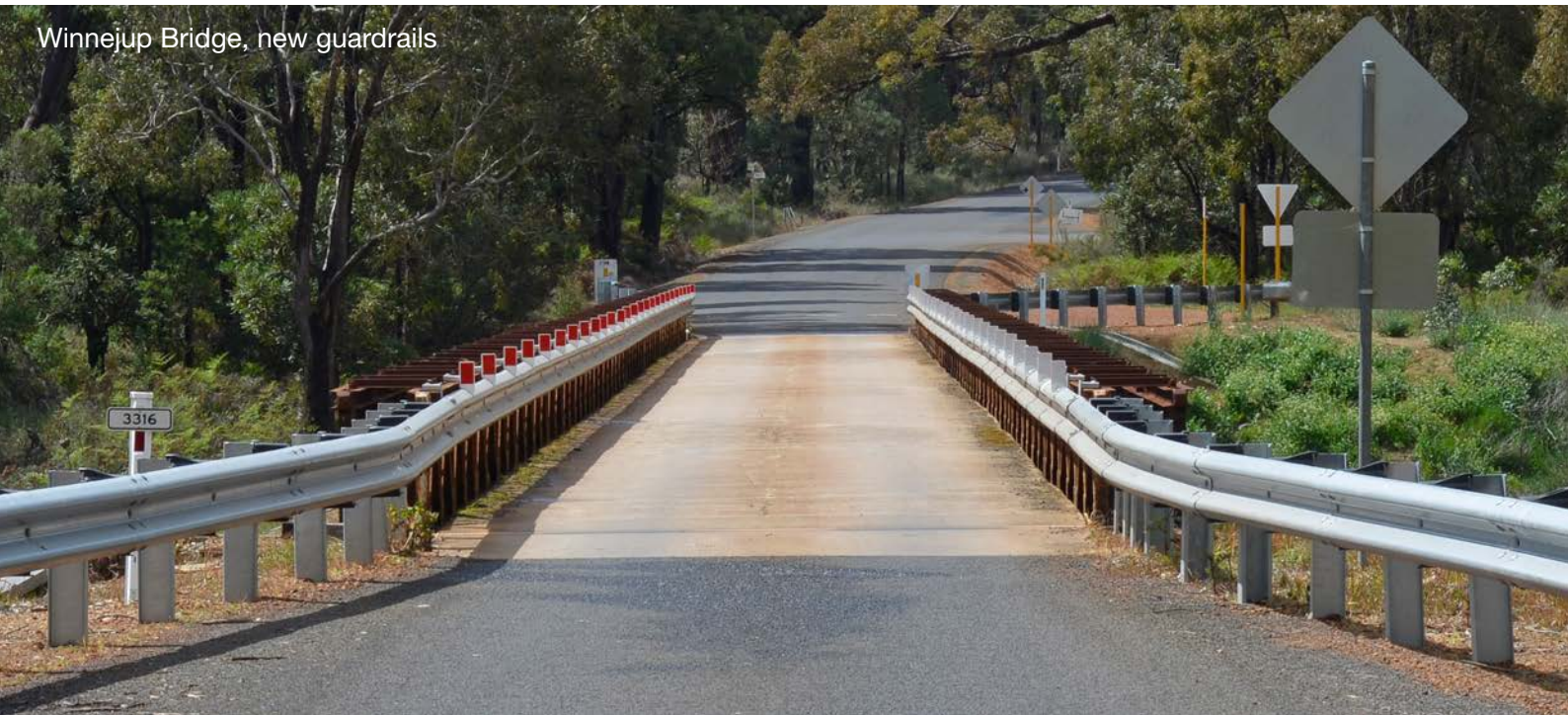
MRWA undertakes structural bridge inspections on behalf of Local Government and this information is used to prioritise funding for remedial and replacement works. Table 32 provides a guide to the condition of bridges across WA. While the majority of the bridges are in good to very good condition, a significant number of timber bridges in the South West and Wheatbelt regions are in a poor to fair condition.

TABLE 32: BRIDGE CONDITION 2017

Bridge Type	Region Name	Not Calculated	Very Good	Good	Fair	Poor
Non Timber	Goldfields - Esperance	2	1	1		
	Great Southern	12				
	Kimberley	11			1	
	Metropolitan	81	5	3		
	Mid West-Gascoyne	19	2	2		
	Pilbara	22				
	South West	69		8		
	Wheatbelt	136	9	3		
	Total - Non Timber	**352**	**17**	**17**	**1**	
Timber	Great Southern	7		47	4	
	Metropolitan	9		18	7	
	Mid West-Gascoyne	2				
	South West	38		151	14	2
	Wheatbelt	57	5	122	19	2
	Total - Timber	**113**	**5**	**338**	**44**	**4**
Overall	**Total**	**465**	**22**	**355**	**45**	**4**
		52%	48%			

The above information was provided by MRWA to the Bridge Committee of the WA Local Government Grants Commission. It is not possible to establish the condition of some bridges because of the difficulties of accessing the underside for inspection.

Nearly 60% of bridges (for which an age is known) are more than 30 years old; 27% are more than 50 years old. The situation is somewhat worse in the wheatbelt and south-west, with around 80% of timber bridges more than 30 years old, and 43% of timber bridges in the wheatbelt more than 50 years old.



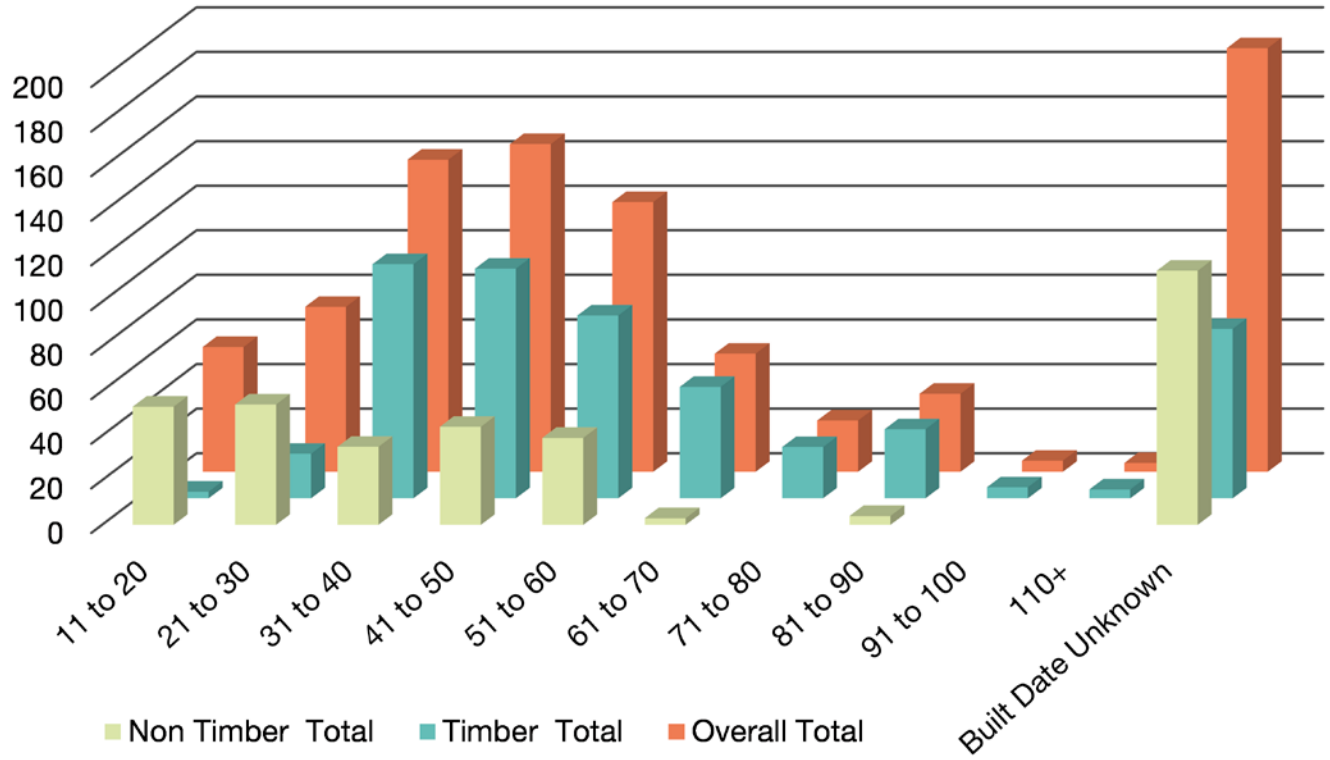
Winnejup Bridge, new guardrails

TABLE 33: BRIDGE AGE (years)

Bridge Type	Region Name	Total No. of Bridges	0 to 10	11 to 20	21 to 30	31 to 40	41 to 50	51 to 60	61 to 70	71 to 80	81 to 90	91 to 100	110+	Built Date Unknown
Non Timber	Goldfields - Esperance	4	1			2	1							
	Great Southern	12	5	2	1			2						2
	Kimberley	12					4	7			1			
	Metropolitan	89	4	17	20	15	16	7						10
	Mid West-Gascoyne	23	2	2		3	3	10	1		2			
	Pilbara	22	3		1	3	8							7
	South West	77	25	11	7	7	2				1			24
	Wheatbelt	148	1	21	25	5	10	13	2					71
	Total - Non Timber	**387**	**41**	**53**	**54**	**35**	**44**	**39**	**3**		**4**			**114**
Timber	Great Southern	58			4	16	6	10	5	2	3			12
	Metropolitan	34			1	5		8	9	5	1			5
	Mid West-Gascoyne	2	1			1								
	South West	205	1	3	9	46	55	29	14	7	8	2		31
	Wheatbelt	205			6	37	42	35	22	9	19	3	4	28
	Total - Timber	**504**	**2**	**3**	**20**	**105**	**103**	**82**	**50**	**23**	**31**	**5**	**4**	**76**
Overall	**Total**	**891**	**43**	**56**	**74**	**140**	**147**	**121**	**53**	**23**	**35**	**5**	**4**	**190**

The above information was provided by MRWA to the Bridge Committee of the WA Local Government Grants Commission.

Figure 11
Age of Local Government Bridges 2017 (years)



Two Rocks Road, Yanchep
works for new roundabout

Two Rocks Road, Yanchep
completed roundabout

APPENDIX 1

COSTS USED IN CALCULATING VALUATIONS

2016-2017

Appendix 1

REPLACEMENT COSTS

Costs are in 2016-17 prices

$ per kilometre

Region	Residential Streets		Roads Outside Built up Areas	
	Sealed 7.0 m wide	Sealed 6.0 m wide	Gravel	Formed
Gascoyne	353,293 - 414,249	320,350	59,928	32,426
Goldfields Esperance	326,637 - 382,147	302,568	60,063	30,334
Great Southern	320,075 - 373,205	279,739	52,329	26,673
Kimberley	481,253 - 558,317	453,395	65,643	36,610
Metropolitan	499,971 - 536,673	375,521	74,297	37,656
Pilbara	450,594 - 523,174	432,567	59,204	30,334
Midwest	309,326 - 362,457	276,923	57,055	26,673
Southwest	389,190 - 436,783	345,948	62,986	31,380
Wheatbelt North	297,358 - 350,489	261,593	52,865	26,673
Wheatbelt South	302,986 - 356,116	265,199	53,079	26,673

The lower costs for residential streets are for sprayed seals, while the higher costs are for asphalt seals.

The cost of sealed residential streets excludes the cost of kerbing and footpaths.

Kerbing costs $46,000 to $63,000 per kilometre, increasing up to $79,000 in the north of the State.

Concrete footpaths cost $92,000 to $105,000 per kilometre, increasing up to $136,000 in the north of the State.

Dual Use paths cost $101,000 to $120,000 per kilometre, increasing up to $157,000 in the north of the State.

Local distributor roads

The replacement cost in the Metropolitan Region ranges from $520,000 to $1,550,000 per km depending on the number of lanes.

ROAD PRESERVATION COSTS

Costs are in 2016-17 prices

Sealed Roads within Built up Areas

$ per kilometre

Region	Residential Streets Sealed 7 m wide			
	Routine maintenance	Reseal	Reconstruction	
Gascoyne	2,550	65,503	301,869	366,374
Goldfields Esperance	2,346	47,723 - 65,019	271,261	332,109
Great Southern	2,244	43,980	248,651	301,409
Kimberley	2,855	79,539	376,800	458,977
Metropolitan	2,339	42,109	222,147	259,346
Pilbara	2,754	65,503	370,808	452,522
Midwest	2,040	44,916	246,614	305,607
Southwest	2,244	44,916	280,782	328,595
Wheatbelt North	2,040	44,916	240,509	297,183
Wheatbelt South	2,040	44,916	242,624	301,617

Appendix 1

Sealed Roads Outside Built up Areas

$ per kilometre

Region	Roads Sealed 6.0 m wide		
	Routine maintenance	Reseal	Reconstruction
Gascoyne	2,193	56,145	279,810
Goldfields Esperance	2,019	40,905 - 56,145	246,953
Great Southern	1,931	37,697	235,293
Kimberley	2,457	68,176	338,108
Metropolitan	2,228	36,093	309,484
Pilbara	2,369	56,145	343,402
Midwest	1,755	38,499	225,755
Southwest	2,451	38,499	278,749
Wheatbelt North	1,755	38,499	220,461
Wheatbelt South	1,838	38,499	222,573

The costs for reconstruction are based on partial replacement of the existing pavement.

ROAD PRESERVATION COSTS

Unsealed Roads Outside Built up Areas

Costs are in 2016-17 prices

$ per kilometre

Region	Gravel Roads		Formed Roads	
	Routine maintenance Annual	Resheeting Every 20 years	Routine maintenance Annual	Reformation Every 5 years
Gascoyne	1,181	30,822	715	8,689
Goldfields Esperance	1,081	31,856	680	6,815
Great Southern	1,284	27,639	715	4,567
Kimberley	1,248	28,713	891	12,672
Metropolitan	1,337	33,509	891	5,570
Pilbara	1,203	31,848	758	9,413
Midwest	1,081	29,138	680	4,567
Southwest	1,392	27,641	891	5,926
Wheatbelt North	1,081	28,027	680	4,567
Wheatbelt South	1,170	27,357	680	4,567

APPENDIX 2

STANDARDS FOR CALCULATING EXPENDITURE REQUIRED TO MAINTAIN CURRENT STANDARDS

2016-2017

Appendix 2

Standards are expressed as frequencies for undertaking work, eg the standard for reconstructing pavements for sealed roads outside built up areas is once every 55 years.

Roads outside built up areas

Region	Sealed Roads		Gravel Roads	Formed Roads
	Reconstruction Pavement	Reseal Sprayed seal	Resheet	Reform
Metropolitan	55	15	20	15
Agricultural	55	15	20	15
Pastoral	55	15	20	15
Pilbara	55	12	20	15
Kimberley	55	12	20	15

Bridges

Region	Reconstruction Timber Bridges	Reconstruction Concrete Bridges
Metropolitan	60	Expected life 100 years No annual allowance for reconstruction
Agricultural	60	
Pastoral	0	
Pilbara	0	
Kimberley	0	

Sealed roads within built up areas - Residential Streets

Region	Reconstruction Pavement	Reseal Sprayed seal	Reseal Asphalt Seal
Metropolitan	75	15	25
Agricultural	60	15	25
Pastoral	60	15	
Pilbara	60	12	
Kimberley	60	12	

Reconstruction footpaths, kerbing and longitudinal pipe drains

Region	Footpaths and Kerbing	Longitudinal Pipe Drains
Metropolitan	75	Expected life 100 years 0.5% annual allowance for reconstruction
Agricultural	60	
Pastoral	60	
Pilbara	60	
Kimberley	60	

Sealed roads within built up areas - Local Distributor Roads

Region	Reconstruction Pavement	Reseal Sprayed seal	Reseal Asphalt Seal
Metropolitan	60	15	20
Agricultural	60	15	20
Pastoral	60	15	
Pilbara	60	12	
Kimberley	60	12	

APPENDIX 3

FORMULAE USED IN THIS REPORT

2016-2017

Appendix 3

Formulae used in this report

Written Down Value

Depreciation	$\frac{(CRV - RESID) \times Age}{Useful\ Life}$
Written Down Value	CRV – DEP

Road Asset Consumption

Depreciable amount	CRV - RESID
Annual Depreciation Expense	$\frac{Depreciable\ Amount}{Useful\ Life}$
Performance	$\frac{Annual\ Depreciation\ Expense}{Depreciation\ Amount}$

Sealed Road sustainability

Annual Depreciation Expense	$\frac{Depreciable\ Amount}{Useful\ Life}$
Life Cycle Cost per year	Annual Depreciation Expense + Maintenance
Performance	$\frac{Maintenance + Renewal}{Life\ Cycle\ Cost\ per\ year}$

Explanation of Terms:

DEP	Depreciation
CRV	Current Replacement Value
RESID	Residual value at the end of the road's useful life
Age	Age of the road in years
Useful Life	Estimated useful life of the road in years
Maintenance	Annual expenditure on maintenance
Renewal	Annual expenditure on renewal

APPENDIX 4

EXPLANATION OF TERMS

2016-2017

Appendix 4

Explanation of Terms:
Maintenance, Capital Renewal, Capital Upgrade, and Capital Expansion

Unformed Road - Cleared and flat bladed with minimum construction.

Formed Road - Unsealed road shaped and drained without imported material and constructed pavement.

Gravel Road - Unsealed road constructed from imported material, shaped and drained.

Sealed Road - A road constructed with a bituminous or asphalt seal.

Maintenance - Maintains the asset, but does not increase the asset's service potential or life.

Expenditure in this category includes:

Roads

Grading unsealed roads
Grading shoulders on sealed roads
Patching potholes
Repairing seal edges
Repairing culverts and end walls
Repairing drainage associated with a road
Clearing culverts and drainage systems associated with a road
Painting and replacing guide posts
Sweeping pavements

Bridges

Repairs to bridge components and surface
Clearing firebreaks
White ant protection
Tightening bolts
Painting handrails
Bridge inspection

Ancillary

Lighting including power costs
Road signals and signs including street signs
Road marking
All other traffic management devices
Footpaths and dual use paths
Road verges (including care and watering of trees)

Capital Renewal - Increases the life of the asset and may increase its service potential.

Expenditure in this category includes:

Roads

Resealing aggregate and asphalt seals
Regravelling existing gravel roads
Reforming existing formed roads
Reconstructing roads to existing standards (may include widening less than lane width)
Reconstructing shoulders on sealed roads
Replacing cattle grids
Replacing culverts
Replacing kerbs

Bridges

Replacing bridge components
Strengthening individual structural components
Constructing concrete overlays
Reconstructing of bridges to existing standards (may include widening less than 1 metre)

Ancillary

Replacement of lighting infrastructure
Replacement of road signals and signs including street signs
Replacement of road marking
Replacement of all other traffic management devices
Reconstruction of footpaths and dual use paths

Road Preservation - Is the sum of maintenance and capital renewal.

Capital Upgrade - Provides a higher level of service to users.

Expenditure in this category includes:

Roads

Gravelling a road that was not previously gravelled
Sealing a road that was not previously sealed
Constructing a second carriageway
Widening a road

Bridges

Widening a bridge
Strengthening a bridge to accommodate higher axle loads

Ancillary

Upgrading or adding to existing:
- Street lighting
- Road signals and signs including street signs
- Road marking
- All other traffic management devices
- Footpaths including dual use paths

Capital Expansion - Extending the road network.

Expenditure in this category includes:

Roads

Constructing a road that previously did not exist. It may be a formed, gravelled or sealed road or street

Bridges

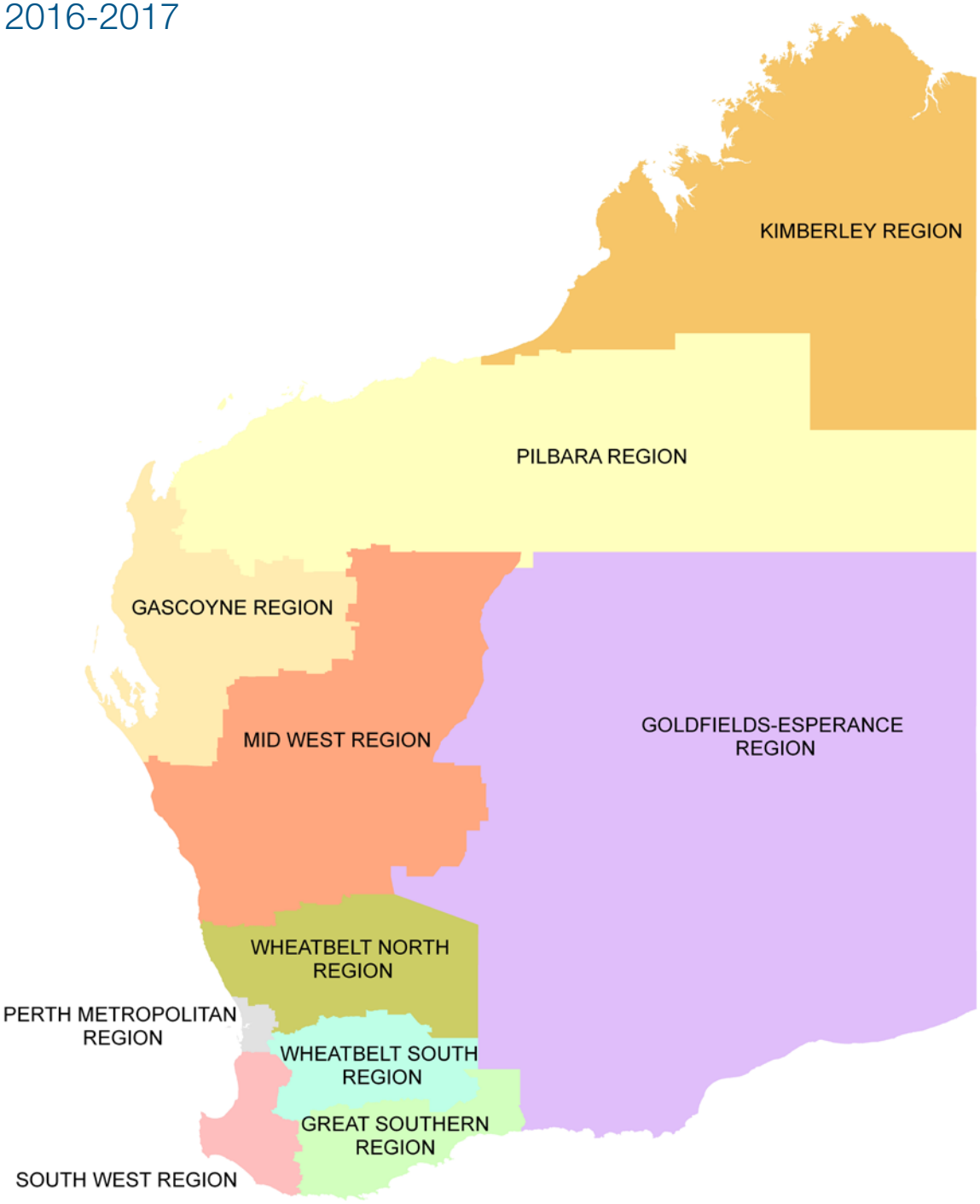
Constructing a bridge where none existed previously

Ancillary

Provision of the following on new roads:
- Street lighting
- Road signals and signs including street signs
- Road marking
- All other traffic management devices
- Footpaths including dual use paths

ROAD ASSETS & EXPENDITURE INDICATORS AND EXPENDITURE STATISTICS

2016-2017



APPENDIX 5

GASCOYNE REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age

Appendix 5

Road assets & expenditure indicators 2016-17

Gascoyne Regional Road Group

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
CARNARVON	0.63	3.2%	31%	0.39
EXMOUTH	0.59	3.0%	55%	0.59
SHARK BAY	0.60	4.1%	118%	1.05
UPPER GASCOYNE	0.56	5.3%	87%	0.61
Region Average	0.60	3.6%	53%	0.58
State Average	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Gascoyne Regional Road Group

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
CARNARVON	2,152	260	12%	82%	3%	43
EXMOUTH	1,641	353	22%	51%	8%	135
SHARK BAY	2,109	164	8%	88%	7%	172
UPPER GASCOYNE	11,765	1,124	10%	134%	33%	4226
Region	17,667	1,901	11%	85%	11%	192
State	904,322	446,552	49%	26%	22%	171

Appendix 5

Road data 2016-17

Gascoyne Regional Road Group

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
CARNARVON	4	44	221	540	525	181	1,515	18.5	0.0	19.6
EXMOUTH	1	38	116	19	47	64	286	11.0	10.0	10.0
SHARK BAY	7	5	28	374	165	6	585	4.9	9.2	11.2
UPPER GASCOYNE	0	1	60	659	883	226	1,829	0.6	0.0	0.0
Region	12	89	424	1,593	1,620	477	4,215	35.0	19.2	40.7
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17

Gascoyne Regional Road Group

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
CARNARVON	946	614	581	0	2,141	8,611	1,695	1,463	658
EXMOUTH	1,085	460	96	0	1,641	12,622	0	0	0
SHARK BAY	680	101	1,032	0	1,813	25,301	1,604	2,275	829
UPPER GASCOYNE	10	445	1,502	0	1,957	3,034	9,417	2,232	5,712
Region	2,721	1,620	3,211	0	7,552	12,040	1,820	2,035	6
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Appendix 5

Expenditure by work categories 2016-17

Gascoyne Regional Road Group

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
CARNARVON	1,364	777	11	0	2,152	63.4%	36.1%	0.5%	0.0%	5,425	2,141
EXMOUTH	794	847	0	0	1,641	48.4%	51.6%	0.0%	0.0%	2,766	1,641
SHARK BAY	764	1,049	296	0	2,109	36.2%	49.7%	14.0%	0.0%	1,725	1,813
UPPER GASCOYNE	805	1,152	25	9,783	11,765	6.8%	9.8%	0.2%	83.2%	2,976	1,828
Region	3,727	3,825	332	9,783	17,667	21.1%	21.7%	1.9%	55.4%	12,892	7,423
State	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17

Gascoyne Regional Road Group

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
CARNARVON	1	3,849	0	0	0	0	0
EXMOUTH	0	0	0	0	0	0	0
SHARK BAY	0	0	0	0	0	0	0
UPPER GASCOYNE	0	0	0	0	0	0	9,783
Region	1	3,849	0	0	0	0	9,783
State	902	68,510	77,950	17,787	2,462	10,024	25,947

Appendix 5

Sealed road area statistics and expenditure 2016-17

Gascoyne Regional Road Group

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
CARNARVON	384,490	1,564,368	946	614	2.46	0.39
EXMOUTH	300,872	856,471	1,085	460	3.61	0.54
SHARK BAY	94,069	198,585	680	101	7.23	0.51
UPPER GASCOYNE	11,535	418,109	10	445	0.87	1.06
Region	790,965	3,037,533	2,721	1,620	3.44	0.53
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17

Gascoyne Regional Road Group

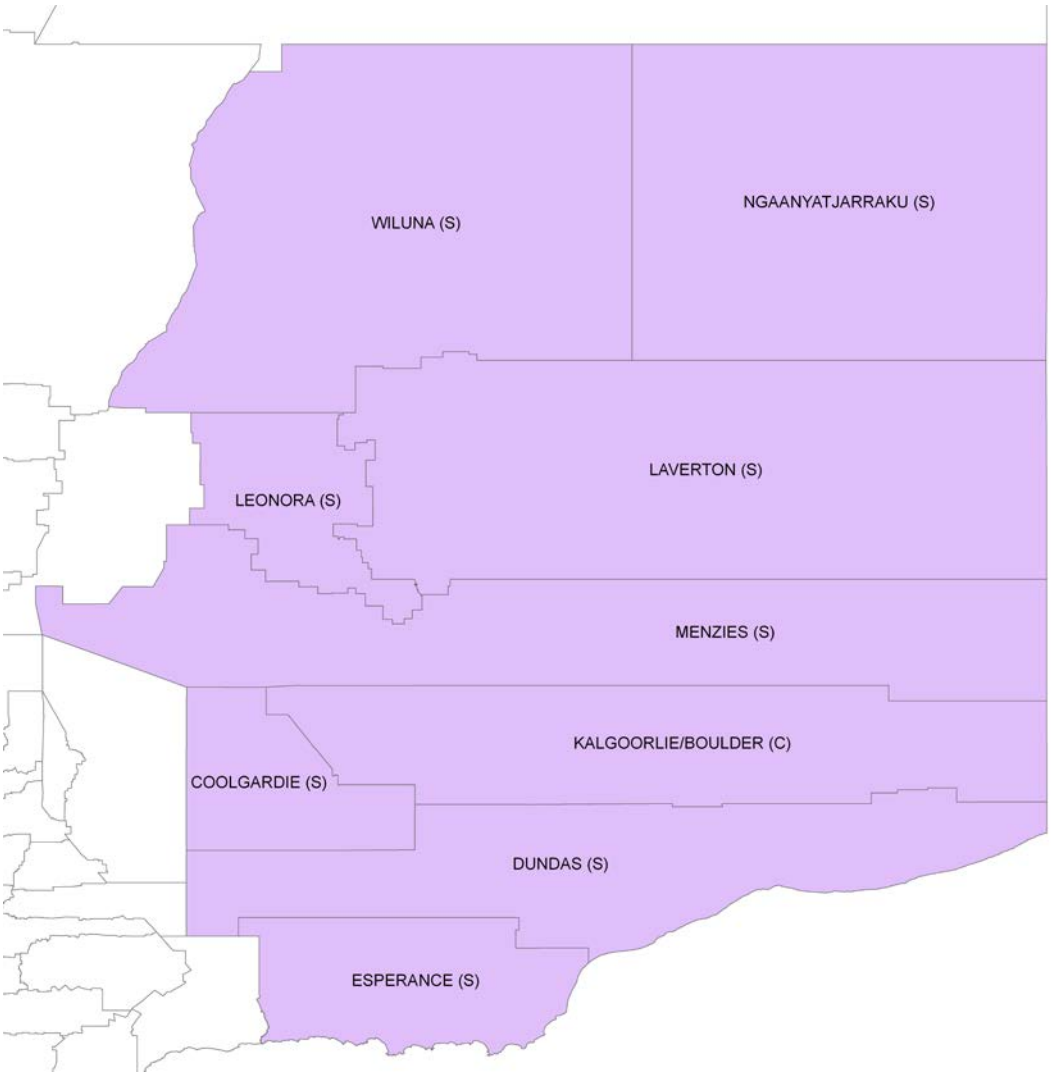
COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
CARNARVON	48	40	14	17	221	20	11
EXMOUTH	39	30	15	13	116	24	14
SHARK BAY	12	29	14	3	28	17	12
UPPER GASCOYNE	1	20	12	0	60	15	9
Region	101	30	14	11	424	19	12

APPENDIX 6

GOLDFIELDS ESPERANCE REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age



Road assets & expenditure indicators 2016-17

Goldfields Esperance Regional Road Group

Appendix 6

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
COOLGARDIE	0.44	3.3%	123%	0.79
DUNDAS	0.58	3.9%	108%	0.60
ESPERANCE	0.55	3.4%	75%	0.68
KALGOORLIE BOULDER	0.41	2.8%	83%	1.13
LAVERTON	0.47	5.0%	79%	0.89
LEONORA	0.56	4.6%	49%	0.99
MENZIES	0.55	5.2%	20%	0.37
NGAANYATJARRAKU	0.53	5.6%	14%	1.38
WILUNA	0.53	5.2%	171%	0.44
Region Average	0.51	3.7%	81.2%	0.82
State Average	0.60	2.5%	69.1%	0.83

Expenditure from Local Governments' own resources 2016-17

Goldfields Esperance Regional Road Group

Appendix 6

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
COOLGARDIE	2,529	694	27%	41%	10%	176
DUNDAS	1,212	0	0%	49%	0%	0
ESPERANCE	15,710	6,194	39%	80%	33%	434
KALGOORLIE BOULDER	13,250	7,200	54%	31%	28%	221
LAVERTON	4,743	689	15%	75%	13%	604
LEONORA	3,488	1,516	43%	53%	26%	652
MENZIES	1,681	428	25%	81%	8%	1206
NGAANYATJARRAKU	3,606	541	15%	88%	14%	405
WILUNA	2,287	1,161	51%	105%	27%	1058
Region	48,506	18,423	38%	59%	23%	317
State	904,322	446,552	49%	26%	22%	171

Road data 2016-17

Goldfields Esperance Regional Road Group

Appendix 6

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
COOLGARDIE	3	51	58	414	123	199	847	57.1	10.4	2.4
DUNDAS	1	21	10	288	212	95	627	31.9	1.2	0.0
ESPERANCE	79	41	724	3,010	196	209	4,259	24.6	12.2	108.7
KALGOORLIE BOULDER	117	114	160	550	355	74	1,370	271.5	0.0	51.7
LAVERTON	1	8	34	587	503	3,078	4,209	0.0	0.0	0.0
LEONORA	1	9	22	605	379	210	1,226	13.6	4.5	1.4
MENZIES	0	2	42	721	744	557	2,066	0.8	0.4	0.5
NGAANYATJARRAKU	0	0	8	523	739	41	1,311	3.6	0.0	0.0
WILUNA	0	5	11	668	579	645	1,908	0.0	0.0	0.0
Region	201	249	1,068	7,367	3,830	5,109	17,824	403.1	28.8	164.8
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17

Goldfields Esperance Regional Road Group

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
COOLGARDIE	1,082	545	520	0	2,147	6,983	0	219	140
DUNDAS	455	0	679	0	1,134	9,358	5,656	2,231	321
ESPERANCE	2,796	4,687	5,120	0	12,603	10,097	1,476	1,219	301
KALGOORLIE BOULDER	9,308	376	1,603	0	11,287	12,369	1,706	1,757	483
LAVERTON	529	15	1,237	308	2,089	25,585	250	6,233	1,348
LEONORA	495	71	1,301	671	2,538	23,657	736	2,436	1,511
MENZIES	55	26	1,082	0	1,163	12,686	0	3,634	530
NGAANYATJARRAKU	99	72	1,779	857	2,807	6,493	0	3,703	880
WILUNA	398	303	614	680	1,995	37,196	55,687	825	439
Region	15,217	6,095	13,935	2,516	37,763	11,661	2,879	1,901	663
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Goldfields Esperance Regional Road Group

Appendix 6

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
COOLGARDIE	980	1,167	0	375	2,522	38.9%	46.3%	0.0%	14.9%	2,711	2,147
DUNDAS	226	908	78	0	1,212	18.6%	74.9%	6.4%	0.0%	1,374	819
ESPERANCE	5,519	7,084	3,107	0	15,710	35.1%	45.1%	19.8%	0.0%	16,417	11,141
KALGOORLIE BOULDER	6,557	4,730	1,963	0	13,250	49.5%	35.7%	14.8%	0.0%	9,948	11,287
LAVERTON	1,331	758	2,654	0	4,743	28.1%	16.0%	56.0%	0.0%	2,354	2,089
LEONORA	1,908	630	950	0	3,488	54.7%	18.1%	27.2%	0.0%	2,399	2,369
MENZIES	982	181	518	0	1,681	58.4%	10.8%	30.8%	0.0%	2,930	1,092
NGAANYATJARRAKU	1,299	1,509	755	44	3,606	36.0%	41.8%	20.9%	1.2%	2,036	2,807
WILUNA	1,354	641	257	37	2,289	59.2%	28.0%	11.2%	1.6%	2,377	1,041
Region	20,156	17,608	10,282	456	48,501	41.6%	36.3%	21.2%	0.9%	42,546	34,793
State	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17

Goldfields Esperance Regional Road Group

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
COOLGARDIE	0	0	0	0	0	0	0
DUNDAS	0	0	0	0	0	0	0
ESPERANCE	4	892	0	0	0	0	0
KALGOORLIE BOULDER	0	0	0	0	0	0	0
LAVERTON	0	0	0	0	0	0	0
LEONORA	0	0	0	0	0	0	0
MENZIES	0	0	0	0	0	0	0
NGAANYATJARRAKU	0	0	0	0	0	0	0
WILUNA	0	0	0	0	0	0	0
Region	4	892	0	0	0	0	0
State	902	68,510	77,950	17,787	2,462	10,024	25,947

Appendix 6

Sealed road area statistics and expenditure 2016-17

Goldfields Esperance Regional Road Group

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
COOLGARDIE	542,280	366,589	1,082	545	2.00	1.49
DUNDAS	170,174	64,971	455	0	2.67	0.00
ESPERANCE	969,246	4,829,068	2,796	4,687	2.88	0.97
KALGOORLIE BOULDER	2,633,812	1,245,406	9,308	376	3.53	0.30
LAVERTON	72,366	229,639	529	15	7.31	0.07
LEONORA	73,234	174,162	495	71	6.76	0.41
MENZIES	15,174	312,075	55	26	3.62	0.08
NGAANYATJARRAKU	0	53,475	99	72	0.00	1.34
WILUNA	37,450	72,468	398	303	10.63	4.18
Region	4,513,735	7,347,852	15,217	6,095	3.37	0.83
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Goldfields Esperance Road Group

Appendix 6

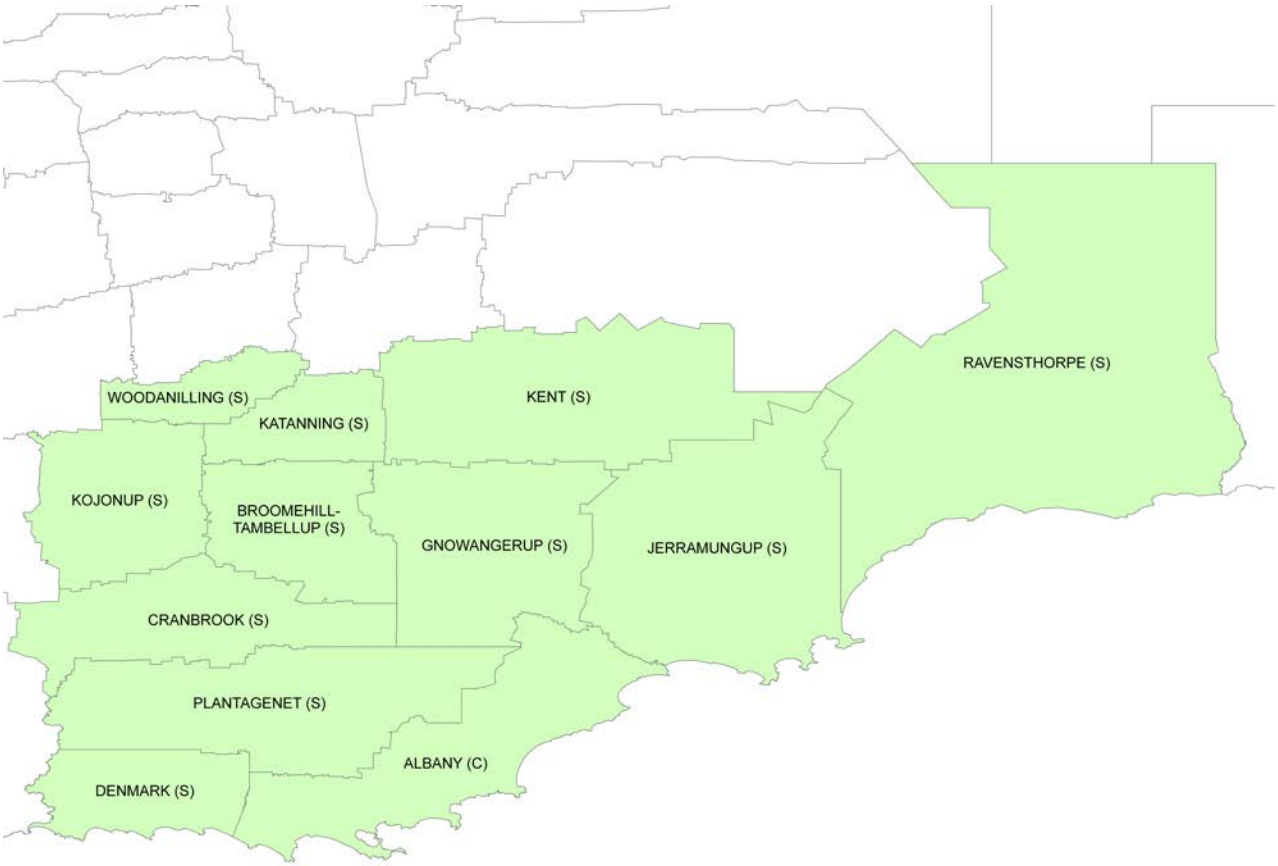
COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
COOLGARDIE	53	42	27	24	58	43	33
DUNDAS	22	34	19	19	10	20	12
ESPERANCE	120	29	20	20	724	24	19
KALGOORLIE BOULDER	231	50	29	31	160	32	24
LAVERTON	8	39	26	32	34	26	32
LEONORA	10	29	12	9	22	23	16
MENZIES	2	25	30	0	42	18	11
NGAANYATJARRAKU	0	0	0	0	8	20	20
WILUNA	5	20	20	0	11	25	23
Region	451	34	23	23	1,068	26	21

APPENDIX 7

GREAT SOUTHERN REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age



Road assets & expenditure indicators 2016-17

Great Southern Regional Road Group

Appendix 7

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
ALBANY	0.53	2.5%	80%	1.04
BROOMEHILL TAMBELLUP	0.47	3.5%	48%	0.52
CRANBROOK	0.38	3.4%	19%	0.21
DENMARK	0.54	2.9%	104%	1.10
GNOWANGERUP	0.52	3.9%	192%	0.85
JERRAMUNGUP	0.52	4.0%	0%	0.17
KATANNING	0.46	3.2%	83%	0.65
KENT	0.47	4.4%	38%	0.54
KOJONUP	0.37	3.5%	24%	0.61
PLANTAGENET	0.43	3.6%	58%	0.85
RAVENSTHORPE	0.60	3.9%	83%	0.87
WOODANILLING	0.44	3.9%	50%	0.48
Region	0.48	3.3%	69%	0.72
State	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Great Southern Regional Road Group

Appendix 7

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ALBANY	13,350	7,951	60%	32%	27%	213
BROOMEHILL TAMBELLUP	4,325	881	20%	92%	27%	789
CRANBROOK	2,648	1,038	39%	107%	36%	986
DENMARK	3,910	1,617	41%	39%	27%	272
GNOWANGERUP	5,301	1,763	33%	96%	51%	1373
JERRAMUNGUP	3,556	1,766	50%	87%	46%	1649
KATANNING	4,187	1,080	26%	53%	22%	253
KENT	2,653	779	29%	141%	27%	1489
KOJONUP	3,366	786	23%	102%	22%	397
PLANTAGENET	5,578	1,943	35%	71%	30%	374
RAVENSTHORPE	5,316	2,579	49%	77%	49%	1164
WOODANILLING	943	0	0%	104%	0%	0
Region	55,133	22,183	40%	61%	30%	355
State	904,322	446,552	49%	26%	22%	171

Road data 2016-17

Great Southern Regional Road Group

Appendix 7

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
ALBANY	157	109	494	775	53	11	1,598	80.7	3.7	73.1
BROOMEHILL TAMBELLUP	0	12	209	609	114	28	971	10.0	1.0	7.5
CRANBROOK	1	8	282	617	75	32	1,015	5.0	4.4	2.7
DENMARK	16	39	164	316	53	34	622	18.4	0.0	18.6
GNOWANGERUP	0	17	177	584	195	21	993	6.2	0.0	0.0
JERRAMUNGUP	3	12	190	679	108	88	1,080	9.3	1.5	4.2
KATANNING	8	41	134	447	61	2	692	18.0	11.2	5.7
KENT	0	4	139	791	316	73	1,324	1.6	0.9	0.5
KOJONUP	0	15	238	741	131	3	1,129	12.7	0.0	0.0
PLANTAGENET	1	24	353	623	301	10	1,311	40.5	0.2	2.5
RAVENSTHORPE	6	29	99	959	121	13	1,227	16.2	1.8	6.1
WOODANILLING	0	2	87	350	62	22	523	2.3	0.0	2.3
Region	191	310	2,567	7,490	1,590	338	12,485	220.8	24.6	123.1
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17

Great Southern Regional Road Group

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
ALBANY	6,615	2,832	2,198	133	11,778	12,269	4,002	2,793	4,884
BROOMEHILL TAMBELLUP	102	1,997	848	34	2,981	3,952	1,437	2,377	1,325
CRANBROOK	0	332	841	56	1,229	0	1,544	2,076	525
DENMARK	1,562	751	1,008	0	3,321	15,384	5,498	5,870	3,219
GNOWANGERUP	101	2,322	2,118	64	4,605	2,654	2,113	1,479	723
JERRAMUNGUP	0	0	2,040	0	2,040	0	96	1,795	545
KATANNING	788	2,365	628	0	3,781	6,030	1,811	1,499	946
KENT	65	355	1,051	270	1,741	7,628	2,328	1,686	664
KOJONUP	301	319	1,202	29	1,851	8,748	3,362	1,720	2,350
PLANTAGENET	1,139	1,511	1,914	177	4,741	16,979	2,747	2,226	868
RAVENSTHORPE	712	172	3,073	0	3,957	9,890	287	1,885	822
WOODANILLING	0	341	550	0	891	0	2,556	1,389	378
Region	11,385	13,297	17,471	763	42,916	10,634	2,684	2,439	647
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Great Southern Regional Road Group

Appendix 7

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
ALBANY	7,375	4,490	835	650	13,350	55.2%	33.6%	6.3%	4.9%	11,412	11,865
BROOMEHILL TAMBELLUP	1,031	1,964	114	1,215	4,324	23.8%	45.4%	2.6%	28.1%	3,806	1,976
CRANBROOK	702	535	1,411	0	2,648	26.5%	20.2%	53.3%	0.0%	4,154	891
DENMARK	1,738	1,604	568	0	3,910	44.5%	41.0%	14.5%	0.0%	3,029	3,342
GNOWANGERUP	1,973	2,632	696	0	5,301	37.2%	49.7%	13.1%	0.0%	3,229	2,735
JERRAMUNGUP	716	1,324	375	1,141	3,556	20.1%	37.2%	10.5%	32.1%	3,379	573
KATANNING	2,655	1,126	403	0	4,184	63.5%	26.9%	9.6%	0.0%	2,977	1,922
KENT	1,035	706	911	0	2,652	39.0%	26.6%	34.4%	0.0%	3,230	1,741
KOJONUP	1,160	1,456	730	20	3,366	34.5%	43.3%	21.7%	0.6%	4,131	2,508
PLANTAGENET	2,060	2,681	836	0	5,577	36.9%	48.1%	15.0%	0.0%	5,056	4,275
RAVENSTHORPE	2,298	1,659	1,307	53	5,317	43.2%	31.2%	24.6%	1.0%	3,810	3,318
WOODANILLING	390	501	52	0	943	41.4%	53.1%	5.5%	0.0%	1,743	834
Region	23,133	20,678	8,238	3,079	55,128	42.0%	37.5%	14.9%	5.6%	49,954	35,980
State	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17

Great Southern Regional Road Group

Appendix 7

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ALBANY	12	362	3,100	0	654	87	0
BROOMEHILL TAMBELLUP	7	0	1,104	157	0	14	0
CRANBROOK	12	0	1,873	674	0	8	0
DENMARK	20	220	519	495	0	21	561
GNOWANGERUP	1	0	252	0	0	0	0
JERRAMUNGUP	0	0	0	0	0	0	0
KATANNING	3	271	147	0	0	0	0
KENT	0	0	0	0	0	0	0
KOJONUP	14	0	1,620	314	0	765	0
PLANTAGENET	0	0	0	0	0	0	0
RAVENSTHORPE	1	64	0	0	0	0	0
WOODANILLING	3	0	365	0	0	0	0
Region	73	917	8,980	1,640	654	895	561
State	902	68,510	77,950	17,787	2,462	10,024	25,947

Sealed road area statistics and expenditure 2016-17

Great Southern Regional Road Group

Appendix 7

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ALBANY	1,887,129	3,093,369	6,615	2,832	3.51	0.92
BROOMEHILL TAMBELLUP	90,333	1,344,115	102	1,997	1.13	1.49
CRANBROOK	66,657	1,652,125	0	332	0.00	0.20
DENMARK	355,366	1,014,088	1,562	751	4.40	0.74
GNOWANGERUP	133,207	1,107,821	101	2,322	0.76	2.10
JERRAMUNGUP	107,124	1,146,932	0	0	0.00	0.00
KATANNING	457,415	782,861	788	2,365	1.72	3.02
KENT	29,824	857,087	65	355	2.18	0.41
KOJONUP	120,434	1,412,946	301	319	2.50	0.23
PLANTAGENET	234,785	2,248,270	1,139	1,511	4.85	0.67
RAVENSTHORPE	251,976	689,822	712	172	2.83	0.25
WOODANILLING	12,971	605,191	0	341	0.00	0.56
Region	3,747,220	15,954,628	11,385	13,297	3.04	0.83
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Great Southern Regional Road Group

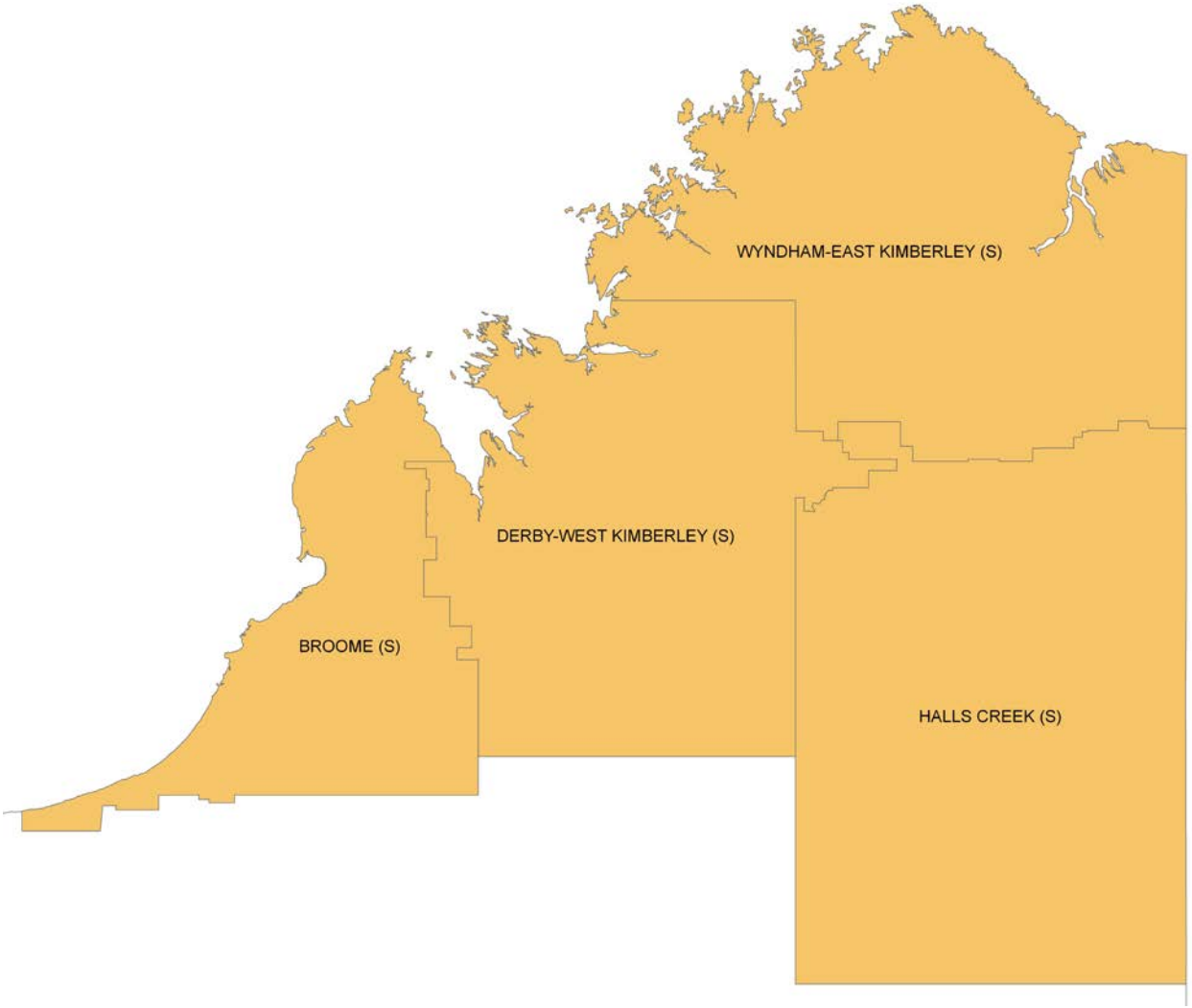
COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ALBANY	266	32	24	22	494	29	20
BROOMEHILL TAMBELLUP	12	33	25	0	209	33	17
CRANBROOK	8	37	20	31	282	37	23
DENMARK	55	26	23	15	164	26	17
GNOWANGERUP	17	33	14	0	177	31	13
JERRAMUNGUP	14	28	27	14	190	28	14
KATANNING	49	38	21	25	134	42	24
KENT	4	35	33	0	139	29	23
KOJONUP	15	34	27	55	238	41	26
PLANTAGENET	25	46	30	16	353	33	20
RAVENSTHORPE	35	15	14	12	99	16	15
WOODANILLING	2	23	20	0	87	35	21
Region	500	32	23	24	2,567	32	19

APPENDIX 8

KIMBERLEY REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age



Appendix 8

Road assets and expenditure indicators 2016-17
Kimberley Regional Road Group

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
BROOME	0.64	2.8%	78%	1.04
DERBY WEST KIMBERLEY	0.53	3.9%	101%	1.63
HALLS CREEK	0.53	4.7%	145%	1.08
WYNDHAM EAST KIMBERLEY	0.39	3.3%	35%	0.52
Region	0.52	3.4%	70%	0.99
State	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17
Kimberley Regional Road Group

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
BROOME	7,349	4,387	60%	31%	30%	253
DERBY WEST KIMBERLEY	5,695	1,462	26%	48%	16%	164
HALLS CREEK	3,966	401	10%	79%	8%	101
WYNDHAM EAST KIMBERLEY	3,821	1,386	36%	51%	16%	161
Region	20,831	7,636	37%	47%	20%	197
State	904,322	446,552	49%	26%	22%	171

Appendix 8

Road data 2016-17

Kimberley Regional Road Group

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
BROOME	4	99	175	9	153	132	572	78.4	0.0	60.4
DERBY WEST KIMBERLEY	0	39	40	477	473	750	1,779	17.4	0.0	8.8
HALLS CREEK	0	12	21	895	133	359	1,420	0.0	0.0	0.0
WYNDHAM EAST KIMBERLEY	6	51	186	515	122	200	1,080	21.5	4.2	15.7
Region	10	201	422	1,896	881	1,441	4,852	117.3	4.2	84.9
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17

Kimberley Regional Road Group

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
BROOME	4,325	729	0	986	6,040	18,773	2,116	0	0
DERBY WEST KIMBERLEY	2,449	397	2,203	646	5,695	28,595	0	5,290	977
HALLS CREEK	1,001	0	1,882	675	3,558	37,148	0	3,489	1,454
WYNDHAM EAST KIMBERLEY	1,450	425	611	350	2,836	10,154	4,524	2,964	5,091
Region	9,225	1,551	4,696	2,657	18,129	18,991	2,004	2,408	3,267
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Appendix 8

Expenditure by work categories 2016-17
Kimberley Regional Road Group

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
BROOME	3,507	2,533	1,027	282	7,349	47.7%	34.5%	14.0%	3.8%	5,793	6,026
DERBY WEST KIMBERLEY	2,111	3,584	0	0	5,695	37.1%	62.9%	0.0%	0.0%	3,262	5,305
HALLS CREEK	690	2,868	0	408	3,966	17.4%	72.3%	0.0%	10.3%	3,058	3,296
WYNDHAM EAST KIMBERLEY	1,555	1,518	749	0	3,822	40.7%	39.7%	19.6%	0.0%	5,412	2,799
Region	7,863	10,503	1,776	690	20,832	37.7%	50.4%	8.5%	3.3%	17,526	17,426
State	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17
Kimberley Regional Road Group

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
BROOME	0	0	0	0	0	0	0
DERBY WEST KIMBERLEY	1	746	0	0	0	0	0
HALLS CREEK	0	0	0	0	0	0	0
WYNDHAM EAST KIMBERLEY	11	1,798	0	0	0	237	0
Region	12	2,544	0	0	0	237	0
State	902	68,510	77,950	17,787	2,462	10,024	25,947

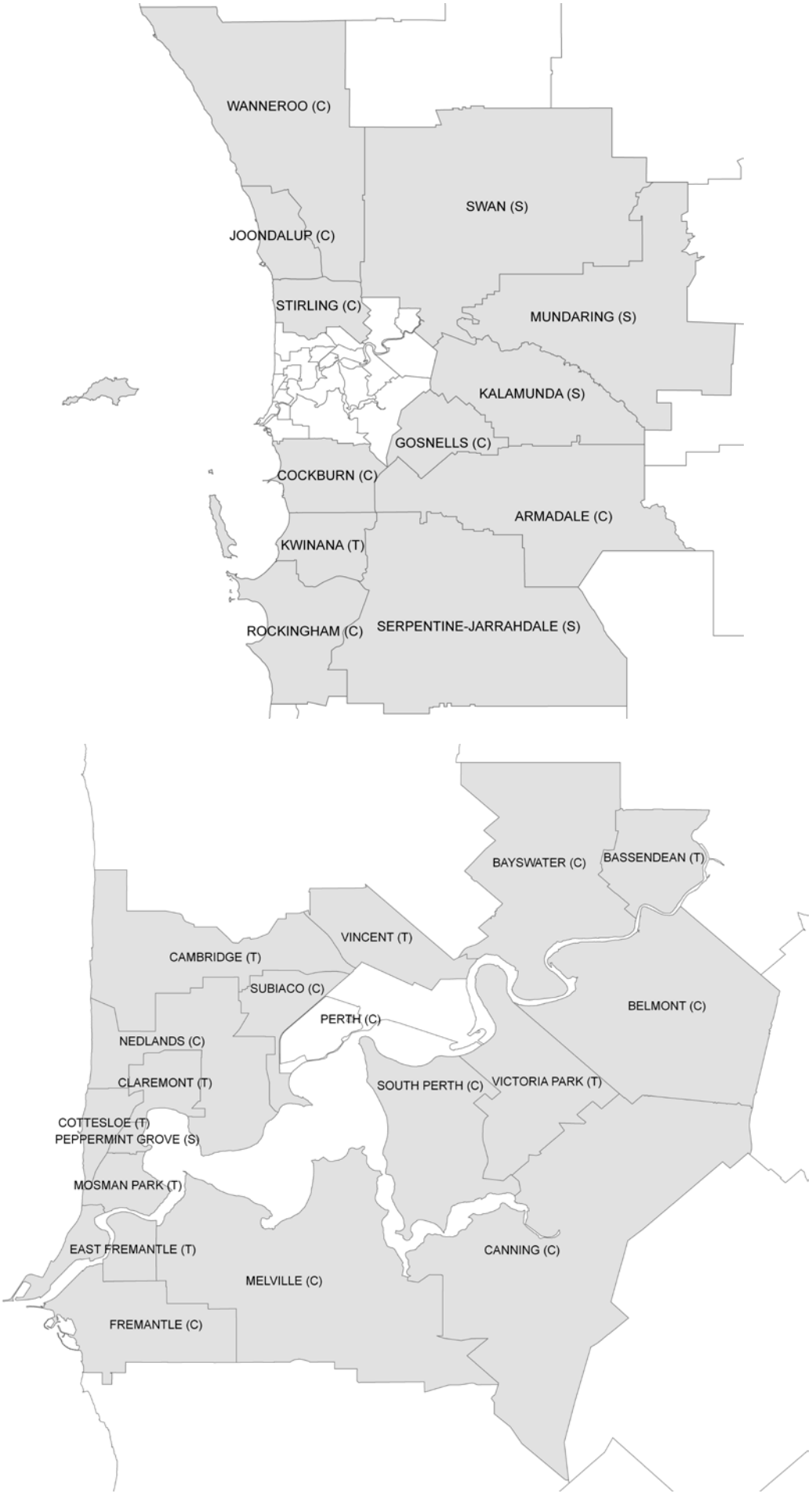
Sealed road area statistics and expenditure 2016-17
Kimberley Regional Road Group

Appendix 8

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
BROOME	806,324	1,202,398	4,325	729	5.36	0.61
DERBY WEST KIMBERLEY	299,757	270,645	2,449	397	8.17	1.47
HALLS CREEK	94,313	145,798	1,001	0	10.61	0.00
WYNDHAM EAST KIMBERLEY	499,796	1,029,084	1,450	425	2.90	0.41
Region	1,700,190	2,647,924	9,225	1,551	5.43	0.59
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Kimberley Regional Road Group

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
BROOME	103	26	19	17	175	16	12
DERBY WEST KIMBERLEY	40	34	21	15	40	22	16
HALLS CREEK	12	46	21	0	21	43	8
WYNDHAM EAST KIMBERLEY	57	47	25	4	186	40	26
Region	211	38	22	12	422	30	16


WANNEROO (C)
SWAN (S)
JOONDALUP (C)
STIRLING (C)
MUNDARING (S)
KALAMUNDA (S)
GOSNELLS (C)
COCKBURN (C)
ARMADALE (C)
KWINANA (T)
ROCKINGHAM (C)
SERPENTINE-JARRAHDALE (S)
BAYSWATER (C)
BASSENDEAN (T)
VINCENT (T)
CAMBRIDGE (T)
SUBIACO (C)
BELMONT (C)
PERTH (C)
NEDLANDS (C)
CLAREMONT (T)
SOUTH PERTH (C)
VICTORIA PARK (T)
COTTESLOE (T)
PEPPERMINT GROVE (S)
MOSMAN PARK (T)
EAST FREMANTLE (T)
CANNING (C)
MELVILLE (C)
FREMANTLE (C)

APPENDIX 9

METROPOLITAN REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age

Road assets & expenditure indicators 2016-17

Metropolitan Regional Road Group

Appendix 9

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
ARMADALE	0.69	1.7%	49%	0.51
BASSENDEAN	0.81	1.6%	91%	1.47
BAYSWATER	0.84	1.6%	82%	1.08
BELMONT	0.87	1.6%	130%	1.21
CAMBRIDGE	0.74	1.6%	123%	1.30
CANNING	0.70	1.8%	54%	0.94
CLAREMONT	0.69	1.6%	153%	2.12
COCKBURN	0.57	1.7%	44%	0.67
COTTESLOE	0.68	1.6%	53%	0.52
EAST FREMANTLE	0.67	1.6%	94%	1.20
FREMANTLE	0.78	1.6%	82%	1.54
GOSNELLS	0.69	1.6%	103%	1.29
JOONDALUP	0.83	1.6%	86%	0.91
KALAMUNDA	0.80	1.7%	55%	0.91
KWINANA	0.70	1.8%	31%	0.87
MELVILLE	0.80	1.6%	140%	1.65
MOSMAN PARK	0.75	1.7%	71%	1.33
MUNDARING	0.60	2.1%	55%	0.75

Road assets & expenditure indicators 2016-17 [continued]

Appendix 9

Metropolitan Regional Road Group

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
NEDLANDS	0.83	1.6%	384%	3.14
PEPPERMINT GROVE	0.87	1.5%	107%	1.77
PERTH	0.73	1.6%	159%	7.19
ROCKINGHAM	0.78	1.7%	83%	0.99
SERPENTINE JARRAHDALE	0.46	2.3%	82%	1.08
SOUTH PERTH	0.84	1.6%	113%	1.69
STIRLING	0.73	1.6%	99%	0.94
SUBIACO	0.79	1.5%	116%	2.16
SWAN	0.67	1.8%	61%	0.99
VICTORIA PARK	0.66	1.6%	101%	1.72
VINCENT	0.67	1.5%	83%	1.22
WANNEROO	0.77	1.6%	36%	0.45
Region	0.73	1.7%	82%	1.09
State	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Metropolitan Regional Road Group

Appendix 9

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of Total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ARMADALE	13,731	9,252	67%	14%	19%	111
BASSENDEAN	3,585	2,426	68%	8%	22%	151
BAYSWATER	11,248	7,283	65%	8%	15%	101
BELMONT	8,110	5,275	65%	9%	16%	126
CAMBRIDGE	6,790	5,290	78%	9%	29%	186
CANNING	21,498	12,444	58%	10%	19%	127
CLAREMONT	2,388	2,067	87%	3%	22%	190
COCKBURN	22,999	10,152	44%	12%	14%	93
COTTESLOE	658	534	81%	8%	7%	62
EAST FREMANTLE	1,158	1,070	92%	7%	19%	138
FREMANTLE	8,041	5,534	69%	6%	20%	178
GOSNELLS	26,368	21,178	80%	12%	30%	168
JOONDALUP	28,600	20,854	73%	11%	20%	125
KALAMUNDA	10,871	7,423	68%	17%	20%	122
KWINANA	7,952	5,099	46%	20%	28%	131
MELVILLE	19,014	12,190	64%	7%	17%	115
MOSMAN PARK	1,091	941	86%	6%	13%	99
MUNDARING	7,730	4,978	64%	22%	21%	124

Expenditure from Local Governments' own resources 2016-17 [continued]

Metropolitan Regional Road Group

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of Total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
NEDLANDS	8,597	7,075	82%	9%	40%	306
PEPPERMINT GROVE	390	307	79%	6%	20%	190
PERTH	24,445	23,012	94%	2%	34%	943
ROCKINGHAM	25,498	18,960	74%	13%	25%	143
SERPENTINE JARRAHDALE	7,341	3,785	52%	32%	25%	146
SOUTH PERTH	9,410	7,585	81%	6%	23%	164
STIRLING	31,209	24,498	78%	7%	16%	107
SUBIACO	8,810	7,919	90%	4%	41%	445
SWAN	47,753	37,476	78%	16%	43%	274
VICTORIA PARK	9,189	7,115	77%	6%	25%	185
VINCENT	7,175	5,431	76%	5%	19%	143
WANNEROO	28,150	13,678	49%	14%	12%	70
Region	409,799	290,831	71%	10%	22%	148
State	904,322	446,552	49%	26%	22%	171

Road data 2016-17

Metropolitan Regional Road Group

Appendix 9

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
ARMADALE	475	35	215	1	5	1	732	202.0	0.0	213.0
BASSENDEAN	94	1	1	0	0	0	96	98.3	0.4	27.3
BAYSWATER	345	1	1	0	0	0	347	123.2	0.0	209.8
BELMONT	214	12	0	0	0	0	227	133.7	0.0	98.4
CAMBRIDGE	167	3	2	0	0	0	173	160.3	0.0	32.6
CANNING	539	34	3	1	0	0	578	144.0	0.0	217.0
CLAREMONT	47	0	0	0	0	0	47	85.8	2.1	4.9
COCKBURN	635	20	178	2	0	0	835	487.9	7.3	147.6
COTTESLOE	36	11	0	0	0	0	47	60.0	0.0	9.9
EAST FREMANTLE	36	1	0	0	0	0	37	59.3	0.0	2.6
FREMANTLE	168	9	0	0	0	0	177	201.5	0.0	65.6
GOSNELLS	651	17	107	1	0	0	777	303.0	2.0	331.0
JOONDALUP	970	32	8	0	0	0	1,010	667.8	21.7	182.4
KALAMUNDA	293	148	158	14	6	0	620	287.0	10.0	74.0
KWINANA	236	48	117	0	1	0	402	242.5	3.3	33.9
MELVILLE	518	7	0	0	0	0	525	478.0	3.0	98.0
MOSMAN PARK	40	3	1	0	0	0	44	53.0	0.0	0.9
MUNDARING	168	114	332	25	21	9	669	31.0	4.1	67.5

Road data 2016-17 [continued]

Metropolitan Regional Road Group

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
NEDLANDS	119	19	0	0	0	0	137	132.0	0.0	10.0
PEPPERMINT GROVE	9	0	0	0	0	0	9	16.9	0.8	0.0
PERTH	99	8	0	0	0	0	107	135.0	0.0	17.0
ROCKINGHAM	747	80	207	4	1	4	1,044	442.0	0.0	439.3
SERPENTINE JARRAHDALE	110	35	466	110	2	4	726	119.0	5.2	27.0
SOUTH PERTH	188	4	0	0	0	0	192	195.1	2.6	55.2
STIRLING	1,008	21	0	0	0	0	1,029	780.0	0.0	111.0
SUBIACO	75	2	0	0	0	0	77	138.9	0.0	7.1
SWAN	772	83	550	45	13	3	1,467	424.5	0.0	378.5
VICTORIA PARK	162	3	0	2	0	0	166	211.0	1.7	21.0
VINCENT	139	7	0	0	0	0	146	244.0	0.0	15.0
WANNEROO	1,183	185	135	0	5	0	1,508	586.0	0.0	513.0
Region	10,242	943	2,481	206	54	23	13,949	7243	64	3411
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17

Metropolitan Regional Road Group

Appendix 9

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Built up areas	Outside built up areas		
						Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
ARMADALE	5,635	124	0	0	5,759	5,398	1,521	5,391	143
BASSENDEAN	3,236	0	0	0	3,236	14,519	0	0	0
BAYSWATER	8,278	0	0	0	8,278	10,134	0	0	0
BELMONT	6,272	0	0	0	6,272	11,815	0	0	0
CAMBRIDGE	5,014	0	0	0	5,014	12,325	0	0	0
CANNING	10,985	0	0	0	10,985	8,459	0	0	0
CLAREMONT	2,388	0	0	0	2,388	22,961	0	0	0
COCKBURN	9,311	300	0	0	9,611	7,008	696	0	0
COTTESLOE	547	0	0	0	547	5,319	0	0	0
EAST FREMANTLE	934	0	0	0	934	11,208	0	0	0
FREMANTLE	6,084	0	0	0	6,084	14,917	0	0	0
GOSNELLS	19,917	0	0	0	19,917	14,043	4,024	0	1,301
JOONDALUP	19,164	0	0	0	19,164	8,474	0	0	0
KALAMUNDA	6,747	2,004	131	72	8,954	7,587	6,768	1,381	4,355
KWINANA	4,067	1,506	0	0	5,573	7,288	4,783	0	0
MELVILLE	17,957	0	0	0	17,957	15,368	0	0	0
MOSMAN PARK	1,076	0	0	0	1,076	12,468	0	0	0
MUNDARING	3,123	2,391	249	0	5,763	5,850	3,322	8,845	3,338

Expenditure on road preservation 2016-17 [continued]

Metropolitan Regional Road Group

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Built up areas	Outside built up areas		
						Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
NEDLANDS	8,596	0	0	0	8,596	29,636	0	0	0
PEPPERMINT GROVE	389	0	0	0	389	18,339	0	0	0
PERTH	24,445	0	0	0	24,445	75,968	0	0	0
ROCKINGHAM	17,869	149	0	0	18,018	10,601	4,660	0	552
SERPENTINE JARRAHDALE	4,158	2,428	544	0	7,130	15,194	3,380	1,547	220
SOUTH PERTH	7,223	0	0	0	7,223	16,068	0	0	0
STIRLING	19,969	0	0	0	19,969	8,655	0	0	0
SUBIACO	4,399	0	0	0	4,399	23,417	0	0	0
SWAN	15,307	5,527	93	0	20,927	8,987	5,286	5,714	3,548
VICTORIA PARK	6,653	0	0	0	6,653	16,349	0	0	0
VINCENT	4,701	0	0	0	4,701	12,141	0	0	0
WANNEROO	12,045	68	0	0	12,113	4,441	3,644	0	0
Region	256,489	14,497	1,017	72	272,075	10,683	2,603	13,553	12,236
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Metropolitan Regional Road Group

Appendix 9

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
ARMADALE	3,847	2,392	6,552	940	13,731	28.0%	17.4%	47.7%	6.8%	12,351	6,239
BASSENDEAN	2,409	827	334	15	3,585	67.2%	23.1%	9.3%	0.4%	2,209	3,236
BAYSWATER	5,524	2,754	1,700	1,270	11,248	49.1%	24.5%	15.1%	11.3%	7,616	8,198
BELMONT	2,610	3,662	1,614	224	8,110	32.2%	45.2%	19.9%	2.8%	5,163	6,272
CAMBRIDGE	2,024	2,990	1,556	220	6,790	29.8%	44.0%	22.9%	3.2%	3,861	5,014
CANNING	8,540	2,613	8,973	1,371	21,497	39.7%	12.2%	41.7%	6.4%	11,841	11,153
CLAREMONT	843	1,545	0	0	2,388	35.3%	64.7%	0.0%	0.0%	1,125	2,388
COCKBURN	7,161	2,450	2,669	10,717	22,997	31.1%	10.7%	11.6%	46.6%	14,407	9,611
COTTESLOE	476	71	111	0	658	72.3%	10.8%	16.9%	0.0%	1,055	547
EAST FREMANTLE	670	264	224	0	1,158	57.9%	22.8%	19.3%	0.0%	780	934
FREMANTLE	4,582	1,502	1,957	0	8,041	57.0%	18.7%	24.3%	0.0%	3,962	6,084
GOSNELLS	12,025	8,186	5,380	777	26,368	45.6%	31.0%	20.4%	2.9%	15,663	20,211
JOONDALUP	8,878	10,463	9,260	0	28,601	31.0%	36.6%	32.4%	0.0%	21,204	19,341
KALAMUNDA	7,325	1,629	991	926	10,871	67.4%	15.0%	9.1%	8.5%	9,875	8,954
KWINANA	5,021	552	504	1,875	7,952	63.1%	6.9%	6.3%	23.6%	6,413	5,573
MELVILLE	9,811	8,146	120	937	19,014	51.6%	42.8%	0.6%	4.9%	10,886	17,957
MOSMAN PARK	740	336	0	15	1,091	67.8%	30.8%	0.0%	1.4%	808	1,076
MUNDARING	3,988	1,831	1,546	367	7,732	51.6%	23.7%	20.0%	4.7%	7,534	5,688

Expenditure by work categories 2016-17 [continued]

Metropolitan Regional Road Group

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
NEDLANDS	1,542	7,054	0	0	8,596	17.9%	82.1%	0.0%	0.0%	2,738	8,596
PEPPERMINT GROVE	210	179	0	0	389	54.0%	46.0%	0.0%	0.0%	220	389
PERTH	11,171	13,274	0	0	24,445	45.7%	54.3%	0.0%	0.0%	3,402	24,445
ROCKINGHAM	11,402	6,616	5,414	2,067	25,499	44.7%	25.9%	21.2%	8.1%	18,237	18,018
SERPENTINE JARRAHDALE	3,753	3,398	99	91	7,341	51.1%	46.3%	1.3%	1.2%	6,608	7,151
SOUTH PERTH	4,970	2,253	1,812	375	9,410	52.8%	23.9%	19.3%	4.0%	4,280	7,223
STIRLING	10,285	9,684	8,061	3,180	31,210	33.0%	31.0%	25.8%	10.2%	21,223	19,969
SUBIACO	3,271	1,128	4,362	48	8,809	37.1%	12.8%	49.5%	0.5%	2,033	4,399
SWAN	15,668	6,646	9,062	16,377	47,753	32.8%	13.9%	19.0%	34.3%	22,638	22,314
VICTORIA PARK	4,687	1,966	2,536	0	9,189	51.0%	21.4%	27.6%	0.0%	3,857	6,653
VINCENT	3,148	1,553	2,209	265	7,175	43.9%	21.6%	30.8%	3.7%	3,864	4,701
WANNEROO	8,698	3,415	15,110	926	28,149	30.9%	12.1%	53.7%	3.3%	26,636	12,113
Region	165,279	109,379	92,156	42,983	409,797	40.3%	26.7%	22.5%	10.5%	252,488	274,447
State	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17

Metropolitan Regional Road Group

Appendix 9

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ARMADALE	14	2,415	890	313	0	480	0
BASSENDEAN	0	0	0	0	0	0	0
BAYSWATER	0	0	0	0	0	0	0
BELMONT	1	243	0	0	0	0	0
CAMBRIDGE	1	76	0	0	0	0	0
CANNING	5	1,558	1,072	0	0	168	0
CLAREMONT	0	0	0	0	0	0	0
COCKBURN	3	909	0	0	0	0	0
COTTESLOE	0	0	0	0	0	0	0
EAST FREMANTLE	0	0	0	0	0	0	0
FREMANTLE	0	0	0	0	0	0	0
GOSNELLS	10	3,299	3,202	0	0	294	441
JOONDALUP	25	3,234	0	0	220	177	0
KALAMUNDA	4	69	137	0	0	0	0
KWINANA	0	0	0	0	0	0	0
MELVILLE	0	0	0	0	0	0	0
MOSMAN PARK	0	0	0	0	0	0	0
MUNDARING	7	620	666	0	0	56	0

Bridge statistics and expenditure 2016-17 [continued]

Metropolitan Regional Road Group

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
NEDLANDS	0	0	0	0	0	0	0
PEPPERMINT GROVE	0	0	0	0	0	0	0
PERTH	6	1,032	0	0	355	0	0
ROCKINGHAM	1	688	0	0	0	0	0
SERPENTINE JARRAHDALE	11	1,295	451	36	0	21	34
SOUTH PERTH	2	255	0	0	0	0	0
STIRLING	4	183	0	0	329	0	0
SUBIACO	1	129	0	0	0	0	0
SWAN	27	3,443	3,022	682	160	1,387	220
VICTORIA PARK	0	0	0	0		0	0
VINCENT	3	214	0	0	286	0	0
WANNEROO	6	795	0	0	0	0	0
Region	131	20,457	9,439	1,030	1,349	2,583	695
State	902	68,510	77,950	17,787	2,462	10,024	25,947

Sealed road area statistics and expenditure 2016-17

Metropolitan Regional Road Group

Appendix 9

COUNCIL	Area [Sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ARMADALE	3,653,370	1,447,449	5,635	124	1.54	0.09
BASSENDEAN	780,064	5,455	3,236	0	4.15	0.00
BAYSWATER	2,858,887	8,732	8,278	0	2.90	0.00
BELMONT	1,858,017	2,624	6,272	0	3.38	0.00
CAMBRIDGE	1,423,862	15,408	5,014	0	3.52	0.00
CANNING	4,545,244	23,319	10,985	0	2.42	0.00
CLAREMONT	364,007	0	2,388	0	6.56	0.00
COCKBURN	4,649,949	1,242,511	9,311	300	2.00	0.24
COTTESLOE	359,906	0	547	0	1.52	0.00
EAST FREMANTLE	291,675	0	934	0	3.20	0.00
FREMANTLE	1,427,504	0	6,084	0	4.26	0.00
GOSNELLS	4,964,173	744,584	19,917	0	4.01	0.00
JOONDALUP	7,914,939	54,837	19,164	0	2.42	0.00
KALAMUNDA	3,112,411	1,006,941	6,747	2,004	2.17	1.99
KWINANA	1,953,232	853,244	4,067	1,506	2.08	1.77
MELVILLE	4,089,613	0	17,957	0	4.39	0.00
MOSMAN PARK	302,048	9,849	1,076	0	3.56	0.00
MUNDARING	1,868,455	1,972,575	3,123	2,391	1.67	1.21

Sealed road area statistics and expenditure 2016-17 [continued]

Metropolitan Regional Road Group

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
NEDLANDS	1,015,188	0	8,596	0	8.47	0.00
PEPPERMINT GROVE	74,240	0	389	0	5.24	0.00
PERTH	1,126,231	0	24,445	0	21.71	0.00
ROCKINGHAM	5,899,545	1,513,371	17,869	149	3.03	0.10
SERPENTINE JARRAHDALE	957,837	2,880,955	4,158	2,428	4.34	0.84
SOUTH PERTH	1,573,297	0	7,223	0	4.59	0.00
STIRLING	8,075,300	0	19,969	0	2.47	0.00
SUBIACO	657,497	0	4,399	0	6.69	0.00
SWAN	5,961,633	3,433,365	15,307	5,527	2.57	1.61
VICTORIA PARK	1,424,247	0	6,653	0	4.67	0.00
VINCENT	1,355,170	0	4,701	0	3.47	0.00
WANNEROO	9,493,611	1,098,835	12,045	68	1.27	0.06
Region	84,031,147	16,314,054	256,489	14,497	3.05	0.89
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Metropolitan Regional Road Group

Appendix 9

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ARMADALE	510	22	28	18	215	26	18
BASSENDEAN	96	40	0	26	1	34	11
BAYSWATER	346	40	0	19	1	24	24
BELMONT	227	26	0	18	0	23	23
CAMBRIDGE	170	40	14	22	2	43	39
CANNING	573	35	23	18	3	22	21
CLAREMONT	47	77	0	38	0	0	0
COCKBURN	655	21	48	23	178	31	30
COTTESLOE	47	52	23	24	0	0	0
EAST FREMANTLE	37	113	0	40	0	0	0
FREMANTLE	177	24	17	18	0	0	0
GOSNELLS	668	27	27	22	107	26	23
JOONDALUP	1,002	35	0	24	8	21	16
KALAMUNDA	441	24	12	13	158	27	14
KWINANA	284	25	27	15	117	30	20
MELVILLE	525	41	0	28	0	0	0
MOSMAN PARK	43	38	16	20	1	33	17
MUNDARING	282	35	24	22	332	29	22

Sealed road age 2016-17 [continued]
Metropolitan Regional Road Group

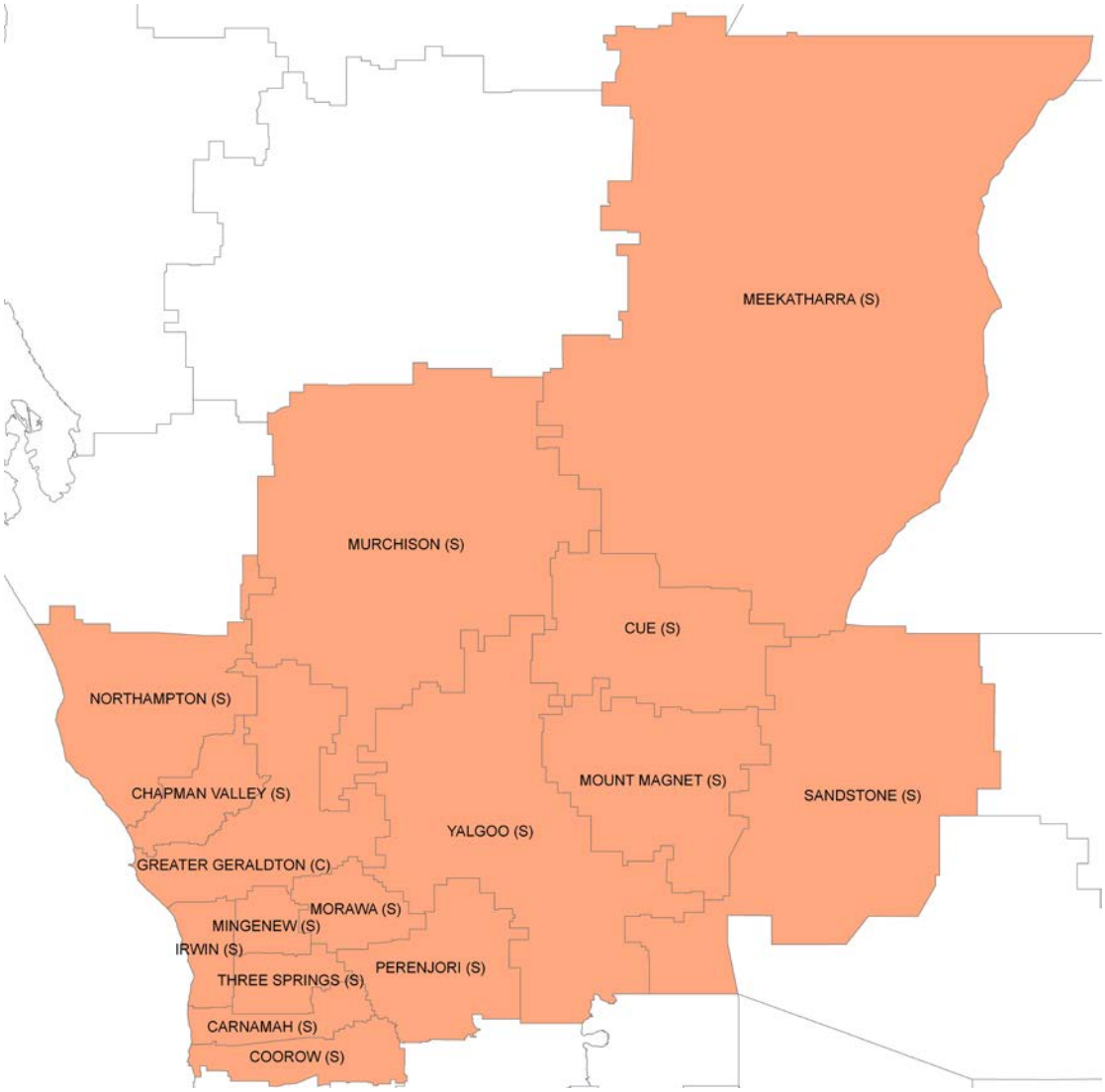
COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
NEDLANDS	137	55	0	18	0	0	0
PEPPERMINT GROVE	9	28	0	21	0	0	0
PERTH	106	51	0	25	0	0	0
ROCKINGHAM	828	22	16	14	207	34	19
SERPENTINE JARRAHDALE	145	22	23	11	466	48	22
SOUTH PERTH	192	36	0	25	0	0	0
STIRLING	1,029	47	16	22	0	0	0
SUBIACO	77	48	0	29	0	0	0
SWAN	855	24	23	19	550	33	24
VICTORIA PARK	164	58	22	27	0	0	0
VINCENT	146	60	25	24	0	0	0
WANNEROO	1,368	20	20	16	135	22	18
Region	11,185	40	22	22	2,481	30	21

APPENDIX 10

MID WEST REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age



Road assets & expenditure indicators 2016-17

Mid West Regional Road Group

Appendix 10

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
CARNAMAH	0.50	3.5%	47%	0.77
CHAPMAN VALLEY	0.57	3.9%	62%	0.89
COOROW	0.50	3.5%	40%	0.46
CUE	0.60	4.3%	75%	0.85
GREATER GERALDTON	0.58	2.7%	49%	1.16
IRWIN	0.60	3.1%	86%	0.98
MEEKATHARRA	0.56	4.8%	121%	0.63
MINGENEW	0.64	3.0%	59%	0.83
MORAWA	0.49	4.2%	58%	0.43
MOUNT MAGNET	0.57	4.5%	65%	0.44
MURCHISON	0.60	4.8%	0%	0.96
NORTHAMPTON	0.47	3.6%	71%	0.63
PERENJORI	0.56	4.2%	66%	0.48
SANDSTONE	0.56	5.4%	0%	2.26
THREE SPRINGS	0.59	3.8%	36%	0.52
YALGOO	0.60	4.8%	15%	0.41
Region	0.56	3.6%	55%	0.81
State	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Mid West Regional Road Group

Appendix 10

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
CARNAMAH	4,832	809	17%	94%	35%	1535
CHAPMAN VALLEY	3,512	968	28%	98%	36%	786
COOROW	2,422	513	21%	84%	14%	496
CUE	8,671	880	10%	95%	36%	3424
GREATER GERALDTON	19,101	7,803	41%	31%	22%	190
IRWIN	2,124	1,019	48%	40%	23%	273
MEEKATHARRA	10,603	1,345	13%	111%	21%	1031
MINGENEW	1,500	266	18%	84%	17%	571
MORAWA	2,070	132	6%	104%	5%	153
MOUNT MAGNET	4,708	258	5%	70%	11%	423
MURCHISON	7,924	423	5%	168%	14%	3917
NORTHAMPTON	3,601	790	22%	60%	13%	244
PERENJORI	4,318	718	17%	136%	21%	815
SANDSTONE	6,772	1,481	22%	105%	67%	14810
THREE SPRINGS	2,255	771	34%	115%	37%	1276
YALGOO	2,689	262	10%	117%	10%	686
Region	87,102	18,438	21%	69%	22%	326
State	904,322	446,552	49%	26%	22%	171

Road data 2016-17

Mid West Regional Road Group

Appendix 10

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
CARNAMAH	3	10	161	341	74	54	643	0.8	1.2	9.0
CHAPMAN VALLEY	0	4	131	381	246	102	863	1.7	0.0	0.0
COOROW	1	22	196	511	66	59	855	9.0	2.1	3.3
CUE	0	6	100	191	359	84	740	2.4	0.3	3.8
GREATER GERALDTON	136	155	533	966	202	93	2,084	35.5	27.7	148.7
IRWIN	8	24	116	258	13	27	445	10.0	1.0	12.4
MEEKATHARRA	0	12	72	1,447	495	393	2,420	4.6	12.2	1.8
MINGENEW	1	10	133	253	52	4	451	4.6	8.7	1.2
MORAWA	1	12	126	515	271	46	970	1.4	12.7	4.6
MOUNT MAGNET	1	14	12	202	200	153	582	1.1	1.8	6.8
MURCHISON	0	0	170	498	943	35	1,647	0.5	0.9	0.0
NORTHAMPTON	15	33	242	479	272	30	1,070	18.9	5.6	4.1
PERENJORI	0	5	240	850	296	47	1,438	0.3	0.0	3.5
SANDSTONE	0	4	9	302	415	200	930	1.1	0.0	0.9
THREE SPRINGS	1	7	158	453	26	31	675	0.2	0.0	2.3
YALGOO	0	2	169	159	750	53	1,133	0.4	0.0	0.0
Region	166	319	2,566	7,807	4,678	1,412	16,949	92	74	202
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17

Mid West Regional Road Group

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Paved roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
CARNAMAH	186	553	2,580	0	3,319	6,210	6,930	1,009	266
CHAPMAN VALLEY	0	619	1,342	0	1,961	0	118	2,843	1,412
COOROW	198	466	799	0	1,463	4,194	2,053	1,687	455
CUE	191	826	7,270	0	8,287	16,257	0	3,694	358
GREATER GERALDTON	9,802	2,163	5,640	236	17,841	15,065	289	1,659	687
IRWIN	910	607	549	0	2,066	13,498	736	1,173	120
MEEKATHARRA	556	728	4,917	2,155	8,356	12,442	0	2,459	876
MINGENEW	173	504	787	0	1,464	7,753	8,156	842	483
MORAWA	294	386	403	0	1,083	8,764	3,828	872	263
MOUNT MAGNET	305	0	4,017	0	4,322	10,137	0	1,507	468
MURCHISON	0	18	4,774	2,140	6,932	0	1,514	2,401	812
NORTHAMPTON	440	1,349	579	265	2,633	4,408	429	1,691	1,009
PERENJORI	370	874	1,752	431	3,427	35,522	2,188	1,402	347
SANDSTONE	0	5	6,767	0	6,772	0	261	4,619	449
THREE SPRINGS	112	404	918	0	1,434	6,834	777	1,455	780
YALGOO	165	48	727	1,065	2,005	21,631	5,658	2,054	568
Region	13,702	9,550	43,821	6,292	73,365	12,581	1,882	5,656	1,369
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Mid West Regional Road Group

Appendix 10

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
CARNAMAH	897	2,422	1,513	0	4,832	18.6%	50.1%	31.3%	0.0%	2,263	1,754
CHAPMAN VALLEY	1,302	659	1,513	40	3,514	37.1%	18.8%	43.1%	1.1%	2,206	1,961
COOROW	380	1,083	676	283	2,422	15.7%	44.7%	27.9%	11.7%	3,173	1,463
CUE	7,378	909	384	0	8,671	85.1%	10.5%	4.4%	0.0%	2,031	1,719
GREATER GERALDTON	7,388	10,651	1,062	0	19,101	38.7%	55.8%	5.6%	0.0%	12,755	14,790
IRWIN	1,169	897	6	52	2,124	55.0%	42.2%	0.3%	2.4%	2,103	2,066
MEEKATHARRA	2,222	6,134	2,247	0	10,603	21.0%	57.9%	21.2%	0.0%	5,146	3,235
MINGENEW	650	814	36	0	1,500	43.3%	54.3%	2.4%	0.0%	1,760	1,464
MORAWA	668	415	416	571	2,070	32.3%	20.0%	20.1%	27.6%	2,509	1,083
MOUNT MAGNET	356	3,966	387	0	4,709	7.6%	84.2%	8.2%	0.0%	1,079	474
MURCHISON	5,720	1,226	978	0	7,924	72.2%	15.5%	12.3%	0.0%	3,674	3,526
NORTHAMPTON	1,293	1,340	63	905	3,601	35.9%	37.2%	1.7%	25.1%	4,211	2,633
PERENJORI	858	2,569	891	0	4,318	19.9%	59.5%	20.6%	0.0%	4,359	2,100
SANDSTONE	436	6,336	0	0	6,772	6.4%	93.6%	0.0%	0.0%	1,263	2,858
THREE SPRINGS	271	1,163	787	33	2,254	12.0%	51.6%	34.9%	1.5%	2,598	1,348
YALGOO	2,005	0	684	0	2,689	74.6%	0.0%	25.4%	0.0%	2,269	940
Region	32,993	40,584	11,643	1,884	87,104	37.9%	46.6%	13.4%	2.2%	53,399	43,413
State	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17

Mid West Regional Road Group

Appendix 10

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
CARNAMAH	2	295	0	0	0	0	0
CHAPMAN VALLEY	3	502	0	0	0	0	0
COOROW	2	480	0	0	0	0	0
CUE	0	0	0	0	0	0	0
GREATER GERALDTON	6	1,246	0	141	0	198	0
IRWIN	2	464	0	89	0	0	0
MEEKATHARRA	0	0	0	0	0	0	0
MINGENEW	5	1,367	0	0	0	0	0
MORAWA	0	0	0	0	0	0	0
MOUNT MAGNET	0	0	0	0	0	0	0
MURCHISON	0	0	0	0	0	14	8
NORTHAMPTON	0	0	0	0	0	0	0
PERENJORI	0	0	0	0	0	0	0
SANDSTONE	0	0	0	0	0	0	0
THREE SPRINGS	1	122	0	0	0	0	0
YALGOO	0	0	0	0	0	0	0
Region	21	4,476	0	230	0	212	8
State	902	68,510	77,950	17,787	2,462	10,024	25,947

Sealed road area statistics and expenditure 2016-17

Mid West Regional Road Group

Appendix 10

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
CARNAMAH	104,832	953,063	186	553	1.77	0.58
CHAPMAN VALLEY	30,250	828,046	0	619	0.00	0.75
COOROW	165,237	1,331,674	198	466	1.20	0.35
CUE	41,121	788,333	191	826	4.64	1.05
GREATER GERALDTON	2,277,308	3,700,439	9,802	2,163	4.30	0.58
IRWIN	235,965	804,021	910	607	3.86	0.75
MEEKATHARRA	156,407	510,986	556	728	3.55	1.42
MINGENEW	78,102	744,753	173	504	2.22	0.68
MORAWA	117,411	695,848	294	386	2.50	0.55
MOUNT MAGNET	105,304	96,252	305	0	2.90	0.00
MURCHISON	240	1,101,130	0	18	0.00	0.02
NORTHAMPTON	349,344	1,706,185	440	1,349	1.26	0.79
PERENJORI	36,456	1,654,052	370	874	10.15	0.53
SANDSTONE	29,760	72,480	0	5	0.00	0.07
THREE SPRINGS	57,363	1,153,812	112	404	1.95	0.35
YALGOO	26,698	778,867	165	48	6.18	0.06
Region	3,811,798	16,919,941	13,702	9,550	3.59	0.56
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Mid West Regional Road Group

Appendix 10

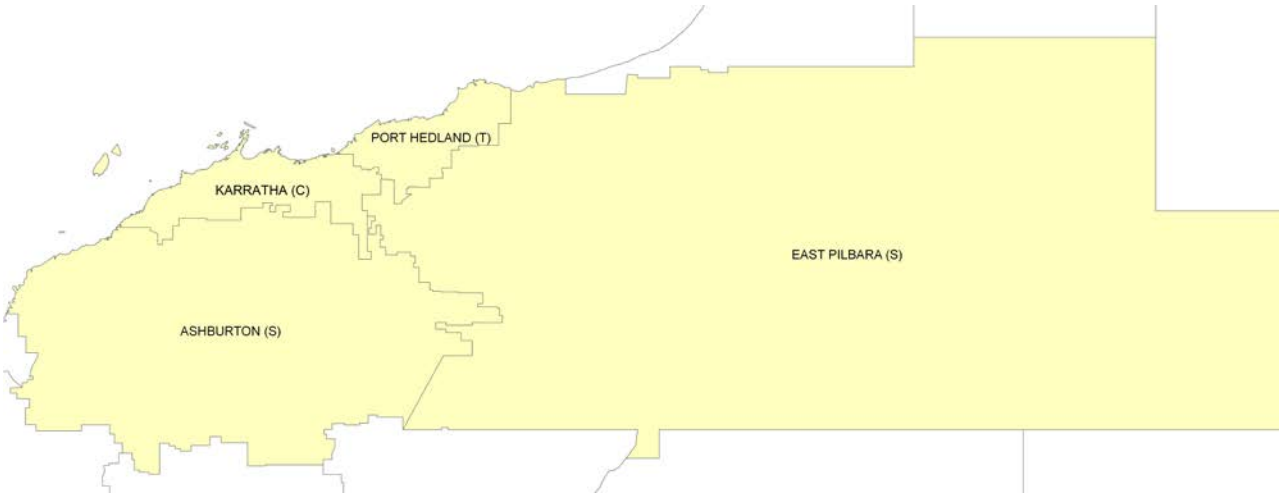
COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
CARNAMAH	13	28	13	20	161	34	18
CHAPMAN VALLEY	4	14	18	0	131	23	13
COOROW	23	39	20	13	196	27	20
CUE	6	28	15	0	100	14	12
GREATER GERALDTON	290	41	19	18	533	28	18
IRWIN	32	29	19	12	116	18	16
MEEKATHARRA	13	47	18	17	72	20	9
MINGENEW	10	33	15	16	133	23	11
MORAWA	13	44	20	12	126	38	16
MOUNT MAGNET	15	26	16	0	12	18	17
MURCHISON	0	6	6	0	170	11	11
NORTHAMPTON	48	32	24	27	242	31	19
PERENJORI	5	25	19	0	240	22	13
SANDSTONE	4	12	12	9	9	8	6
THREE SPRINGS	7	22	14	10	158	21	12
YALGOO	2	23	8	0	169	14	11
Region	485	28	16	15	2,566	22	14

APPENDIX 11

PILBARA REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age



Appendix 11

Road assets & expenditure indicators 2016-17

Pilbara Regional Road Group

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
ASHBURTON	0.50	3.8%	51%	0.57
EAST PILBARA	0.51	4.1%	59%	0.45
KARRATHA	0.50	2.6%	91%	1.12
PORT HEDLAND	0.50	2.5%	73%	0.97
Region	0.50	3.2%	75%	0.75
State	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Pilbara Regional Road Group

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ASHBURTON	4,566	2,061	45%	42%	16%	191
EAST PILBARA	8,516	1,377	16%	56%	8%	114
KARRATHA	8,474	4,964	59%	14%	18%	189
PORT HEDLAND	7,404	4,114	56%	21%	22%	248
Region Average	28,960	12,516	43%	30%	16%	191
State Average	904,322	446,552	49%	26%	22%	171

Appendix 11

Road data 2016-17

Pilbara Regional Road Group

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
ASHBURTON	22	42	102	1,097	390	161	1,814	22.0	0.0	7.5
EAST PILBARA	19	28	83	1,528	1,014	438	3,110	62.5	0.0	20.3
KARRATHA	81	92	41	216	129	40	599	50.0	0.0	82.6
PORT HEDLAND	42	92	61	206	0	57	458	30.2	0.0	94.3
Region	164	254	286	3,047	1,534	695	5,981	165	0	205
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17

Pilbara Regional Road Group

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Built up areas	Outside built up areas		
						Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
ASHBURTON	1,213	491	1,370	410	3,484	9,494	0	1,060	972
EAST PILBARA	1,925	190	2,022	555	4,692	18,351	3,579	1,277	1,924
KARRATHA	4,995	0	1,713	0	6,708	13,809	0	3,911	627
PORT HEDLAND	4,360	0	0	461	4,821	14,979	5,925	670	0
Region	12,493	681	5,105	1,426	19,705	14,109	923	1,723	962
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17
Pilbara Regional Road Group

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
ASHBURTON	1,967	1,517	20	1,063	4,567	43.1%	33.2%	0.4%	23.3%	5,319	3,048
EAST PILBARA	2,555	2,137	3,824	0	8,516	30.0%	25.1%	44.9%	0.0%	7,211	3,224
KARRATHA	3,058	3,661	784	971	8,474	36.1%	43.2%	9.3%	11.5%	5,331	5,986
PORT HEDLAND	3,332	1,489	2,584	0	7,405	45.0%	20.1%	34.9%	0.0%	4,993	4,821
Region Average	10,912	8,804	7,212	2,034	28,962	37.7%	30.4%	24.9%	7.0%	22,855	17,079
State Average	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17
Pilbara Regional Road Group

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ASHBURTON	2	444	0	0	0	0	0
EAST PILBARA	0	0	0	0	0	0	0
KARRATHA	15	2,064	0	0	0	11	0
PORT HEDLAND	6	2,058	0	0	0	0	0
Region	23	4,566	0	0	0	11	0
State	902	68,510	77,950	17,787	2,462	10,024	25,947

Appendix 11

Sealed road area statistics and expenditure 2016-17
Pilbara Regional Road Group

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ASHBURTON	447,197	474,874	1,213	491	2.71	1.03
EAST PILBARA	367,137	548,618	1,925	190	5.24	0.35
KARRATHA	1,265,993	310,837	4,995	0	3.95	0.00
PORT HEDLAND	1,018,786	502,706	4,360	0	4.28	0.00
Region	3,099,113	1,837,034	12,493	681	4.03	0.37
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Pilbara Regional Road Group

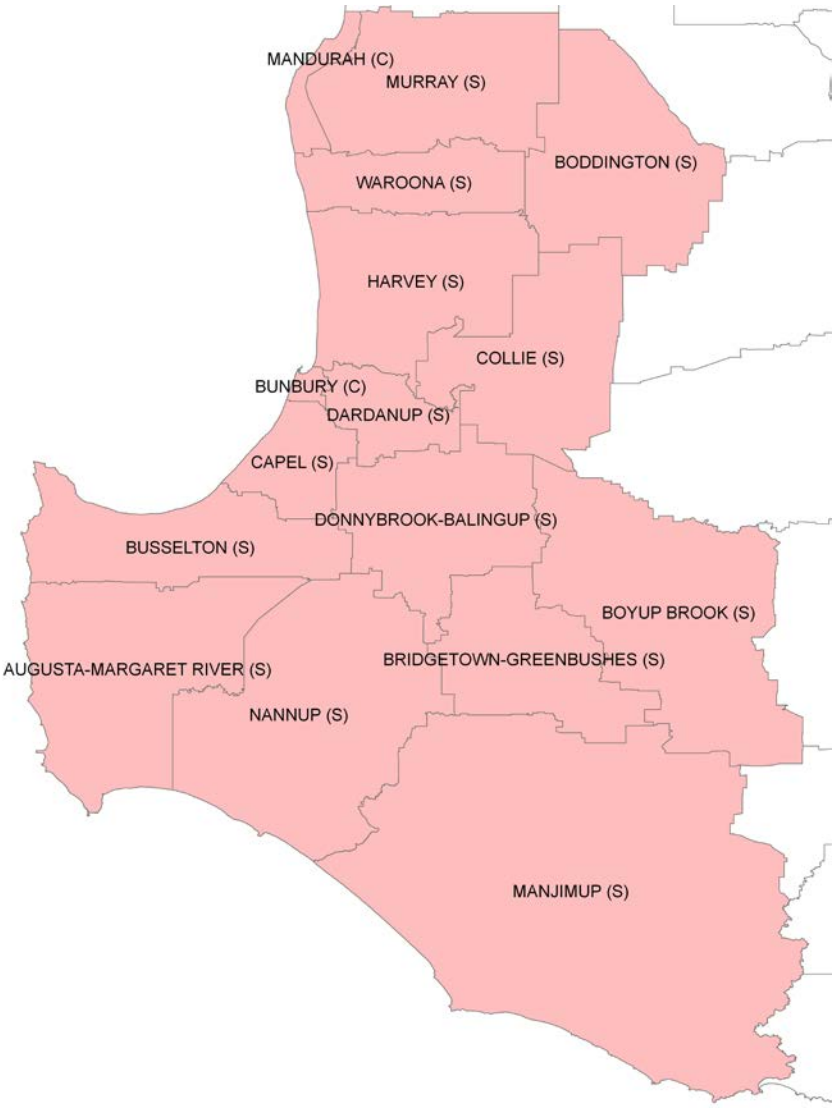
COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ASHBURTON	64	33	27	30	102	27	20
EAST PILBARA	47	37	32	25	83	19	18
KARRATHA	173	38	26	23	41	35	30
PORT HEDLAND	135	34	32	17	61	22	20
Region	418	36	29	24	286	26	22

APPENDIX 12

SOUTH WEST REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age



Road assets & expenditure indicators 2016-17

South West Regional Road Group

Appendix 12

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
AUGUSTA MARGARET RIVER	0.52	2.6%	80%	0.88
BODDINGTON	0.44	3.1%	51%	0.47
BOYUP BROOK	0.41	3.2%	11%	0.64
BRIDGETOWN GREENBUSHES	0.48	3.0%	44%	0.52
BUNBURY	0.64	1.9%	46%	0.81
BUSSELTON	0.40	2.3%	45%	0.78
CAPEL	0.66	2.4%	36%	0.78
COLLIE	0.53	2.7%	60%	0.62
DARDANUP	0.63	2.3%	72%	1.06
DONNYBROOK-BALINGUP	0.42	2.7%	51%	0.58
HARVEY	0.55	2.5%	60%	0.74
MANDURAH	0.68	1.8%	48%	0.72
MANJIMUP	0.39	2.9%	87%	0.84
MURRAY	0.64	2.4%	16%	0.48
NANNUP	0.42	2.9%	45%	1.30
WAROONA	0.52	2.9%	23%	0.27
Region	0.54	2.4%	51%	0.74
State	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

South West Regional Road Group

Appendix 12

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
AUGUSTA MARGARET RIVER	7,245	3,710	51%	39%	27%	263
BODDINGTON	1,114	344	31%	32%	12%	137
BOYUP BROOK	4,629	530	11%	127%	18%	321
BRIDGETOWN GREENBUSHES	3,835	351	9%	65%	6%	76
BUNBURY	9,621	5,746	60%	18%	23%	167
BUSSELTON	14,879	8,142	55%	24%	26%	219
CAPEL	4,859	2,512	52%	27%	22%	144
COLLIE	2,653	551	21%	34%	8%	58
DARDANUP	5,678	2,531	45%	28%	27%	177
DONNYBROOK-BALINGUP	3,912	1,432	37%	64%	26%	242
HARVEY	8,652	5,226	60%	28%	28%	189
MANDURAH	25,307	7,895	31%	12%	13%	93
MANJIMUP	8,977	2,158	24%	69%	21%	230
MURRAY	7,840	1,612	21%	30%	12%	92
NANNUP	3,825	1,646	43%	103%	65%	1277
WAROONA	2,184	523	24%	44%	11%	129
Region	115,210	44,909	39%	29%	20%	156
State	904,322	446,552	49%	26%	22%	171

Road data 2016-17
South West Regional Road Group

Appendix 12

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
AUGUSTA MARGARET RIVER	90	28	395	342	43	9	907	12.0	44.0	81.0
BODDINGTON	2	10	86	156	12	0	265	0.0	0.0	0.0
BOYUP BROOK	0	10	207	428	359	15	1,020	9.5	6.0	4.5
BRIDGETOWN GREENBUSHES	7	22	226	391	18	16	680	4.6	0.4	11.5
BUNBURY	147	121	52	1	0	0	321	35.0	0.7	180.7
BUSSELTON	204	63	582	215	24	8	1,096	117.0	0.0	70.0
CAPEL	93	44	178	154	10	17	496	42.1	3.4	46.1
COLLIE	21	49	184	117	3	10	383	15.8	7.5	27.5
DARDANUP	69	9	201	89	11	28	408	3.5	12.5	55.2
DONNYBROOK-BALINGUP	7	23	251	346	28	16	670	2.9	1.6	18.5
HARVEY	73	44	436	277	17	1	849	23.2	9.4	107.6
MANDURAH	481	133	78	4	3	0	699	463.9	16.9	66.4
MANJIMUP	10	59	444	705	66	19	1,303	40.8	0.1	21.2
MURRAY	72	38	376	181	33	0	699	86.3	0.1	73.0
NANNUP	0	7	200	246	22	14	489	7.6	0.5	10.0
WAROONA	2	28	229	76	4	2	340	13.8	0.0	7.2
Region	1,277	685	4,125	3,728	652	155	10,624	878	103	780
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17

South West Regional Road Group

Appendix 12

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Paved roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
AUGUSTA MARGARET RIVER	1,873	3,242	698	0	5,813	8,332	2,944	2,168	2,117
BODDINGTON	428	68	220	0	716	16,542	3,422	926	1,997
BOYUP BROOK	115	124	955	0	1,194	4,083	1,672	1,592	638
BRIDGETOWN GREENBUSHES	669	732	678	0	2,079	10,965	887	1,218	3,373
BUNBURY	4,877	0	0	0	4,877	8,272	0	0	0
BUSSELTON	4,775	1,884	800	56	7,515	9,278	3,030	3,047	6,373
CAPEL	1,297	687	689	68	2,741	5,068	2,104	3,688	3,009
COLLIE	525	1,205	377	0	2,107	3,106	2,832	1,955	107
DARDANUP	715	2,296	887	1	3,899	4,538	8,677	5,712	5,722
DONNYBROOK-BALINGUP	389	1,157	891	0	2,437	6,552	1,461	2,096	966
HARVEY	2,780	1,568	834	0	5,182	11,354	2,037	2,747	1,592
MANDURAH	9,329	0	0	0	9,329	7,269	0	0	0
MANJIMUP	3,486	2,092	1,840	55	7,473	22,280	3,182	2,098	1,786
MURRAY	1,233	1,406	322	0	2,961	5,632	3,444	4,097	4,432
NANNUP	839	1,421	559	0	2,819	52,122	313	1,748	858
WAROONA	232	362	80	16	690	3,691	1,415	2,735	1,567
Region	33,562	18,244	9,830	196	61,832	8,249	2,325	2,943	884
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

South West Regional Road Group

Appendix 12

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
AUGUSTA MARGARET RIVER	2,612	3,503	1,130	0	7,245	36.1%	48.4%	15.6%	0.0%	6,945	6,115
BODDINGTON	424	330	333	27	1,114	38.1%	29.6%	29.9%	2.4%	1,493	702
BOYUP BROOK	971	1,548	2,087	23	4,629	21.0%	33.4%	45.1%	0.5%	3,959	2,519
BRIDGETOWN GREENBUSHES	1,289	854	1,679	13	3,835	33.6%	22.3%	43.8%	0.3%	4,094	2,143
BUNBURY	3,920	959	4,248	494	9,621	40.7%	10.0%	44.2%	5.1%	6,022	4,879
BUSSELTON	5,741	2,640	5,053	1,446	14,880	38.6%	17.7%	34.0%	9.7%	10,585	8,276
CAPEL	3,031	236	1,590	0	4,857	62.4%	4.9%	32.7%	0.0%	4,205	3,267
COLLIE	770	1,409	272	203	2,654	29.0%	53.1%	10.2%	7.6%	3,538	2,179
DARDANUP	2,178	1,786	868	837	5,669	38.4%	31.5%	15.3%	14.8%	3,749	3,964
DONNYBROOK-BALINGUP	1,460	1,142	1,260	50	3,912	37.3%	29.2%	32.2%	1.3%	4,513	2,602
HARVEY	3,100	2,135	1,833	1,584	8,652	35.8%	24.7%	21.2%	18.3%	7,087	5,235
MANDURAH	7,499	1,882	12,291	3,635	25,307	29.6%	7.4%	48.6%	14.4%	12,995	9,379
MANJIMUP	2,866	4,797	848	466	8,977	31.9%	53.4%	9.4%	5.2%	8,195	6,843
MURRAY	2,675	367	2,875	1,923	7,840	34.1%	4.7%	36.7%	24.5%	6,241	2,997
NANNUP	2,003	1,797	24	1	3,825	52.4%	47.0%	0.6%	0.0%	2,930	3,800
WAROONA	636	71	1,478	0	2,185	29.1%	3.2%	67.6%	0.0%	2,623	707
Region	41,175	25,456	37,869	10,702	115,202	35.7%	22.1%	32.9%	9.3%	89,172	65,607
State	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17

South West Regional Road Group

Appendix 12

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
AUGUSTA MARGARET RIVER	17	17	1,787	434	0	302	0
BODDINGTON	5	0	1,206	0	0	38	0
BOYUP BROOK	18	0	4,195	281	0	1,325	977
BRIDGETOWN GREENBUSHES	15	196	2,032	386	0	64	1,277
BUNBURY	1	655	0	0	0	2	0
BUSSELTON	36	1,028	2,969	680	0	866	1,085
CAPEL	13	522	1,059	254	0	526	0
COLLIE	6	154	1,408	53	0	72	0
DARDANUP	20	986	1,719	127	0	65	2
DONNYBROOK-BALINGUP	34	899	3,357	1,256	0	165	2
HARVEY	18	2,348	1,812	253	0	53	0
MANDURAH	22	5,396	1,703	0	278	52	10,150
MANJIMUP	42	465	3,533	1,265	0	190	0
MURRAY	20	2,327	1,860	311	0	81	1,120
NANNUP	13	688	1,029	193	0	981	0
WAROONA	2	244	341	0	0	17	0
Region	282	15,925	30,008	5,492	278	4,799	14,613
State	902	68,510	77,950	17,787	2,462	10,024	25,947

Sealed road area statistics and expenditure 2016-17

South West Regional Road Group

Appendix 12

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
AUGUSTA MARGARET RIVER	786,804	2,316,185	1,873	3,242	2.38	1.40
BODDINGTON	90,555	540,244	428	68	4.73	0.13
BOYUP BROOK	98,577	1,127,553	115	124	1.17	0.11
BRIDGETOWN GREENBUSHES	213,534	1,422,726	669	732	3.13	0.51
BUNBURY	2,063,571	367,274	4,877	0	2.36	0.00
BUSSELTON	1,801,283	3,555,049	4,775	1,884	2.65	0.53
CAPEL	895,804	1,083,140	1,297	687	1.45	0.63
COLLIE	591,528	1,261,944	525	1,205	0.89	0.95
DARDANUP	551,469	1,226,007	715	2,296	1.30	1.87
DONNYBROOK-BALINGUP	207,814	1,475,179	389	1,157	1.87	0.78
HARVEY	856,998	2,738,720	2,780	1,568	3.24	0.57
MANDURAH	4,492,070	573,316	9,329	0	2.08	0.00
MANJIMUP	547,622	2,482,594	3,486	2,092	6.37	0.84
MURRAY	766,232	2,404,033	1,233	1,406	1.61	0.58
NANNUP	56,339	1,229,883	839	1,421	14.89	1.16
WAROONA	219,990	1,372,517	232	362	1.05	0.26
Region	14,240,188	25,176,362	33,562	18,244	2.36	0.72
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
South West Regional Road Group

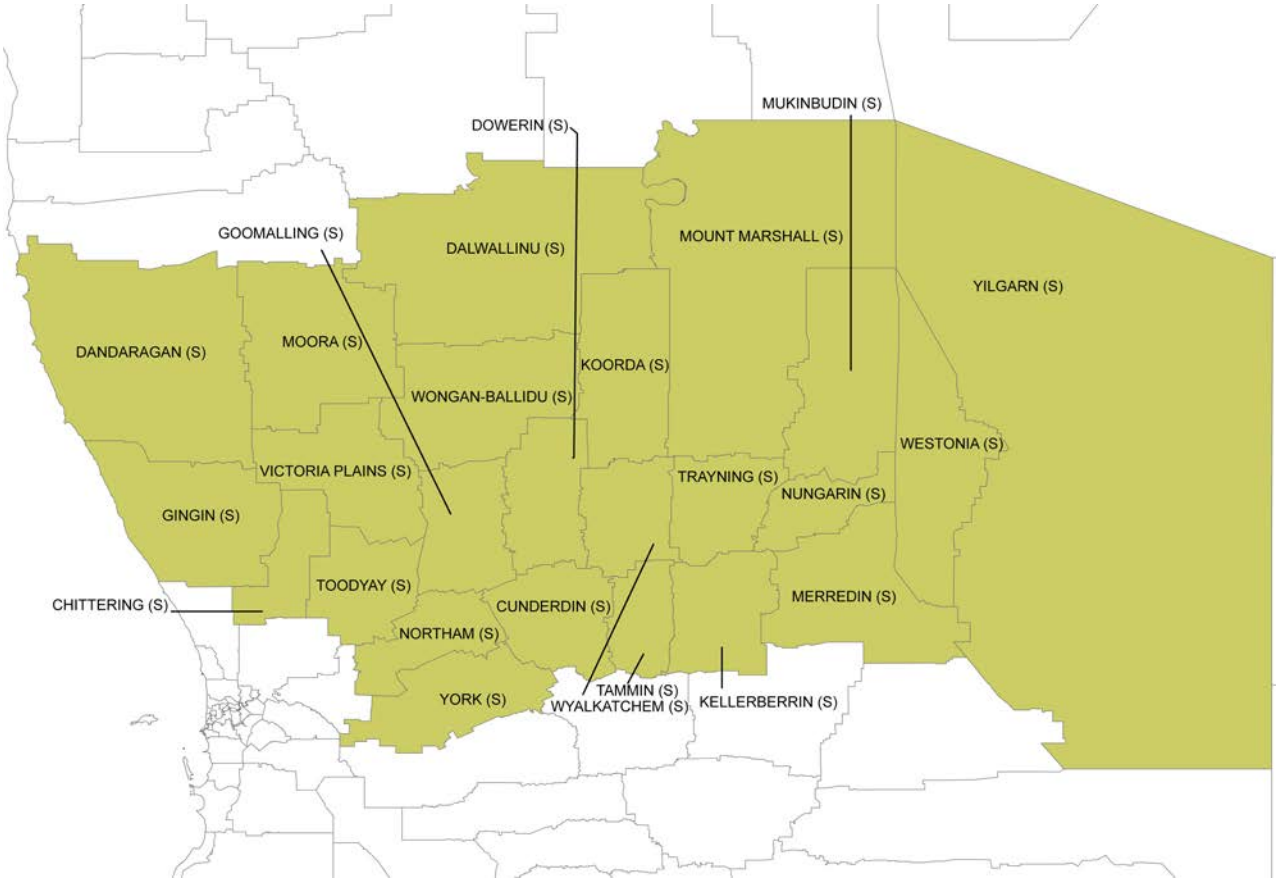
COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
AUGUSTA MARGARET RIVER	117	26	28	19	395	28	20
BODDINGTON	11	24	21	12	86	27	22
BOYUP BROOK	10	35	27	0	207	36	25
BRIDGETOWN GREENBUSHES	29	38	24	18	226	29	19
BUNBURY	267	36	22	20	52	28	23
BUSSELTON	266	58	30	16	582	58	19
CAPEL	136	20	13	14	178	26	16
COLLIE	70	39	19	12	184	28	19
DARDANUP	79	23	18	14	201	24	16
DONNYBROOK-BALINGUP	30	29	26	14	251	38	23
HARVEY	117	26	23	18	436	27	21
MANDURAH	614	26	23	22	78	27	22
MANJIMUP	69	36	34	19	444	35	29
MURRAY	109	24	15	12	376	22	15
NANNUP	7	44	28	0	200	33	25
WAROONA	30	35	20	6	229	26	18
Region	1,963	32	23	15	4,125	31	21

APPENDIX 13

WHEATBELT NORTH REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age



Road assets & expenditure indicators 2016-17

Wheatbelt North Regional Road Group

Appendix 13

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
CHITTERING	0.55	3.2%	29%	0.37
CUNDERDIN	0.29	3.6%	56%	0.63
DALWALLINU	0.54	3.8%	33%	0.38
DANDARAGAN	0.45	3.3%	129%	0.94
DOWERIN	0.44	4.0%	78%	0.53
GINGIN	0.41	3.3%	64%	0.88
GOOMALLING	0.42	3.5%	30%	0.84
KELLERBERRIN	0.36	3.6%	24%	0.37
KOORDA	0.48	4.0%	45%	0.55
MERREDIN	0.48	3.5%	87%	0.61
MOORA	0.30	3.2%	66%	0.65
MOUNT MARSHALL	0.46	4.3%	79%	0.63
MUKINBUDIN	0.25	4.0%	61%	0.50
NORTHAM (S)	0.41	2.5%	43%	0.76
NUNGARIN	0.33	4.1%	71%	0.64
TAMMIN	0.37	3.9%	83%	0.68
TOODYAY	0.47	2.8%	40%	0.39
TRAYNING	0.36	4.0%	7%	0.35
VICTORIA PLAINS	0.36	3.7%	25%	0.48
WESTONIA	0.31	4.4%	67%	0.45
WONGAN BALLIDU	0.44	3.8%	51%	0.51
WYALKATCHEM	0.51	3.9%	78%	0.48
YILGARN	0.56	4.3%	57%	0.31
YORK	0.46	3.0%	49%	0.64
Region	0.43	3.5%	57%	0.57
State	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Wheatbelt North Regional Road Group

Appendix 13

COUNCIL	Total council expenditure $000s	Expenditure from Councils' own resources $000s	% of total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
CHITTERING	4,405	1,571	36%	51%	34%	296
CUNDERDIN	1,917	393	21%	90%	14%	294
DALWALLINU	6,652	383	6%	137%	8%	301
DANDARAGAN	5,349	927	17%	59%	12%	287
DOWERIN	1,455	109	7%	126%	5%	163
GINGIN	4,950	2,307	47%	52%	26%	423
GOOMALLING	2,999	1,632	54%	89%	75%	1689
KELLERBERRIN	2,503	626	25%	103%	21%	519
KOORDA	2,666	826	31%	130%	31%	1934
MERREDIN	3,446	881	26%	82%	17%	268
MOORA	4,020	1,415	35%	90%	34%	559
MOUNT MARSHALL	2,877	97	3%	128%	3%	222
MUKINBUDIN	1,612	295	18%	114%	12%	648
NORTHAM (S)	5,622	3,591	64%	38%	34%	313
NUNGARIN	1,216	286	24%	108%	19%	1343
TAMMIN	1,353	275	20%	92%	18%	689
TOODYAY	3,012	611	20%	63%	14%	135
TRAYNING	1,449	0	0%	125%	0%	0
VICTORIA PLAINS	2,686	1,138	42%	115%	46%	1256
WESTONIA	1,979	288	15%	145%	15%	1143
WONGAN BALLIDU	2,964	585	20%	119%	16%	398
WYALKATCHEM	1,349	56	4%	107%	3%	109
YILGARN	3,987	521	13%	137%	9%	342
YORK	2,724	480	18%	64%	10%	139
Region	73,192	19,293	26%	87%	20%	374
State	904,322	446,552	49%	26%	22%	171

Road data 2016-17

Wheatbelt North Regional Road Group

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
CHITTERING	0	1	281	143	3	6	434	2.2	0.0	4.6
CUNDERDIN	1	17	231	369	154	11	783	7.8	0.0	0.0
DALWALLINU	1	21	465	1,055	309	60	1,912	8.9	0.3	0.9
DANDARAGAN	14	32	339	787	13	10	1,195	46.6	2.2	10.1
DOWERIN	1	6	165	509	192	66	939	7.1	5.8	1.0
GINGIN	13	67	391	352	26	17	866	12.5	0.0	2.2
GOOMALLING	0	7	104	391	81	5	588	9.5	4.6	7.0
KELLERBERRIN	1	17	216	418	287	7	945	26.4	8.7	15.8
KOORDA	0	7	242	480	302	36	1,067	9.2	5.1	0.0
MERREDIN	11	38	370	563	286	23	1,291	26.0	41.7	8.3
MOORA	2	22	313	564	20	13	935	3.8	4.0	19.3
MOUNT MARSHALL	0	8	292	725	632	19	1,676	0.0	0.0	0.0
MUKINBUDIN	0	9	179	579	126	13	905	0.1	2.1	8.6
NORTHAM (S)	14	67	375	246	49	1	753	55.0	4.8	4.0
NUNGARIN	0	3	103	364	23	17	510	0.0	0.0	0.0
TAMMIN	0	6	126	262	83	18	495	1.2	3.3	4.0
TOODYAY	1	11	274	285	28	26	626	0.5	0.3	11.2
TRAYNING	0	8	139	544	41	20	752	6.2	2.5	0.3
VICTORIA PLAINS	0	7	247	414	118	23	808	5.2	0.2	0.9
WESTONIA	0	3	116	528	209	26	881	0.0	0.0	0.0
WONGAN BALLIDU	3	19	331	483	466	19	1,320	6.5	0.0	4.3
WYALKATCHEM	0	11	133	494	61	26	724	3.8	0.9	0.0
YILGARN	0	14	285	2,172	74	176	2,721	5.9	7.9	1.2
YORK	2	36	261	200	158	9	667	19.6	36.2	3.0
Region	64	436	5,978	12,924	3,741	647	23,791	264	130	106
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17
Wheatbelt North Regional Road Group

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Built up areas	Outside built up areas		
						Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
CHITTERING	297	552	336	0	1,185	113,515	1,682	3,333	2,128
CUNDERDIN	224	803	788	96	1,911	4,492	1,491	1,052	367
DALWALLINU	277	1,004	4,405	0	5,686	5,155	1,023	1,196	397
DANDARAGAN	1,052	2,761	1,371	0	5,184	10,252	1,366	1,677	508
DOWERIN	212	785	458	0	1,455	10,923	2,925	797	296
GINGIN	447	2,597	1,722	0	4,766	2,730	2,914	3,746	1,774
GOOMALLING	157	177	1,549	39	1,922	9,809	3,085	3,080	1,155
KELLERBERRIN	367	33	918	220	1,538	7,809	4,847	681	183
KOORDA	179	745	902	0	1,826	7,756	1,402	802	276
MERREDIN	778	1,819	520	50	3,167	5,845	2,525	625	31
MOORA	1,134	1,101	600	53	2,888	19,286	1,383	663	3,117
MOUNT MARSHALL	62	1,215	1,061	375	2,713	3,814	2,372	687	774
MUKINBUDIN	121	726	593	0	1,440	5,937	2,720	869	547
NORTHAM (S)	2,170	1,283	910	0	4,363	12,093	1,139	2,914	7,504
NUNGARIN	0	307	644	0	951	0	4,206	2,423	1,318
TAMMIN	85	599	627	0	1,311	6,087	1,851	1,677	714
TOODYAY	303	787	272	51	1,413	11,304	1,073	3,300	740
TRAYNING	59	2	811	0	872	2,689	9,703	841	460
VICTORIA PLAINS	145	796	658	0	1,599	8,829	1,479	1,318	795
WESTONIA	89	637	350	0	1,076	12,958	550	1,425	201
WONGAN BALLIDU	453	763	861	0	2,077	7,838	1,565	1,200	322
WYALKATCHEM	109	655	585	0	1,349	3,174	2,031	913	323
YILGARN	225	903	291	870	2,289	6,494	1,704	148	9,389
YORK	595	801	1,023	147	2,566	7,148	1,449	1,512	742
Region	9,540	21,851	22,255	1,901	55,547	8,039	2,060	1,753	544
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Wheatbelt North Regional Road Group

Appendix 13

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
CHITTERING	932	257	3,216	0	4,405	21.2%	5.8%	73.0%	0.0%	3,146	1,152
CUNDERDIN	899	1,018	0	0	1,917	46.9%	53.1%	0.0%	0.0%	3,048	1,917
DALWALLINU	5,298	388	966	0	6,652	79.6%	5.8%	14.5%	0.0%	6,062	2,321
DANDARAGAN	1,091	4,109	149	0	5,349	20.4%	76.8%	2.8%	0.0%	5,505	5,200
DOWERIN	514	941	0	0	1,455	35.3%	64.7%	0.0%	0.0%	2,693	1,423
GINGIN	1,981	2,814	32	123	4,950	40.0%	56.8%	0.6%	2.5%	5,460	4,795
GOOMALLING	1,188	771	1,040	0	2,999	39.6%	25.7%	34.7%	0.0%	2,063	1,724
KELLERBERRIN	323	1,215	964	0	2,502	12.9%	48.6%	38.5%	0.0%	3,063	1,126
KOORDA	916	910	838	0	2,664	34.4%	34.2%	31.5%	0.0%	3,298	1,826
MERREDIN	684	2,483	278	0	3,445	19.9%	72.1%	8.1%	0.0%	5,178	3,167
MOORA	926	1,962	1,132	0	4,020	23.0%	48.8%	28.2%	0.0%	4,448	2,888
MOUNT MARSHALL	811	1,902	164	0	2,877	28.2%	66.1%	5.7%	0.0%	4,339	2,713
MUKINBUDIN	442	998	170	2	1,612	27.4%	61.9%	10.5%	0.1%	2,890	1,432
NORTHAM (S)	2,373	2,013	1,194	42	5,622	42.2%	35.8%	21.2%	0.7%	5,565	4,243
NUNGARIN	644	307	265	0	1,216	53.0%	25.2%	21.8%	0.0%	1,486	951
TAMMIN	579	732	41	0	1,352	42.8%	54.1%	3.0%	0.0%	1,623	1,103
TOODYAY	856	582	1,570	0	3,008	28.5%	19.3%	52.2%	0.0%	3,631	1,404
TRAYNING	193	679	577	0	1,449	13.3%	46.9%	39.8%	0.0%	2,516	872
VICTORIA PLAINS	1,097	519	1,070	0	2,686	40.8%	19.3%	39.8%	0.0%	3,349	1,616
WESTONIA	695	381	903	0	1,979	35.1%	19.3%	45.6%	0.0%	2,407	1,076
WONGAN BALLIDU	1,019	1,058	830	56	2,963	34.4%	35.7%	28.0%	1.9%	4,081	2,077
WYALKATCHEM	523	826	0	0	1,349	38.8%	61.2%	0.0%	0.0%	2,346	1,115
YILGARN	1,127	1,162	1,115	577	3,981	28.3%	29.2%	28.0%	14.5%	7,471	2,289
YORK	1,107	1,517	100	0	2,724	40.6%	55.7%	3.7%	0.0%	3,824	2,459
Region	26,218	29,544	16,614	800	73,176	35.8%	40.4%	22.7%	1.1%	89,494	50,889
State	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17

Wheatbelt North Regional Road Group

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All Bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
CHITTERING	12	280	723	331	0	4	40
CUNDERDIN	5	196	409	37	0	6	0
DALWALLINU	0	0	0	0	0	0	0
DANDARAGAN	1	0	484	0	0	16	0
DOWERIN	1	69	0	0	0	0	0
GINGIN	5	0	369	647	0	29	0
GOOMALLING	6	30	753	55	0	37	0
KELLERBERRIN	4	379	149	0	0	0	0
KOORDA	0	0	0	0	0	0	0
MERREDIN	4	483	0	0	0	0	0
MOORA	8	1,329	501	0	0	0	0
MOUNT MARSHALL	0	0	0	0	0	0	0
MUKINBUDIN	0	0	0	0	0	0	0
NORTHAM (S)	25	3,056	3,032	1,009	0	23	0
NUNGARIN	0	0	0	0	0	0	0
TAMMIN	0	0	0	0	0	0	0
TOODYAY	16	1,740	2,983	107	0	25	0
TRAYNING	0	0	0	0	0	0	0
VICTORIA PLAINS	7	0	812	0	0	17	0
WESTONIA	0	0	0	0	0	0	0
WONGAN BALLIDU	0	0	0	0	0	0	0
WYALKATCHEM	0	0	0	0	0	0	0
YILGARN	0	0	0	0	0	0	0
YORK	19	198	2,879	527	0	58	18
Region	113	7,760	13,093	2,714	0	215	58
State	902	68,510	77,950	17,787	2,462	10,024	25,947

Sealed road area statistics and expenditure 2016-17

Wheatbelt North Regional Road Group

Appendix 13

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
CHITTERING	9,157	1,982,780	297	552	32.43	0.28
CUNDERDIN	174,539	1,420,931	224	803	1.28	0.57
DALWALLINU	188,074	2,399,187	277	1,004	1.47	0.42
DANDARAGAN	359,145	2,239,809	1,052	2,761	2.93	1.23
DOWERIN	67,933	1,047,793	212	785	3.12	0.75
GINGIN	573,037	2,652,098	447	2,597	0.78	0.98
GOOMALLING	56,018	625,142	157	177	2.80	0.28
KELLERBERRIN	164,491	1,219,607	367	33	2.23	0.03
KOORDA	80,781	1,487,596	179	745	2.22	0.50
MERREDIN	465,842	2,256,476	778	1,819	1.67	0.81
MOORA	205,800	1,911,038	1,134	1,101	5.51	0.58
MOUNT MARSHALL	56,899	1,752,673	62	1,215	1.09	0.69
MUKINBUDIN	71,332	1,086,167	121	726	1.70	0.67
NORTHAM (S)	628,073	2,108,320	2,170	1,283	3.46	0.61
NUNGARIN	16,227	425,267	0	307	0.00	0.72
TAMMIN	48,871	702,926	85	599	1.74	0.85
TOODYAY	93,814	1,707,011	303	787	3.23	0.46
TRAYNING	76,785	835,450	59	2	0.77	0.00
VICTORIA PLAINS	57,482	1,594,529	145	796	2.52	0.50
WESTONIA	24,039	795,588	89	637	3.70	0.80
WONGAN BALLIDU	202,288	1,858,948	453	763	2.24	0.41
WYALKATCHEM	120,199	776,578	109	655	0.91	0.84
YILGARN	121,266	1,782,927	225	903	1.86	0.51
YORK	291,349	1,539,141	595	801	2.04	0.52
Region	4,153,442	36,207,982	9,540	21,851	2.30	0.60
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Wheatbelt North Regional Road Group

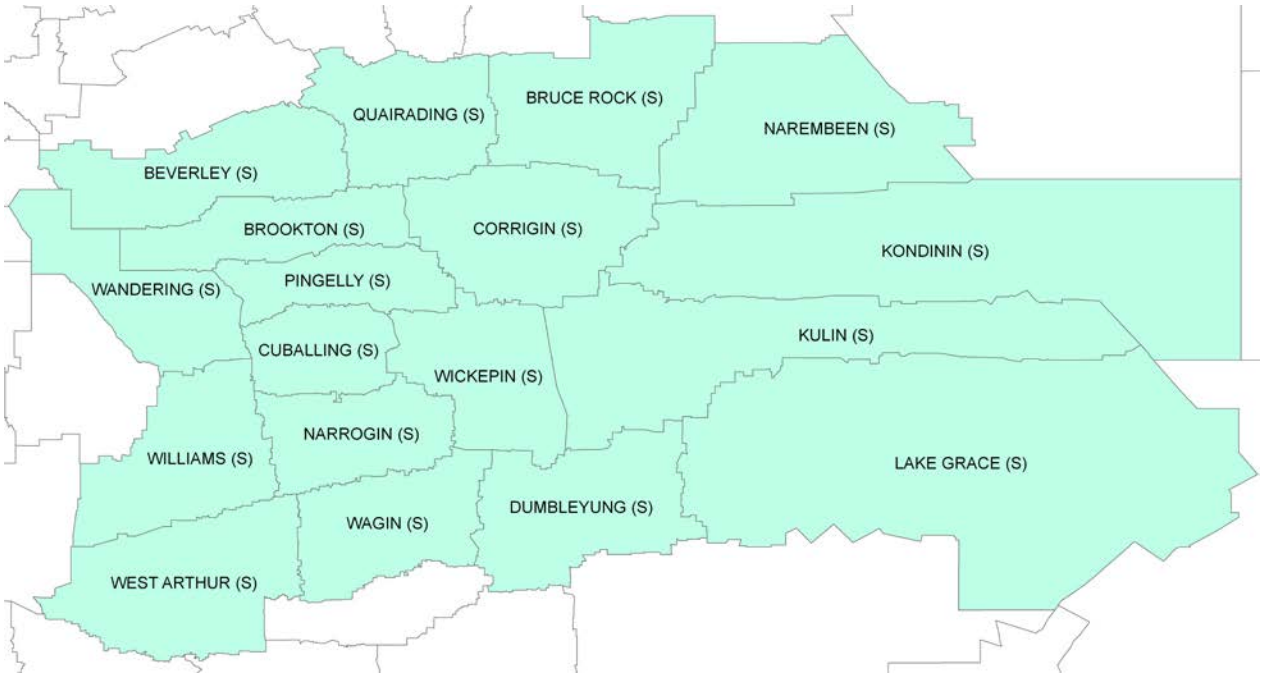
COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
CHITTERING	1	20	21	9	281	22	14
CUNDERDIN	18	43	22	19	231	48	27
DALWALLINU	22	36	15	13	465	31	12
DANDARAGAN	45	27	23	15	339	31	23
DOWERIN	7	34	26	20	165	39	18
GINGIN	80	33	26	16	391	30	22
GOOMALLING	7	45	24	0	104	42	22
KELLERBERRIN	18	40	21	9	216	40	30
KOORDA	7	29	15	0	242	38	13
MERREDIN	49	26	19	15	370	29	21
MOORA	24	57	29	29	313	58	23
MOUNT MARSHALL	8	24	21	0	292	32	19
MUKINBUDIN	9	54	32	0	179	56	31
NORTHAM (S)	81	50	28	19	375	43	22
NUNGARIN	3	0	0	0	103	48	33
TAMMIN	6	35	28	19	126	37	25
TOODYAY	12	31	14	6	274	31	19
TRAYNING	9	12	13	4	139	43	30
VICTORIA PLAINS	7	52	25	0	247	44	18
WESTONIA	3	35	35	0	116	46	33
WONGAN BALLIDU	22	29	24	28	331	31	22
WYALKATCHEM	11	26	24	0	133	26	18
YILGARN	14	35	22	0	285	16	15
YORK	38	25	19	19	261	27	21
Region	501	35	23	16	5,978	37	22

APPENDIX 14

WHEATBELT SOUTH REGION

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Road data
- Expenditure on road preservation
- Expenditure by work categories
- Bridge statistics and expenditure
- Sealed road area statistics and expenditure
- Sealed road age



Road assets & expenditure indicators 2016-17

Wheatbelt South Regional Road Group

Appendix 14

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
BEVERLEY	0.51	2.7%	37%	0.38
BROOKTON	0.41	3.1%	50%	0.24
BRUCE ROCK	0.39	2.8%	49%	0.47
CORRIGIN	0.25	3.7%	47%	0.42
CUBALLING	0.50	3.1%	40%	0.38
DUMBLEYUNG	0.56	3.8%	36%	0.58
KONDININ	0.44	4.2%	82%	0.69
KULIN	0.42	4.3%	51%	0.50
LAKE GRACE	0.56	4.4%	59%	0.38
NAREMBEEN	0.38	4.1%	21%	0.26
NARROGIN	0.56	3.2%	53%	0.82
PINGELLY	0.35	3.2%	48%	0.56
QUAIRADING	0.31	3.4%	33%	0.27
WAGIN	0.54	3.2%	83%	0.57
WANDERING	0.44	3.0%	3%	0.34
WEST ARTHUR	0.35	3.1%	65%	0.54
WICKEPIN	0.50	4.0%	54%	0.41
WILLIAMS	0.46	3.3%	40%	0.55
Region	0.44	3.5%	48%	0.46
State	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Wheatbelt South Regional Road Group

Appendix 14

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of Total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
BEVERLEY	2,267	655	29%	72%	20%	417
BROOKTON	1,608	351	22%	86%	17%	350
BRUCE ROCK	2,585	250	10%	123%	7%	270
CORRIGIN	3,105	850	27%	123%	28%	778
CUBALLING	1,604	343	21%	99%	19%	389
DUMBLEYUNG	2,298	481	21%	113%	19%	831
KONDININ	3,075	425	14%	121%	12%	404
KULIN	2,915	771	26%	137%	23%	969
LAKE GRACE	3,596	667	19%	125%	12%	509
NAREMBEEN	5,191	1,192	23%	126%	36%	1513
NARROGIN	3,847	2,059	54%	47%	35%	389
PINGELLY	2,485	476	19%	74%	20%	406
QUAIRADING	4,608	299	6%	100%	10%	293
WAGIN	1,807	305	17%	74%	9%	161
WANDERING	1,543	390	25%	92%	32%	905
WEST ARTHUR	2,271	346	15%	119%	15%	389
WICKEPIN	1,482	16	1%	102%	1%	22
WILLIAMS	1,635	546	33%	81%	28%	593
Region	47,922	10,422	22%	101%	19%	467
State	904,322	446,552	49%	26%	21.6%	171

Road data 2016-17

Wheatbelt South Regional Road Group

Appendix 14

COUNCIL	Road data [kilometres]							Footpaths [km]		Dual use
	Built up areas asphalt seal	Built up areas sprayed seal	Sealed roads outside built up areas	Gravel roads	Formed roads	Unformed roads	Total length	Bitumen / concrete	Gravel	Paths [km]
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
BEVERLEY	0	12	204	328	137	15	697	14.4	8.0	0.0
BROOKTON	0	10	95	330	95	3	532	5.2	0.0	3.1
BRUCE ROCK	0	14	414	557	171	17	1,173	5.3	14.4	2.1
CORRIGIN	1	13	317	568	148	12	1,058	0.0	0.0	0.0
CUBALLING	0	1	162	209	164	19	555	7.6	0.8	2.6
DUMBLEYUNG	0	7	175	600	192	15	989	0.0	0.0	0.0
KONDININ	0	12	182	998	123	22	1,337	3.2	7.4	4.2
KULIN	0	7	176	1,094	140	19	1,436	0.0	0.0	0.0
LAKE GRACE	0	15	193	1,811	200	61	2,281	0.0	0.0	0.0
NAREMBEEN	0	8	285	907	193	16	1,410	1.6	3.5	0.7
NARROGIN	6	43	194	299	247	10	799	7.7	0.0	24.7
PINGELLY	0	16	172	190	155	31	564	14.0	3.6	4.1
QUAIRADING	5	8	258	405	170	17	863	7.2	0.1	0.0
WAGIN	1	27	143	392	190	29	782	47.0	0.0	0.8
WANDERING	0	3	89	191	66	6	355	2.9	0.3	0.4
WEST ARTHUR	0	6	222	490	122	18	858	4.7	0.0	2.7
WICKEPIN	0	9	151	399	282	33	874	5.6	5.6	2.3
WILLIAMS	0	8	126	282	55	3	473	7.6	5.8	3.1
Region	14	220	3,557	10,051	2,849	346	17,037	134	49	51
State	12,342	3,708	23,476	56,109	21,430	10,643	127,707	9,552	498	5,168

Expenditure on road preservation 2016-17

Wheatbelt South Regional Road Group

Appendix 14

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
BEVERLEY	150	544	574	24	1,292	3,709	752	1,884	991
BROOKTON	284	303	0	0	587	11,682	2,622	1,275	745
BRUCE ROCK	182	1,181	357	52	1,772	4,258	5,835	1,863	401
CORRIGIN	341	812	514	0	1,667	8,748	742	438	285
CUBALLING	185	315	268	100	868	94,264	1,848	1,990	2,683
DUMBLEYUNG	56	376	1,406	60	1,898	2,687	1,822	1,196	361
KONDININ	233	1,020	1,789	0	3,042	7,568	1,048	314	318
KULIN	104	926	1,182	0	2,212	5,282	751	1,229	855
LAKE GRACE	513	651	1,561	0	2,725	14,535	1,408	1,091	452
NAREMBEEN	0	379	2,078	0	2,457	0	915	1,064	465
NARROGIN	1,539	369	1,147	0	3,055	11,048	4,216	1,225	1,373
PINGELLY	264	619	386	186	1,455	8,103	3,391	1,877	1,083
QUAIRADING	174	443	353	92	1,062	5,318	3,175	570	387
WAGIN	264	854	531	0	1,649	3,414	1,620	1,822	380
WANDERING	18	117	340	0	475	2,739	0	5,610	960
WEST ARTHUR	38	1,061	571	104	1,774	2,480	1,664	1,499	667
WICKEPIN	19	476	535	0	1,030	1,083	7,660	441	281
WILLIAMS	78	364	806	32	1,280	3,900	306	2,618	1,125
Region	4,442	10,810	14,398	650	30,300	7,189	1,748	1,448	247
State	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Wheatbelt South Regional Road Group

Appendix 14

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
BEVERLEY	790	721	699	57	2,267	34.8%	31.8%	30.8%	2.5%	3,988	1,511
BROOKTON	433	165	1,003	6	1,607	26.9%	10.3%	62.4%	0.4%	2,449	598
BRUCE ROCK	1,009	975	475	126	2,585	39.0%	37.7%	18.4%	4.9%	4,262	1,984
CORRIGIN	872	795	1,437	0	3,104	28.1%	25.6%	46.3%	0.0%	3,906	1,630
CUBALLING	611	268	725	0	1,604	38.1%	16.7%	45.2%	0.0%	2,319	879
DUMBLEYUNG	729	1,171	398	0	2,298	31.7%	51.0%	17.3%	0.0%	3,257	1,900
KONDININ	936	2,106	33	0	3,075	30.4%	68.5%	1.1%	0.0%	3,986	2,769
KULIN	917	1,295	0	703	2,915	31.5%	44.4%	0.0%	24.1%	4,329	2,160
LAKE GRACE	1,349	1,376	871	0	3,596	37.5%	38.3%	24.2%	0.0%	6,385	2,423
NAREMBEEN	920	1,537	1,669	1,065	5,191	17.7%	29.6%	32.2%	20.5%	4,422	1,146
NARROGIN	1,784	1,273	789	0	3,846	46.4%	33.1%	20.5%	0.0%	3,507	2,874
PINGELLY	1,317	185	983	0	2,485	53.0%	7.4%	39.6%	0.0%	2,462	1,379
QUAIRADING	699	379	3,530	0	4,608	15.2%	8.2%	76.6%	0.0%	3,409	915
WAGIN	560	1,114	133	0	1,807	31.0%	61.6%	7.4%	0.0%	2,748	1,563
WANDERING	276	354	913	0	1,543	17.9%	22.9%	59.2%	0.0%	1,790	612
WEST ARTHUR	684	1,462	125	0	2,271	30.1%	64.4%	5.5%	0.0%	3,807	2,049
WICKEPIN	483	547	452	0	1,482	32.6%	36.9%	30.5%	0.0%	2,475	1,007
WILLIAMS	763	517	354	0	1,634	46.7%	31.6%	21.7%	0.0%	1,963	1,088
Region	15,132	16,240	14,589	1,957	47,918	31.6%	33.9%	30.4%	4.1%	61,464	28,487
State	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Bridge statistics and expenditure 2016-17

Wheatbelt South Regional Road Group

COUNCIL	Number	Bridge deck area [sq metres]				Expenditure $000s	
	All Bridges	Concrete and steel	Timber with concrete overlay	Timber without concrete overlay	Footbridges	Preservation	Upgrade
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
BEVERLEY	30	175	4,504	1,329	0	219	0
BROOKTON	15	137	1,011	1,570	0	11	0
BRUCE ROCK	88	4,494	0	0	0	212	0
CORRIGIN	2	0	0	230	0	0	0
CUBALLING	12	0	1,889	373	0	11	0
DUMBLEYUNG	5	70	628	112	0	2	0
KONDININ	0	0	0	0	0	0	0
KULIN	0	0	0	0	0	0	0
LAKE GRACE	0	0	0	0	0	0	0
NAREMBEEN	1	94	0	0	0	0	0
NARROGIN	7	205	619	90	181	2	0
PINGELLY	17	42	443	1,052	0	47	163
QUAIRADING	15	249	797	338	0	16	0
WAGIN	9	553	410	351	0	25	66
WANDERING	15	457	1,502	613	0	155	0
WEST ARTHUR	17	90	3,574	570	0	372	0
WICKEPIN	4	33	274	54	0	0	0
WILLIAMS	5	525	779	0	0	0	0
Region	242	7,124	16,430	6,682	181	1,072	229
State	902	68,510	77,950	17,787	2,462	10,024	25,947

Sealed road area statistics and expenditure 2016-17

Wheatbelt South Regional Road Group

Appendix 14

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
BEVERLEY	141,533	1,210,057	150	544	1.06	0.45
BROOKTON	85,086	559,273	284	303	3.34	0.54
BRUCE ROCK	149,605	1,962,031	182	1,181	1.22	0.60
CORRIGIN	136,438	1,655,246	341	812	2.50	0.49
CUBALLING	6,869	996,466	185	315	26.93	0.32
DUMBLEYUNG	72,938	1,169,872	56	376	0.77	0.32
KONDININ	107,754	1,168,618	233	1,020	2.16	0.87
KULIN	68,916	1,160,086	104	926	1.51	0.80
LAKE GRACE	123,532	1,339,042	513	651	4.15	0.49
NAREMBEEN	75,240	1,706,656	0	379	0.00	0.22
NARROGIN	487,539	1,297,350	1,539	369	3.16	0.28
PINGELLY	114,027	1,018,683	264	619	2.32	0.61
QUAIRADING	114,511	1,489,653	174	443	1.52	0.30
WAGIN	270,681	736,224	264	854	0.98	1.16
WANDERING	23,001	612,035	18	117	0.78	0.19
WEST ARTHUR	53,628	1,375,939	38	1,061	0.71	0.77
WICKEPIN	61,399	934,362	19	476	0.31	0.51
WILLIAMS	69,997	824,328	78	364	1.11	0.44
Region	2,162,694	21,215,919	4,442	10,810	2.05	0.51
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Wheatbelt South Regional Road Group

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
BEVERLEY	13	21	12	21	204	22	14
BROOKTON	10	27	27	0	95	29	29
BRUCE ROCK	14	52	39	0	414	47	29
CORRIGIN	13	53	59	44	317	41	31
CUBALLING	1	27	15	0	162	25	14
DUMBLEYUNG	7	45	30	0	175	29	7
KONDININ	12	41	32	0	182	36	22
KULIN	7	45	29	0	176	42	23
LAKE GRACE	16	44	31	0	193	18	12
NAREMBEEN	9	56	26	16	285	43	23
NARROGIN	49	37	18	6	194	28	14
PINGELLY	16	49	28	0	172	42	22
QUAIRADING	13	14	15	13	258	46	28
WAGIN	28	24	22	22	143	23	18
WANDERING	3	37	35	0	89	32	20
WEST ARTHUR	6	37	25	7	222	43	25
WICKEPIN	9	35	25	0	151	29	15
WILLIAMS	8	99	30	3	126	33	17
Region	234	41	28	17	3,557	34	20

APPENDIX 15

METROPOLITAN LOCAL GOVERNMENTS

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Expenditure on road preservation
- Expenditure by work categories
- Sealed road area statistics and expenditure
- Sealed road age

Road assets & expenditure indicators 2016-17

Metropolitan Local Governments

Appendix 15

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
ARMADALE	0.69	1.7%	49%	0.51
BASSENDEAN	0.81	1.6%	91%	1.47
BAYSWATER	0.84	1.6%	82%	1.08
BELMONT	0.87	1.6%	130%	1.21
CAMBRIDGE	0.74	1.6%	123%	1.30
CANNING	0.70	1.8%	54%	0.94
CLAREMONT	0.69	1.6%	153%	2.12
COCKBURN	0.57	1.7%	44%	0.67
COTTESLOE	0.68	1.6%	53%	0.52
EAST FREMANTLE	0.67	1.6%	94%	1.20
FREMANTLE	0.78	1.6%	82%	1.54
GOSNELLS	0.69	1.6%	103%	1.29
JOONDALUP	0.83	1.6%	86%	0.91
KALAMUNDA	0.80	1.7%	55%	0.91
KWINANA	0.70	1.8%	31%	0.87
MELVILLE	0.80	1.6%	140%	1.65
MOSMAN PARK	0.75	1.7%	71%	1.33
MUNDARING	0.60	2.1%	55%	0.75
NEDLANDS	0.83	1.6%	384%	3.14

Road assets & expenditure indicators 2016-17 [continued]

Metropolitan Local Governments

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
PEPPERMINT GROVE	0.87	1.5%	107%	1.77
PERTH	0.73	1.6%	159%	7.19
ROCKINGHAM	0.78	1.7%	83%	0.99
SERPENTINE JARRAHDALE	0.46	2.3%	82%	1.08
SOUTH PERTH	0.84	1.6%	113%	1.69
STIRLING	0.73	1.6%	99%	0.94
SUBIACO	0.79	1.5%	116%	2.16
SWAN	0.67	1.8%	61%	0.99
VICTORIA PARK	0.66	1.6%	101%	1.72
VINCENT	0.67	1.5%	83%	1.22
WANNEROO	0.77	1.6%	36%	0.45
Region Average	0.73	1.7%	82%	1.09
State Average	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Metropolitan Local Governments

Appendix 15

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of Total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ARMADALE	13,731	9,252	67%	14%	19%	111
BASSENDEAN	3,585	2,426	68%	8%	22%	151
BAYSWATER	11,248	7,283	65%	8%	15%	101
BELMONT	8,110	5,275	65%	9%	16%	126
CAMBRIDGE	6,790	5,290	78%	9%	29%	186
CANNING	21,498	12,444	58%	10%	19%	127
CLAREMONT	2,388	2,067	87%	3%	22%	190
COCKBURN	22,999	10,152	44%	12%	14%	93
COTTESLOE	658	534	81%	8%	7%	62
EAST FREMANTLE	1,158	1,070	92%	7%	19%	138
FREMANTLE	8,041	5,534	69%	6%	20%	178
GOSNELLS	26,368	21,178	80%	12%	30%	168
JOONDALUP	28,600	20,854	73%	11%	20%	125
KALAMUNDA	10,871	7,423	68%	17%	20%	122
KWINANA	7,952	5,099	46%	20%	28%	131
MELVILLE	19,014	12,190	64%	7%	17%	115
MOSMAN PARK	1,091	941	86%	6%	13%	99
MUNDARING	7,730	4,978	64%	22%	21%	124
NEDLANDS	8,597	7,075	82%	9%	40%	306

Expenditure from Local Governments' own resources 2016-17 [continued]

Metropolitan Local Governments

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of Total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
PEPPERMINT GROVE	390	307	79%	6%	20%	190
PERTH	24,445	23,012	94%	2%	34%	943
ROCKINGHAM	25,498	18,960	74%	13%	25%	143
SERPENTINE JARRAHDALE	7,341	3,785	52%	32%	25%	146
SOUTH PERTH	9,410	7,585	81%	6%	23%	164
STIRLING	31,209	24,498	78%	7%	16%	107
SUBIACO	8,810	7,919	90%	4%	41%	445
SWAN	47,753	37,476	78%	16%	43%	274
VICTORIA PARK	9,189	7,115	77%	6%	25%	185
VINCENT	7,175	5,431	76%	5%	19%	143
WANNEROO	28,150	13,678	49%	14%	12%	70
Region Average	409,799	290,831	71%	10%	22%	148
State Average	904,322	446,552	49%	26%	22%	171

Expenditure on road preservation 2016-17

Metropolitan Local Governments

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]	[10]	[11]
ARMADALE	5,635	124	0	0	5,759	5,398	1,521	5,391	143
BASSENDEAN	3,236	0	0	0	3,236	14,519	0	0	0
BAYSWATER	8,278	0	0	0	8,278	10,134	0	0	0
BELMONT	6,272	0	0	0	6,272	11,815	0	0	0
CAMBRIDGE	5,014	0	0	0	5,014	12,325	0	0	0
CANNING	10,985	0	0	0	10,985	8,459	0	0	0
CLAREMONT	2,388	0	0	0	2,388	22,961	0	0	0
COCKBURN	9,311	300	0	0	9,611	7,008	696	0	0
COTTESLOE	547	0	0	0	547	5,319	0	0	0
EAST FREMANTLE	934	0	0	0	934	11,208	0	0	0
FREMANTLE	6,084	0	0	0	6,084	14,917	0	0	0
GOSNELLS	19,917	0	0	0	19,917	14,043	4,024	0	1,301
JOONDALUP	19,164	0	0	0	19,164	8,474	0	0	0
KALAMUNDA	6,747	2,004	131	72	8,954	7,587	6,768	1,381	4,355
KWINANA	4,067	1,506	0	0	5,573	7,288	4,783	0	0
MELVILLE	17,957	0	0	0	17,957	15,368	0	0	0
MOSMAN PARK	1,076	0	0	0	1,076	12,468	0	0	0
MUNDARING	3,123	2,391	249	0	5,763	5,850	3,322	8,845	3,338
NEDLANDS	8,596	0	0	0	8,596	29,636	0	0	0

Expenditure on road preservation 2016-17 [continued]

Metropolitan Local Governments

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]	[10]	[11]
PEPPERMINT GROVE	389	0	0	0	389	18,339	0	0	0
PERTH	24,445	0	0	0	24,445	75,968	0	0	0
ROCKINGHAM	17,869	149	0	0	18,018	10,601	4,660	0	552
SERPENTINE JARRAHDALE	4,158	2,428	544	0	7,130	15,194	3,380	1,547	220
SOUTH PERTH	7,223	0	0	0	7,223	16,068	0	0	0
STIRLING	19,969	0	0	0	19,969	8,655	0	0	0
SUBIACO	4,399	0	0	0	4,399	23,417	0	0	0
SWAN	15,307	5,527	93	0	20,927	8,987	5,286	5,714	3,548
VICTORIA PARK	6,653	0	0	0	6,653	16,349	0	0	0
VINCENT	4,701	0	0	0	4,701	12,141	0	0	0
WANNEROO	12,045	68	0	0	12,113	4,441	3,644	0	0
Region	256,489	14,497	1,017	72	272,075	10,683	2,603	13,553	12,236
State Average	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Metropolitan Local Governments

Appendix 15

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
ARMADALE	3,847	2,392	6,552	940	13,731	28.0%	17.4%	47.7%	6.8%	12,351	6,239
BASSENDEAN	2,409	827	334	15	3,585	67.2%	23.1%	9.3%	0.4%	2,209	3,236
BAYSWATER	5,524	2,754	1,700	1,270	11,248	49.1%	24.5%	15.1%	11.3%	7,616	8,198
BELMONT	2,610	3,662	1,614	224	8,110	32.2%	45.2%	19.9%	2.8%	5,163	6,272
CAMBRIDGE	2,024	2,990	1,556	220	6,790	29.8%	44.0%	22.9%	3.2%	3,861	5,014
CANNING	8,540	2,613	8,973	1,371	21,497	39.7%	12.2%	41.7%	6.4%	11,841	11,153
CLAREMONT	843	1,545	0	0	2,388	35.3%	64.7%	0.0%	0.0%	1,125	2,388
COCKBURN	7,161	2,450	2,669	10,717	22,997	31.1%	10.7%	11.6%	46.6%	14,407	9,611
COTTESLOE	476	71	111	0	658	72.3%	10.8%	16.9%	0.0%	1,055	547
EAST FREMANTLE	670	264	224	0	1,158	57.9%	22.8%	19.3%	0.0%	780	934
FREMANTLE	4,582	1,502	1,957	0	8,041	57.0%	18.7%	24.3%	0.0%	3,962	6,084
GOSNELLS	12,025	8,186	5,380	777	26,368	45.6%	31.0%	20.4%	2.9%	15,663	20,211
JOONDALUP	8,878	10,463	9,260	0	28,601	31.0%	36.6%	32.4%	0.0%	21,204	19,341
KALAMUNDA	7,325	1,629	991	926	10,871	67.4%	15.0%	9.1%	8.5%	9,875	8,954
KWINANA	5,021	552	504	1,875	7,952	63.1%	6.9%	6.3%	23.6%	6,413	5,573
MELVILLE	9,811	8,146	120	937	19,014	51.6%	42.8%	0.6%	4.9%	10,886	17,957
MOSMAN PARK	740	336	0	15	1,091	67.8%	30.8%	0.0%	1.4%	808	1,076
MUNDARING	3,988	1,831	1,546	367	7,732	51.6%	23.7%	20.0%	4.7%	7,534	5,688
NEDLANDS	1,542	7,054	0	0	8,596	17.9%	82.1%	0.0%	0.0%	2,738	8,596

Expenditure by work categories 2016-17 [continued]

Metropolitan Local Governments

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
PEPPERMINT GROVE	210	179	0	0	389	54.0%	46.0%	0.0%	0.0%	220	389
PERTH	11,171	13,274	0	0	24,445	45.7%	54.3%	0.0%	0.0%	3,402	24,445
ROCKINGHAM	11,402	6,616	5,414	2,067	25,499	44.7%	25.9%	21.2%	8.1%	18,237	18,018
SERPENTINE JARRAHDALE	3,753	3,398	99	91	7,341	51.1%	46.3%	1.3%	1.2%	6,608	7,151
SOUTH PERTH	4,970	2,253	1,812	375	9,410	52.8%	23.9%	19.3%	4.0%	4,280	7,223
STIRLING	10,285	9,684	8,061	3,180	31,210	33.0%	31.0%	25.8%	10.2%	21,223	19,969
SUBIACO	3,271	1,128	4,362	48	8,809	37.1%	12.8%	49.5%	0.5%	2,033	4,399
SWAN	15,668	6,646	9,062	16,377	47,753	32.8%	13.9%	19.0%	34.3%	22,638	22,314
VICTORIA PARK	4,687	1,966	2,536	0	9,189	51.0%	21.4%	27.6%	0.0%	3,857	6,653
VINCENT	3,148	1,553	2,209	265	7,175	43.9%	21.6%	30.8%	3.7%	3,864	4,701
WANNEROO	8,698	3,415	15,110	926	28,149	30.9%	12.1%	53.7%	3.3%	26,636	12,113
Region	165,279	109,379	92,156	42,983	409,797	40.3%	26.7%	22.5%	10.5%	252,488	274,447
State Average	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Sealed road area statistics and expenditure 2016-17

Metropolitan Local Governments

Appendix 15

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ARMADALE	3,653,370	1,447,449	5,635	124	1.54	0.09
BASSENDEAN	780,064	5,455	3,236	0	4.15	0.00
BAYSWATER	2,858,887	8,732	8,278	0	2.90	0.00
BELMONT	1,858,017	2,624	6,272	0	3.38	0.00
CAMBRIDGE	1,423,862	15,408	5,014	0	3.52	0.00
CANNING	4,545,244	23,319	10,985	0	2.42	0.00
CLAREMONT	364,007	0	2,388	0	6.56	0.00
COCKBURN	4,649,949	1,242,511	9,311	300	2.00	0.24
COTTESLOE	359,906	0	547	0	1.52	0.00
EAST FREMANTLE	291,675	0	934	0	3.20	0.00
FREMANTLE	1,427,504	0	6,084	0	4.26	0.00
GOSNELLS	4,964,173	744,584	19,917	0	4.01	0.00
JOONDALUP	7,914,939	54,837	19,164	0	2.42	0.00
KALAMUNDA	3,112,411	1,006,941	6,747	2,004	2.17	1.99
KWINANA	1,953,232	853,244	4,067	1,506	2.08	1.77
MELVILLE	4,089,613	0	17,957	0	4.39	0.00
MOSMAN PARK	302,048	9,849	1,076	0	3.56	0.00
MUNDARING	1,868,455	1,972,575	3,123	2,391	1.67	1.21
NEDLANDS	1,015,188	0	8,596	0	8.47	0.00

Sealed road area statistics and expenditure 2016-17 [continued]

Metropolitan Local Governments

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
PEPPERMINT GROVE	74,240	0	389	0	5.24	0.00
PERTH	1,126,231	0	24,445	0	21.71	0.00
ROCKINGHAM	5,899,545	1,513,371	17,869	149	3.03	0.10
SERPENTINE JARRAHDALE	957,837	2,880,955	4,158	2,428	4.34	0.84
SOUTH PERTH	1,573,297	0	7,223	0	4.59	0.00
STIRLING	8,075,300	0	19,969	0	2.47	0.00
SUBIACO	657,497	0	4,399	0	6.69	0.00
SWAN	5,961,633	3,433,365	15,307	5,527	2.57	1.61
VICTORIA PARK	1,424,247	0	6,653	0	4.67	0.00
VINCENT	1,355,170	0	4,701	0	3.47	0.00
WANNEROO	9,493,611	1,098,835	12,045	68	1.27	0.06
Region	84,031,147	16,314,054	256,489	14,497	3.05	0.89
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Metropolitan Local Governments

Appendix 15

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ARMADALE	510	22	28	18	215	26	18
BASSENDEAN	96	40	0	26	1	34	11
BAYSWATER	346	40	0	19	1	24	24
BELMONT	227	26	0	18	0	23	23
CAMBRIDGE	170	40	14	22	2	43	39
CANNING	573	35	23	18	3	22	21
CLAREMONT	47	77	0	38	0	0	0
COCKBURN	655	21	48	23	178	31	30
COTTESLOE	47	52	23	24	0	0	0
EAST FREMANTLE	37	113	0	40	0	0	0
FREMANTLE	177	24	17	18	0	0	0
GOSNELLS	668	27	27	22	107	26	23
JOONDALUP	1,002	35	0	24	8	21	16
KALAMUNDA	441	24	12	13	158	27	14
KWINANA	284	25	27	15	117	30	20
MELVILLE	525	41	0	28	0	0	0
MOSMAN PARK	43	38	16	20	1	33	17
MUNDARING	282	35	24	22	332	29	22
NEDLANDS	137	55	0	18	0	0	0

Sealed road age 2016-17 [continued]
Metropolitan Local Governments

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
PEPPERMINT GROVE	9	28	0	21	0	0	0
PERTH	106	51	0	25	0	0	0
ROCKINGHAM	828	22	16	14	207	34	19
SERPENTINE JARRAHDALE	145	22	23	11	466	48	22
SOUTH PERTH	192	36	0	25	0	0	0
STIRLING	1,029	47	16	22	0	0	0
SUBIACO	77	48	0	29	0	0	0
SWAN	855	24	23	19	550	33	24
VICTORIA PARK	164	58	22	27	0	0	0
VINCENT	146	60	25	24	0	0	0
WANNEROO	1,368	20	20	16	135	22	18
Region		40	22	22		30	21

APPENDIX 16

SOUTH WEST COUNTRY CITIES AND TOWNS

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Expenditure on road preservation
- Expenditure by work categories
- Sealed road area statistics and expenditure
- Sealed road age

Appendix 16

Road assets & expenditure indicators 2016-17

South West country cities and towns

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
ALBANY	0.53	2.5%	80%	1.04
BUNBURY	0.64	1.9%	46%	0.81
GREATER GERALDTON	0.58	2.7%	49%	1.16
KALGOORLIE BOULDER	0.41	2.8%	83%	1.13
MANDURAH	0.68	1.8%	48%	0.72
Group Average	0.58	2.3%	63%	0.98
State Average	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

South West country cities and towns

Appendix 16

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of Total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ALBANY	13,350	7,951	60%	32%	27%	213
BUNBURY	9,621	5,746	60%	18%	23%	167
GREATER GERALDTON	19,101	7,803	41%	31%	22%	190
KALGOORLIE BOULDER	13,250	7,200	54%	31%	28%	221
MANDURAH	25,307	7,895	31%	12%	13%	93
Group Average	80,629	36,595	45%	22%	21%	158
State Average	904,322	446,552	49%	26%	22%	171

Expenditure on road preservation 2016-17

South West country cities and towns

Appendix 16

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]	[10]	[11]
ALBANY	6,615	2,832	2,198	133	11,778	12,269	4,002	2,793	4,884
BUNBURY	4,877	0	0	0	4,877	8,272	0	0	0
GREATER GERALDTON	9,802	2,163	5,640	236	17,841	15,065	289	1,659	687
KALGOORLIE BOULDER	9,308	376	1,603	0	11,287	12,369	1,706	1,757	483
MANDURAH	9,329	0	0	0	9,329	7,269	0	0	0
Group Average	39,931	5,371	9,441	369	55,112	10,466	1,818	4,342	891
State Average	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

South West country cities and towns

Appendix 16

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
ALBANY	7,375	4,490	835	650	13,350	55.2%	33.6%	6.3%	4.9%	11,412	11,865
BUNBURY	3,920	959	4,248	494	9,621	40.7%	10.0%	44.2%	5.1%	6,022	4,879
GREATER GERALDTON	7,388	10,651	1,062	0	19,101	38.7%	55.8%	5.6%	0.0%	12,755	14,790
KALGOORLIE BOULDER	6,557	4,730	1,963	0	13,250	49.5%	35.7%	14.8%	0.0%	9,948	11,287
MANDURAH	7,499	1,882	12,291	3,635	25,307	29.6%	7.4%	48.6%	14.4%	12,995	9,379
Group Average	32,739	22,712	20,399	4,779	80,629	40.6%	28.2%	25.3%	5.9%	53,132	52,200
State Average	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Sealed road area statistics and expenditure 2016-17

South West country cities and towns

Appendix 16

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ALBANY	1,887,129	3,093,369	6,615	2,832	3.51	0.92
BUNBURY	2,063,571	367,274	4,877	0	2.36	0.00
GREATER GERALDTON	2,277,308	3,700,439	9,802	2,163	4.30	0.58
KALGOORLIE BOULDER	2,633,812	1,245,406	9,308	376	3.53	0.30
MANDURAH	4,492,070	573,316	9,329	0	2.08	0.00
Group	13,353,890	8,979,804	39,931	5,371	2.99	0.60
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
South West country cities and towns

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ALBANY	266	32	24	22	494	29	20
BUNBURY	267	36	22	20	52	28	23
GREATER GERALDTON	290	41	19	18	533	28	18
KALGOORLIE BOULDER	231	50	29	31	160	32	24
MANDURAH	614	26	23	22	78	27	22
Group		37	23	23		29	21

APPENDIX 17

AGRICULTURAL LOCAL GOVERNMENTS WITH LARGE TOWNS

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Expenditure on road preservation
- Expenditure by work categories
- Sealed road area statistics and expenditure
- Sealed road age

Road assets & expenditure indicators 2016-17

Agricultural Local Governments with large towns

Appendix 17

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
AUGUSTA MARGARET RIVER	0.52	2.6%	80%	0.88
BUSSELTON	0.40	2.3%	45%	0.78
COLLIE	0.53	2.7%	60%	0.62
COOLGARDIE	0.44	3.3%	123%	0.79
ESPERANCE	0.55	3.4%	75%	0.68
HARVEY	0.55	2.5%	60%	0.74
KATANNING	0.46	3.2%	83%	0.65
MANJIMUP	0.39	2.9%	87%	0.84
MURRAY	0.64	2.4%	16%	0.48
NARROGIN	0.56	3.2%	53%	0.82
NORTHAM	0.41	2.5%	43%	0.76
Group Average	0.49	2.7%	63%	0.73
State Average	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Agricultural Local Governments with large towns

Appendix 17

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
AUGUSTA MARGARET RIVER	7,245	3,710	51%	39%	27%	263
BUSSELTON	14,879	8,142	55%	24%	26%	219
COLLIE	2,653	551	21%	34%	8%	58
COOLGARDIE	2,529	694	27%	41%	10%	176
ESPERANCE	15,710	6,194	39%	80%	33%	434
HARVEY	8,652	5,226	60%	28%	28%	189
KATANNING	4,187	1,080	26%	53%	22%	253
MANJIMUP	8,977	2,158	24%	69%	21%	230
MURRAY	7,840	1,612	21%	30%	12%	92
NARROGIN	3,847	2,059	54%	47%	35%	389
NORTHAM	5,622	3,591	64%	38%	34%	313
Group Average	82,141	35,017	42%	41%	24%	221
State Average	904,322	446,552	49%	26%	22%	171

Expenditure on road preservation 2016-17

Agricultural Local Governments with large towns

Appendix 17

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]	[10]	[11]
AUGUSTA MARGARET RIVER	1,873	3,242	698	0	5,813	8,332	2,944	2,168	2,117
BUSSELTON	4,775	1,884	800	56	7,515	9,278	3,030	3,047	6,373
COLLIE	525	1,205	377	0	2,107	3,106	2,832	1,955	107
COOLGARDIE	1,082	545	520	0	2,147	6,983	0	219	140
ESPERANCE	2,796	4,687	5,120	0	12,603	10,097	1,476	1,219	301
HARVEY	2,780	1,568	834	0	5,182	11,354	2,037	2,747	1,592
KATANNING	788	2,365	628	0	3,781	6,030	1,811	1,499	946
MANJIMUP	3,486	2,092	1,840	55	7,473	22,280	3,182	2,098	1,786
MURRAY	1,233	1,406	322	0	2,961	5,632	3,444	4,097	4,432
NARROGIN	1,539	369	1,147	0	3,055	11,048	4,216	1,225	1,373
NORTHAM	2,170	1,283	910	0	4,363	12,093	1,139	2,914	7,504
Group Average	23,047	20,646	13,196	111	57,000	9,472	2,950	2,152	595
State Average	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Agricultural Local Governments with large towns

Appendix 17

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
AUGUSTA MARGARET RIVER	2,612	3,503	1,130	0	7,245	36.1%	48.4%	15.6%	0.0%	6,945	6,115
BUSSELTON	5,741	2,640	5,053	1,446	14,880	38.6%	17.7%	34.0%	9.7%	10,585	8,276
COLLIE	770	1,409	272	203	2,654	29.0%	53.1%	10.2%	7.6%	3,538	2,179
COOLGARDIE	980	1,167	0	375	2,522	38.9%	46.3%	0.0%	14.9%	2,711	2,147
ESPERANCE	5,519	7,084	3,107	0	15,710	35.1%	45.1%	19.8%	0.0%	16,417	11,141
HARVEY	3,100	2,135	1,833	1,584	8,652	35.8%	24.7%	21.2%	18.3%	7,087	5,235
KATANNING	2,655	1,126	403	0	4,184	63.5%	26.9%	9.6%	0.0%	2,977	1,922
MANJIMUP	2,866	4,797	848	466	8,977	31.9%	53.4%	9.4%	5.2%	8,195	6,843
MURRAY	2,675	367	2,875	1,923	7,840	34.1%	4.7%	36.7%	24.5%	6,241	2,997
NARROGIN (S)	1,784	1,273	789	0	3,846	46.4%	33.1%	20.5%	0.0%	3,507	2,874
NORTHAM (S)	2,373	2,013	1,194	42	5,622	42.2%	35.8%	21.2%	0.7%	5,565	4,243
Group Average	31,075	27,514	17,504	6,039	82,132	37.8%	33.5%	21.3%	7.4%	73,767	53,972
State Average	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Sealed road area statistics and expenditure 2016-17

Agricultural Local Governments with large towns

Appendix 17

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
AUGUSTA MARGARET RIVER	786,804	2,316,185	1,873	3,242	2.38	1.40
BUSSELTON	1,801,283	3,555,049	4,775	1,884	2.65	0.53
COLLIE	591,528	1,261,944	525	1,205	0.89	0.95
COOLGARDIE	542,280	366,589	1,082	545	2.00	1.49
ESPERANCE	969,246	4,829,068	2,796	4,687	2.88	0.97
HARVEY	856,998	2,738,720	2,780	1,568	3.24	0.57
KATANNING	457,415	782,861	788	2,365	1.72	3.02
MANJIMUP	547,622	2,482,594	3,486	2,092	6.37	0.84
MURRAY	766,232	2,404,033	1,233	1,406	1.61	0.58
NARROGIN	487,539	1,297,350	1,539	369	3.16	0.28
NORTHAM	628,073	2,108,320	2,170	1,283	3.46	0.61
Group	8,435,019	24,142,711	23,047	20,646	2.73	0.86
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Agricultural Local Governments with large towns

Appendix 17

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
AUGUSTA MARGARET RIVER	117	26	28	19	395	28	20
BUSSELTON	266	58	30	16	582	58	19
COLLIE	70	39	19	12	184	28	19
COOLGARDIE	53	42	27	24	58	43	33
ESPERANCE	120	29	20	20	724	24	19
HARVEY	117	26	23	18	436	27	21
KATANNING	49	38	21	25	134	42	24
MANJIMUP	69	36	34	19	444	35	29
MURRAY	109	24	15	12	376	22	15
NARROGIN	49	37	18	6	194	28	14
NORTHAM	81	50	28	19	375	43	22
Group		37	24	17		34	21

APPENDIX 18

PASTORAL AND MINING LOCAL GOVERNMENTS WITH LARGE TOWNS

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Expenditure on road preservation
- Expenditure by work categories
- Sealed road area statistics and expenditure
- Sealed road age

Road assets & expenditure indicators 2016-17

Pastoral and Mining Local Governments with large towns

Appendix 18

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
ASHBURTON	0.50	3.8%	51%	0.57
BROOME	0.64	2.8%	78%	1.04
CARNARVON	0.63	3.2%	31%	0.39
DERBY WEST KIMBERLEY	0.53	3.9%	101%	1.63
EAST PILBARA	0.51	4.1%	59%	0.45
EXMOUTH	0.59	3.0%	55%	0.59
KARRATHA	0.50	2.6%	91%	1.12
PORT HEDLAND	0.50	2.5%	73%	0.97
WYNDHAM EAST KIMBERLEY	0.39	3.3%	35%	0.52
Group Average	0.53	3.2%	65%	0.77
State Average	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Pastoral and Mining Local Governments with large towns

Appendix 18

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ASHBURTON	4,566	2,061	45%	42%	16%	191
BROOME	7,349	4,387	60%	31%	30%	253
CARNARVON	2,152	260	12%	82%	3%	43
DERBY WEST KIMBERLEY	5,695	1,462	26%	48%	16%	164
EAST PILBARA	8,516	1,377	16%	56%	8%	114
EXMOUTH	1,641	353	22%	51%	8%	135
KARRATHA	8,474	4,964	59%	14%	18%	189
PORT HEDLAND	7,404	4,114	56%	21%	22%	248
WYNDHAM EAST KIMBERLEY	3,821	1,386	36%	51%	16%	161
Group Average	49,618	20,364	41%	37%	17%	187
State Average	904,322	446,552	49%	26%	22%	171

Expenditure on road preservation 2016-17

Pastoral and Mining Local Governments with large towns

Appendix 18

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Built up areas	Outside built up areas		
						Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]	[10]	[11]
ASHBURTON	1,213	491	1,370	410	3,484	9,494	0	1,060	972
BROOME	4,325	729	0	986	6,040	18,773	2,116	0	0
CARNARVON	946	614	581	0	2,141	8,611	1,695	1,463	658
DERBY WEST KIMBERLEY	2,449	397	2,203	646	5,695	28,595	0	5,290	977
EAST PILBARA	1,925	190	2,022	555	4,692	18,351	3,579	1,277	1,924
EXMOUTH	1,085	460	96	0	1,641	12,622	0	0	0
KARRATHA	4,995	0	1,713	0	6,708	13,809	0	3,911	627
PORT HEDLAND	4,360	0	0	461	4,821	14,979	5,925	670	0
WYNDHAM EAST KIMBERLEY	1,450	425	611	350	2,836	10,154	4,524	2,964	5,091
Group Average	22,748	3,306	8,596	3,408	38,058	14,770	1,571	1,883	1,246
State Average	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Pastoral and Mining Local Governments with large towns

Appendix 18

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
ASHBURTON	1,967	1,517	20	1,063	4,567	43.1%	33.2%	0.4%	23.3%	5,319	3,048
BROOME	3,507	2,533	1,027	282	7,349	47.7%	34.5%	14.0%	3.8%	5,793	6,026
CARNARVON	1,364	777	11	0	2,152	63.4%	36.1%	0.5%	0.0%	5,425	2,141
DERBY WEST KIMBERLEY	2,111	3,584	0	0	5,695	37.1%	62.9%	0.0%	0.0%	3,262	5,305
EAST PILBARA	2,555	2,137	3,824	0	8,516	30.0%	25.1%	44.9%	0.0%	7,211	3,224
EXMOUTH	794	847	0	0	1,641	48.4%	51.6%	0.0%	0.0%	2,766	1,641
KARRATHA	3,058	3,661	784	971	8,474	36.1%	43.2%	9.3%	11.5%	5,331	5,986
PORT HEDLAND	3,332	1,489	2,584	0	7,405	45.0%	20.1%	34.9%	0.0%	4,993	4,821
WYNDHAM EAST KIMBERLEY	1,555	1,518	749	0	3,822	40.7%	39.7%	19.6%	0.0%	5,412	2,799
Group Average	20,243	18,063	8,999	2,316	49,621	40.8%	36.4%	18.1%	4.7%	45,513	34,991
State Average	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Sealed road area statistics and expenditure 2016-17

Pastoral and Mining Local Governments with large towns

Appendix 18

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
ASHBURTON	447,197	474,874	1,213	491	2.71	1.03
BROOME	806,324	1,202,398	4,325	729	5.36	0.61
CARNARVON	384,490	1,564,368	946	614	2.46	0.39
DERBY WEST KIMBERLEY	299,757	270,645	2,449	397	8.17	1.47
EAST PILBARA	367,137	548,618	1,925	190	5.24	0.35
EXMOUTH	300,872	856,471	1,085	460	3.61	0.54
KARRATHA	1,265,993	310,837	4,995	0	3.95	0.00
PORT HEDLAND	1,018,786	502,706	4,360	0	4.28	0.00
WYNDHAM EAST KIMBERLEY	499,796	1,029,084	1,450	425	2.90	0.41
Group	5,390,352	6,760,000	22,748	3,306	4.22	0.49
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Pastoral and Mining Local Governments with large towns

Appendix 18

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ASHBURTON	64	33	27	30	102	27	20
BROOME	103	26	19	17	175	16	12
CARNARVON	48	40	14	17	221	20	11
DERBY WEST KIMBERLEY	40	34	21	15	40	22	16
EAST PILBARA	47	37	32	25	83	19	18
EXMOUTH	39	30	15	13	116	24	14
KARRATHA	173	38	26	23	41	35	30
PORT HEDLAND	135	34	32	17	61	22	20
WYNDHAM EAST KIMBERLEY	57	47	25	4	186	40	26
Group		35	23	18		25	19

APPENDIX 19

AGRICULTURAL LOCAL GOVERNMENTS WITHOUT LARGE TOWNS

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Expenditure on road preservation
- Expenditure by work categories
- Sealed road area statistics and expenditure
- Sealed road age

Road assets & expenditure indicators 2016-17

Agricultural Local Governments without large towns

Appendix 19

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
BEVERLEY	0.51	2.7%	37%	0.38
BODDINGTON	0.44	3.1%	51%	0.47
BOYUP BROOK	0.41	3.2%	11%	0.64
BRIDGETOWN GREENBUSHES	0.48	3.0%	44%	0.52
BROOKTON	0.41	3.1%	50%	0.24
BROOMEHILL TAMBELLUP	0.47	3.5%	48%	0.52
BRUCE ROCK	0.39	2.8%	49%	0.47
CAPEL	0.66	2.4%	36%	0.78
CARNAMAH	0.50	3.5%	47%	0.77
CHAPMAN VALLEY	0.57	3.9%	62%	0.89
CHITTERING	0.55	3.2%	29%	0.37
COOROW	0.50	3.5%	40%	0.46
CORRIGIN	0.25	3.7%	47%	0.42
CRANBROOK	0.38	3.4%	19%	0.21
CUBALLING	0.50	3.1%	40%	0.38
CUNDERDIN	0.29	3.6%	56%	0.63
DALWALLINU	0.54	3.8%	33%	0.38
DANDARAGAN	0.45	3.3%	129%	0.94
DARDANUP	0.63	2.3%	72%	1.06
DENMARK	0.54	2.9%	104%	1.10
DONNYBROOK-BALINGUP	0.42	2.7%	51%	0.58
DOWERIN	0.44	4.0%	78%	0.53
DUMBLEYUNG	0.56	3.8%	36%	0.58

Road assets & expenditure indicators 2016-17 [continued]

Agricultural Local Governments without large towns

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
GINGIN	0.41	3.3%	64%	0.88
GNOWANGERUP	0.52	3.9%	192%	0.85
GOOMALLING	0.42	3.5%	30%	0.84
IRWIN	0.60	3.1%	86%	0.98
JERRAMUNGUP	0.52	4.0%	0%	0.17
KELLERBERRIN	0.36	3.6%	24%	0.37
KENT	0.47	4.4%	38%	0.54
KOJONUP	0.37	3.5%	24%	0.61
KONDININ	0.44	4.2%	82%	0.69
KOORDA	0.48	4.0%	45%	0.55
KULIN	0.42	4.3%	51%	0.50
LAKE GRACE	0.56	4.4%	59%	0.38
MERREDIN	0.48	3.5%	87%	0.61
MINGENEW	0.64	3.0%	59%	0.83
MOORA	0.30	3.2%	66%	0.65
MORAWA	0.49	4.2%	58%	0.43
MOUNT MARSHALL	0.46	4.3%	79%	0.63
MUKINBUDIN	0.25	4.0%	61%	0.50
NANNUP	0.42	2.9%	45%	1.30
NAREMBEEN	0.38	4.1%	21%	0.26
NORTHAMPTON	0.47	3.6%	71%	0.63
NUNGARIN	0.33	4.1%	71%	0.64
PERENJORI	0.56	4.2%	66%	0.48
PINGELLY	0.35	3.2%	48%	0.56

Road assets & expenditure indicators 2016-17 [continued]

Agricultural Local Governments without large towns

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
PLANTAGENET	0.43	3.6%	58%	0.85
QUAIRADING	0.31	3.4%	33%	0.27
RAVENSTHORPE	0.60	3.9%	83%	0.87
TAMMIN	0.37	3.9%	83%	0.68
THREE SPRINGS	0.59	3.8%	36%	0.52
TOODYAY	0.47	2.8%	40%	0.39
TRAYNING	0.36	4.0%	7%	0.35
VICTORIA PLAINS	0.36	3.7%	25%	0.48
WAGIN	0.54	3.2%	83%	0.57
WANDERING	0.44	3.0%	3%	0.34
WAROONA	0.52	2.9%	23%	0.27
WEST ARTHUR	0.35	3.1%	65%	0.54
WESTONIA	0.31	4.4%	67%	0.45
WICKEPIN	0.50	4.0%	54%	0.41
WILLIAMS	0.46	3.3%	40%	0.55
WONGAN BALLIDU	0.44	3.8%	51%	0.51
WOODANILLING	0.44	3.9%	50%	0.48
WYALKATCHEM	0.51	3.9%	78%	0.48
YILGARN	0.56	4.3%	57%	0.31
YORK	0.46	3.0%	49%	0.64
Group Average	0.46	3.5%	54%	0.57
State Average	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Agricultural Local Governments without large towns

Appendix 19

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road Expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
BEVERLEY	2,267	655	29%	72%	20%	417
BODDINGTON	1,114	344	31%	32%	12%	137
BOYUP BROOK	4,629	530	11%	127%	18%	321
BRIDGETOWN GREENBUSHES	3,835	351	9%	65%	6%	76
BROOKTON	1,608	351	22%	86%	17%	350
BROOMEHILL TAMBELLUP	4,325	881	20%	92%	27%	789
BRUCE ROCK	2,585	250	10%	123%	7%	270
CAPEL	4,859	2,512	52%	27%	22%	144
CARNAMAH	4,832	809	17%	94%	35%	1535
CHAPMAN VALLEY	3,512	968	28%	98%	36%	786
CHITTERING	4,405	1,571	36%	51%	34%	296
COOROW	2,422	513	21%	84%	14%	496
CORRIGIN	3,105	850	27%	123%	28%	778
CRANBROOK	2,648	1,038	39%	107%	36%	986
CUBALLING	1,604	343	21%	99%	19%	389
CUNDERDIN	1,917	393	21%	90%	14%	294
DALWALLINU	6,652	383	6%	137%	8%	301
DANDARAGAN	5,349	927	17%	59%	12%	287
DARDANUP	5,678	2,531	45%	28%	27%	177
DENMARK	3,910	1,617	41%	39%	27%	272
DONNYBROOK-BALINGUP	3,912	1,432	37%	64%	26%	242
DOWERIN	1,455	109	7%	126%	5%	163
DUMBLEYUNG	2,298	481	21%	113%	19%	831

Expenditure from Local Governments' own resources 2016-17 [continued]

Agricultural Local Governments without large towns

Appendix 19

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road Expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
GINGIN	4,950	2,307	47%	52%	26%	423
GNOWANGERUP	5,301	1,763	33%	96%	51%	1373
GOOMALLING	2,999	1,632	54%	89%	75%	1689
IRWIN	2,124	1,019	48%	40%	23%	273
JERRAMUNGUP	3,556	1,766	50%	87%	46%	1649
KELLERBERRIN	2,503	626	25%	103%	21%	519
KENT	2,653	779	29%	141%	27%	1489
KOJONUP	3,366	786	23%	102%	22%	397
KONDININ	3,075	425	14%	121%	12%	404
KOORDA	2,666	826	31%	130%	31%	1934
KULIN	2,915	771	26%	137%	23%	969
LAKE GRACE	3,596	667	19%	125%	12%	509
MERREDIN	3,446	881	26%	82%	17%	268
MINGENEW	1,500	266	18%	84%	17%	571
MOORA	4,020	1,415	35%	90%	34%	559
MORAWA	2,070	132	6%	104%	5%	153
MOUNT MARSHALL	2,877	97	3%	128%	3%	222
MUKINBUDIN	1,612	295	18%	114%	12%	648
NANNUP	3,825	1,646	43%	103%	65%	1277
NAREMBEEN	5,191	1,192	23%	126%	36%	1513
NORTHAMPTON	3,601	790	22%	60%	13%	244
NUNGARIN	1,216	286	24%	108%	19%	1343
PERENJORI	4,318	718	17%	136%	21%	815

Expenditure from Local Governments' own resources 2016-17 [continued]

Agricultural Local Governments without large towns

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road Expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
PINGELLY	2,485	476	19%	74%	20%	406
PLANTAGENET	5,578	1,943	35%	71%	30%	374
QUAIRADING	4,608	299	6%	100%	10%	293
RAVENSTHORPE	5,316	2,579	49%	77%	49%	1164
TAMMIN	1,353	275	20%	92%	18%	689
THREE SPRINGS	2,255	771	34%	115%	37%	1276
TOODYAY	3,012	611	20%	63%	14%	135
TRAYNING	1,449	0	0%	125%	0%	0
VICTORIA PLAINS	2,686	1,138	42%	115%	46%	1256
WAGIN	1,807	305	17%	74%	9%	161
WANDERING	1,543	390	25%	92%	32%	905
WAROONA	2,184	523	24%	44%	11%	129
WEST ARTHUR	2,271	346	15%	119%	15%	389
WESTONIA	1,979	288	15%	145%	15%	1143
WICKEPIN	1,482	16	1%	102%	1%	22
WILLIAMS	1,635	546	33%	81%	28%	593
WONGAN BALLIDU	2,964	585	20%	119%	16%	398
WOODANILLING	943	0	0%	104%	0%	0
WYALKATCHEM	1,349	56	4%	107%	3%	109
YILGARN	3,987	521	13%	137%	9%	342
YORK	2,724	480	18%	64%	10%	139
Group Average	205,911	53,072	26%	85%	22%	373
State Average	904,322	446,552	49%	26%	22%	171

Expenditure on road preservation 2016-17

Agricultural Local Governments without large towns

Appendix 19

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed road $ per km
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]	[10]	[11]
BEVERLEY	150	544	574	24	1,292	3,709	752	1,884	991
BODDINGTON	428	68	220	0	716	16,542	3,422	926	1,997
BOYUP BROOK	115	124	955	0	1,194	4,083	1,672	1,592	638
BRIDGETOWN GREENBUSHES	669	732	678	0	2,079	10,965	887	1,218	3,373
BROOKTON	284	303	0	0	587	11,682	2,622	1,275	745
BROOMEHILL TAMBELLUP	102	1,997	848	34	2,981	3,952	1,437	2,377	1,325
BRUCE ROCK	182	1,181	357	52	1,772	4,258	5,835	1,863	401
CAPEL	1,297	687	689	68	2,741	5,068	2,104	3,688	3,009
CARNAMAH	186	553	2,580	0	3,319	6,210	6,930	1,009	266
CHAPMAN VALLEY	0	619	1,342	0	1,961	0	118	2,843	1,412
CHITTERING	297	552	336	0	1,185	113,515	1,682	3,333	2,128
COOROW	198	466	799	0	1,463	4,194	2,053	1,687	455
CORRIGIN	341	812	514	0	1,667	8,748	742	438	285
CRANBROOK	0	332	841	56	1,229	0	1,544	2,076	525
CUBALLING	185	315	268	100	868	94,264	1,848	1,990	2,683
CUNDERDIN	224	803	788	96	1,911	4,492	1,491	1,052	367
DALWALLINU	277	1,004	4,405	0	5,686	5,155	1,023	1,196	397
DANDARAGAN	1,052	2,761	1,371	0	5,184	10,252	1,366	1,677	508
DARDANUP	715	2,296	887	1	3,899	4,538	8,677	5,712	5,722
DENMARK	1,562	751	1,008	0	3,321	15,384	5,498	5,870	3,219
DONNYBROOK-BALINGUP	389	1,157	891	0	2,437	6,552	1,461	2,096	966
DOWERIN	212	785	458	0	1,455	10,923	2,925	797	296
DUMBLEYUNG	56	376	1,406	60	1,898	2,687	1,822	1,196	361

Expenditure on road preservation 2016-17 [continued]

Agricultural Local Governments without large towns

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
						Built up areas	Outside built up areas		
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed road $ per km
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]	[10]	[11]
GINGIN	447	2,597	1,722	0	4,766	2,730	2,914	3,746	1,774
GNOWANGERUP	101	2,322	2,118	64	4,605	2,654	2,113	1,479	723
GOOMALLING	157	177	1,549	39	1,922	9,809	3,085	3,080	1,155
IRWIN	910	607	549	0	2,066	13,498	736	1,173	120
JERRAMUNGUP	0	0	2,040	0	2,040	0	96	1,795	545
KELLERBERRIN	367	33	918	220	1,538	7,809	4,847	681	183
KENT	65	355	1,051	270	1,741	7,628	2,328	1,686	664
KOJONUP	301	319	1,202	29	1,851	8,748	3,362	1,720	2,350
KONDININ	233	1,020	1,789	0	3,042	7,568	1,048	314	318
KOORDA	179	745	902	0	1,826	7,756	1,402	802	276
KULIN	104	926	1,182	0	2,212	5,282	751	1,229	855
LAKE GRACE	513	651	1,561	0	2,725	14,535	1,408	1,091	452
MERREDIN	778	1,819	520	50	3,167	5,845	2,525	625	31
MINGENEW	173	504	787	0	1,464	7,753	8,156	842	483
MOORA	1,134	1,101	600	53	2,888	19,286	1,383	663	3,117
MORAWA	294	386	403	0	1,083	8,764	3,828	872	263
MOUNT MARSHALL	62	1,215	1,061	375	2,713	3,814	2,372	687	774
MUKINBUDIN	121	726	593	0	1,440	5,937	2,720	869	547
NANNUP	839	1,421	559	0	2,819	52,122	313	1,748	858
NAREMBEEN	0	379	2,078	0	2,457	0	915	1,064	465
NORTHAMPTON	440	1,349	579	265	2,633	4,408	429	1,691	1,009
NUNGARIN	0	307	644	0	951	0	4,206	2,423	1,318
PERENJORI	370	874	1,752	431	3,427	35,522	2,188	1,402	347

Expenditure on road preservation 2016-17 [continued]

Agricultural Local Governments without large towns

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Built up areas	Outside built up areas		
						Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]	[10]	[11]
PINGELLY	264	619	386	186	1,455	8,103	3,391	1,877	1,083
PLANTAGENET	1,139	1,511	1,914	177	4,741	16,979	2,747	2,226	868
QUAIRADING	174	443	353	92	1,062	5,318	3,175	570	387
RAVENSTHORPE	712	172	3,073	0	3,957	9,890	287	1,885	822
TAMMIN	85	599	627	0	1,311	6,087	1,851	1,677	714
THREE SPRINGS	112	404	918	0	1,434	6,834	777	1,455	780
TOODYAY	303	787	272	51	1,413	11,304	1,073	3,300	740
TRAYNING	59	2	811	0	872	2,689	9,703	841	460
VICTORIA PLAINS	145	796	658	0	1,599	8,829	1,479	1,318	795
WAGIN	264	854	531	0	1,649	3,414	1,620	1,822	380
WANDERING	18	117	340	0	475	2,739	0	5,610	960
WAROONA	232	362	80	16	690	3,691	1,415	2,735	1,567
WEST ARTHUR	38	1,061	571	104	1,774	2,480	1,664	1,499	667
WESTONIA	89	637	350	0	1,076	12,958	550	1,425	201
WICKEPIN	19	476	535	0	1,030	1,083	7,660	441	281
WILLIAMS	78	364	806	32	1,280	3,900	306	2,618	1,125
WONGAN BALLIDU	453	763	861	0	2,077	7,838	1,565	1,200	322
WOODANILLING	0	341	550	0	891	0	2,556	1,389	378
WYALKATCHEM	109	655	585	0	1,349	3,174	2,031	913	323
YILGARN	225	903	291	870	2,289	6,494	1,704	148	9,389
YORK	595	801	1,023	147	2,566	7,148	1,449	1,512	742
Group Average	21,622	51,718	63,909	3,962	141,211	7,648	2,022	1,905	455
State Average	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Agricultural Local Governments without large towns

Appendix 19

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
BEVERLEY	790	721	699	57	2,267	34.8%	31.8%	30.8%	2.5%	3,988	1,511
BODDINGTON	424	330	333	27	1,114	38.1%	29.6%	29.9%	2.4%	1,493	702
BOYUP BROOK	971	1,548	2,087	23	4,629	21.0%	33.4%	45.1%	0.5%	3,959	2,519
BRIDGETOWN GREENBUSHES	1,289	854	1,679	13	3,835	33.6%	22.3%	43.8%	0.3%	4,094	2,143
BROOKTON	433	165	1,003	6	1,607	26.9%	10.3%	62.4%	0.4%	2,449	598
BROOMEHILL TAMBELLUP	1,031	1,964	114	1,215	4,324	23.8%	45.4%	2.6%	28.1%	3,806	1,976
BRUCE ROCK	1,009	975	475	126	2,585	39.0%	37.7%	18.4%	4.9%	4,262	1,984
CAPEL	3,031	236	1,590	0	4,857	62.4%	4.9%	32.7%	0.0%	4,205	3,267
CARNAMAH	897	2,422	1,513	0	4,832	18.6%	50.1%	31.3%	0.0%	2,263	1,754
CHAPMAN VALLEY	1,302	659	1,513	40	3,514	37.1%	18.8%	43.1%	1.1%	2,206	1,961
CHITTERING	932	257	3,216	0	4,405	21.2%	5.8%	73.0%	0.0%	3,146	1,152
COOROW	380	1,083	676	283	2,422	15.7%	44.7%	27.9%	11.7%	3,173	1,463
CORRIGIN	872	795	1,437	0	3,104	28.1%	25.6%	46.3%	0.0%	3,906	1,630
CRANBROOK	702	535	1,411	0	2,648	26.5%	20.2%	53.3%	0.0%	4,154	891
CUBALLING	611	268	725	0	1,604	38.1%	16.7%	45.2%	0.0%	2,319	879
CUNDERDIN	899	1,018	0	0	1,917	46.9%	53.1%	0.0%	0.0%	3,048	1,917
DALWALLINU	5,298	388	966	0	6,652	79.6%	5.8%	14.5%	0.0%	6,062	2,321
DANDARAGAN	1,091	4,109	149	0	5,349	20.4%	76.8%	2.8%	0.0%	5,505	5,200
DARDANUP	2,178	1,786	868	837	5,669	38.4%	31.5%	15.3%	14.8%	3,749	3,964
DENMARK	1,738	1,604	568	0	3,910	44.5%	41.0%	14.5%	0.0%	3,029	3,342
DONNYBROOK-BALINGUP	1,460	1,142	1,260	50	3,912	37.3%	29.2%	32.2%	1.3%	4,513	2,602
DOWERIN	514	941	0	0	1,455	35.3%	64.7%	0.0%	0.0%	2,693	1,423
DUMBLEYUNG	729	1,171	398	0	2,298	31.7%	51.0%	17.3%	0.0%	3,257	1,900

Expenditure by Work Categories 2016-17 [continued]

Agricultural Local Governments without large towns

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
GINGIN	1,981	2,814	32	123	4,950	40.0%	56.8%	0.6%	2.5%	5,460	4,795
GNOWANGERUP	1,973	2,632	696	0	5,301	37.2%	49.7%	13.1%	0.0%	3,229	2,735
GOOMALLING	1,188	771	1,040	0	2,999	39.6%	25.7%	34.7%	0.0%	2,063	1,724
IRWIN	1,169	897	6	52	2,124	55.0%	42.2%	0.3%	2.4%	2,103	2,066
JERRAMUNGUP	716	1,324	375	1,141	3,556	20.1%	37.2%	10.5%	32.1%	3,379	573
KELLERBERRIN	323	1,215	964	0	2,502	12.9%	48.6%	38.5%	0.0%	3,063	1,126
KENT	1,035	706	911	0	2,652	39.0%	26.6%	34.4%	0.0%	3,230	1,741
KOJONUP	1,160	1,456	730	20	3,366	34.5%	43.3%	21.7%	0.6%	4,131	2,508
KONDININ	936	2,106	33	0	3,075	30.4%	68.5%	1.1%	0.0%	3,986	2,769
KOORDA	916	910	838	0	2,664	34.4%	34.2%	31.5%	0.0%	3,298	1,826
KULIN	917	1,295	0	703	2,915	31.5%	44.4%	0.0%	24.1%	4,329	2,160
LAKE GRACE	1,349	1,376	871	0	3,596	37.5%	38.3%	24.2%	0.0%	6,385	2,423
MERREDIN	684	2,483	278	0	3,445	19.9%	72.1%	8.1%	0.0%	5,178	3,167
MINGENEW	650	814	36	0	1,500	43.3%	54.3%	2.4%	0.0%	1,760	1,464
MOORA	926	1,962	1,132	0	4,020	23.0%	48.8%	28.2%	0.0%	4,448	2,888
MORAWA	668	415	416	571	2,070	32.3%	20.0%	20.1%	27.6%	2,509	1,083
MOUNT MARSHALL	811	1,902	164	0	2,877	28.2%	66.1%	5.7%	0.0%	4,339	2,713
MUKINBUDIN	442	998	170	2	1,612	27.4%	61.9%	10.5%	0.1%	2,890	1,432
NANNUP	2,003	1,797	24	1	3,825	52.4%	47.0%	0.6%	0.0%	2,930	3,800
NAREMBEEN	920	1,537	1,669	1,065	5,191	17.7%	29.6%	32.2%	20.5%	4,422	1,146
NORTHAMPTON	1,293	1,340	63	905	3,601	35.9%	37.2%	1.7%	25.1%	4,211	2,633
NUNGARIN	644	307	265	0	1,216	53.0%	25.2%	21.8%	0.0%	1,486	951
PERENJORI	858	2,569	891	0	4,318	19.9%	59.5%	20.6%	0.0%	4,359	2,100

Expenditure by work categories 2016-17 [continued]

Agricultural Local Governments without large towns

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
PINGELLY	1,317	185	983	0	2,485	53.0%	7.4%	39.6%	0.0%	2,462	1,379
PLANTAGENET	2,060	2,681	836	0	5,577	36.9%	48.1%	15.0%	0.0%	5,056	4,275
QUAIRADING	699	379	3,530	0	4,608	15.2%	8.2%	76.6%	0.0%	3,409	915
RAVENSTHORPE	2,298	1,659	1,307	53	5,317	43.2%	31.2%	24.6%	1.0%	3,810	3,318
TAMMIN	579	732	41	0	1,352	42.8%	54.1%	3.0%	0.0%	1,623	1,103
THREE SPRINGS	271	1,163	787	33	2,254	12.0%	51.6%	34.9%	1.5%	2,598	1,348
TOODYAY	856	582	1,570	0	3,008	28.5%	19.3%	52.2%	0.0%	3,631	1,404
TRAYNING	193	679	577	0	1,449	13.3%	46.9%	39.8%	0.0%	2,516	872
VICTORIA PLAINS	1,097	519	1,070	0	2,686	40.8%	19.3%	39.8%	0.0%	3,349	1,616
WAGIN	560	1,114	133	0	1,807	31.0%	61.6%	7.4%	0.0%	2,748	1,563
WANDERING	276	354	913	0	1,543	17.9%	22.9%	59.2%	0.0%	1,790	612
WAROONA	636	71	1,478	0	2,185	29.1%	3.2%	67.6%	0.0%	2,623	707
WEST ARTHUR	684	1,462	125	0	2,271	30.1%	64.4%	5.5%	0.0%	3,807	2,049
WESTONIA	695	381	903	0	1,979	35.1%	19.3%	45.6%	0.0%	2,407	1,076
WICKEPIN	483	547	452	0	1,482	32.6%	36.9%	30.5%	0.0%	2,475	1,007
WILLIAMS	763	517	354	0	1,634	46.7%	31.6%	21.7%	0.0%	1,963	1,088
WONGAN BALLIDU	1,019	1,058	830	56	2,963	34.4%	35.7%	28.0%	1.9%	4,081	2,077
WOODANILLING	390	501	52	0	943	41.4%	53.1%	5.5%	0.0%	1,743	834
WYALKATCHEM	523	826	0	0	1,349	38.8%	61.2%	0.0%	0.0%	2,346	1,115
YILGARN	1,127	1,162	1,115	577	3,981	28.3%	29.2%	28.0%	14.5%	7,471	2,289
YORK	1,107	1,517	100	0	2,724	40.6%	55.7%	3.7%	0.0%	3,824	2,459
Group Average	69,776	76,686	51,440	7,979	205,881	33.9%	37.2%	25.0%	3.9%	230,198	130,026
State Average	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Sealed Road Area statistics and expenditure 2016-17

Agricultural Local Governments without large towns

Appendix 19

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
BEVERLEY	141,533	1,210,057	150	544	1.06	0.45
BODDINGTON	90,555	540,244	428	68	4.73	0.13
BOYUP BROOK	98,577	1,127,553	115	124	1.17	0.11
BRIDGETOWN GREENBUSHES	213,534	1,422,726	669	732	3.13	0.51
BROOKTON	85,086	559,273	284	303	3.34	0.54
BROOMEHILL TAMBELLUP	90,333	1,344,115	102	1,997	1.13	1.49
BRUCE ROCK	149,605	1,962,031	182	1,181	1.22	0.60
CAPEL	895,804	1,083,140	1,297	687	1.45	0.63
CARNAMAH	104,832	953,063	186	553	1.77	0.58
CHAPMAN VALLEY	30,250	828,046	0	619	0.00	0.75
CHITTERING	9,157	1,982,780	297	552	32.43	0.28
COOROW	165,237	1,331,674	198	466	1.20	0.35
CORRIGIN	136,438	1,655,246	341	812	2.50	0.49
CRANBROOK	66,657	1,652,125	0	332	0.00	0.20
CUBALLING	6,869	996,466	185	315	26.93	0.32
CUNDERDIN	174,539	1,420,931	224	803	1.28	0.57
DALWALLINU	188,074	2,399,187	277	1,004	1.47	0.42
DANDARAGAN	359,145	2,239,809	1,052	2,761	2.93	1.23
DARDANUP	551,469	1,226,007	715	2,296	1.30	1.87
DENMARK	355,366	1,014,088	1,562	751	4.40	0.74
DONNYBROOK-BALINGUP	207,814	1,475,179	389	1,157	1.87	0.78
DOWERIN	67,933	1,047,793	212	785	3.12	0.75
DUMBLEYUNG	72,938	1,169,872	56	376	0.77	0.32

Sealed Road Area statistics and expenditure 2016-17 [continued]

Agricultural Local Governments without large towns

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
GINGIN	573,037	2,652,098	447	2,597	0.78	0.98
GNOWANGERUP	133,207	1,107,821	101	2,322	0.76	2.10
GOOMALLING	56,018	625,142	157	177	2.80	0.28
IRWIN	235,965	804,021	910	607	3.86	0.75
JERRAMUNGUP	107,124	1,146,932	0	0	0.00	0.00
KELLERBERRIN	164,491	1,219,607	367	33	2.23	0.03
KENT	29,824	857,087	65	355	2.18	0.41
KOJONUP	120,434	1,412,946	301	319	2.50	0.23
KONDININ	107,754	1,168,618	233	1,020	2.16	0.87
KOORDA	80,781	1,487,596	179	745	2.22	0.50
KULIN	68,916	1,160,086	104	926	1.51	0.80
LAKE GRACE	123,532	1,339,042	513	651	4.15	0.49
MERREDIN	465,842	2,256,476	778	1,819	1.67	0.81
MINGENEW	78,102	744,753	173	504	2.22	0.68
MOORA	205,800	1,911,038	1,134	1,101	5.51	0.58
MORAWA	117,411	695,848	294	386	2.50	0.55
MOUNT MARSHALL	56,899	1,752,673	62	1,215	1.09	0.69
MUKINBUDIN	71,332	1,086,167	121	726	1.70	0.67
NANNUP	56,339	1,229,883	839	1,421	14.89	1.16
NAREMBEEN	75,240	1,706,656	0	379	0.00	0.22
NORTHAMPTON	349,344	1,706,185	440	1,349	1.26	0.79
NUNGARIN	16,227	425,267	0	307	0.00	0.72
PERENJORI	36,456	1,654,052	370	874	10.15	0.53

Sealed Road Area statistics and expenditure 2016-17 [continued]

Agricultural Local Governments without large towns

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
PINGELLY	114,027	1,018,683	264	619	2.32	0.61
PLANTAGENET	234,785	2,248,270	1,139	1,511	4.85	0.67
QUAIRADING	114,511	1,489,653	174	443	1.52	0.30
RAVENSTHORPE	251,976	689,822	712	172	2.83	0.25
TAMMIN	48,871	702,926	85	599	1.74	0.85
THREE SPRINGS	57,363	1,153,812	112	404	1.95	0.35
TOODYAY	93,814	1,707,011	303	787	3.23	0.46
TRAYNING	76,785	835,450	59	2	0.77	0.00
VICTORIA PLAINS	57,482	1,594,529	145	796	2.52	0.50
WAGIN	270,681	736,224	264	854	0.98	1.16
WANDERING	23,001	612,035	18	117	0.78	0.19
WAROONA	219,990	1,372,517	232	362	1.05	0.26
WEST ARTHUR	53,628	1,375,939	38	1,061	0.71	0.77
WESTONIA	24,039	795,588	89	637	3.70	0.80
WICKEPIN	61,399	934,362	19	476	0.31	0.51
WILLIAMS	69,997	824,328	78	364	1.11	0.44
WONGAN BALLIDU	202,288	1,858,948	453	763	2.24	0.41
WOODANILLING	12,971	605,191	0	341	0.00	0.56
WYALKATCHEM	120,199	776,578	109	655	0.91	0.84
YILGARN	121,266	1,782,927	225	903	1.86	0.51
YORK	291,349	1,539,141	595	801	2.04	0.52
Group	10,599,780	86,742,683	23,161	52,087	2.19	0.60
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Agricultural Local Governments without large towns

Appendix 19

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
BEVERLEY	13	21	12	21	204	22	14
BODDINGTON	11	24	21	12	86	27	22
BOYUP BROOK	10	35	27	0	207	36	25
BRIDGETOWN GREENBUSHES	29	38	24	18	226	29	19
BROOKTON	10	27	27	0	95	29	29
BROOMEHILL TAMBELLUP	12	33	25	0	209	33	17
BRUCE ROCK	14	52	39	0	414	47	29
CAPEL	136	20	13	14	178	26	16
CARNAMAH	13	28	13	20	161	34	18
CHAPMAN VALLEY	4	14	18	0	131	23	13
CHITTERING	1	20	21	9	281	22	14
COOROW	23	39	20	13	196	27	20
CORRIGIN	13	53	59	44	317	41	31
CRANBROOK	8	37	20	31	282	37	23
CUBALLING	1	27	15	0	162	25	14
CUNDERDIN	18	43	22	19	231	48	27
DALWALLINU	22	36	15	13	465	31	12
DANDARAGAN	45	27	23	15	339	31	23
DARDANUP	79	23	18	14	201	24	16
DENMARK	55	26	23	15	164	26	17
DONNYBROOK-BALINGUP	30	29	26	14	251	38	23
DOWERIN	7	34	26	20	165	39	18
DUMBLEYUNG	7	45	30	0	175	29	7

Sealed road age 2016-17 [continued]
Agricultural Local Governments without large towns

Appendix 19

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
GINGIN	80	33	26	16	391	30	22
GNOWANGERUP	17	33	14	0	177	31	13
GOOMALLING	7	45	24	0	104	42	22
IRWIN	32	29	19	12	116	18	16
JERRAMUNGUP	14	28	27	14	190	28	14
KELLERBERRIN	18	40	21	9	216	40	30
KENT	4	35	33	0	139	29	23
KOJONUP	15	34	27	55	238	41	26
KONDININ	12	41	32	0	182	36	22
KOORDA	7	29	15	0	242	38	13
KULIN	7	45	29	0	176	42	23
LAKE GRACE	16	44	31	0	193	18	12
MERREDIN	49	26	19	15	370	29	21
MINGENEW	10	33	15	16	133	23	11
MOORA	24	57	29	29	313	58	23
MORAWA	13	44	20	12	126	38	16
MOUNT MARSHALL	8	24	21	0	292	32	19
MUKINBUDIN	9	54	32	0	179	56	31
NANNUP	7	44	28	0	200	33	25
NAREMBEEN	9	56	26	16	285	43	23
NORTHAMPTON	48	32	24	27	242	31	19
NUNGARIN	3	0	0	0	103	48	33
PERENJORI	5	25	19	0	240	22	13

Sealed road age 2016-17 [continued]
Agricultural Local Governments without large towns

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
PINGELLY	16	49	28	0	172	42	22
PLANTAGENET	25	46	30	16	353	33	20
QUAIRADING	13	14	15	13	258	46	28
RAVENSTHORPE	35	15	14	12	99	16	15
TAMMIN	6	35	28	19	126	37	25
THREE SPRINGS	7	22	14	10	158	21	12
TOODYAY	12	31	14	6	274	31	19
TRAYNING	9	12	13	4	139	43	30
VICTORIA PLAINS	7	52	25	0	247	44	18
WAGIN	28	24	22	22	143	23	18
WANDERING	3	37	35	0	89	32	20
WAROONA	30	35	20	6	229	26	18
WEST ARTHUR	6	37	25	7	222	43	25
WESTONIA	3	35	35	0	116	46	33
WICKEPIN	9	35	25	0	151	29	15
WILLIAMS	8	99	30	3	126	33	17
WONGAN BALLIDU	22	29	24	28	331	31	22
WOODANILLING	2	23	20	0	87	35	21
WYALKATCHEM	11	26	24	0	133	26	18
YILGARN	14	35	22	0	285	16	15
YORK	38	25	19	19	261	27	21
Group		35	23	17		33	20

APPENDIX 20

PASTORAL AND MINING LOCAL GOVERNMENTS WITHOUT LARGE TOWNS

2016-2017

- Road assets and expenditure indicators
- Expenditure from Local Governments' own resources
- Expenditure on road preservation
- Expenditure by work categories
- Sealed road area statistics and expenditure
- Sealed road age

Road assets & expenditure indicators 2016-17

Pastoral and Mining Local Governments without large towns

Appendix 20

COUNCIL	Indicators			
	State of the road asset	Road asset consumption	Sealed road sustainability	Preservation performance
[1]	[2]	[3]	[4]	[5]
CUE	0.60	4.3%	75%	0.85
DUNDAS	0.58	3.9%	108%	0.60
HALLS CREEK	0.53	4.7%	145%	1.08
LAVERTON	0.47	5.0%	79%	0.89
LEONORA	0.56	4.6%	49%	0.99
MEEKATHARRA	0.56	4.8%	121%	0.63
MENZIES	0.55	5.2%	20%	0.37
MOUNT MAGNET	0.57	4.5%	65%	0.44
MURCHISON	0.60	4.8%	0%	0.96
NGAANYATJARRAKU	0.53	5.6%	14%	1.38
SANDSTONE	0.56	5.4%	0%	2.26
SHARK BAY	0.60	4.1%	118%	1.05
UPPER GASCOYNE	0.56	5.3%	87%	0.61
WILUNA	0.53	5.2%	171%	0.44
YALGOO	0.60	4.8%	15%	0.41
Group Average	0.56	4.8%	71%	0.82
State Average	0.60	2.5%	69%	0.83

Expenditure from Local Governments' own resources 2016-17

Pastoral and Mining Local Governments without large towns

Appendix 20

COUNCIL	Total council expenditure $000s	Expenditure from councils' own resources $000s	% of total road expenditure	% Revenue capacity needed to meet net road preservation needs	Total road expenditure (from own resources) as % of revenue capacity	Expenditure $ per person
[1]	[2]	[3]	[4]	[5]	[6]	[7]
CUE	8,671	880	10%	95%	36%	3424
DUNDAS	1,212	0	0%	49%	0%	0
HALLS CREEK	3,966	401	10%	79%	8%	101
LAVERTON	4,743	689	15%	75%	13%	604
LEONORA	3,488	1,516	43%	53%	26%	652
MEEKATHARRA	10,603	1,345	13%	111%	21%	1031
MENZIES	1,681	428	25%	81%	8%	1206
MOUNT MAGNET	4,708	258	5%	70%	11%	423
MURCHISON	7,924	423	5%	168%	14%	3917
NGAANYATJARRAKU	3,606	541	15%	88%	14%	405
SANDSTONE	6,772	1,481	22%	105%	67%	14810
SHARK BAY	2,109	164	8%	88%	7%	172
UPPER GASCOYNE	11,765	1,124	10%	134%	33%	4226
WILUNA	2,287	1,161	51%	105%	27%	1058
YALGOO	2,689	262	10%	117%	10%	686
Group Average	76,224	10,673	14%	92%	18%	698
State Average	904,322	446,552	49%	26%	22%	171

Expenditure on road preservation 2016-17

Pastoral and Mining Local Governments without large towns

Appendix 20

COUNCIL	Preservation expenditure $000s					Preservation expenditure $/km			
	Sealed roads in built up areas	Sealed roads outside built up areas	Gravel roads	Formed roads	Total	Built up areas	Outside built up areas		
						Sealed roads $ per lane km	Sealed roads $ per lane km	Gravel roads $ per km	Formed roads $ per km
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]	[10]	[11]
CUE	191	826	7,270	0	8,287	16,257	0	3,694	358
DUNDAS	455	0	679	0	1,134	9,358	5,656	2,231	321
HALLS CREEK	1,001	0	1,882	675	3,558	37,148	0	3,489	1,454
LAVERTON	529	15	1,237	308	2,089	25,585	250	6,233	1,348
LEONORA	495	71	1,301	671	2,538	23,657	736	2,436	1,511
MEEKATHARRA	556	728	4,917	2,155	8,356	12,442	0	2,459	876
MENZIES	55	26	1,082	0	1,163	12,686	0	3,634	530
MOUNT MAGNET	305	0	4,017	0	4,322	10,137	0	1,507	468
MURCHISON	0	18	4,774	2,140	6,932	0	1,514	2,401	812
NGAANYATJARRAKU	99	72	1,779	857	2,807	6,493	0	3,703	880
SANDSTONE	0	5	6,767	0	6,772	0	261	4,619	449
SHARK BAY	680	101	1,032	0	1,813	25,301	1,604	2,275	829
UPPER GASCOYNE	10	445	1,502	0	1,957	3,034	9,417	2,232	5,712
WILUNA	398	303	614	680	1,995	37,196	55,687	825	439
YALGOO	165	48	727	1,065	2,005	21,631	5,658	2,054	568
Group Average	4,939	2,658	39,580	8,551	55,728	17,616	1,746	4,891	1,146
State Average	368,776	98,196	135,739	16,473	619,184	10,553	2,189	2,503	847

Expenditure by work categories 2016-17

Pastoral and Mining Local Governments without large towns

Appendix 20

COUNCIL	Expenditure on roads and bridges - $000s					% Road expenditure spent on				Preservation	
	Maintenance	Renewal	Capital upgrade	Capital expansion	Total	Maintenance	Renewal	Capital upgrade	Capital expansion	Required expenditure $000s	Actual expenditure $000s (excl. flood damage)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
CUE	7,378	909	384	0	8,671	85.1%	10.5%	4.4%	0.0%	2,031	1,719
DUNDAS	226	908	78	0	1,212	18.6%	74.9%	6.4%	0.0%	1,374	819
HALLS CREEK	690	2,868	0	408	3,966	17.4%	72.3%	0.0%	10.3%	3,058	3,296
LAVERTON	1,331	758	2,654	0	4,743	28.1%	16.0%	56.0%	0.0%	2,354	2,089
LEONORA	1,908	630	950	0	3,488	54.7%	18.1%	27.2%	0.0%	2,399	2,369
MEEKATHARRA	2,222	6,134	2,247	0	10,603	21.0%	57.9%	21.2%	0.0%	5,146	3,235
MENZIES	982	181	518	0	1,681	58.4%	10.8%	30.8%	0.0%	2,930	1,092
MOUNT MAGNET	356	3,966	387	0	4,709	7.6%	84.2%	8.2%	0.0%	1,079	474
MURCHISON	5,720	1,226	978	0	7,924	72.2%	15.5%	12.3%	0.0%	3,674	3,526
NGAANYATJARRAKU	1,299	1,509	755	44	3,606	36.0%	41.8%	20.9%	1.2%	2,036	2,807
SANDSTONE	436	6,336	0	0	6,772	6.4%	93.6%	0.0%	0.0%	1,263	2,858
SHARK BAY	764	1,049	296	0	2,109	36.2%	49.7%	14.0%	0.0%	1,725	1,813
UPPER GASCOYNE	805	1,152	25	9,783	11,765	6.8%	9.8%	0.2%	83.2%	2,976	1,828
WILUNA	1,354	641	257	37	2,289	59.2%	28.0%	11.2%	1.6%	2,377	1,041
YALGOO	2,005	0	684	0	2,689	74.6%	0.0%	25.4%	0.0%	2,269	940
Group Average	27,476	28,267	10,213	10,272	76,227	36.0%	37.1%	13.4%	13.5%	36,691	29,906
State Average	346,588	282,621	200,711	74,368	904,287	38.3%	31.3%	22.2%	8.2%	691,789	575,542

Sealed road area statistics and expenditure 2016-17

Pastoral and Mining Local Governments without large towns

Appendix 20

COUNCIL	Area [sq metres]		Expenditure $000s		Expenditure $ per square metre	
	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas	Sealed roads in built up areas	Sealed roads outside built up areas
[1]	[2]	[3]	[4]	[5]	[6]	[7]
CUE	41,121	788,333	191	826	4.64	1.05
DUNDAS	170,174	64,971	455	0	2.67	0.00
HALLS CREEK	94,313	145,798	1,001	0	10.61	0.00
LAVERTON	72,366	229,639	529	15	7.31	0.07
LEONORA	73,234	174,162	495	71	6.76	0.41
MEEKATHARRA	156,407	510,986	556	728	3.55	1.42
MENZIES	15,174	312,075	55	26	3.62	0.08
MOUNT MAGNET	105,304	96,252	305	0	2.90	0.00
MURCHISON	240	1,101,130	0	18	0.00	0.02
NGAANYATJARRAKU	0	53,475	99	72	0.00	1.34
SANDSTONE	29,760	72,480	0	5	0.00	0.07
SHARK BAY	94,069	198,585	680	101	7.23	0.51
UPPER GASCOYNE	11,535	418,109	10	445	0.87	1.06
WILUNA	37,450	72,468	398	303	10.63	4.18
YALGOO	26,698	778,867	165	48	6.18	0.06
Group	927,845	5,017,329	4,939	2,658	5.32	0.53
State	122,250,493	146,659,231	368,776	98,196	3.02	0.67

Sealed road age 2016-17
Pastoral and Mining Local Governments without large towns

COUNCIL	Roads in built up areas				Roads outside built up areas		
	Length km	Pavement age years	Sprayed seal age years	Asphalt seal age years	Length km	Pavement age years	Sprayed seal age years
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
CUE	6	28	15	0	100	14	12
DUNDAS	22	34	19	19	10	20	12
HALLS CREEK	12	46	21	0	21	43	8
LAVERTON	8	39	26	32	34	26	32
LEONORA	10	29	12	9	22	23	16
MEEKATHARRA	13	47	18	17	72	20	9
MENZIES	2	25	30	0	42	18	11
MOUNT MAGNET	15	26	16	0	12	18	17
MURCHISON	0	6	6	0	170	11	11
NGAANYATJARRAKU	0	0	0	0	8	20	20
SANDSTONE	4	12	12	9	9	8	6
SHARK BAY	12	29	14	3	28	17	12
UPPER GASCOYNE	1	20	12	0	60	15	9
WILUNA	5	20	20	0	11	25	23
YALGOO	2	23	8	0	169	14	11
Group		27	16	15		19	14

APPENDIX 21

SOURCES OF ROAD FUNDS

2007-08 to 2016-17

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Gascoyne Region									
2007-08	3,419	34.1%	4,815	48.0%	0	0.0%	1,795	17.9%	10,029
2008-09	3,414	37.6%	3,140	34.5%	0	0.0%	2,535	27.9%	9,089
2009-10	3,649	44.6%	3,171	38.8%	0	0.0%	1,354	16.6%	8,174
2010-11	4,170	23.3%	12,354	68.9%	30	0.2%	1,365	7.6%	17,919
2011-12	3,931	13.5%	22,765	77.9%	44	0.2%	2,471	8.5%	29,211
2012-13	3,395	19.3%	8,340	47.5%	178	1.0%	5,654	32.2%	17,567
2013-14	3,165	32.1%	3,160	32.0%	35	0.4%	3,514	35.6%	9,874
2014-15	3,286	38.9%	2,552	30.2%	8	0.1%	2,607	30.8%	8,453
2015-16	4,594	39.5%	4,426	38.1%	8	0.1%	2,594	22.3%	11,622
2016-17	4,679	26.5%	11,053	62.6%	34	0.2%	1,901	10.8%	17,667
Carnarvon									
2007-08	1,543	29.3%	3,532	67.0%	0	0.0%	200	3.8%	5,275
2008-09	1,155	28.7%	1,290	32.0%	0	0.0%	1,582	39.3%	4,027
2009-10	1,445	48.8%	583	19.7%	0	0.0%	932	31.5%	2,960
2010-11	1,381	13.3%	8,542	82.1%	0	0.0%	486	4.7%	10,409
2011-12	1,649	9.7%	13,919	81.9%	0	0.0%	1,422	8.4%	16,990
2012-13	1,406	27.1%	794	15.3%	0	0.0%	2,989	57.6%	5,189
2013-14	1,503	43.4%	867	25.0%	0	0.0%	1,093	31.6%	3,463
2014-15	1,132	46.9%	879	36.4%	0	0.0%	401	16.6%	2,412
2015-16	1,100	37.2%	884	29.9%	0	0.0%	973	32.9%	2,957
2016-17	1,132	52.6%	760	35.3%	0	0.0%	260	12.1%	2,152
Exmouth									
2007-08	315	38.4%	483	58.9%	0	0.0%	22	2.7%	820
2008-09	943	59.2%	593	37.2%	0	0.0%	58	3.6%	1,594
2009-10	501	34.1%	415	28.3%	0	0.0%	553	37.6%	1,469
2010-11	560	34.6%	359	22.2%	0	0.0%	699	43.2%	1,618
2011-12	675	24.8%	1,668	61.3%	0	0.0%	376	13.8%	2,719
2012-13	567	22.2%	1,383	54.2%	0	0.0%	604	23.6%	2,554
2013-14	361	15.2%	541	22.8%	0	0.0%	1,471	62.0%	2,373
2014-15	484	18.2%	515	19.3%	0	0.0%	1,663	62.5%	2,662
2015-16	672	19.6%	1,935	56.5%	0	0.0%	819	23.9%	3,426
2016-17	847	51.6%	441	26.9%	0	0.0%	353	21.5%	1,641
Shark Bay									
2007-08	505	51.7%	468	48.0%	0	0.0%	3	0.3%	976
2008-09	341	37.6%	552	60.8%	0	0.0%	15	1.7%	908
2009-10	831	54.9%	684	45.1%	0	0.0%	0	0.0%	1,515
2010-11	436	46.7%	595	63.8%	30	3.2%	-128	-13.7%	933
2011-12	573	33.1%	787	45.4%	44	2.5%	329	19.0%	1,733
2012-13	227	15.2%	1,010	67.8%	178	12.0%	74	5.0%	1,489
2013-14	507	33.8%	758	50.5%	35	2.3%	202	13.4%	1,502
2014-15	422	38.9%	640	59.0%	8	0.7%	15	1.4%	1,085
2015-16	698	41.9%	608	36.5%	8	0.5%	353	21.2%	1,667
2016-17	891	42.2%	1,046	49.6%	8	0.4%	164	7.8%	2,109

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Upper Gascoyne									
2007-08	1,056	35.7%	332	11.2%	0	0.0%	1,570	53.1%	2,958
2008-09	975	38.1%	705	27.5%	0	0.0%	880	34.4%	2,560
2009-10	872	39.1%	1,489	66.8%	0	0.0%	-131	-5.9%	2,230
2010-11	1,793	36.2%	2,858	57.6%	0	0.0%	308	6.2%	4,959
2011-12	1,034	13.3%	6,391	82.3%	0	0.0%	344	4.4%	7,769
2012-13	1,195	14.3%	5,153	61.8%	0	0.0%	1,987	23.8%	8,335
2013-14	794	31.3%	994	39.2%	0	0.0%	748	29.5%	2,536
2014-15	1,248	54.4%	518	22.6%	0	0.0%	528	23.0%	2,294
2015-16	2,124	59.5%	999	28.0%	0	0.0%	449	12.6%	3,572
2016-17	1,809	15.4%	8,806	74.8%	26	0.2%	1,124	9.6%	11,765

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Goldfields - Esperance Region									
2007-08	13,580	37.3%	7,583	20.8%	354	1.0%	14,935	41.0%	36,452
2008-09	13,023	36.7%	7,224	20.4%	85	0.2%	15,143	42.7%	35,475
2009-10	13,691	36.9%	7,316	19.7%	210	0.6%	15,867	42.8%	37,084
2010-11	14,270	34.7%	9,642	23.4%	1,100	2.7%	16,145	39.2%	41,157
2011-12	12,762	32.7%	7,998	20.5%	314	0.8%	17,940	46.0%	39,014
2012-13	13,245	28.5%	12,793	27.6%	173	0.4%	20,211	43.5%	46,422
2013-14	12,615	28.4%	9,097	20.4%	165	0.4%	22,610	50.8%	44,487
2014-15	12,331	26.0%	14,088	29.8%	0	0.0%	20,929	44.2%	47,348
2015-16	23,610	36.8%	23,159	36.1%	130	0.2%	17,326	27.0%	64,225
2016-17	17,584	36.3%	12,459	25.7%	40	0.1%	18,423	38.0%	48,506
Coolgardie									
2007-08	566	64.2%	192	21.8%	0	0.0%	123	14.0%	881
2008-09	608	49.4%	61	5.0%	0	0.0%	562	45.7%	1,231
2009-10	650	35.2%	740	40.0%	0	0.0%	459	24.8%	1,849
2010-11	696	42.9%	292	18.0%	0	0.0%	634	39.1%	1,622
2011-12	813	49.9%	237	14.6%	0	0.0%	578	35.5%	1,628
2012-13	638	22.3%	347	12.1%	0	0.0%	1,872	65.5%	2,857
2013-14	789	42.2%	238	12.7%	165	8.8%	678	36.3%	1,870
2014-15	606	32.5%	860	46.1%	0	0.0%	400	21.4%	1,866
2015-16	905	53.8%	284	16.9%	94	5.6%	400	23.8%	1,683
2016-17	1,203	47.6%	592	23.4%	40	1.6%	694	27.4%	2,529
Dundas									
2007-08	370	28.8%	273	21.3%	175	13.6%	465	36.2%	1,283
2008-09	881	50.8%	373	21.5%	75	4.3%	404	23.3%	1,733
2009-10	528	32.3%	571	34.9%	100	6.1%	435	26.6%	1,634
2010-11	795	44.2%	395	21.9%	0	0.0%	610	33.9%	1,800
2011-12	781	45.5%	235	13.7%	0	0.0%	701	40.8%	1,717
2012-13	557	29.6%	597	31.7%	0	0.0%	727	38.6%	1,881
2013-14	395	22.5%	466	26.6%	0	0.0%	894	50.9%	1,755
2014-15	376	15.5%	1,179	48.7%	0	0.0%	865	35.7%	2,420
2015-16	868	44.7%	645	33.2%	0	0.0%	428	22.1%	1,941
2016-17	666	55.0%	546	45.0%	0	0.0%	0	0.0%	1,212
Esperance									
2007-08	3,612	32.8%	2,499	22.7%	29	0.3%	4,858	44.2%	10,998
2008-09	3,587	39.6%	1,545	17.1%	0	0.0%	3,928	43.4%	9,060
2009-10	3,526	34.4%	1,680	16.4%	0	0.0%	5,032	49.2%	10,238
2010-11	4,367	42.6%	1,753	17.1%	0	0.0%	4,136	40.3%	10,256
2011-12	4,493	41.3%	1,989	18.3%	0	0.0%	4,405	40.5%	10,887
2012-13	3,941	36.6%	2,109	19.6%	0	0.0%	4,729	43.9%	10,779
2013-14	2,525	22.8%	2,133	19.2%	0	0.0%	6,423	58.0%	11,081
2014-15	3,975	33.6%	2,185	18.5%	0	0.0%	5,660	47.9%	11,820
2015-16	6,502	47.7%	1,856	13.6%	0	0.0%	5,275	38.7%	13,633
2016-17	6,015	38.3%	3,501	22.3%	0	0.0%	6,194	39.4%	15,710

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Kalgoorlie – Boulder									
2007-08	2,871	30.7%	1,042	11.2%	150	1.6%	5,281	56.5%	9,344
2008-09	2,300	24.4%	1,248	13.3%	0	0.0%	5,864	62.3%	9,412
2009-10	2,287	23.3%	1,113	11.4%	110	1.1%	6,295	64.2%	9,805
2010-11	2,336	20.2%	1,845	16.0%	50	0.4%	7,332	63.4%	11,563
2011-12	1,714	13.9%	1,705	13.8%	75	0.6%	8,839	71.7%	12,333
2012-13	2,245	18.1%	2,090	16.9%	173	1.4%	7,876	63.6%	12,384
2013-14	2,998	22.6%	2,202	16.6%	0	0.0%	8,076	60.8%	13,276
2014-15	2,336	19.0%	2,131	17.3%	0	0.0%	7,841	63.7%	12,308
2015-16	6,149	39.3%	1,881	12.0%	0	0.0%	7,611	48.7%	15,641
2016-17	3,527	26.6%	2,523	19.0%	0	0.0%	7,200	54.3%	13,250
Laverton									
2007-08	1,524	42.2%	1,429	39.6%	0	0.0%	656	18.2%	3,609
2008-09	1,216	35.3%	1,292	37.5%	0	0.0%	937	27.2%	3,445
2009-10	1,622	55.5%	552	18.9%	0	0.0%	748	25.6%	2,922
2010-11	802	16.2%	2,503	50.6%	1,050	21.2%	593	12.0%	4,948
2011-12	1,150	30.2%	2,074	54.4%	137	3.6%	450	11.8%	3,811
2012-13	1,244	18.0%	4,677	67.8%	0	0.0%	981	14.2%	6,902
2013-14	1,089	25.7%	894	21.1%	0	0.0%	2,248	53.1%	4,231
2014-15	911	21.1%	2,599	60.3%	0	0.0%	800	18.6%	4,310
2015-16	1,969	28.9%	3,961	58.2%	28	0.4%	847	12.4%	6,805
2016-17	1,199	25.3%	2,855	60.2%	0	0.0%	689	14.5%	4,743
Leonora									
2007-08	824	32.5%	137	5.4%	0	0.0%	1,576	62.1%	2,537
2008-09	853	33.8%	139	5.5%	0	0.0%	1,532	60.7%	2,524
2009-10	879	45.9%	271	14.2%	0	0.0%	763	39.9%	1,913
2010-11	1,117	45.1%	453	18.3%	0	0.0%	904	36.5%	2,474
2011-12	1,019	37.9%	322	12.0%	102	3.8%	1,244	46.3%	2,687
2012-13	874	30.0%	439	15.1%	0	0.0%	1,598	54.9%	2,911
2013-14	593	23.0%	413	16.0%	0	0.0%	1,568	60.9%	2,574
2014-15	881	20.0%	1,648	37.3%	0	0.0%	1,887	42.7%	4,416
2015-16	1,402	46.5%	432	14.3%	8	0.3%	1,171	38.9%	3,013
2016-17	1,528	43.8%	444	12.7%	0	0.0%	1,516	43.5%	3,488
Menzies									
2007-08	888	54.7%	519	32.0%	0	0.0%	217	13.4%	1,624
2008-09	1,426	47.2%	913	30.2%	10	0.3%	674	22.3%	3,023
2009-10	1,319	51.5%	760	29.7%	0	0.0%	482	18.8%	2,561
2010-11	1,263	52.5%	485	20.1%	0	0.0%	659	27.4%	2,407
2011-12	952	55.0%	481	27.8%	0	0.0%	298	17.2%	1,731
2012-13	1,552	45.4%	827	24.2%	0	0.0%	1,037	30.4%	3,416
2013-14	1,216	42.1%	628	21.8%	0	0.0%	1,041	36.1%	2,885
2014-15	1,139	37.7%	794	26.2%	0	0.0%	1,092	36.1%	3,025
2015-16	1,739	38.1%	1,701	37.3%	0	0.0%	1,126	24.7%	4,566
2016-17	1,075	64.0%	178	10.6%	0	0.0%	428	25.5%	1,681

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Ngaanyayjarraku									
2007-08	1,829	43.2%	1,279	30.2%	0	0.0%	1,123	26.5%	4,231
2008-09	997	32.8%	1,475	48.6%	0	0.0%	565	18.6%	3,037
2009-10	1,856	42.0%	1,480	33.5%	0	0.0%	1,085	24.5%	4,421
2010-11	1,765	44.5%	1,686	42.5%	0	0.0%	512	12.9%	3,963
2011-12	1,291	43.3%	692	23.2%	0	0.0%	1,000	33.5%	2,983
2012-13	1,092	36.3%	1,320	43.8%	0	0.0%	600	19.9%	3,012
2013-14	1,825	46.2%	1,829	46.3%	0	0.0%	300	7.6%	3,954
2014-15	1,198	31.3%	2,296	59.9%	0	0.0%	338	8.8%	3,832
2015-16	2,368	55.8%	1,411	33.2%	0	0.0%	468	11.0%	4,247
2016-17	1,555	43.1%	1,510	41.9%	0	0.0%	541	15.0%	3,606
Wiluna									
2007-08	1,096	56.3%	213	11.0%	0	0.0%	636	32.7%	1,945
2008-09	1,155	57.5%	178	8.9%	0	0.0%	677	33.7%	2,010
2009-10	1,024	58.8%	149	8.6%	0	0.0%	568	32.6%	1,741
2010-11	1,129	53.2%	230	10.8%	0	0.0%	765	36.0%	2,124
2011-12	549	44.4%	263	21.3%	0	0.0%	425	34.4%	1,237
2012-13	1,102	48.3%	387	17.0%	0	0.0%	791	34.7%	2,280
2013-14	1,185	41.4%	294	10.3%	0	0.0%	1,382	48.3%	2,861
2014-15	909	27.1%	396	11.8%	0	0.0%	2,046	61.1%	3,351
2015-16	1,708	13.5%	10,988	86.5%	0	0.0%	0	0.0%	12,696
2016-17	816	35.7%	310	13.6%	0	0.0%	1,161	50.8%	2,287

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Great Southern Region									
2007-08	11,103	36.1%	6,733	21.9%	130	0.4%	12,788	41.6%	30,754
2008-09	12,174	39.4%	7,854	25.4%	31	0.1%	10,851	35.1%	30,910
2009-10	12,737	36.7%	10,997	31.7%	0	0.0%	10,991	31.7%	34,725
2010-11	12,577	34.4%	10,016	27.4%	0	0.0%	13,980	38.2%	36,573
2011-12	13,529	36.9%	9,862	26.9%	0	0.0%	13,266	36.2%	36,657
2012-13	11,901	28.0%	13,807	32.4%	0	0.0%	16,851	39.6%	42,559
2013-14	11,158	23.4%	17,096	35.8%	0	0.0%	19,483	40.8%	47,737
2014-15	11,964	32.9%	8,673	23.9%	152	0.4%	15,540	42.8%	36,329
2015-16	20,602	47.2%	9,041	20.7%	0	0.0%	13,984	32.1%	43,627
2016-17	18,604	33.7%	14,345	26.0%	1	0.0%	22,183	40.2%	55,133
Albany									
2007-08	2,180	25.7%	1,120	13.2%	77	0.9%	5,097	60.1%	8,474
2008-09	2,269	29.5%	2,293	29.8%	0	0.0%	3,139	40.8%	7,701
2009-10	3,081	32.6%	2,945	31.1%	0	0.0%	3,438	36.3%	9,464
2010-11	2,931	22.8%	3,547	27.6%	0	0.0%	6,368	49.6%	12,846
2011-12	2,810	30.4%	2,204	23.9%	0	0.0%	4,221	45.7%	9,235
2012-13	2,744	27.8%	2,203	22.4%	0	0.0%	4,908	49.8%	9,855
2013-14	2,722	20.4%	5,299	39.7%	0	0.0%	5,341	40.0%	13,362
2014-15	2,552	28.3%	1,697	18.8%	0	0.0%	4,761	52.8%	9,010
2015-16	4,956	54.6%	1,538	16.9%	0	0.0%	2,586	28.5%	9,080
2016-17	3,933	29.5%	1,466	11.0%	0	0.0%	7,951	59.6%	13,350
Shire of Broomehill - Tambellup [Established 1 July 2008] by the amalgamation of the former Shires of Broomehill and Tambellup									
The amounts for 2007-08 are the sums of the amounts for the previous Shires of Broomehill and Tambellup									
2007-08	831	43.7%	389	20.5%	0	0.0%	681	35.8%	1,901
2008-09	802	45.2%	449	25.3%	0	0.0%	522	29.4%	1,773
2009-10	705	37.6%	564	30.1%	0	0.0%	604	32.2%	1,873
2010-11	947	46.1%	414	20.1%	0	0.0%	695	33.8%	2,056
2011-12	847	45.7%	494	26.7%	0	0.0%	511	27.6%	1,852
2012-13	740	22.8%	1,688	52.0%	0	0.0%	820	25.2%	3,248
2013-14	1,253	28.8%	2,021	46.4%	0	0.0%	1,079	24.8%	4,353
2014-15	813	25.9%	1,297	41.3%	0	0.0%	1,034	32.9%	3,144
2015-16	1,421	46.3%	871	28.4%	0	0.0%	776	25.3%	3,068
2016-17	1,189	27.5%	2,255	52.1%	0	0.0%	881	20.4%	4,325
Cranbrook									
2007-08	774	48.2%	561	34.9%	31	1.9%	241	15.0%	1,607
2008-09	895	58.6%	591	38.7%	0	0.0%	41	2.7%	1,527
2009-10	1,045	50.8%	850	41.3%	0	0.0%	163	7.9%	2,058
2010-11	904	42.0%	1,027	47.7%	0	0.0%	221	10.3%	2,152
2011-12	1,139	49.6%	851	37.0%	0	0.0%	308	13.4%	2,298
2012-13	1,223	59.2%	639	30.9%	0	0.0%	205	9.9%	2,067
2013-14	596	26.0%	800	34.8%	0	0.0%	900	39.2%	2,296
2014-15	1,138	55.1%	661	32.0%	0	0.0%	265	12.8%	2,064
2015-16	2,113	43.1%	1,213	24.8%	0	0.0%	1,575	32.1%	4,901
2016-17	941	35.5%	669	25.3%	0	0.0%	1,038	39.2%	2,648

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Denmark									
2007-08	514	22.3%	630	27.4%	17	0.7%	1,139	49.5%	2,300
2008-09	590	21.2%	350	12.6%	11	0.4%	1,830	65.8%	2,781
2009-10	768	22.8%	625	18.6%	0	0.0%	1,973	58.6%	3,366
2010-11	635	23.9%	517	19.4%	0	0.0%	1,509	56.7%	2,661
2011-12	776	25.0%	751	24.2%	0	0.0%	1,573	50.7%	3,100
2012-13	906	18.1%	2,614	52.3%	0	0.0%	1,481	29.6%	5,001
2013-14	411	10.0%	1,415	34.3%	0	0.0%	2,300	55.7%	4,126
2014-15	576	16.5%	1,308	37.5%	0	0.0%	1,604	46.0%	3,488
2015-16	572	19.6%	809	27.8%	0	0.0%	1,534	52.6%	2,915
2016-17	1,260	32.2%	1,033	26.4%	0	0.0%	1,617	41.4%	3,910
Gnowangerup									
2007-08	894	52.9%	541	32.0%	0	0.0%	255	15.1%	1,690
2008-09	899	44.3%	661	32.6%	0	0.0%	470	23.2%	2,030
2009-10	952	51.8%	258	14.0%	0	0.0%	627	34.1%	1,837
2010-11	850	48.2%	319	18.1%	0	0.0%	593	33.7%	1,762
2011-12	713	33.9%	235	11.2%	0	0.0%	1,156	54.9%	2,104
2012-13	861	38.7%	395	17.8%	0	0.0%	968	43.5%	2,224
2013-14	948	20.9%	1,447	31.9%	0	0.0%	2,148	47.3%	4,543
2014-15	899	47.9%	153	8.2%	0	0.0%	825	44.0%	1,877
2015-16	1,428	59.1%	251	10.4%	0	0.0%	737	30.5%	2,416
2016-17	1,255	23.7%	2,283	43.1%	0	0.0%	1,763	33.3%	5,301
Jerramungup									
2007-08	714	39.1%	100	5.5%	0	0.0%	1,014	55.5%	1,828
2008-09	1,036	51.0%	81	4.0%	0	0.0%	916	45.1%	2,033
2009-10	896	45.9%	402	20.6%	0	0.0%	656	33.6%	1,954
2010-11	950	40.2%	787	33.3%	0	0.0%	629	26.6%	2,366
2011-12	993	26.6%	1,981	53.0%	0	0.0%	765	20.5%	3,739
2012-13	654	22.6%	472	16.3%	0	0.0%	1,769	61.1%	2,895
2013-14	518	18.3%	608	21.5%	0	0.0%	1,699	60.1%	2,825
2014-15	875	29.6%	642	21.7%	0	0.0%	1,440	48.7%	2,957
2015-16	1,394	46.2%	622	20.6%	0	0.0%	1,004	33.2%	3,020
2016-17	1,110	31.2%	680	19.1%	0	0.0%	1,766	49.7%	3,556
Katanning									
2007-08	613	35.4%	383	22.1%	0	0.0%	738	42.6%	1,734
2008-09	655	43.4%	381	25.3%	0	0.0%	472	31.3%	1,508
2009-10	787	40.9%	662	34.4%	0	0.0%	475	24.7%	1,924
2010-11	857	47.8%	436	24.3%	0	0.0%	499	27.8%	1,792
2011-12	820	42.8%	350	18.3%	0	0.0%	744	38.9%	1,914
2012-13	525	17.1%	1,073	35.0%	0	0.0%	1,466	47.8%	3,064
2013-14	1,011	27.3%	1,879	50.7%	0	0.0%	815	22.0%	3,705
2014-15	704	36.4%	605	31.3%	0	0.0%	624	32.3%	1,933
2015-16	1,170	44.2%	745	28.2%	0	0.0%	731	27.6%	2,646
2016-17	914	21.8%	2,193	52.4%	0	0.0%	1,080	25.8%	4,187

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Kent									
2007-08	943	51.2%	273	14.8%	5	0.3%	621	33.7%	1,842
2008-09	869	46.2%	240	12.8%	0	0.0%	771	41.0%	1,880
2009-10	804	44.6%	231	12.8%	0	0.0%	766	42.5%	1,801
2010-11	862	48.8%	314	17.8%	0	0.0%	590	33.4%	1,766
2011-12	1,305	61.5%	266	12.5%	0	0.0%	550	25.9%	2,121
2012-13	955	44.2%	356	16.5%	0	0.0%	848	39.3%	2,159
2013-14	660	35.5%	270	14.5%	0	0.0%	931	50.0%	1,861
2014-15	691	38.4%	257	14.3%	0	0.0%	850	47.3%	1,798
2015-16	1,622	54.9%	303	10.3%	0	0.0%	1,028	34.8%	2,953
2016-17	1,498	56.5%	376	14.2%	0	0.0%	779	29.4%	2,653
Kojonup									
2007-08	839	44.5%	622	33.0%	0	0.0%	426	22.6%	1,887
2008-09	1,446	50.6%	718	25.1%	0	0.0%	692	24.2%	2,856
2009-10	898	32.8%	1,262	46.1%	0	0.0%	577	21.1%	2,737
2010-11	943	37.0%	905	35.5%	0	0.0%	700	27.5%	2,548
2011-12	1,322	50.5%	621	23.7%	0	0.0%	676	25.8%	2,619
2012-13	929	22.1%	2,341	55.8%	0	0.0%	925	22.1%	4,195
2013-14	650	19.2%	1,439	42.5%	0	0.0%	1,300	38.4%	3,389
2014-15	1,009	38.8%	721	27.7%	0	0.0%	870	33.5%	2,600
2015-16	1,757	55.7%	878	27.9%	0	0.0%	517	16.4%	3,152
2016-17	2,159	64.1%	421	12.5%	0	0.0%	786	23.4%	3,366
Plantagenet									
2007-08	1,387	28.5%	1,352	27.8%	0	0.0%	2,132	43.8%	4,871
2008-09	1,196	29.0%	1,453	35.2%	0	0.0%	1,473	35.7%	4,122
2009-10	1,393	33.6%	1,725	41.6%	0	0.0%	1,030	24.8%	4,148
2010-11	1,160	32.7%	1,068	30.1%	0	0.0%	1,315	37.1%	3,543
2011-12	1,277	33.1%	991	25.7%	0	0.0%	1,589	41.2%	3,857
2012-13	1,288	29.5%	1,277	29.3%	0	0.0%	1,798	41.2%	4,363
2013-14	766	18.8%	1,171	28.8%	0	0.0%	2,131	52.4%	4,068
2014-15	1,247	35.5%	494	14.1%	0	0.0%	1,768	50.4%	3,509
2015-16	1,974	37.3%	643	12.2%	0	0.0%	2,675	50.5%	5,292
2016-17	2,122	38.0%	1,513	27.1%	0	0.0%	1,943	34.8%	5,578
Ravensthorpe									
2007-08	1,085	56.9%	503	26.4%	0	0.0%	320	16.8%	1,908
2008-09	859	48.6%	403	22.8%	20	1.1%	485	27.4%	1,767
2009-10	947	41.0%	752	32.6%	0	0.0%	608	26.4%	2,307
2010-11	1,022	46.4%	378	17.2%	0	0.0%	801	36.4%	2,201
2011-12	1,225	43.3%	393	13.9%	0	0.0%	1,209	42.8%	2,827
2012-13	669	29.2%	133	5.8%	0	0.0%	1,487	65.0%	2,289
2013-14	1,172	57.6%	132	6.5%	0	0.0%	732	36.0%	2,036
2014-15	1,020	36.2%	303	10.8%	152	5.4%	1,339	47.6%	2,814
2015-16	1,498	50.8%	748	25.4%	0	0.0%	703	23.8%	2,949
2016-17	1,673	31.5%	1,063	20.0%	1	0.0%	2,579	48.5%	5,316

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Woodanilling									
2007-08	329	46.2%	259	36.4%	0	0.0%	124	17.4%	712
2008-09	658	70.6%	234	25.1%	0	0.0%	40	4.3%	932
2009-10	461	36.7%	721	57.4%	0	0.0%	74	5.9%	1,256
2010-11	516	58.6%	304	34.5%	0	0.0%	60	6.8%	880
2011-12	302	30.5%	725	73.2%	0	0.0%	-36	-3.6%	991
2012-13	407	33.9%	616	51.4%	0	0.0%	176	14.7%	1,199
2013-14	451	38.4%	615	52.4%	0	0.0%	107	9.1%	1,173
2014-15	440	38.8%	535	47.1%	0	0.0%	160	14.1%	1,135
2015-16	697	56.4%	420	34.0%	0	0.0%	118	9.6%	1,235
2016-17	550	58.3%	393	41.7%	0	0.0%	0	0.0%	943

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Kimberley Region									
2007-08	4,047	28.3%	2,400	16.8%	213	1.5%	7,634	53.4%	14,294
2008-09	5,247	37.9%	2,618	18.9%	1	0.0%	5,961	43.1%	13,827
2009-10	5,920	32.9%	5,032	27.9%	33	0.2%	7,021	39.0%	18,006
2010-11	5,054	37.2%	2,710	19.9%	76	0.6%	5,759	42.3%	13,599
2011-12	5,676	30.9%	5,555	30.2%	648	3.5%	6,515	35.4%	18,394
2012-13	7,150	30.4%	9,486	40.4%	575	2.4%	6,289	26.8%	23,500
2013-14	3,787	21.7%	6,338	36.4%	174	1.0%	7,133	40.9%	17,432
2014-15	6,162	33.8%	5,375	29.5%	276	1.5%	6,433	35.3%	18,246
2015-16	9,997	39.3%	9,984	39.3%	149	0.6%	5,285	20.8%	25,415
2016-17	8,255	39.6%	4,940	23.7%	0	0.0%	7,636	36.7%	20,831
Broome									
2007-08	1,040	24.6%	718	17.0%	0	0.0%	2,465	58.4%	4,223
2008-09	1,313	26.9%	856	17.5%	0	0.0%	2,711	55.6%	4,880
2009-10	1,797	34.9%	908	17.6%	12	0.2%	2,438	47.3%	5,155
2010-11	1,153	31.1%	644	17.4%	53	1.4%	1,856	50.1%	3,706
2011-12	1,107	34.0%	706	21.7%	12	0.4%	1,433	44.0%	3,258
2012-13	1,818	31.4%	1,575	27.2%	0	0.0%	2,400	41.4%	5,793
2013-14	471	7.1%	1,548	23.5%	0	0.0%	4,574	69.4%	6,593
2014-15	1,733	28.0%	751	12.1%	0	0.0%	3,710	59.9%	6,194
2015-16	3,259	43.8%	744	10.0%	0	0.0%	3,432	46.2%	7,435
2016-17	2,003	27.3%	959	13.0%	0	0.0%	4,387	59.7%	7,349
Derby West Kimberley									
2007-08	1,194	29.9%	770	19.3%	213	5.3%	1,820	45.5%	3,997
2008-09	1,173	36.2%	663	20.4%	1	0.0%	1,406	43.4%	3,243
2009-10	2,015	36.3%	1,460	26.3%	21	0.4%	2,054	37.0%	5,550
2010-11	1,477	28.4%	1,435	27.6%	23	0.4%	2,269	43.6%	5,204
2011-12	1,087	16.1%	2,312	34.3%	164	2.4%	3,178	47.1%	6,741
2012-13	1,454	25.5%	2,167	38.0%	0	0.0%	2,079	36.5%	5,700
2013-14	955	23.6%	2,323	57.5%	0	0.0%	762	18.9%	4,040
2014-15	1,081	20.1%	1,918	35.6%	0	0.0%	2,383	44.3%	5,382
2015-16	2,792	45.0%	2,784	44.9%	0	0.0%	624	10.1%	6,200
2016-17	2,711	47.6%	1,522	26.7%	0	0.0%	1,462	25.7%	5,695
Halls Creek									
2007-08	1,029	41.5%	365	14.7%	0	0.0%	1,086	43.8%	2,480
2008-09	1,185	42.2%	586	20.8%	0	0.0%	1,040	37.0%	2,811
2009-10	977	22.3%	2,283	52.1%	0	0.0%	1,125	25.7%	4,385
2010-11	1,358	77.2%	247	14.0%	0	0.0%	155	8.8%	1,760
2011-12	1,511	42.1%	1,066	29.7%	0	0.0%	1,014	28.2%	3,591
2012-13	1,349	24.6%	3,213	58.7%	0	0.0%	916	16.7%	5,478
2013-14	1,455	53.2%	1,144	41.8%	0	0.0%	137	5.0%	2,736
2014-15	1,763	54.5%	1,306	40.4%	0	0.0%	163	5.0%	3,232
2015-16	2,189	33.7%	3,516	54.2%	0	0.0%	782	12.1%	6,487
2016-17	2,024	51.0%	1,541	38.9%	0	0.0%	401	10.1%	3,966

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Wyndham - East Kimberley									
2007-08	784	21.8%	547	15.2%	0	0.0%	2,263	63.0%	3,594
2008-09	1,576	54.5%	513	17.7%	0	0.0%	804	27.8%	2,893
2009-10	1,131	38.8%	381	13.1%	0	0.0%	1,404	48.1%	2,916
2010-11	1,066	36.4%	384	13.1%	0	0.0%	1,479	50.5%	2,929
2011-12	1,971	41.0%	1,471	30.6%	472	9.8%	890	18.5%	4,804
2012-13	2,529	38.7%	2,531	38.8%	575	8.8%	894	13.7%	6,529
2013-14	906	22.3%	1,323	32.6%	174	4.3%	1,660	40.9%	4,063
2014-15	1,585	46.1%	1,400	40.7%	276	8.0%	177	5.1%	3,438
2015-16	1,757	33.2%	2,940	55.5%	149	2.8%	447	8.4%	5,293
2016-17	1,517	39.7%	918	24.0%	0	0.0%	1,386	36.3%	3,821

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Metropolitan Region									
2007-08	37,357	16.3%	22,749	9.9%	8,256	3.6%	160,340	70.1%	228,702
2008-09	41,518	15.3%	33,382	12.3%	9,447	3.5%	186,414	68.8%	270,761
2009-10	42,754	15.1%	35,693	12.6%	8,570	3.0%	195,776	69.2%	282,793
2010-11	42,701	14.4%	35,363	11.9%	15,374	5.2%	203,635	68.5%	297,073
2011-12	42,819	12.3%	34,708	9.9%	16,250	4.7%	255,098	73.1%	348,875
2012-13	41,302	11.5%	41,653	11.6%	12,065	3.4%	264,311	73.6%	359,331
2013-14	37,530	9.8%	35,881	9.4%	10,376	2.7%	299,160	78.1%	382,947
2014-15	41,330	11.6%	42,781	12.0%	7,535	2.1%	265,473	74.3%	357,119
2015-16	65,614	16.8%	34,253	8.8%	11,417	2.9%	279,413	71.5%	390,697
2016-17	63,209	15.4%	47,436	11.6%	8,324	2.0%	290,831	71.0%	409,800
Armadale									
2007-08	4,151	31.5%	1,466	11.1%	1,576	12.0%	5,972	45.4%	13,165
2008-09	2,354	16.1%	700	4.8%	491	3.4%	11,067	75.7%	14,612
2009-10	2,569	18.3%	4,264	30.4%	308	2.2%	6,887	49.1%	14,028
2010-11	1,624	15.3%	2,506	23.6%	2,455	23.1%	4,049	38.1%	10,634
2011-12	1,414	7.8%	1,833	10.2%	5,222	28.9%	9,587	53.1%	18,056
2012-13	2,234	12.3%	527	2.9%	4,994	27.4%	10,460	57.4%	18,215
2013-14	2,833	16.0%	2,485	14.0%	2,017	11.4%	10,425	58.7%	17,760
2014-15	3,526	24.6%	1,789	12.5%	1,728	12.1%	7,277	50.8%	14,320
2015-16	4,173	29.3%	930	6.5%	249	1.8%	8,876	62.4%	14,228
2016-17	3,162	23.0%	1,302	9.5%	15	0.1%	9,252	67.4%	13,731
Bassendean									
2007-08	318	19.4%	59	3.6%	17	1.0%	1,243	75.9%	1,637
2008-09	470	16.6%	431	15.3%	6	0.2%	1,916	67.9%	2,823
2009-10	313	17.2%	166	9.1%	0	0.0%	1,339	73.7%	1,818
2010-11	288	18.0%	361	22.6%	0	0.0%	949	59.4%	1,598
2011-12	406	18.0%	99	4.4%	0	0.0%	1,755	77.7%	2,260
2012-13	395	13.3%	91	3.1%	0	0.0%	2,484	83.6%	2,970
2013-14	99	4.0%	180	7.2%	0	0.0%	2,227	88.9%	2,506
2014-15	320	9.3%	333	9.7%	0	0.0%	2,782	81.0%	3,435
2015-16	496	11.9%	814	19.6%	67	1.6%	2,784	66.9%	4,161
2016-17	522	14.6%	521	14.5%	116	3.2%	2,426	67.7%	3,585
Bayswater									
2007-08	1,017	21.8%	321	6.9%	0	0.0%	3,336	71.4%	4,674
2008-09	915	16.4%	590	10.6%	0	0.0%	4,068	73.0%	5,573
2009-10	1,042	15.8%	651	9.9%	0	0.0%	4,911	74.4%	6,604
2010-11	1,343	22.1%	149	2.5%	0	0.0%	4,574	75.4%	6,066
2011-12	1,146	17.7%	398	6.1%	0	0.0%	4,948	76.2%	6,492
2012-13	1,008	15.1%	659	9.9%	0	0.0%	4,997	75.0%	6,664
2013-14	1,031	11.7%	807	9.2%	252	2.9%	6,699	76.2%	8,789
2014-15	1,096	12.6%	659	7.6%	294	3.4%	6,617	76.4%	8,666
2015-16	1,697	17.0%	487	4.9%	180	1.8%	7,628	76.3%	9,992
2016-17	1,536	13.7%	1,719	15.3%	710	6.3%	7,283	64.7%	11,248

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Belmont									
2007-08	592	10.5%	138	2.4%	0	0.0%	4,904	87.0%	5,634
2008-09	833	14.3%	236	4.1%	101	1.7%	4,647	79.9%	5,817
2009-10	725	11.2%	1,338	20.7%	123	1.9%	4,273	66.2%	6,459
2010-11	757	11.1%	765	11.2%	69	1.0%	5,234	76.7%	6,825
2011-12	870	11.5%	473	6.2%	103	1.4%	6,139	80.9%	7,585
2012-13	722	10.0%	289	4.0%	32	0.4%	6,152	85.5%	7,195
2013-14	506	6.9%	448	6.1%	0	0.0%	6,376	87.0%	7,330
2014-15	802	11.0%	497	6.8%	0	0.0%	5,986	82.2%	7,285
2015-16	1,599	22.5%	305	4.3%	0	0.0%	5,218	73.3%	7,122
2016-17	2,412	29.7%	423	5.2%	0	0.0%	5,275	65.0%	8,110
Cambridge									
2007-08	437	6.3%	286	4.1%	87	1.3%	6,109	88.3%	6,919
2008-09	673	11.1%	357	5.9%	0	0.0%	5,007	82.9%	6,037
2009-10	518	8.9%	485	8.4%	93	1.6%	4,696	81.1%	5,792
2010-11	615	12.9%	707	14.9%	135	2.8%	3,297	69.4%	4,754
2011-12	763	8.0%	596	6.3%	84	0.9%	8,054	84.8%	9,497
2012-13	536	7.1%	819	10.9%	20	0.3%	6,132	81.7%	7,507
2013-14	790	9.5%	555	6.6%	0	0.0%	7,004	83.9%	8,349
2014-15	661	7.0%	1,133	12.0%	14	0.1%	7,619	80.8%	9,427
2015-16	727	9.7%	417	5.6%	251	3.3%	6,114	81.4%	7,509
2016-17	779	11.5%	743	10.9%	-22	-0.3%	5,290	77.9%	6,790
Canning									
2007-08	1,992	14.8%	1,314	9.8%	163	1.2%	9,946	74.1%	13,415
2008-09	1,572	11.4%	1,180	8.6%	480	3.5%	10,542	76.5%	13,774
2009-10	1,904	10.2%	2,011	10.7%	915	4.9%	13,897	74.2%	18,727
2010-11	2,296	15.6%	2,139	14.6%	140	1.0%	10,099	68.8%	14,674
2011-12	2,026	16.2%	2,062	16.5%	106	0.8%	8,336	66.5%	12,530
2012-13	2,507	14.4%	1,606	9.3%	899	5.2%	12,347	71.1%	17,359
2013-14	1,162	6.0%	3,676	18.9%	155	0.8%	14,467	74.3%	19,460
2014-15	2,064	12.4%	1,927	11.6%	169	1.0%	12,503	75.0%	16,663
2015-16	3,621	18.2%	2,713	13.6%	143	0.7%	13,459	67.5%	19,936
2016-17	3,310	15.4%	3,753	17.5%	1,991	9.3%	12,444	57.9%	21,498
Claremont									
2007-08	80	6.7%	67	5.6%	0	0.0%	1,053	87.8%	1,200
2008-09	88	3.1%	614	21.4%	0	0.0%	2,172	75.6%	2,874
2009-10	138	5.2%	207	7.7%	0	0.0%	2,334	87.1%	2,679
2010-11	139	4.9%	23	0.8%	0	0.0%	2,669	94.3%	2,831
2011-12	165	3.5%	30	0.6%	0	0.0%	4,530	95.9%	4,725
2012-13	291	3.5%	1,499	17.8%	0	0.0%	6,608	78.7%	8,398
2013-14	61	1.4%	202	4.5%	0	0.0%	4,228	94.1%	4,491
2014-15	103	4.1%	248	9.8%	0	0.0%	2,175	86.1%	2,526
2015-16	548	19.0%	172	6.0%	0	0.0%	2,162	75.0%	2,882
2016-17	100	4.2%	221	9.3%	0	0.0%	2,067	86.6%	2,388

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Cockburn									
2007-08	1,982	18.6%	621	5.8%	1,421	13.3%	6,639	62.3%	10,663
2008-09	1,731	13.6%	1,413	11.1%	3,252	25.6%	6,310	49.7%	12,706
2009-10	2,110	21.0%	752	7.5%	1,446	14.4%	5,717	57.0%	10,025
2010-11	1,631	13.5%	2,943	24.4%	362	3.0%	7,117	59.0%	12,053
2011-12	2,628	14.4%	3,804	20.8%	1,340	7.3%	10,522	57.5%	18,294
2012-13	2,466	13.8%	2,104	11.8%	981	5.5%	12,295	68.9%	17,846
2013-14	695	3.9%	3,998	22.3%	1,263	7.0%	11,984	66.8%	17,940
2014-15	1,738	9.3%	2,302	12.4%	58	0.3%	14,516	78.0%	18,614
2015-16	3,542	21.3%	1,807	10.8%	49	0.3%	11,267	67.6%	16,665
2016-17	3,032	13.2%	5,643	24.5%	4,172	18.1%	10,152	44.1%	22,999
Cottesloe									
2007-08	828	30.1%	775	28.2%	0	0.0%	1,149	41.8%	2,752
2008-09	465	21.3%	166	7.6%	0	0.0%	1,557	71.2%	2,188
2009-10	331	16.1%	135	6.6%	0	0.0%	1,590	77.3%	2,056
2010-11	165	11.3%	15	1.0%	0	0.0%	1,281	87.7%	1,461
2011-12	125	7.5%	26	1.6%	0	0.0%	1,525	91.0%	1,676
2012-13	96	5.4%	135	7.6%	0	0.0%	1,552	87.0%	1,783
2013-14	275	11.0%	237	9.4%	0	0.0%	1,999	79.6%	2,511
2014-15	102	9.4%	20	1.8%	0	0.0%	968	88.8%	1,090
2015-16	101	11.5%	19	2.2%	15	1.7%	743	84.6%	878
2016-17	100	15.2%	24	3.6%	0	0.0%	534	81.2%	658
East Fremantle									
2007-08	219	39.7%	10	1.8%	0	0.0%	323	58.5%	552
2008-09	61	4.6%	150	11.3%	0	0.0%	1,121	84.2%	1,332
2009-10	62	5.2%	10	0.8%	0	0.0%	1,125	94.0%	1,197
2010-11	262	8.8%	155	5.2%	0	0.0%	2,553	86.0%	2,970
2011-12	70	3.1%	286	12.6%	391	17.2%	1,531	67.2%	2,278
2012-13	87	4.5%	42	2.2%	0	0.0%	1,784	93.3%	1,913
2013-14	33	1.6%	103	4.9%	0	0.0%	1,969	93.5%	2,105
2014-15	73	3.8%	14	0.7%	0	0.0%	1,831	95.5%	1,918
2015-16	72	3.9%	13	0.7%	0	0.0%	1,766	95.4%	1,851
2016-17	71	6.1%	17	1.5%	0	0.0%	1,070	92.4%	1,158
Fremantle									
2007-08	584	10.7%	552	10.1%	55	1.0%	4,263	78.2%	5,454
2008-09	516	8.5%	390	6.4%	0	0.0%	5,198	85.2%	6,104
2009-10	649	10.8%	476	7.9%	0	0.0%	4,878	81.3%	6,003
2010-11	977	10.1%	1,135	11.8%	0	0.0%	7,536	78.1%	9,648
2011-12	689	6.9%	868	8.6%	0	0.0%	8,479	84.5%	10,036
2012-13	557	5.3%	1,311	12.4%	17	0.2%	8,707	82.2%	10,592
2013-14	374	3.9%	916	9.5%	0	0.0%	8,359	86.6%	9,649
2014-15	553	5.6%	1,159	11.7%	0	0.0%	8,188	82.7%	9,900
2015-16	1,151	11.7%	752	7.6%	175	1.8%	7,778	78.9%	9,856
2016-17	996	12.4%	1,511	18.8%	0	0.0%	5,534	68.8%	8,041

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Gosnells									
2007-08	1,557	8.6%	2,451	13.6%	1,093	6.1%	12,901	71.7%	18,002
2008-09	4,381	27.2%	3,349	20.8%	1,260	7.8%	7,096	44.1%	16,086
2009-10	4,254	20.6%	5,397	26.1%	165	0.8%	10,867	52.5%	20,683
2010-11	2,166	12.3%	5,144	29.3%	41	0.2%	10,195	58.1%	17,546
2011-12	2,677	12.9%	4,743	22.9%	0	0.0%	13,287	64.2%	20,707
2012-13	2,151	9.8%	3,760	17.1%	113	0.5%	15,930	72.6%	21,954
2013-14	1,442	6.9%	2,853	13.6%	0	0.0%	16,739	79.6%	21,034
2014-15	2,779	12.6%	4,220	19.1%	0	0.0%	15,143	68.4%	22,142
2015-16	4,566	20.0%	1,555	6.8%	0	0.0%	16,704	73.2%	22,825
2016-17	3,142	11.9%	1,912	7.3%	136	0.5%	21,178	80.3%	26,368
Joondalup									
2007-08	2,684	31.9%	1,570	18.7%	0	0.0%	4,161	49.4%	8,415
2008-09	4,751	24.2%	5,182	26.4%	1	0.0%	9,668	49.3%	19,602
2009-10	5,172	25.6%	3,809	18.9%	0	0.0%	11,223	55.5%	20,204
2010-11	2,692	11.7%	4,475	19.5%	1	0.0%	15,759	68.7%	22,927
2011-12	3,604	17.7%	1,604	7.9%	1	0.0%	15,173	74.4%	20,382
2012-13	3,146	12.2%	5,028	19.5%	1	0.0%	17,603	68.3%	25,778
2013-14	2,401	12.0%	1,681	8.4%	1	0.0%	15,931	79.6%	20,014
2014-15	3,207	18.0%	2,500	14.0%	139	0.8%	11,957	67.2%	17,803
2015-16	5,325	22.6%	5,507	23.3%	95	0.4%	12,685	53.7%	23,612
2016-17	4,863	17.0%	2,853	10.0%	30	0.1%	20,854	72.9%	28,600
Kalamunda									
2007-08	2,772	29.3%	857	9.1%	0	0.0%	5,835	61.7%	9,464
2008-09	3,049	41.7%	491	6.7%	0	0.0%	3,766	51.5%	7,306
2009-10	1,232	20.5%	846	14.1%	0	0.0%	3,927	65.4%	6,005
2010-11	2,277	40.6%	1,050	18.7%	0	0.0%	2,280	40.7%	5,607
2011-12	1,778	28.5%	2,093	33.6%	0	0.0%	2,360	37.9%	6,231
2012-13	1,655	17.7%	1,059	11.3%	47	0.5%	6,588	70.5%	9,349
2013-14	868	8.1%	1,401	13.1%	122	1.1%	8,324	77.7%	10,715
2014-15	1,210	15.0%	809	10.0%	15	0.2%	6,032	74.8%	8,066
2015-16	2,856	26.4%	390	3.6%	40	0.4%	7,546	69.7%	10,832
2016-17	2,662	24.5%	780	7.2%	6	0.1%	7,423	68.3%	10,871
Kwinana									
2007-08	757	15.1%	864	17.3%	123	2.5%	3,264	65.2%	5,008
2008-09	738	14.1%	469	8.9%	0	0.0%	4,041	77.0%	5,248
2009-10	1,365	18.3%	568	7.6%	40	0.5%	5,471	73.5%	7,444
2010-11	1,090	10.6%	1,404	13.6%	198	1.9%	7,600	73.8%	10,292
2011-12	959	12.3%	1,177	15.1%	138	1.8%	5,509	70.8%	7,783
2012-13	884	7.5%	3,397	28.9%	2,583	22.0%	4,871	41.5%	11,735
2013-14	853	8.3%	1,077	10.5%	301	2.9%	8,034	78.3%	10,265
2014-15	999	7.8%	4,497	35.0%	0	0.0%	7,344	57.2%	12,840
2015-16	1,854	15.4%	2,577	21.4%	24	0.2%	7,571	63.0%	12,026
2016-17	1,326	16.7%	1,483	18.6%	44	0.6%	5,099	64.1%	7,952

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Melville									
2007-08	1,374	20.3%	597	8.8%	117	1.7%	4,680	69.1%	6,768
2008-09	1,498	12.6%	1,053	8.9%	65	0.5%	9,251	78.0%	11,867
2009-10	1,141	12.1%	2,735	29.0%	57	0.6%	5,513	58.4%	9,446
2010-11	1,733	12.7%	1,332	9.7%	55	0.4%	10,559	77.2%	13,679
2011-12	1,760	11.9%	1,316	8.9%	7	0.0%	11,734	79.2%	14,817
2012-13	1,904	11.0%	1,703	9.8%	58	0.3%	13,697	78.9%	17,362
2013-14	980	6.1%	898	5.6%	20	0.1%	14,111	88.1%	16,009
2014-15	1,932	11.0%	2,413	13.7%	0	0.0%	13,291	75.4%	17,636
2015-16	2,587	16.0%	1,248	7.7%	1	0.0%	12,363	76.3%	16,199
2016-17	3,597	18.9%	3,227	17.0%	0	0.0%	12,190	64.1%	19,014
Mosman Park									
2007-08	114	15.2%	12	1.6%	21	2.8%	603	80.4%	750
2008-09	110	12.2%	12	1.3%	0	0.0%	778	86.4%	900
2009-10	142	20.1%	12	1.7%	0	0.0%	554	78.2%	708
2010-11	114	14.5%	12	1.5%	0	0.0%	660	84.0%	786
2011-12	58	7.6%	15	2.0%	0	0.0%	687	90.4%	760
2012-13	190	18.2%	14	1.3%	0	0.0%	841	80.5%	1,045
2013-14	86	11.2%	15	2.0%	0	0.0%	664	86.8%	765
2014-15	122	14.0%	16	1.8%	0	0.0%	732	84.1%	870
2015-16	81	12.0%	15	2.2%	0	0.0%	580	85.8%	676
2016-17	131	12.0%	19	1.7%	0	0.0%	941	86.3%	1,091
Mundaring									
2007-08	1,118	22.5%	605	12.2%	122	2.5%	3,131	62.9%	4,976
2008-09	1,990	29.4%	707	10.4%	45	0.7%	4,037	59.6%	6,779
2009-10	1,514	25.0%	137	2.3%	80	1.3%	4,314	71.4%	6,045
2010-11	1,166	21.8%	274	5.1%	6	0.1%	3,907	73.0%	5,353
2011-12	2,051	31.6%	255	3.9%	55	0.8%	4,129	63.6%	6,490
2012-13	1,672	17.0%	591	6.0%	93	0.9%	7,486	76.1%	9,842
2013-14	1,451	18.3%	831	10.5%	130	1.6%	5,525	69.6%	7,937
2014-15	1,692	20.5%	1,069	12.9%	180	2.2%	5,325	64.4%	8,266
2015-16	2,974	32.5%	679	7.4%	94	1.0%	5,415	59.1%	9,162
2016-17	1,904	24.6%	705	9.1%	143	1.8%	4,978	64.4%	7,730
Nedlands									
2007-08	621	10.3%	602	10.0%	0	0.0%	4,827	79.8%	6,050
2008-09	252	3.3%	655	8.5%	0	0.0%	6,826	88.3%	7,733
2009-10	1,182	21.4%	236	4.3%	0	0.0%	4,101	74.3%	5,519
2010-11	286	5.4%	534	10.1%	0	0.0%	4,479	84.5%	5,299
2011-12	286	5.4%	805	15.1%	0	0.0%	4,227	79.5%	5,318
2012-13	459	8.7%	532	10.1%	0	0.0%	4,300	81.3%	5,291
2013-14	125	2.1%	206	3.5%	0	0.0%	5,538	94.4%	5,869
2014-15	293	7.1%	101	2.4%	0	0.0%	3,759	90.5%	4,153
2015-16	946	29.2%	104	3.2%	0	0.0%	2,195	67.6%	3,245
2016-17	953	11.1%	569	6.6%	0	0.0%	7,075	82.3%	8,597

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Peppermint Grove									
2007-08	43	20.0%	3	1.4%	0	0.0%	169	78.6%	215
2008-09	17	9.6%	3	1.7%	0	0.0%	158	88.8%	178
2009-10	22	6.6%	3	0.9%	0	0.0%	310	92.5%	335
2010-11	18	3.7%	3	0.6%	0	0.0%	467	95.7%	488
2011-12	17	4.5%	3	0.8%	0	0.0%	356	94.7%	376
2012-13	30	7.6%	3	0.8%	0	0.0%	363	91.7%	396
2013-14	9	2.2%	4	1.0%	0	0.0%	397	96.8%	410
2014-15	30	5.2%	4	0.7%	0	0.0%	540	94.1%	574
2015-16	20	3.5%	4	0.7%	0	0.0%	550	95.8%	574
2016-17	42	10.7%	42	10.7%	0	0.0%	307	78.5%	391
Perth									
2007-08	502	3.7%	464	3.5%	0	0.0%	12,479	92.8%	13,445
2008-09	332	1.8%	783	4.2%	0	0.0%	17,664	94.1%	18,779
2009-10	415	1.6%	353	1.4%	0	0.0%	24,825	97.0%	25,593
2010-11	757	3.8%	719	3.6%	0	0.0%	18,637	92.7%	20,113
2011-12	586	1.4%	714	1.7%	0	0.0%	41,304	96.9%	42,604
2012-13	809	3.0%	596	2.2%	0	0.0%	25,526	94.8%	26,931
2013-14	371	0.9%	1,355	3.2%	0	0.0%	40,340	95.9%	42,066
2014-15	475	2.3%	917	4.3%	0	0.0%	19,713	93.4%	21,105
2015-16	1,013	3.2%	759	2.4%	0	0.0%	29,530	94.3%	31,302
2016-17	771	3.2%	662	2.7%	0	0.0%	23,012	94.1%	24,445
Rockingham									
2007-08	2,167	23.4%	715	7.7%	435	4.7%	5,931	64.1%	9,248
2008-09	2,705	22.7%	961	8.1%	329	2.8%	7,935	66.5%	11,930
2009-10	2,559	20.7%	2,889	23.3%	110	0.9%	6,833	55.1%	12,391
2010-11	2,804	19.6%	1,277	8.9%	26	0.2%	10,216	71.3%	14,323
2011-12	2,488	14.0%	2,288	12.9%	7	0.0%	12,991	73.1%	17,774
2012-13	4,143	17.7%	1,724	7.3%	0	0.0%	17,600	75.0%	23,467
2013-14	6,291	19.1%	2,397	7.3%	2	0.0%	24,218	73.6%	32,908
2014-15	2,659	10.5%	990	3.9%	2	0.0%	21,575	85.5%	25,226
2015-16	3,230	12.4%	2,416	9.3%	203	0.8%	20,206	77.6%	26,055
2016-17	3,911	15.3%	2,248	8.8%	379	1.5%	18,960	74.4%	25,498
Serpentine – Jarrahdale									
2007-08	915	21.9%	639	15.3%	0	0.0%	2,618	62.8%	4,172
2008-09	1,165	32.6%	706	19.8%	0	0.0%	1,701	47.6%	3,572
2009-10	1,121	31.2%	689	19.2%	0	0.0%	1,780	49.6%	3,590
2010-11	1,349	33.3%	908	22.4%	0	0.0%	1,788	44.2%	4,045
2011-12	1,567	37.3%	993	23.6%	0	0.0%	1,644	39.1%	4,204
2012-13	1,451	20.1%	1,712	23.7%	802	11.1%	3,259	45.1%	7,224
2013-14	1,444	27.0%	1,098	20.5%	470	8.8%	2,333	43.6%	5,345
2014-15	1,650	26.1%	1,210	19.1%	722	11.4%	2,750	43.4%	6,332
2015-16	2,094	28.0%	791	10.6%	730	9.8%	3,868	51.7%	7,483
2016-17	1,967	26.8%	1,589	21.6%	0	0.0%	3,785	51.6%	7,341

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
South Perth									
2007-08	651	13.7%	493	10.4%	95	2.0%	3,521	74.0%	4,760
2008-09	846	15.7%	580	10.8%	3	0.1%	3,950	73.4%	5,379
2009-10	818	13.6%	380	6.3%	24	0.4%	4,793	79.7%	6,015
2010-11	700	11.8%	460	7.8%	105	1.8%	4,660	78.6%	5,925
2011-12	713	11.5%	471	7.6%	64	1.0%	4,926	79.8%	6,174
2012-13	615	7.3%	389	4.6%	124	1.5%	7,245	86.5%	8,373
2013-14	860	10.2%	555	6.6%	240	2.9%	6,751	80.3%	8,406
2014-15	720	9.5%	140	1.8%	286	3.8%	6,453	84.9%	7,599
2015-16	1,213	13.4%	357	3.9%	143	1.6%	7,355	81.1%	9,068
2016-17	1,124	11.9%	614	6.5%	87	0.9%	7,585	80.6%	9,410
Stirling									
2007-08	2,838	12.7%	688	3.1%	202	0.9%	18,621	83.3%	22,349
2008-09	2,791	12.0%	1,734	7.5%	160	0.7%	18,566	79.9%	23,251
2009-10	3,371	13.5%	1,123	4.5%	160	0.6%	20,306	81.4%	24,960
2010-11	2,986	11.6%	1,781	6.9%	178	0.7%	20,844	80.8%	25,789
2011-12	2,302	8.7%	1,460	5.5%	161	0.6%	22,576	85.2%	26,499
2012-13	3,418	12.4%	1,631	5.9%	182	0.7%	22,282	81.0%	27,513
2013-14	3,274	11.9%	1,162	4.2%	70	0.3%	23,083	83.7%	27,589
2014-15	3,243	11.5%	1,969	7.0%	2	0.0%	22,876	81.4%	28,090
2015-16	4,471	15.3%	1,540	5.3%	382	1.3%	22,759	78.1%	29,152
2016-17	5,014	16.1%	1,697	5.4%	0	0.0%	24,498	78.5%	31,209
Subiaco									
2007-08	521	8.4%	497	8.0%	0	0.0%	5,211	83.7%	6,229
2008-09	504	8.6%	972	16.6%	0	0.0%	4,376	74.8%	5,852
2009-10	523	9.5%	488	8.8%	0	0.0%	4,514	81.7%	5,525
2010-11	356	7.0%	506	9.9%	2	0.0%	4,245	83.1%	5,109
2011-12	213	4.1%	251	4.8%	0	0.0%	4,748	91.1%	5,212
2012-13	523	9.9%	656	12.5%	0	0.0%	4,083	77.6%	5,262
2013-14	214	4.2%	535	10.5%	0	0.0%	4,369	85.4%	5,118
2014-15	356	5.8%	488	8.0%	0	0.0%	5,255	86.2%	6,099
2015-16	576	9.6%	158	2.6%	0	0.0%	5,262	87.8%	5,996
2016-17	381	4.3%	510	5.8%	0	0.0%	7,919	89.9%	8,810
Swan									
2007-08	2,484	14.6%	2,973	17.5%	115	0.7%	11,387	67.1%	16,959
2008-09	2,632	11.6%	2,812	12.4%	125	0.6%	17,064	75.4%	22,633
2009-10	3,198	13.1%	2,678	10.9%	0	0.0%	18,623	76.0%	24,499
2010-11	3,487	13.8%	1,515	6.0%	90	0.4%	20,190	79.9%	25,282
2011-12	2,529	8.6%	2,809	9.5%	0	0.0%	24,173	81.9%	29,511
2012-13	3,069	11.1%	6,176	22.3%	0	0.0%	18,420	66.6%	27,665
2013-14	3,333	12.2%	1,379	5.1%	0	0.0%	22,497	82.7%	27,209
2014-15	4,159	12.1%	5,627	16.3%	0	0.0%	24,721	71.6%	34,507
2015-16	5,839	12.8%	4,567	10.0%	0	0.0%	35,186	77.2%	45,592
2016-17	6,963	14.6%	3,314	6.9%	0	0.0%	37,476	78.5%	47,753

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Victoria Park									
2007-08	510	9.7%	387	7.4%	54	1.0%	4,282	81.8%	5,233
2008-09	542	10.7%	449	8.9%	10	0.2%	4,058	80.2%	5,059
2009-10	478	7.8%	681	11.1%	36	0.6%	4,937	80.5%	6,132
2010-11	500	7.3%	551	8.0%	31	0.5%	5,791	84.3%	6,873
2011-12	484	7.4%	360	5.5%	46	0.7%	5,659	86.4%	6,549
2012-13	324	4.4%	561	7.6%	12	0.2%	6,513	87.9%	7,410
2013-14	680	8.5%	779	9.7%	20	0.2%	6,563	81.6%	8,042
2014-15	508	5.5%	1,056	11.4%	17	0.2%	7,685	82.9%	9,266
2015-16	1,030	12.3%	513	6.1%	0	0.0%	6,824	81.6%	8,367
2016-17	1,080	11.8%	904	9.8%	90	1.0%	7,115	77.4%	9,189
Vincent									
2007-08	440	7.2%	400	6.6%	208	3.4%	5,027	82.7%	6,075
2008-09	518	9.2%	674	12.0%	135	2.4%	4,278	76.3%	5,605
2009-10	483	9.5%	879	17.2%	113	2.2%	3,629	71.1%	5,104
2010-11	544	10.9%	596	11.9%	70	1.4%	3,798	75.8%	5,008
2011-12	649	12.5%	637	12.3%	322	6.2%	3,589	69.1%	5,197
2012-13	1,743	27.2%	584	9.1%	135	2.1%	3,940	61.5%	6,402
2013-14	379	5.7%	755	11.3%	33	0.5%	5,526	82.6%	6,693
2014-15	591	8.4%	764	10.8%	217	3.1%	5,495	77.8%	7,067
2015-16	903	12.4%	688	9.4%	85	1.2%	5,624	77.0%	7,300
2016-17	697	9.7%	983	13.7%	64	0.9%	5,431	75.7%	7,175
Wanneroo									
2007-08	3,089	21.3%	2,323	16.0%	2,352	16.2%	6,755	46.5%	14,519
2008-09	3,019	15.8%	5,563	29.0%	2,984	15.6%	7,596	39.6%	19,162
2009-10	3,403	19.8%	1,295	7.5%	4,900	28.5%	7,609	44.2%	17,207
2010-11	7,579	26.0%	1,924	6.6%	11,410	39.2%	8,202	28.2%	29,115
2011-12	7,796	27.0%	2,239	7.8%	8,203	28.4%	10,620	36.8%	28,858
2012-13	2,217	14.0%	2,455	15.4%	972	6.1%	10,246	64.5%	15,890
2013-14	4,610	18.0%	3,293	12.8%	5,280	20.6%	12,480	48.6%	25,663
2014-15	3,667	14.3%	3,910	15.3%	3,692	14.4%	14,365	56.0%	25,634
2015-16	6,309	24.1%	1,956	7.5%	8,491	32.5%	9,395	35.9%	26,151
2016-17	6,661	23.7%	7,448	26.5%	363	1.3%	13,678	48.6%	28,150

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Mid West Region									
2007-08	13,977	41.5%	8,414	25.0%	278	0.8%	11,029	32.7%	33,698
2008-09	15,973	45.8%	6,740	19.3%	87	0.2%	12,093	34.7%	34,893
2009-10	15,170	37.3%	10,170	25.0%	241	0.6%	15,130	37.2%	40,711
2010-11	14,945	39.8%	10,200	27.2%	56	0.1%	12,347	32.9%	37,548
2011-12	14,896	27.2%	23,004	42.0%	1,949	3.6%	14,966	27.3%	54,815
2012-13	17,504	31.0%	20,927	37.1%	1,126	2.0%	16,895	29.9%	56,452
2013-14	16,082	26.4%	25,008	41.1%	520	0.9%	19,252	31.6%	60,862
2014-15	20,605	33.1%	19,859	31.9%	782	1.3%	20,921	33.7%	62,167
2015-16	30,086	36.0%	34,134	40.8%	100	0.1%	19,244	23.0%	83,564
2016-17	32,287	37.1%	36,281	41.7%	96	0.1%	18,438	21.2%	87,102
Carnamah									
2007-08	464	42.2%	281	25.6%	0	0.0%	354	32.2%	1,099
2008-09	620	62.0%	196	19.6%	0	0.0%	184	18.4%	1,000
2009-10	529	47.9%	280	25.4%	0	0.0%	295	26.7%	1,104
2010-11	542	44.1%	284	23.1%	0	0.0%	404	32.8%	1,230
2011-12	650	31.9%	970	47.5%	0	0.0%	420	20.6%	2,040
2012-13	567	21.2%	1,496	56.1%	0	0.0%	606	22.7%	2,669
2013-14	371	16.5%	1,267	56.3%	0	0.0%	614	27.3%	2,252
2014-15	967	29.6%	1,731	53.0%	0	0.0%	567	17.4%	3,265
2015-16	1,565	39.3%	1,685	42.3%	0	0.0%	734	18.4%	3,984
2016-17	2,371	49.1%	1,652	34.2%	0	0.0%	809	16.7%	4,832
Chapman Valley									
2007-08	1,218	50.8%	309	12.9%	68	2.8%	802	33.5%	2,397
2008-09	625	33.9%	677	36.7%	27	1.5%	517	28.0%	1,846
2009-10	772	32.3%	468	19.6%	112	4.7%	1,040	43.5%	2,392
2010-11	690	40.5%	705	41.4%	0	0.0%	307	18.0%	1,702
2011-12	834	27.2%	1,658	54.2%	0	0.0%	569	18.6%	3,061
2012-13	1,101	60.1%	386	21.1%	0	0.0%	346	18.9%	1,833
2013-14	404	17.1%	1,141	48.2%	38	1.6%	785	33.2%	2,368
2014-15	701	22.6%	1,757	56.8%	13	0.4%	624	20.2%	3,095
2015-16	1,190	36.2%	1,288	39.2%	37	1.1%	768	23.4%	3,283
2016-17	1,224	34.9%	1,271	36.2%	49	1.4%	968	27.6%	3,512
Coorow									
2007-08	903	46.7%	1,031	53.3%	0	0.0%	0	0.0%	1,934
2008-09	686	35.2%	592	30.3%	0	0.0%	673	34.5%	1,951
2009-10	718	37.3%	825	42.8%	0	0.0%	383	19.9%	1,926
2010-11	771	37.5%	675	32.8%	0	0.0%	609	29.6%	2,055
2011-12	787	42.4%	433	23.4%	0	0.0%	634	34.2%	1,854
2012-13	1,097	43.7%	977	38.9%	0	0.0%	437	17.4%	2,511
2013-14	1,130	38.2%	671	22.7%	0	0.0%	1,159	39.2%	2,960
2014-15	663	36.5%	616	33.9%	0	0.0%	536	29.5%	1,815
2015-16	1,262	49.1%	921	35.9%	0	0.0%	385	15.0%	2,568
2016-17	1,234	50.9%	675	27.9%	0	0.0%	513	21.2%	2,422

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Cue									
2007-08	279	68.6%	128	31.4%	0	0.0%	0	0.0%	407
2008-09	915	82.7%	191	17.3%	0	0.0%	0	0.0%	1,106
2009-10	694	14.9%	3,470	74.6%	0	0.0%	489	10.5%	4,653
2010-11	544	61.6%	188	21.3%	0	0.0%	151	17.1%	883
2011-12	556	13.3%	3,378	80.9%	0	0.0%	242	5.8%	4,176
2012-13	512	60.9%	73	8.7%	0	0.0%	256	30.4%	841
2013-14	563	49.7%	330	29.2%	16	1.4%	223	19.7%	1,132
2014-15	2,947	75.9%	353	9.1%	0	0.0%	585	15.1%	3,885
2015-16	5,964	91.2%	280	4.3%	0	0.0%	296	4.5%	6,540
2016-17	7,427	85.7%	364	4.2%	0	0.0%	880	10.1%	8,671
City of Greater Geraldton [New City established 1 July 2011]									
2007-08 to 2009-10	Sum of the former City of Geraldton, Greenough and the Shire of Mullewa								
2010-11 to 2016-17	New City of Greater Geraldton								
2007-08	2,164	19.7%	2,802	25.5%	125	1.1%	5,897	53.7%	10,988
2008-09	3,573	33.5%	1,089	10.2%	0	0.0%	5,991	56.2%	10,653
2009-10	2,369	22.3%	720	6.8%	0	0.0%	7,556	71.0%	10,645
2010-11	2,280	22.4%	1,227	12.1%	0	0.0%	6,659	65.5%	10,166
2011-12	3,114	26.5%	1,566	13.3%	0	0.0%	7,079	60.2%	11,759
2012-13	5,248	31.6%	3,916	23.6%	0	0.0%	7,442	44.8%	16,606
2013-14	5,340	26.1%	6,648	32.5%	0	0.0%	8,477	41.4%	20,465
2014-15	6,477	32.7%	1,899	9.6%	0	0.0%	11,449	57.8%	19,825
2015-16	5,413	20.9%	9,209	35.5%	0	0.0%	11,314	43.6%	25,936
2016-17	6,068	31.8%	5,230	27.4%	0	0.0%	7,803	40.9%	19,101
Irwin									
2007-08	381	28.0%	286	21.0%	0	0.0%	693	51.0%	1,360
2008-09	394	31.0%	284	22.3%	0	0.0%	593	46.7%	1,271
2009-10	416	23.1%	383	21.2%	0	0.0%	1,004	55.7%	1,803
2010-11	537	23.3%	941	40.8%	0	0.0%	827	35.9%	2,305
2011-12	381	21.3%	565	31.6%	0	0.0%	840	47.0%	1,786
2012-13	435	17.4%	1,023	41.0%	0	0.0%	1,038	41.6%	2,496
2013-14	481	25.5%	481	25.5%	0	0.0%	926	49.0%	1,888
2014-15	481	26.2%	452	24.6%	0	0.0%	905	49.2%	1,838
2015-16	739	39.5%	538	28.7%	0	0.0%	596	31.8%	1,873
2016-17	651	30.6%	454	21.4%	0	0.0%	1,019	48.0%	2,124
Meekatharra									
2007-08	1,626	57.1%	740	26.0%	0	0.0%	480	16.9%	2,846
2008-09	1,408	49.6%	353	12.4%	0	0.0%	1,080	38.0%	2,841
2009-10	1,476	55.6%	1,144	43.1%	0	0.0%	36	1.4%	2,656
2010-11	1,738	60.6%	428	14.9%	0	0.0%	704	24.5%	2,870
2011-12	1,315	26.7%	2,840	57.6%	0	0.0%	774	15.7%	4,929
2012-13	2,016	27.9%	4,478	61.9%	0	0.0%	738	10.2%	7,232
2013-14	1,006	10.0%	8,140	81.0%	0	0.0%	908	9.0%	10,054
2014-15	1,635	23.7%	3,935	57.0%	0	0.0%	1,334	19.3%	6,904
2015-16	2,602	30.3%	5,164	60.2%	0	0.0%	817	9.5%	8,583
2016-17	2,911	27.5%	6,347	59.9%	0	0.0%	1,345	12.7%	10,603

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Mingenew									
2007-08	366	33.1%	348	31.5%	0	0.0%	391	35.4%	1,105
2008-09	442	35.5%	548	44.0%	0	0.0%	256	20.5%	1,246
2009-10	417	28.1%	435	29.3%	0	0.0%	631	42.5%	1,483
2010-11	481	33.7%	619	43.4%	0	0.0%	326	22.9%	1,426
2011-12	443	28.5%	533	34.2%	0	0.0%	581	37.3%	1,557
2012-13	290	6.6%	3,231	73.1%	0	0.0%	898	20.3%	4,419
2013-14	587	25.1%	958	40.9%	0	0.0%	798	34.1%	2,343
2014-15	633	30.5%	1,229	59.3%	0	0.0%	212	10.2%	2,074
2015-16	731	45.8%	723	45.3%	0	0.0%	143	9.0%	1,597
2016-17	670	44.7%	564	37.6%	0	0.0%	266	17.7%	1,500
Morawa									
2007-08	700	59.9%	239	20.4%	0	0.0%	230	19.7%	1,169
2008-09	732	72.5%	249	24.7%	0	0.0%	29	2.9%	1,010
2009-10	797	62.9%	318	25.1%	0	0.0%	152	12.0%	1,267
2010-11	781	65.9%	349	29.5%	0	0.0%	55	4.6%	1,185
2011-12	914	57.5%	281	17.7%	394	24.8%	0	0.0%	1,589
2012-13	802	47.0%	381	22.3%	80	4.7%	442	25.9%	1,705
2013-14	519	31.1%	595	35.7%	13	0.8%	540	32.4%	1,667
2014-15	763	48.3%	536	33.9%	31	2.0%	251	15.9%	1,581
2015-16	1,016	55.2%	583	31.7%	48	2.6%	193	10.5%	1,840
2016-17	1,430	69.1%	461	22.3%	47	2.3%	132	6.4%	2,070
Mount Magnet									
2007-08	778	138.2%	140	24.9%	0	0.0%	-355	-63.1%	563
2008-09	631	111.7%	117	20.7%	0	0.0%	-183	-32.4%	565
2009-10	758	69.3%	162	14.8%	0	0.0%	174	15.9%	1,094
2010-11	762	70.0%	323	29.7%	0	0.0%	3	0.3%	1,088
2011-12	517	55.8%	185	20.0%	0	0.0%	224	24.2%	926
2012-13	437	50.8%	132	15.3%	0	0.0%	292	33.9%	861
2013-14	591	63.5%	239	25.7%	0	0.0%	100	10.8%	930
2014-15	454	47.0%	361	37.4%	0	0.0%	150	15.5%	965
2015-16	721	20.8%	2,491	71.8%	0	0.0%	258	7.4%	3,470
2016-17	401	8.5%	4,049	86.0%	0	0.0%	258	5.5%	4,708
Murchison									
2007-08	1,072	59.9%	359	20.0%	0	0.0%	360	20.1%	1,791
2008-09	1,450	71.1%	235	11.5%	0	0.0%	355	17.4%	2,040
2009-10	1,253	67.9%	164	8.9%	0	0.0%	429	23.2%	1,846
2010-11	540	19.6%	2,216	80.4%	0	0.0%	0	0.0%	2,756
2011-12	1,131	12.6%	6,186	69.0%	1,353	15.1%	297	3.3%	8,967
2012-13	1,108	24.4%	2,025	44.6%	750	16.5%	656	14.5%	4,539
2013-14	1,160	38.2%	366	12.1%	173	5.7%	1,338	44.1%	3,037
2014-15	1,054	16.0%	3,299	49.9%	458	6.9%	1,797	27.2%	6,608
2015-16	2,313	32.7%	3,553	50.2%	15	0.2%	1,201	17.0%	7,082
2016-17	1,832	23.1%	5,669	71.5%	0	0.0%	423	5.3%	7,924

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Northampton									
2007-08	1,066	38.3%	491	17.7%	25	0.9%	1,198	43.1%	2,780
2008-09	912	31.9%	591	20.7%	0	0.0%	1,357	47.4%	2,860
2009-10	1,199	39.8%	500	16.6%	15	0.5%	1,297	43.1%	3,011
2010-11	1,285	42.0%	361	11.8%	56	1.8%	1,355	44.3%	3,057
2011-12	1,067	35.0%	779	25.6%	0	0.0%	1,201	39.4%	3,047
2012-13	1,067	40.8%	266	10.2%	0	0.0%	1,280	49.0%	2,613
2013-14	523	18.5%	1,434	50.8%	0	0.0%	867	30.7%	2,824
2014-15	1,182	45.4%	870	33.4%	0	0.0%	552	21.2%	2,604
2015-16	1,334	40.2%	1,046	31.5%	0	0.0%	938	28.3%	3,318
2016-17	1,304	36.2%	1,507	41.8%	0	0.0%	790	21.9%	3,601
Perenjori									
2007-08	963	67.3%	98	6.8%	0	0.0%	370	25.9%	1,431
2008-09	1,054	76.2%	154	11.1%	0	0.0%	176	12.7%	1,384
2009-10	1,259	74.9%	216	12.8%	0	0.0%	206	12.3%	1,681
2010-11	1,043	70.3%	158	10.7%	0	0.0%	282	19.0%	1,483
2011-12	943	52.1%	203	11.2%	0	0.0%	664	36.7%	1,810
2012-13	1,146	46.7%	620	25.3%	0	0.0%	687	28.0%	2,453
2013-14	1,176	43.1%	719	26.3%	0	0.0%	836	30.6%	2,731
2014-15	1,209	51.6%	784	33.5%	0	0.0%	349	14.9%	2,342
2015-16	1,918	63.1%	707	23.3%	0	0.0%	415	13.7%	3,040
2016-17	1,621	37.5%	1,979	45.8%	0	0.0%	718	16.6%	4,318
Sandstone									
2007-08	778	80.2%	140	14.4%	0	0.0%	52	5.4%	970
2008-09	884	56.6%	419	26.8%	0	0.0%	260	16.6%	1,563
2009-10	1,033	62.7%	292	17.7%	0	0.0%	322	19.6%	1,647
2010-11	850	54.3%	252	16.1%	0	0.0%	464	29.6%	1,566
2011-12	578	36.3%	504	31.7%	0	0.0%	509	32.0%	1,591
2012-13	746	46.1%	233	14.4%	0	0.0%	639	39.5%	1,618
2013-14	880	53.3%	349	21.2%	0	0.0%	421	25.5%	1,650
2014-15	428	23.3%	754	41.1%	0	0.0%	654	35.6%	1,836
2015-16	1,300	25.2%	2,980	57.8%	0	0.0%	873	16.9%	5,153
2016-17	1,157	17.1%	4,134	61.0%	0	0.0%	1,481	21.9%	6,772
Three Springs									
2007-08	484	45.7%	310	29.3%	0	0.0%	264	25.0%	1,058
2008-09	711	44.2%	597	37.1%	0	0.0%	299	18.6%	1,607
2009-10	651	41.3%	412	26.1%	0	0.0%	515	32.6%	1,578
2010-11	1,077	67.9%	451	28.5%	0	0.0%	57	3.6%	1,585
2011-12	612	48.6%	300	23.8%	0	0.0%	347	27.6%	1,259
2012-13	392	33.4%	333	28.4%	0	0.0%	449	38.2%	1,174
2013-14	774	33.6%	820	35.6%	0	0.0%	710	30.8%	2,304
2014-15	434	34.1%	433	34.0%	0	0.0%	406	31.9%	1,273
2015-16	1,001	59.5%	459	27.3%	0	0.0%	222	13.2%	1,682
2016-17	827	36.7%	657	29.1%	0	0.0%	771	34.2%	2,255

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Yalgoo									
2007-08	735	40.8%	712	39.6%	60	3.3%	293	16.3%	1,800
2008-09	936	48.0%	448	23.0%	60	3.1%	506	25.9%	1,950
2009-10	829	43.1%	381	19.8%	114	5.9%	601	31.2%	1,925
2010-11	1,024	46.7%	1,023	46.7%	0	0.0%	144	6.6%	2,191
2011-12	1,054	23.6%	2,623	58.8%	202	4.5%	585	13.1%	4,464
2012-13	540	18.7%	1,357	47.1%	296	10.3%	689	23.9%	2,882
2013-14	577	25.6%	850	37.7%	280	12.4%	550	24.4%	2,257
2014-15	577	25.6%	850	37.7%	280	12.4%	550	24.4%	2,257
2015-16	1,017	28.1%	2,507	69.3%	0	0.0%	91	2.5%	3,615
2016-17	1,159	43.1%	1,268	47.2%	0	0.0%	262	9.7%	2,689

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Pilbara Region									
2007-08	8,234	47.5%	4,100	23.6%	981	5.7%	4,031	23.2%	17,346
2008-09	6,753	25.1%	3,953	14.7%	10,608	39.4%	5,623	20.9%	26,937
2009-10	7,893	33.3%	5,793	24.5%	1,922	8.1%	8,060	34.1%	23,668
2010-11	7,666	34.9%	5,354	24.4%	68	0.3%	8,881	40.4%	21,969
2011-12	7,762	35.6%	6,773	31.1%	1,650	7.6%	5,604	25.7%	21,789
2012-13	7,852	28.7%	7,819	28.6%	1,136	4.2%	10,542	38.5%	27,349
2013-14	5,792	12.4%	7,084	15.2%	20,516	44.0%	13,183	28.3%	46,575
2014-15	8,301	26.9%	6,972	22.6%	2,958	9.6%	12,633	40.9%	30,864
2015-16	13,789	44.2%	6,128	19.7%	551	1.8%	10,716	34.4%	31,184
2016-17	9,704	33.5%	6,613	22.8%	127	0.4%	12,516	43.2%	28,960
Ashburton									
2007-08	1,655	61.0%	860	31.7%	0	0.0%	198	7.3%	2,713
2008-09	2,220	17.8%	1,084	8.7%	9,945	79.7%	-765	-6.1%	12,484
2009-10	2,229	30.5%	3,024	41.4%	1,572	21.5%	485	6.6%	7,310
2010-11	2,229	40.5%	1,671	30.3%	13	0.2%	1,597	29.0%	5,510
2011-12	1,909	47.8%	1,283	32.1%	0	0.0%	800	20.0%	3,992
2012-13	1,739	29.7%	1,464	25.0%	984	16.8%	1,671	28.5%	5,858
2013-14	1,692	56.1%	1,086	36.0%	0	0.0%	240	8.0%	3,018
2014-15	1,934	25.1%	1,427	18.5%	2,258	29.3%	2,090	27.1%	7,709
2015-16	3,069	61.1%	1,373	27.3%	0	0.0%	584	11.6%	5,026
2016-17	1,763	38.6%	742	16.3%	0	0.0%	2,061	45.1%	4,566
East Pilbara									
2007-08	3,320	55.8%	1,028	17.3%	162	2.7%	1,435	24.1%	5,945
2008-09	2,610	48.3%	1,252	23.2%	0	0.0%	1,540	28.5%	5,402
2009-10	3,360	60.6%	1,198	21.6%	100	1.8%	888	16.0%	5,546
2010-11	3,634	47.0%	2,596	33.5%	55	0.7%	1,453	18.8%	7,738
2011-12	3,012	35.8%	4,112	48.9%	50	0.6%	1,236	14.7%	8,410
2012-13	3,322	38.9%	4,163	48.7%	150	1.8%	907	10.6%	8,542
2013-14	2,456	26.8%	3,835	41.9%	150	1.6%	2,711	29.6%	9,152
2014-15	3,915	48.1%	1,668	20.5%	200	2.5%	2,362	29.0%	8,145
2015-16	7,022	69.0%	1,360	13.4%	200	2.0%	1,595	15.7%	10,177
2016-17	4,181	49.1%	2,858	33.6%	100	1.2%	1,377	16.2%	8,516
Karratha [formerly Roebourne]									
2007-08	2,358	59.6%	1,054	26.7%	0	0.0%	542	13.7%	3,954
2008-09	986	27.6%	568	15.9%	0	0.0%	2,015	56.5%	3,569
2009-10	1,248	20.6%	707	11.7%	0	0.0%	4,092	67.7%	6,047
2010-11	1,110	23.1%	580	12.1%	0	0.0%	3,122	64.9%	4,812
2011-12	1,387	27.9%	571	11.5%	0	0.0%	3,012	60.6%	4,970
2012-13	1,369	20.6%	840	12.7%	0	0.0%	4,425	66.7%	6,634
2013-14	625	7.7%	695	8.5%	0	0.0%	6,828	83.8%	8,148
2014-15	1,241	14.7%	1,357	16.1%	0	0.0%	5,833	69.2%	8,431
2015-16	2,063	21.4%	2,114	21.9%	0	0.0%	5,460	56.7%	9,637
2016-17	2,206	26.0%	1,304	15.4%	0	0.0%	4,964	58.6%	8,474

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Port Hedland									
2007-08	901	19.0%	1,158	24.5%	819	17.3%	1,856	39.2%	4,734
2008-09	937	17.1%	1,049	19.1%	663	12.1%	2,833	51.7%	5,482
2009-10	1,056	22.2%	864	18.1%	250	5.2%	2,595	54.5%	4,765
2010-11	693	17.7%	507	13.0%	0	0.0%	2,709	69.3%	3,909
2011-12	1,454	32.9%	807	18.3%	1,600	36.2%	556	12.6%	4,417
2012-13	1,422	22.5%	1,352	21.4%	2	0.0%	3,539	56.0%	6,315
2013-14	1,019	3.9%	1,468	5.6%	20,366	77.6%	3,404	13.0%	26,257
2014-15	1,211	18.4%	2,520	38.3%	500	7.6%	2,348	35.7%	6,579
2015-16	1,635	25.8%	1,281	20.2%	351	5.5%	3,077	48.5%	6,344
2016-17	1,554	21.0%	1,709	23.1%	27	0.4%	4,114	55.6%	7,404

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
South West Region									
2007-08	17,465	30.7%	10,950	19.2%	240	0.4%	28,314	49.7%	56,969
2008-09	18,650	28.8%	14,420	22.3%	548	0.8%	31,049	48.0%	64,667
2009-10	19,276	26.1%	16,033	21.7%	70	0.1%	38,361	52.0%	73,740
2010-11	22,119	28.8%	17,614	22.9%	1,188	1.5%	35,940	46.8%	76,861
2011-12	21,699	28.1%	19,669	25.4%	314	0.4%	35,662	46.1%	77,344
2012-13	22,825	25.0%	28,771	31.5%	355	0.4%	39,455	43.2%	91,406
2013-14	19,510	21.7%	25,110	28.0%	440	0.5%	44,681	49.8%	89,741
2014-15	25,635	27.8%	20,411	22.1%	521	0.6%	45,621	49.5%	92,188
2015-16	32,315	32.1%	29,621	29.4%	894	0.9%	37,822	37.6%	100,652
2016-17	32,546	28.2%	35,244	30.6%	2,511	2.2%	44,909	39.0%	115,210
Augusta-Margaret River									
2007-08	1,392	49.9%	333	11.9%	0	0.0%	1,066	38.2%	2,791
2008-09	2,569	42.9%	973	16.2%	529	8.8%	1,920	32.0%	5,991
2009-10	1,670	35.4%	767	16.2%	29	0.6%	2,255	47.8%	4,721
2010-11	1,601	36.6%	766	17.5%	0	0.0%	2,008	45.9%	4,375
2011-12	2,244	43.8%	981	19.2%	0	0.0%	1,894	37.0%	5,119
2012-13	1,592	35.0%	963	21.2%	0	0.0%	1,996	43.9%	4,551
2013-14	875	13.5%	2,502	38.5%	133	2.0%	2,984	46.0%	6,494
2014-15	1,541	24.5%	1,404	22.3%	212	3.4%	3,133	49.8%	6,290
2015-16	2,629	40.2%	1,435	21.9%	0	0.0%	2,474	37.8%	6,538
2016-17	2,464	34.0%	1,071	14.8%	0	0.0%	3,710	51.2%	7,245
Boddington									
2007-08	269	36.1%	203	27.2%	0	0.0%	273	36.6%	745
2008-09	273	19.4%	652	46.4%	0	0.0%	479	34.1%	1,404
2009-10	272	36.4%	230	30.8%	0	0.0%	245	32.8%	747
2010-11	228	16.5%	816	59.1%	105	7.6%	231	16.7%	1,380
2011-12	242	27.2%	354	39.7%	0	0.0%	295	33.1%	891
2012-13	278	19.2%	767	53.0%	0	0.0%	401	27.7%	1,446
2013-14	378	38.8%	595	61.2%	0	0.0%	0	0.0%	973
2014-15	286	33.2%	226	26.2%	0	0.0%	350	40.6%	862
2015-16	465	46.1%	280	27.8%	0	0.0%	264	26.2%	1,009
2016-17	499	44.8%	271	24.3%	0	0.0%	344	30.9%	1,114
Boyup Brook									
2007-08	792	48.9%	467	28.9%	33	2.0%	326	20.1%	1,618
2008-09	903	49.0%	354	19.2%	19	1.0%	567	30.8%	1,843
2009-10	1,031	44.1%	584	25.0%	0	0.0%	724	31.0%	2,339
2010-11	1,116	59.1%	431	22.8%	0	0.0%	341	18.1%	1,888
2011-12	769	34.0%	706	31.2%	0	0.0%	790	34.9%	2,265
2012-13	911	54.4%	265	15.8%	0	0.0%	498	29.7%	1,674
2013-14	1,318	52.8%	869	34.8%	0	0.0%	310	12.4%	2,497
2014-15	1,261	56.0%	471	20.9%	80	3.6%	440	19.5%	2,252
2015-16	1,450	38.1%	1,837	48.2%	0	0.0%	522	13.7%	3,809
2016-17	2,107	45.5%	1,987	42.9%	5	0.1%	530	11.4%	4,629

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Bridgetown Greenbushes									
2007-08	1,668	45.8%	1,292	35.4%	26	0.7%	659	18.1%	3,645
2008-09	834	39.5%	407	19.3%	0	0.0%	870	41.2%	2,111
2009-10	882	29.9%	1,063	36.0%	0	0.0%	1,008	34.1%	2,953
2010-11	1,317	39.9%	306	9.3%	529	16.0%	1,150	34.8%	3,302
2011-12	1,067	44.4%	480	20.0%	0	0.0%	854	35.6%	2,401
2012-13	947	43.0%	585	26.5%	0	0.0%	672	30.5%	2,204
2013-14	1,124	43.3%	516	19.9%	0	0.0%	956	36.8%	2,596
2014-15	985	45.4%	470	21.7%	0	0.0%	713	32.9%	2,168
2015-16	1,766	60.4%	389	13.3%	14	0.5%	756	25.8%	2,925
2016-17	2,803	73.1%	681	17.8%	0	0.0%	351	9.2%	3,835
Bunbury									
2007-08	1,090	24.8%	397	9.0%	25	0.6%	2,879	65.6%	4,391
2008-09	809	13.3%	1,465	24.1%	0	0.0%	3,801	62.6%	6,075
2009-10	1,294	15.2%	1,451	17.0%	0	0.0%	5,794	67.9%	8,539
2010-11	1,452	18.0%	1,099	13.7%	0	0.0%	5,495	68.3%	8,046
2011-12	2,272	20.8%	1,838	16.9%	0	0.0%	6,789	62.3%	10,899
2012-13	1,458	12.3%	3,460	29.2%	26	0.2%	6,896	58.2%	11,840
2013-14	1,370	13.9%	1,395	14.1%	3	0.0%	7,103	72.0%	9,871
2014-15	1,458	16.4%	1,649	18.5%	7	0.1%	5,786	65.0%	8,900
2015-16	1,824	24.9%	1,852	25.3%	73	1.0%	3,573	48.8%	7,322
2016-17	1,550	16.1%	2,305	24.0%	20	0.2%	5,746	59.7%	9,621
Busselton									
2007-08	1,569	24.7%	1,203	18.9%	0	0.0%	3,589	56.4%	6,361
2008-09	1,887	27.5%	768	11.2%	0	0.0%	4,217	61.4%	6,872
2009-10	2,156	32.5%	706	10.6%	0	0.0%	3,774	56.9%	6,636
2010-11	2,381	27.3%	1,343	15.4%	0	0.0%	5,011	57.4%	8,735
2011-12	2,741	26.9%	3,413	33.5%	139	1.4%	3,893	38.2%	10,186
2012-13	3,803	30.8%	2,538	20.5%	164	1.3%	5,849	47.3%	12,354
2013-14	2,190	17.1%	3,432	26.8%	103	0.8%	7,082	55.3%	12,807
2014-15	2,086	19.9%	1,298	12.4%	26	0.2%	7,087	67.5%	10,497
2015-16	3,834	29.9%	1,440	11.2%	0	0.0%	7,562	58.9%	12,836
2016-17	4,708	31.6%	2,029	13.6%	0	0.0%	8,142	54.7%	14,879
Capel									
2007-08	1,546	39.2%	436	11.1%	0	0.0%	1,958	49.7%	3,940
2008-09	689	25.9%	142	5.3%	0	0.0%	1,834	68.8%	2,665
2009-10	771	22.1%	938	26.9%	0	0.0%	1,776	51.0%	3,485
2010-11	834	24.9%	686	20.5%	34	1.0%	1,797	53.6%	3,351
2011-12	678	20.3%	891	26.7%	3	0.1%	1,768	52.9%	3,340
2012-13	517	16.4%	263	8.3%	48	1.5%	2,328	73.8%	3,156
2013-14	921	27.3%	289	8.6%	22	0.7%	2,143	63.5%	3,375
2014-15	813	21.4%	461	12.1%	26	0.7%	2,502	65.8%	3,802
2015-16	1,350	33.1%	204	5.0%	28	0.7%	2,495	61.2%	4,077
2016-17	1,496	30.8%	851	17.5%	0	0.0%	2,512	51.7%	4,859

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Collie									
2007-08	686	33.0%	337	16.2%	0	0.0%	1,058	50.8%	2,081
2008-09	671	23.7%	402	14.2%	0	0.0%	1,759	62.1%	2,832
2009-10	820	19.4%	2,146	50.9%	0	0.0%	1,250	29.6%	4,216
2010-11	654	18.3%	477	13.4%	0	0.0%	2,439	68.3%	3,570
2011-12	1,163	33.7%	1,229	35.6%	0	0.0%	1,057	30.6%	3,449
2012-13	891	27.2%	864	26.4%	4	0.1%	1,514	46.3%	3,273
2013-14	435	15.7%	763	27.5%	0	0.0%	1,580	56.9%	2,778
2014-15	703	19.9%	1,769	50.1%	0	0.0%	1,057	30.0%	3,529
2015-16	1,381	58.6%	558	23.7%	0	0.0%	416	17.7%	2,355
2016-17	1,497	56.4%	605	22.8%	0	0.0%	551	20.8%	2,653
Dardanup									
2007-08	465	19.9%	867	37.1%	0	0.0%	1,003	43.0%	2,335
2008-09	570	22.6%	735	29.1%	0	0.0%	1,221	48.3%	2,526
2009-10	615	14.1%	1,874	43.0%	0	0.0%	1,871	42.9%	4,360
2010-11	626	19.4%	1,059	32.9%	15	0.5%	1,520	47.2%	3,220
2011-12	649	19.9%	1,623	49.7%	13	0.4%	979	30.0%	3,264
2012-13	1,696	26.2%	2,603	40.2%	0	0.0%	2,177	33.6%	6,476
2013-14	1,031	18.5%	2,176	39.1%	0	0.0%	2,358	42.4%	5,565
2014-15	902	16.5%	1,630	29.8%	10	0.2%	2,928	53.5%	5,470
2015-16	1,092	20.6%	1,468	27.7%	10	0.2%	2,721	51.4%	5,291
2016-17	1,199	21.1%	1,948	34.3%	0	0.0%	2,531	44.6%	5,678
Donnybrook									
2007-08	737	34.0%	751	34.7%	28	1.3%	650	30.0%	2,166
2008-09	1,121	45.4%	812	32.9%	0	0.0%	536	21.7%	2,469
2009-10	898	31.1%	1,104	38.3%	41	1.4%	843	29.2%	2,886
2010-11	1,022	42.1%	683	28.1%	44	1.8%	680	28.0%	2,429
2011-12	1,735	53.1%	658	20.1%	19	0.6%	858	26.2%	3,270
2012-13	1,268	31.9%	1,470	37.0%	19	0.5%	1,220	30.7%	3,977
2013-14	1,477	33.8%	1,398	32.0%	21	0.5%	1,473	33.7%	4,369
2014-15	1,363	17.8%	3,808	49.9%	5	0.1%	2,462	32.2%	7,638
2015-16	2,818	38.1%	3,730	50.4%	11	0.1%	840	11.4%	7,399
2016-17	926	23.7%	1,554	39.7%	0	0.0%	1,432	36.6%	3,912
Harvey									
2007-08	1,279	21.3%	1,298	21.6%	58	1.0%	3,362	56.1%	5,997
2008-09	1,189	22.2%	1,046	19.5%	0	0.0%	3,125	58.3%	5,360
2009-10	1,817	29.9%	502	8.3%	0	0.0%	3,748	61.8%	6,067
2010-11	1,881	30.7%	1,410	23.0%	0	0.0%	2,844	46.4%	6,135
2011-12	1,407	22.7%	1,891	30.6%	0	0.0%	2,887	46.7%	6,185
2012-13	1,699	23.3%	1,609	22.0%	0	0.0%	3,999	54.7%	7,307
2013-14	1,785	26.3%	1,020	15.0%	0	0.0%	3,973	58.6%	6,778
2014-15	2,686	36.2%	824	11.1%	0	0.0%	3,908	52.7%	7,418
2015-16	2,257	35.7%	798	12.6%	0	0.0%	3,263	51.6%	6,318
2016-17	2,183	25.2%	1,243	14.4%	0	0.0%	5,226	60.4%	8,652

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Mandurah									
2007-08	1,095	12.2%	1,164	12.9%	0	0.0%	6,747	74.9%	9,006
2008-09	1,232	12.0%	2,644	25.8%	0	0.0%	6,388	62.2%	10,264
2009-10	1,775	13.1%	1,577	11.6%	0	0.0%	10,247	75.4%	13,599
2010-11	4,502	32.2%	1,394	10.0%	231	1.7%	7,863	56.2%	13,990
2011-12	1,776	14.5%	2,252	18.4%	0	0.0%	8,199	67.1%	12,227
2012-13	1,875	14.3%	4,365	33.3%	0	0.0%	6,877	52.4%	13,117
2013-14	2,094	17.9%	2,731	23.4%	0	0.0%	6,865	58.7%	11,690
2014-15	6,594	38.7%	2,023	11.9%	0	0.0%	8,421	49.4%	17,038
2015-16	3,284	20.6%	4,197	26.3%	673	4.2%	7,784	48.8%	15,938
2016-17	3,311	13.1%	11,657	46.1%	2,444	9.7%	7,895	31.2%	25,307
Manjimup									
2007-08	1,435	31.0%	836	18.1%	0	0.0%	2,355	50.9%	4,626
2008-09	2,840	40.1%	2,767	39.1%	0	0.0%	1,469	20.8%	7,076
2009-10	1,732	35.1%	1,476	29.9%	0	0.0%	1,728	35.0%	4,936
2010-11	2,268	45.7%	933	18.8%	0	0.0%	1,765	35.5%	4,966
2011-12	1,634	32.6%	1,648	32.9%	0	0.0%	1,723	34.4%	5,005
2012-13	2,660	45.6%	1,528	26.2%	0	0.0%	1,647	28.2%	5,835
2013-14	2,477	34.3%	2,334	32.3%	0	0.0%	2,405	33.3%	7,216
2014-15	2,139	36.8%	1,757	30.2%	40	0.7%	1,883	32.4%	5,819
2015-16	2,989	38.4%	2,654	34.1%	15	0.2%	2,116	27.2%	7,774
2016-17	3,328	37.1%	3,471	38.7%	20	0.2%	2,158	24.0%	8,977
Murray									
2007-08	1,306	39.0%	559	16.7%	70	2.1%	1,411	42.2%	3,346
2008-09	989	29.4%	771	22.9%	0	0.0%	1,607	47.7%	3,367
2009-10	1,328	34.2%	697	18.0%	0	0.0%	1,856	47.8%	3,881
2010-11	916	27.8%	486	14.8%	230	7.0%	1,660	50.4%	3,292
2011-12	1,437	28.6%	997	19.8%	140	2.8%	2,456	48.8%	5,030
2012-13	1,062	23.3%	1,392	30.5%	94	2.1%	2,019	44.2%	4,567
2013-14	908	16.1%	1,117	19.8%	158	2.8%	3,447	61.2%	5,630
2014-15	1,172	21.7%	1,049	19.4%	115	2.1%	3,072	56.8%	5,408
2015-16	2,711	22.2%	7,777	63.7%	70	0.6%	1,658	13.6%	12,216
2016-17	2,311	29.5%	3,895	49.7%	22	0.3%	1,612	20.6%	7,840
Nannup									
2007-08	814	43.2%	568	30.1%	0	0.0%	502	26.6%	1,884
2008-09	1,432	61.4%	210	9.0%	0	0.0%	689	29.6%	2,331
2009-10	1,547	55.8%	671	24.2%	0	0.0%	555	20.0%	2,773
2010-11	654	9.6%	5,491	81.0%	0	0.0%	634	9.4%	6,779
2011-12	1,300	55.3%	304	12.9%	0	0.0%	745	31.7%	2,349
2012-13	1,616	20.2%	5,754	71.9%	0	0.0%	638	8.0%	8,008
2013-14	815	15.7%	3,442	66.2%	0	0.0%	944	18.2%	5,201
2014-15	1,073	33.3%	1,250	38.8%	0	0.0%	900	27.9%	3,223
2015-16	1,564	54.3%	441	15.3%	0	0.0%	875	30.4%	2,880
2016-17	1,229	32.1%	950	24.8%	0	0.0%	1,646	43.0%	3,825

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Waroona									
2007-08	1,322	64.9%	239	11.7%	0	0.0%	476	23.4%	2,037
2008-09	642	43.3%	272	18.4%	0	0.0%	567	38.3%	1,481
2009-10	668	41.7%	247	15.4%	0	0.0%	687	42.9%	1,602
2010-11	667	47.5%	234	16.7%	0	0.0%	502	35.8%	1,403
2011-12	585	40.0%	404	27.6%	0	0.0%	475	32.4%	1,464
2012-13	552	34.1%	345	21.3%	0	0.0%	724	44.7%	1,621
2013-14	312	16.4%	531	27.9%	0	0.0%	1,058	55.7%	1,901
2014-15	573	30.6%	322	17.2%	0	0.0%	979	52.2%	1,874
2015-16	901	45.9%	561	28.5%	0	0.0%	503	25.6%	1,965
2016-17	935	42.8%	726	33.2%	0	0.0%	523	23.9%	2,184

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Wheatbelt North Region									
2007-08	20,905	47.1%	10,872	24.5%	495	1.1%	12,154	27.4%	44,426
2008-09	24,256	48.5%	9,664	19.3%	412	0.8%	15,670	31.3%	50,002
2009-10	22,970	47.5%	11,192	23.1%	18	0.0%	14,179	29.3%	48,359
2010-11	23,368	47.7%	11,722	23.9%	106	0.2%	13,809	28.2%	49,005
2011-12	23,531	43.0%	16,756	30.6%	165	0.3%	14,295	26.1%	54,747
2012-13	23,484	39.2%	18,926	31.6%	68	0.1%	17,488	29.2%	59,966
2013-14	18,503	28.6%	21,788	33.7%	344	0.5%	24,104	37.2%	64,739
2014-15	22,920	36.8%	22,243	35.7%	333	0.5%	16,735	26.9%	62,231
2014-16	34,070	47.5%	20,130	28.1%	65	0.1%	17,472	24.4%	71,737
2016-17	33,272	45.5%	20,604	28.2%	23	0.0%	19,293	26.4%	73,192
Chittering									
2007-08	317	19.2%	366	22.2%	5	0.3%	964	58.4%	1,652
2008-09	946	38.1%	337	13.6%	191	7.7%	1,009	40.6%	2,483
2009-10	1,442	42.4%	471	13.8%	0	0.0%	1,489	43.8%	3,402
2010-11	858	31.8%	605	22.4%	7	0.3%	1,226	45.5%	2,696
2011-12	818	28.1%	292	10.0%	135	4.6%	1,667	57.2%	2,912
2012-13	791	37.8%	754	36.0%	0	0.0%	548	26.2%	2,093
2013-14	382	14.4%	840	31.6%	0	0.0%	1,435	54.0%	2,657
2014-15	678	28.0%	613	25.3%	0	0.0%	1,134	46.8%	2,425
2015-16	745	23.4%	868	27.3%	0	0.0%	1,564	49.2%	3,177
2016-17	2,106	47.8%	728	16.5%	0	0.0%	1,571	35.7%	4,405
Cunderdin									
2007-08	633	56.2%	210	18.6%	0	0.0%	284	25.2%	1,127
2008-09	650	44.3%	262	17.9%	0	0.0%	554	37.8%	1,466
2009-10	685	50.5%	265	19.5%	0	0.0%	406	29.9%	1,356
2010-11	693	33.3%	1,117	53.7%	0	0.0%	272	13.1%	2,082
2011-12	725	32.5%	1,220	54.7%	0	0.0%	286	12.8%	2,231
2012-13	971	46.3%	1,056	50.3%	0	0.0%	71	3.4%	2,098
2013-14	484	27.0%	723	40.4%	0	0.0%	583	32.6%	1,790
2014-15	731	50.0%	431	29.5%	0	0.0%	300	20.5%	1,462
2015-16	1,162	66.9%	423	24.4%	0	0.0%	151	8.7%	1,736
2016-17	1,081	56.4%	443	23.1%	0	0.0%	393	20.5%	1,917
Dalwallinu									
2007-08	1,386	47.8%	516	17.8%	0	0.0%	996	34.4%	2,898
2008-09	1,420	47.1%	550	18.3%	0	0.0%	1,043	34.6%	3,013
2009-10	1,752	71.4%	288	11.7%	0	0.0%	413	16.8%	2,453
2010-11	1,566	64.1%	373	15.3%	0	0.0%	503	20.6%	2,442
2011-12	1,895	59.0%	589	18.3%	0	0.0%	727	22.6%	3,211
2012-13	1,555	46.0%	691	20.4%	0	0.0%	1,134	33.6%	3,380
2013-14	1,055	26.7%	791	20.0%	0	0.0%	2,110	53.3%	3,956
2014-15	1,658	56.7%	950	32.5%	0	0.0%	318	10.9%	2,926
2015-16	2,607	35.6%	4,020	54.9%	0	0.0%	698	9.5%	7,325
2016-17	2,470	37.1%	3,799	57.1%	0	0.0%	383	5.8%	6,652

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Dandaragan									
2007-08	1,150	28.4%	1,901	46.9%	0	0.0%	999	24.7%	4,050
2008-09	1,670	46.4%	460	12.8%	0	0.0%	1,469	40.8%	3,599
2009-10	1,370	52.3%	485	18.5%	0	0.0%	763	29.1%	2,618
2010-11	1,574	61.0%	448	17.4%	0	0.0%	558	21.6%	2,580
2011-12	1,614	51.6%	810	25.9%	0	0.0%	705	22.5%	3,129
2012-13	1,314	46.9%	476	17.0%	0	0.0%	1,011	36.1%	2,801
2013-14	824	26.9%	904	29.5%	0	0.0%	1,337	43.6%	3,065
2014-15	930	27.4%	1,838	54.1%	0	0.0%	628	18.5%	3,396
2015-16	2,311	41.7%	2,459	44.4%	0	0.0%	771	13.9%	5,541
2016-17	1,829	34.2%	2,593	48.5%	0	0.0%	927	17.3%	5,349
Dowerin									
2007-08	618	62.3%	364	36.7%	0	0.0%	10	1.0%	992
2008-09	940	68.6%	261	19.1%	0	0.0%	169	12.3%	1,370
2009-10	709	58.8%	411	34.1%	0	0.0%	85	7.1%	1,205
2010-11	743	57.1%	311	23.9%	0	0.0%	247	19.0%	1,301
2011-12	790	55.1%	320	22.3%	0	0.0%	325	22.6%	1,435
2012-13	747	47.8%	390	25.0%	0	0.0%	426	27.3%	1,563
2013-14	878	59.5%	383	25.9%	0	0.0%	215	14.6%	1,476
2014-15	775	52.6%	398	27.0%	0	0.0%	300	20.4%	1,473
2015-16	1,185	81.2%	40	2.7%	0	0.0%	235	16.1%	1,460
2016-17	1,035	71.1%	311	21.4%	0	0.0%	109	7.5%	1,455
Gingin									
2007-08	1,176	40.6%	283	9.8%	10	0.3%	1,430	49.3%	2,899
2008-09	1,207	34.5%	494	14.1%	202	5.8%	1,596	45.6%	3,499
2009-10	1,336	39.0%	1,340	39.1%	0	0.0%	750	21.9%	3,426
2010-11	1,422	49.7%	563	19.7%	0	0.0%	878	30.7%	2,863
2011-12	1,485	38.8%	1,360	35.5%	0	0.0%	981	25.6%	3,826
2012-13	1,305	30.3%	1,756	40.8%	0	0.0%	1,248	29.0%	4,309
2013-14	809	18.9%	757	17.7%	0	0.0%	2,704	63.3%	4,270
2014-15	1,694	32.4%	1,497	28.6%	305	5.8%	1,732	33.1%	5,228
2015-16	1,973	37.1%	929	17.5%	0	0.0%	2,411	45.4%	5,313
2016-17	1,738	35.1%	896	18.1%	9	0.2%	2,307	46.6%	4,950
Goomalling									
2007-08	440	24.8%	521	29.4%	0	0.0%	810	45.7%	1,771
2008-09	615	24.4%	1,031	40.9%	0	0.0%	873	34.7%	2,519
2009-10	537	27.9%	485	25.2%	0	0.0%	902	46.9%	1,924
2010-11	508	22.6%	550	24.5%	0	0.0%	1,189	52.9%	2,247
2011-12	691	23.5%	1,246	42.4%	0	0.0%	1,001	34.1%	2,938
2012-13	502	19.9%	457	18.1%	0	0.0%	1,562	62.0%	2,521
2013-14	333	12.4%	441	16.4%	0	0.0%	1,915	71.2%	2,689
2014-15	517	15.0%	1,739	50.4%	0	0.0%	1,196	34.6%	3,452
2015-16	820	26.6%	596	19.3%	0	0.0%	1,668	54.1%	3,084
2016-17	730	24.3%	637	21.2%	0	0.0%	1,632	54.4%	2,999

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Kellerberrin									
2007-08	684	61.1%	262	23.4%	0	0.0%	174	15.5%	1,120
2008-09	729	52.3%	296	21.2%	0	0.0%	370	26.5%	1,395
2009-10	738	55.9%	272	20.6%	0	0.0%	310	23.5%	1,320
2010-11	774	61.4%	356	28.3%	0	0.0%	130	10.3%	1,260
2011-12	793	21.7%	2,621	71.8%	0	0.0%	236	6.5%	3,650
2012-13	780	16.9%	3,573	77.3%	0	0.0%	272	5.9%	4,625
2013-14	817	13.2%	5,095	82.1%	0	0.0%	294	4.7%	6,206
2014-15	1,497	23.2%	4,198	65.2%	0	0.0%	746	11.6%	6,441
2015-16	1,292	60.3%	575	26.9%	0	0.0%	274	12.8%	2,141
2016-17	1,146	45.8%	731	29.2%	0	0.0%	626	25.0%	2,503
Koorda									
2007-08	834	54.7%	310	20.3%	0	0.0%	381	25.0%	1,525
2008-09	850	54.8%	312	20.1%	0	0.0%	390	25.1%	1,552
2009-10	1,042	63.5%	352	21.5%	0	0.0%	247	15.1%	1,641
2010-11	932	50.3%	384	20.7%	0	0.0%	537	29.0%	1,853
2011-12	779	45.1%	410	23.7%	0	0.0%	538	31.2%	1,727
2012-13	887	50.7%	453	25.9%	0	0.0%	408	23.3%	1,748
2013-14	930	53.3%	497	28.5%	0	0.0%	318	18.2%	1,745
2014-15	897	46.9%	451	23.6%	0	0.0%	565	29.5%	1,913
2015-16	602	28.5%	1,447	68.5%	0	0.0%	62	2.9%	2,111
2016-17	1,363	51.1%	477	17.9%	0	0.0%	826	31.0%	2,666
Merredin									
2007-08	965	67.9%	373	26.2%	0	0.0%	84	5.9%	1,422
2008-09	1,147	51.9%	409	18.5%	0	0.0%	656	29.7%	2,212
2009-10	1,049	55.4%	520	27.5%	0	0.0%	325	17.2%	1,894
2010-11	1,309	61.5%	497	23.4%	0	0.0%	321	15.1%	2,127
2011-12	924	54.4%	482	28.4%	0	0.0%	293	17.2%	1,699
2012-13	1,557	57.3%	624	23.0%	0	0.0%	535	19.7%	2,716
2013-14	873	35.0%	666	26.7%	0	0.0%	952	38.2%	2,491
2014-15	1,171	35.7%	1,569	47.9%	0	0.0%	537	16.4%	3,277
2015-16	1,925	57.4%	723	21.5%	0	0.0%	707	21.1%	3,355
2016-17	1,916	55.6%	649	18.8%	0	0.0%	881	25.6%	3,446
Moora									
2007-08	1,809	66.6%	504	18.6%	0	0.0%	403	14.8%	2,716
2008-09	1,599	65.3%	484	19.8%	0	0.0%	366	14.9%	2,449
2009-10	855	34.1%	722	28.8%	0	0.0%	932	37.1%	2,509
2010-11	1,143	48.8%	671	28.7%	0	0.0%	528	22.5%	2,342
2011-12	1,109	57.3%	694	35.9%	2	0.1%	130	6.7%	1,935
2012-13	936	39.5%	713	30.1%	0	0.0%	719	30.4%	2,368
2013-14	830	33.7%	906	36.8%	0	0.0%	728	29.5%	2,464
2014-15	997	39.3%	781	30.8%	0	0.0%	759	29.9%	2,537
2015-16	1,652	63.6%	742	28.6%	0	0.0%	203	7.8%	2,597
2016-17	1,467	36.5%	1,138	28.3%	0	0.0%	1,415	35.2%	4,020

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Mount Marshall									
2007-08	1,393	68.2%	428	21.0%	0	0.0%	221	10.8%	2,042
2008-09	1,195	61.3%	499	25.6%	0	0.0%	256	13.1%	1,950
2009-10	1,204	63.9%	449	23.8%	0	0.0%	230	12.2%	1,883
2010-11	1,300	58.9%	628	28.4%	0	0.0%	281	12.7%	2,209
2011-12	1,504	71.6%	547	26.0%	0	0.0%	51	2.4%	2,102
2012-13	1,393	62.8%	630	28.4%	0	0.0%	195	8.8%	2,218
2013-14	924	40.3%	667	29.1%	0	0.0%	702	30.6%	2,293
2014-15	1,178	58.9%	690	34.5%	0	0.0%	131	6.6%	1,999
2015-16	1,798	63.8%	715	25.4%	0	0.0%	307	10.9%	2,820
2016-17	1,735	60.3%	1,045	36.3%	0	0.0%	97	3.4%	2,877
Mukinbudin									
2007-08	512	49.5%	450	43.5%	0	0.0%	72	7.0%	1,034
2008-09	734	68.2%	267	24.8%	0	0.0%	76	7.1%	1,077
2009-10	821	67.5%	316	26.0%	0	0.0%	80	6.6%	1,217
2010-11	733	52.4%	533	38.1%	0	0.0%	132	9.4%	1,398
2011-12	862	74.2%	300	25.8%	0	0.0%	0	0.0%	1,162
2012-13	763	47.1%	459	28.3%	0	0.0%	398	24.6%	1,620
2013-14	485	26.4%	595	32.3%	0	0.0%	760	41.3%	1,840
2014-15	757	40.9%	770	41.6%	0	0.0%	325	17.5%	1,852
2015-16	1,203	60.2%	518	25.9%	0	0.0%	276	13.8%	1,997
2016-17	877	54.4%	440	27.3%	0	0.0%	295	18.3%	1,612
Shire of Northam [New Shire established 1 July 2007] by the amalgamation of the former Shire of Northam and the Town of Northam									
2007-08	970	42.8%	414	18.3%	0	0.0%	884	39.0%	2,268
2008-09	932	27.7%	418	12.4%	0	0.0%	2,020	59.9%	3,370
2009-10	1,220	33.7%	641	17.7%	0	0.0%	1,758	48.6%	3,619
2010-11	1,421	37.6%	396	10.5%	0	0.0%	1,961	51.9%	3,778
2011-12	1,532	39.5%	445	11.5%	0	0.0%	1,900	49.0%	3,877
2012-13	1,706	35.2%	609	12.5%	0	0.0%	2,538	52.3%	4,853
2013-14	908	12.3%	3,778	51.2%	0	0.0%	2,686	36.4%	7,372
2014-15	1,248	24.6%	1,393	27.4%	0	0.0%	2,435	48.0%	5,076
2015-16	2,169	37.3%	702	12.1%	0	0.0%	2,944	50.6%	5,815
2016-17	1,231	21.9%	800	14.2%	0	0.0%	3,591	63.9%	5,622
Nungarin									
2007-08	364	62.5%	127	21.8%	0	0.0%	91	15.6%	582
2008-09	379	63.0%	147	24.4%	0	0.0%	76	12.6%	602
2009-10	377	46.9%	304	37.9%	0	0.0%	122	15.2%	803
2010-11	398	43.0%	148	16.0%	0	0.0%	379	41.0%	925
2011-12	568	61.7%	193	21.0%	0	0.0%	160	17.4%	921
2012-13	416	29.2%	566	39.8%	0	0.0%	441	31.0%	1,423
2013-14	293	26.0%	431	38.3%	0	0.0%	402	35.7%	1,126
2014-15	433	34.7%	357	28.6%	0	0.0%	457	36.6%	1,247
2015-16	713	53.6%	239	18.0%	0	0.0%	377	28.4%	1,329
2016-17	686	56.4%	244	20.1%	0	0.0%	286	23.5%	1,216

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Tammin									
2007-08	483	61.7%	157	20.1%	0	0.0%	143	18.3%	783
2008-09	346	75.2%	142	30.9%	0	0.0%	-28	-6.1%	460
2009-10	491	51.3%	271	28.3%	0	0.0%	196	20.5%	958
2010-11	386	42.0%	171	18.6%	0	0.0%	363	39.5%	920
2011-12	406	51.3%	173	21.8%	0	0.0%	213	26.9%	792
2012-13	465	46.9%	248	25.0%	0	0.0%	278	28.1%	991
2013-14	242	25.9%	204	21.8%	0	0.0%	489	52.3%	935
2014-15	419	44.6%	291	31.0%	0	0.0%	229	24.4%	939
2015-16	559	45.4%	373	30.3%	0	0.0%	298	24.2%	1,230
2016-17	663	49.0%	415	30.7%	0	0.0%	275	20.3%	1,353
Toodyay									
2007-08	1,672	54.9%	449	14.8%	240	7.9%	682	22.4%	3,043
2008-09	2,271	67.7%	543	16.2%	0	0.0%	541	16.1%	3,355
2009-10	732	28.0%	459	17.6%	0	0.0%	1,419	54.4%	2,610
2010-11	983	32.1%	499	16.3%	0	0.0%	1,578	51.6%	3,060
2011-12	1,139	27.7%	1,413	34.4%	0	0.0%	1,559	37.9%	4,111
2012-13	1,003	30.4%	512	15.5%	25	0.8%	1,754	53.2%	3,294
2013-14	1,260	33.8%	843	22.6%	308	8.3%	1,315	35.3%	3,726
2014-15	810	36.9%	376	17.1%	0	0.0%	1,007	45.9%	2,193
2015-16	1,322	50.2%	797	30.3%	0	0.0%	515	19.6%	2,634
2016-17	1,350	44.8%	1,051	34.9%	0	0.0%	611	20.3%	3,012
Trayning									
2007-08	567	71.0%	211	26.4%	0	0.0%	21	2.6%	799
2008-09	609	62.0%	228	23.2%	0	0.0%	146	14.9%	983
2009-10	607	65.3%	202	21.7%	0	0.0%	120	12.9%	929
2010-11	625	62.9%	436	43.9%	0	0.0%	-67	-6.7%	994
2011-12	730	48.9%	864	57.9%	0	0.0%	-101	-6.8%	1,493
2012-13	654	23.1%	2,018	71.3%	0	0.0%	158	5.6%	2,830
2013-14	652	57.7%	328	29.0%	0	0.0%	150	13.3%	1,130
2014-15	659	58.3%	349	30.9%	0	0.0%	122	10.8%	1,130
2015-16	994	73.4%	360	26.6%	0	0.0%	0	0.0%	1,354
2016-17	1,076	74.3%	373	25.7%	0	0.0%	0	0.0%	1,449
Victoria Plains									
2007-08	509	28.5%	678	38.0%	0	0.0%	597	33.5%	1,784
2008-09	603	28.2%	305	14.3%	0	0.0%	1,229	57.5%	2,137
2009-10	623	30.2%	778	37.7%	0	0.0%	663	32.1%	2,064
2010-11	770	32.8%	833	35.5%	0	0.0%	744	31.7%	2,347
2011-12	573	33.4%	528	30.8%	0	0.0%	614	35.8%	1,715
2012-13	712	40.8%	437	25.0%	0	0.0%	597	34.2%	1,746
2013-14	744	34.3%	277	12.8%	0	0.0%	1,150	53.0%	2,171
2014-15	748	39.4%	207	10.9%	0	0.0%	942	49.7%	1,897
2015-16	1,201	44.1%	672	24.7%	20	0.7%	831	30.5%	2,724
2016-17	1,235	46.0%	313	11.7%	0	0.0%	1,138	42.4%	2,686

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Westonia									
2007-08	567	58.2%	313	32.1%	0	0.0%	94	9.7%	974
2008-09	600	53.2%	336	29.8%	0	0.0%	192	17.0%	1,128
2009-10	777	69.0%	349	31.0%	0	0.0%	0	0.0%	1,126
2010-11	694	65.6%	245	23.2%	0	0.0%	119	11.2%	1,058
2011-12	597	57.3%	325	31.2%	0	0.0%	120	11.5%	1,042
2012-13	663	67.8%	177	18.1%	0	0.0%	138	14.1%	978
2013-14	748	64.8%	276	23.9%	0	0.0%	130	11.3%	1,154
2014-15	748	64.8%	276	23.9%	0	0.0%	130	11.3%	1,154
2015-16	1,152	67.9%	345	20.3%	0	0.0%	200	11.8%	1,697
2016-17	1,022	51.6%	669	33.8%	0	0.0%	288	14.6%	1,979
Wongan – Ballidu									
2007-08	966	38.2%	590	23.4%	0	0.0%	970	38.4%	2,526
2008-09	1,013	42.9%	411	17.4%	0	0.0%	937	39.7%	2,361
2009-10	1,327	50.2%	567	21.5%	0	0.0%	748	28.3%	2,642
2010-11	1,102	43.2%	665	26.1%	0	0.0%	783	30.7%	2,550
2011-12	1,332	47.6%	635	22.7%	0	0.0%	831	29.7%	2,798
2012-13	1,101	41.6%	665	25.1%	0	0.0%	879	33.2%	2,645
2013-14	643	21.0%	647	21.2%	0	0.0%	1,766	57.8%	3,056
2014-15	1,158	40.9%	1,145	40.4%	0	0.0%	528	18.7%	2,831
2015-16	1,811	57.5%	763	24.2%	0	0.0%	578	18.3%	3,152
2016-17	1,656	55.9%	723	24.4%	0	0.0%	585	19.7%	2,964
Wyalkatchem									
2007-08	536	63.0%	275	32.3%	0	0.0%	40	4.7%	851
2008-09	724	75.0%	201	20.8%	0	0.0%	40	4.1%	965
2009-10	555	71.6%	220	28.4%	0	0.0%	0	0.0%	775
2010-11	626	77.8%	225	28.0%	0	0.0%	-46	-5.7%	805
2011-12	470	51.9%	270	29.8%	0	0.0%	166	18.3%	906
2012-13	710	57.8%	318	25.9%	0	0.0%	200	16.3%	1,228
2013-14	686	62.9%	329	30.2%	0	0.0%	75	6.9%	1,090
2014-15	633	55.2%	341	29.8%	0	0.0%	172	15.0%	1,146
2015-16	975	65.0%	342	22.8%	0	0.0%	182	12.1%	1,499
2016-17	893	66.2%	400	29.7%	0	0.0%	56	4.2%	1,349
Yilgarn									
2007-08	1,609	48.6%	682	20.6%	240	7.2%	781	23.6%	3,312
2008-09	1,797	57.1%	602	19.1%	19	0.6%	729	23.2%	3,147
2009-10	1,538	49.7%	603	19.5%	0	0.0%	952	30.8%	3,093
2010-11	1,935	64.6%	659	22.0%	91	3.0%	312	10.4%	2,997
2011-12	1,397	43.6%	686	21.4%	28	0.9%	1,092	34.1%	3,203
2012-13	1,626	45.7%	806	22.7%	43	1.2%	1,082	30.4%	3,557
2013-14	1,706	45.6%	915	24.4%	36	1.0%	1,088	29.1%	3,745
2014-15	1,689	45.4%	883	23.7%	28	0.8%	1,120	30.1%	3,720
2015-16	2,684	57.9%	919	19.8%	45	1.0%	989	21.3%	4,637
2016-17	2,531	63.5%	921	23.1%	14	0.4%	521	13.1%	3,987

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
York									
2007-08	745	33.0%	488	21.6%	0	0.0%	1,023	45.3%	2,256
2008-09	1,280	44.0%	669	23.0%	0	0.0%	961	33.0%	2,910
2009-10	1,183	40.9%	422	14.6%	18	0.6%	1,269	43.9%	2,892
2010-11	873	40.2%	409	18.8%	8	0.4%	881	40.6%	2,171
2011-12	798	41.3%	333	17.2%	0	0.0%	801	41.5%	1,932
2012-13	927	39.3%	538	22.8%	0	0.0%	896	38.0%	2,361
2013-14	997	43.5%	495	21.6%	0	0.0%	800	34.9%	2,292
2014-15	895	35.6%	700	27.8%	0	0.0%	922	36.6%	2,517
2015-16	1,215	40.4%	563	18.7%	0	0.0%	1,231	40.9%	3,009
2016-17	1,436	52.7%	808	29.7%	0	0.0%	480	17.6%	2,724

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Wheatbelt South Region									
2007-08	13,203	51.1%	5,803	22.5%	5	0.0%	6,818	26.4%	25,829
2008-09	14,015	48.8%	5,904	20.6%	5	0.0%	8,784	30.6%	28,708
2009-10	16,452	50.9%	6,760	20.9%	39	0.1%	9,047	28.0%	32,298
2010-11	16,081	50.2%	8,162	25.5%	53	0.2%	7,752	24.2%	32,048
2011-12	18,160	45.7%	13,791	34.7%	0	0.0%	7,780	19.6%	39,731
2012-13	14,464	33.6%	19,874	46.2%	5	0.0%	8,678	20.2%	43,021
2013-14	14,078	32.7%	18,501	43.0%	0	0.0%	10,472	24.3%	43,051
2014-15	15,245	39.6%	12,172	31.6%	12	0.0%	11,037	28.7%	38,466
2015-16	22,724	52.8%	9,228	21.4%	1,040	2.4%	10,046	23.3%	43,038
2016-17	22,282	46.5%	15,205	31.7%	13	0.0%	10,422	21.7%	47,922
Beverley									
2007-08	675	36.3%	303	16.3%	0	0.0%	884	47.5%	1,862
2008-09	756	35.2%	401	18.7%	0	0.0%	990	46.1%	2,147
2009-10	745	29.8%	610	24.4%	12	0.5%	1,132	45.3%	2,499
2010-11	644	25.9%	1,137	45.7%	0	0.0%	706	28.4%	2,487
2011-12	1,262	40.8%	1,224	39.6%	0	0.0%	608	19.7%	3,094
2012-13	988	40.8%	434	17.9%	0	0.0%	998	41.2%	2,420
2013-14	423	16.7%	967	38.2%	0	0.0%	1,140	45.1%	2,530
2014-15	826	41.0%	392	19.5%	12	0.6%	785	39.0%	2,015
2015-16	1,106	51.3%	438	20.3%	13	0.6%	599	27.8%	2,156
2016-17	1,103	48.7%	496	21.9%	13	0.6%	655	28.9%	2,267
Brookton									
2007-08	283	24.3%	365	31.3%	5	0.4%	514	44.0%	1,167
2008-09	547	43.6%	233	18.6%	5	0.4%	469	37.4%	1,254
2009-10	502	38.3%	270	20.6%	0	0.0%	538	41.1%	1,310
2010-11	456	40.8%	298	26.7%	0	0.0%	363	32.5%	1,117
2011-12	1,019	59.0%	475	27.5%	0	0.0%	232	13.4%	1,726
2012-13	605	36.5%	601	36.2%	5	0.3%	448	27.0%	1,659
2013-14	628	43.0%	288	19.7%	0	0.0%	545	37.3%	1,461
2014-15	483	39.7%	317	26.1%	0	0.0%	416	34.2%	1,216
2015-16	771	53.9%	325	22.7%	0	0.0%	335	23.4%	1,431
2016-17	808	50.2%	449	27.9%	0	0.0%	351	21.8%	1,608
Bruce Rock									
2007-08	882	66.2%	350	26.3%	0	0.0%	101	7.6%	1,333
2008-09	1,254	79.6%	202	12.8%	0	0.0%	119	7.6%	1,575
2009-10	1,093	67.1%	405	24.8%	0	0.0%	132	8.1%	1,630
2010-11	1,117	68.4%	353	21.6%	0	0.0%	162	9.9%	1,632
2011-12	1,392	70.1%	461	23.2%	0	0.0%	132	6.6%	1,985
2012-13	1,144	25.3%	3,182	70.3%	0	0.0%	203	4.5%	4,529
2013-14	746	17.3%	3,427	79.6%	0	0.0%	133	3.1%	4,306
2014-15	1,312	43.7%	583	19.4%	0	0.0%	1,107	36.9%	3,002
2015-16	1,590	60.5%	540	20.5%	0	0.0%	500	19.0%	2,630
2016-17	1,598	61.8%	737	28.5%	0	0.0%	250	9.7%	2,585

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Corrigin									
2007-08	857	81.3%	320	30.4%	0	0.0%	-123	-11.7%	1,054
2008-09	1,158	59.0%	318	16.2%	0	0.0%	487	24.8%	1,963
2009-10	859	65.2%	312	23.7%	0	0.0%	147	11.2%	1,318
2010-11	904	64.6%	346	24.7%	0	0.0%	150	10.7%	1,400
2011-12	1,150	72.1%	349	21.9%	0	0.0%	96	6.0%	1,595
2012-13	995	51.4%	511	26.4%	0	0.0%	428	22.1%	1,934
2013-14	567	31.6%	372	20.7%	0	0.0%	855	47.7%	1,794
2014-15	1,018	49.1%	469	22.6%	0	0.0%	588	28.3%	2,075
2015-16	1,332	54.5%	469	19.2%	0	0.0%	642	26.3%	2,443
2016-17	1,592	51.3%	663	21.4%	0	0.0%	850	27.4%	3,105
Cuballing									
2007-08	895	59.5%	204	13.6%	0	0.0%	406	27.0%	1,505
2008-09	483	38.4%	366	29.1%	0	0.0%	409	32.5%	1,258
2009-10	490	40.0%	389	31.8%	0	0.0%	346	28.2%	1,225
2010-11	815	42.8%	417	21.9%	0	0.0%	672	35.3%	1,904
2011-12	701	26.2%	1,402	52.3%	0	0.0%	577	21.5%	2,680
2012-13	963	28.5%	1,422	42.1%	0	0.0%	991	29.4%	3,376
2013-14	687	32.8%	662	31.6%	0	0.0%	747	35.6%	2,096
2014-15	472	28.5%	449	27.1%	0	0.0%	735	44.4%	1,656
2015-16	713	39.2%	369	20.3%	0	0.0%	737	40.5%	1,819
2016-17	819	51.1%	442	27.6%	0	0.0%	343	21.4%	1,604
Dumbleyung									
2007-08	791	58.0%	204	15.0%	0	0.0%	369	27.1%	1,364
2008-09	731	52.5%	305	21.9%	0	0.0%	356	25.6%	1,392
2009-10	898	58.5%	302	19.7%	0	0.0%	335	21.8%	1,535
2010-11	816	50.4%	332	20.5%	0	0.0%	472	29.1%	1,620
2011-12	673	41.5%	338	20.8%	0	0.0%	612	37.7%	1,623
2012-13	805	44.0%	499	27.3%	0	0.0%	525	28.7%	1,829
2013-14	525	28.7%	483	26.4%	0	0.0%	821	44.9%	1,829
2014-15	843	45.1%	449	24.0%	0	0.0%	577	30.9%	1,869
2015-16	1,330	58.8%	520	23.0%	0	0.0%	412	18.2%	2,262
2016-17	1,433	62.4%	384	16.7%	0	0.0%	481	20.9%	2,298
Kondinin									
2007-08	862	50.0%	561	32.5%	0	0.0%	302	17.5%	1,725
2008-09	897	53.1%	381	22.5%	0	0.0%	412	24.4%	1,690
2009-10	1,104	55.3%	483	24.2%	0	0.0%	409	20.5%	1,996
2010-11	1,017	41.2%	889	36.0%	50	2.0%	515	20.8%	2,471
2011-12	1,223	53.7%	361	15.8%	0	0.0%	695	30.5%	2,279
2012-13	1,040	57.7%	620	34.4%	0	0.0%	143	7.9%	1,803
2013-14	664	27.0%	732	29.8%	0	0.0%	1,061	43.2%	2,457
2014-15	1,138	42.9%	1,062	40.1%	0	0.0%	451	17.0%	2,651
2015-16	1,699	52.5%	488	15.1%	0	0.0%	1,047	32.4%	3,234
2016-17	1,877	61.0%	773	25.1%	0	0.0%	425	13.8%	3,075

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Kulin									
2007-08	1,138	51.1%	612	27.5%	0	0.0%	478	21.5%	2,228
2008-09	982	47.5%	416	20.1%	0	0.0%	670	32.4%	2,068
2009-10	1,421	50.9%	599	21.5%	0	0.0%	771	27.6%	2,791
2010-11	1,166	50.0%	447	19.2%	0	0.0%	718	30.8%	2,331
2011-12	1,199	46.3%	1,097	42.4%	0	0.0%	293	11.3%	2,589
2012-13	977	30.8%	1,897	59.9%	0	0.0%	295	9.3%	3,169
2013-14	1,167	38.9%	1,352	45.1%	0	0.0%	480	16.0%	2,999
2014-15	1,372	49.6%	1,168	42.2%	0	0.0%	228	8.2%	2,768
2015-16	2,178	81.1%	506	18.9%	0	0.0%	0	0.0%	2,684
2016-17	1,612	55.3%	532	18.3%	0	0.0%	771	26.4%	2,915
Lake Grace									
2007-08	1,517	57.4%	365	13.8%	0	0.0%	761	28.8%	2,643
2008-09	1,559	49.8%	570	18.2%	0	0.0%	1,001	32.0%	3,130
2009-10	2,003	55.2%	516	14.2%	0	0.0%	1,112	30.6%	3,631
2010-11	1,725	61.9%	470	16.9%	0	0.0%	594	21.3%	2,789
2011-12	2,161	55.6%	545	14.0%	0	0.0%	1,182	30.4%	3,888
2012-13	1,036	38.0%	502	18.4%	0	0.0%	1,186	43.5%	2,724
2013-14	1,740	49.2%	556	15.7%	0	0.0%	1,242	35.1%	3,538
2014-15	1,771	54.8%	533	16.5%	0	0.0%	930	28.8%	3,234
2015-16	2,969	72.5%	600	14.7%	0	0.0%	526	12.8%	4,095
2016-17	1,948	54.2%	981	27.3%	0	0.0%	667	18.5%	3,596
Narembeen									
2007-08	976	69.2%	338	24.0%	0	0.0%	96	6.8%	1,410
2008-09	952	64.5%	437	29.6%	0	0.0%	86	5.8%	1,475
2009-10	1,408	75.5%	334	17.9%	0	0.0%	123	6.6%	1,865
2010-11	1,210	74.5%	364	22.4%	0	0.0%	51	3.1%	1,625
2011-12	999	41.7%	1,010	42.1%	0	0.0%	388	16.2%	2,397
2012-13	1,162	64.8%	457	25.5%	0	0.0%	174	9.7%	1,793
2013-14	768	24.8%	2,130	68.9%	0	0.0%	195	6.3%	3,093
2014-15	968	36.7%	1,477	56.0%	0	0.0%	191	7.2%	2,636
2015-16	1,459	56.2%	673	25.9%	0	0.0%	463	17.8%	2,595
2016-17	1,455	28.0%	2,544	49.0%	0	0.0%	1,192	23.0%	5,191
Shire of Narrogin (new Shire established 1 July 2016)									
Amalgamation of the former Shire of Narrogin and the Town of Narrogin									
The amounts for 2006-07 to 2015-16 are the sums of the amounts for the former Shire of Narrogin and the Town of Narrogin									
2007-08	896	43.0%	282	13.5%	0	0.0%	906	43.5%	2,084
2008-09	718	31.6%	286	12.6%	0	0.0%	1,266	55.8%	2,270
2009-10	901	36.1%	426	17.1%	26	1.0%	1,141	45.7%	2,494
2010-11	837	31.5%	728	27.4%	0	0.0%	1,095	41.2%	2,660
2011-12	941	35.2%	774	28.9%	0	0.0%	959	35.9%	2,674
2012-13	423	13.4%	1,909	60.7%	0	0.0%	814	25.9%	3,146
2013-14	740	20.1%	1,719	46.6%	0	0.0%	1,228	33.3%	3,687
2014-15	769	17.0%	2,289	50.7%	0	0.0%	1,454	32.2%	4,512
2015-16	1,035	22.0%	681	14.5%	1,025	21.8%	1,963	41.7%	4,704
2016-17	1,189	30.9%	599	15.6%	0	0.0%	2,059	53.5%	3,847

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
Pingelly									
2007-08	439	38.7%	440	38.8%	0	0.0%	254	22.4%	1,133
2008-09	623	51.7%	287	23.8%	0	0.0%	295	24.5%	1,205
2009-10	489	29.7%	318	19.3%	0	0.0%	840	51.0%	1,647
2010-11	429	30.5%	329	23.4%	0	0.0%	650	46.2%	1,408
2011-12	1,221	41.2%	1,411	47.7%	0	0.0%	329	11.1%	2,961
2012-13	937	30.0%	2,090	66.8%	0	0.0%	101	3.2%	3,128
2013-14	1,763	68.6%	627	24.4%	0	0.0%	181	7.0%	2,571
2014-15	492	29.4%	465	27.8%	0	0.0%	715	42.8%	1,672
2015-16	784	35.7%	583	26.6%	0	0.0%	827	37.7%	2,194
2016-17	1,376	55.4%	633	25.5%	0	0.0%	476	19.2%	2,485
Quairading									
2007-08	690	49.1%	198	14.1%	0	0.0%	517	36.8%	1,405
2008-09	468	42.5%	227	20.6%	0	0.0%	405	36.8%	1,100
2009-10	792	63.3%	225	18.0%	0	0.0%	235	18.8%	1,252
2010-11	718	61.2%	262	22.3%	0	0.0%	193	16.5%	1,173
2011-12	966	60.4%	611	38.2%	0	0.0%	22	1.4%	1,599
2012-13	645	33.8%	1,284	67.3%	0	0.0%	-20	-1.0%	1,909
2013-14	977	38.1%	1,252	48.9%	0	0.0%	332	13.0%	2,561
2014-15	806	46.5%	429	24.7%	0	0.0%	499	28.8%	1,734
2015-16	698	39.9%	725	41.5%	0	0.0%	325	18.6%	1,748
2016-17	889	19.3%	3,420	74.2%	0	0.0%	299	6.5%	4,608
Wagin									
2007-08	611	63.3%	217	22.5%	0	0.0%	137	14.2%	965
2008-09	777	64.2%	369	30.5%	0	0.0%	65	5.4%	1,211
2009-10	862	63.8%	335	24.8%	0	0.0%	155	11.5%	1,352
2010-11	864	60.7%	421	29.6%	0	0.0%	139	9.8%	1,424
2011-12	695	56.1%	381	30.8%	0	0.0%	162	13.1%	1,238
2012-13	702	47.6%	470	31.8%	0	0.0%	304	20.6%	1,476
2013-14	712	50.9%	435	31.1%	0	0.0%	252	18.0%	1,399
2014-15	748	52.0%	395	27.5%	0	0.0%	295	20.5%	1,438
2015-16	1,107	61.1%	408	22.5%	0	0.0%	298	16.4%	1,813
2016-17	981	54.3%	521	28.8%	0	0.0%	305	16.9%	1,807
Wandering									
2007-08	270	34.3%	336	42.6%	0	0.0%	182	23.1%	788
2008-09	384	50.1%	324	42.3%	0	0.0%	58	7.6%	766
2009-10	427	39.8%	482	45.0%	0	0.0%	163	15.2%	1,072
2010-11	784	47.7%	561	34.1%	0	0.0%	298	18.1%	1,643
2011-12	261	12.0%	1,696	78.0%	0	0.0%	218	10.0%	2,175
2012-13	321	15.9%	1,275	63.3%	0	0.0%	417	20.7%	2,013
2013-14	372	14.6%	1,792	70.1%	0	0.0%	391	15.3%	2,555
2014-15	477	32.6%	463	31.7%	0	0.0%	521	35.7%	1,461
2015-16	1,042	60.7%	413	24.1%	0	0.0%	262	15.3%	1,717
2016-17	592	38.4%	561	36.4%	0	0.0%	390	25.3%	1,543

Appendix 21

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
West Arthur									
2007-08	480	35.1%	258	18.9%	0	0.0%	629	46.0%	1,367
2008-09	721	43.6%	311	18.8%	0	0.0%	621	37.6%	1,653
2009-10	658	50.9%	204	15.8%	1	0.1%	431	33.3%	1,294
2010-11	827	59.9%	255	18.5%	3	0.2%	295	21.4%	1,380
2011-12	914	45.3%	433	21.5%	0	0.0%	669	33.2%	2,016
2012-13	700	34.6%	516	25.5%	0	0.0%	807	39.9%	2,023
2013-14	668	42.8%	676	43.4%	0	0.0%	215	13.8%	1,559
2014-15	560	38.8%	233	16.2%	0	0.0%	649	45.0%	1,442
2015-16	1,025	46.5%	599	27.2%	2	0.1%	578	26.2%	2,204
2016-17	1,353	59.6%	572	25.2%	0	0.0%	346	15.2%	2,271
Wickepin									
2007-08	614	64.4%	214	22.4%	0	0.0%	126	13.2%	954
2008-09	637	50.8%	278	22.2%	0	0.0%	340	27.1%	1,255
2009-10	1,071	60.5%	302	17.1%	0	0.0%	396	22.4%	1,769
2010-11	864	62.4%	250	18.1%	0	0.0%	271	19.6%	1,385
2011-12	1,013	46.1%	895	40.8%	0	0.0%	288	13.1%	2,196
2012-13	461	19.4%	1,808	76.1%	0	0.0%	108	4.5%	2,377
2013-14	668	38.3%	771	44.3%	0	0.0%	303	17.4%	1,742
2014-15	753	40.9%	659	35.8%	0	0.0%	429	23.3%	1,841
2015-16	1,174	77.3%	317	20.9%	0	0.0%	27	1.8%	1,518
2016-17	1,037	70.0%	429	28.9%	0	0.0%	16	1.1%	1,482
Williams									
2007-08	327	38.8%	236	28.0%	0	0.0%	279	33.1%	842
2008-09	368	28.4%	193	14.9%	0	0.0%	735	56.7%	1,296
2009-10	729	45.1%	248	15.3%	0	0.0%	641	39.6%	1,618
2010-11	888	55.5%	303	18.9%	0	0.0%	408	25.5%	1,599
2011-12	370	36.4%	328	32.3%	0	0.0%	318	31.3%	1,016
2012-13	560	32.7%	397	23.2%	0	0.0%	756	44.1%	1,713
2013-14	263	30.1%	260	29.7%	0	0.0%	351	40.2%	874
2014-15	437	35.1%	340	27.3%	0	0.0%	467	37.5%	1,244
2015-16	712	39.8%	574	32.0%	0	0.0%	505	28.2%	1,791
2016-17	620	37.9%	469	28.7%	0	0.0%	546	33.4%	1,635

Sources of Road Funds – 2007-08 to 2016-17

Year	Federal		State		Private		Own Resources		Total
	$000s	%	$000s	%	$000s	%	$000s	%	$000s
State									
	Federal		State		Private		Council		**Total**
2007-08	143,290	28.7%	84,419	16.9%	10,952	2.2%	259,838	52.1%	**498,499**
2008-09	155,023	27.4%	94,899	16.8%	21,224	3.8%	294,123	52.0%	**565,269**
2009-10	160,512	26.8%	112,157	18.7%	11,103	1.9%	315,786	52.7%	**599,558**
2010-11	162,951	26.1%	123,137	19.7%	18,051	2.9%	319,613	51.2%	**623,752**
2011-12	164,765	22.9%	160,881	22.3%	21,334	3.0%	373,597	51.8%	**720,577**
2012-13	163,122	21.3%	182,396	23.8%	15,681	2.0%	406,374	52.9%	**767,573**
2013-14	142,220	17.6%	169,063	20.9%	32,570	4.0%	463,592	57.4%	**807,445**
2014-15	167,779	22.3%	155,126	20.6%	12,577	1.7%	417,929	55.5%	**753,411**
2015-16	257,401	29.7%	180,104	20.8%	14,354	1.7%	413,902	47.8%	**865,761**
2016-17	242,422	26.8%	204,180	22.6%	11,169	1.2%	446,552	49.4%	**904,323**
10 Years	1,759,485	24.8%	1,466,362	20.6%	169,015	2.4%	3,711,306	52.2%	**7,106,168**
5 Years	972,944	23.7%	890,869	21.7%	86,351	2.1%	2,148,349	52.4%	**4,098,513**
2016-17 based on 5 year average for Ngaanyatjarraku and Wiluna									

Grey's Hill Walk and Bridge,
Bridgetown

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