

land transport road assets

comparison of all territorial authorities



Purpose of this publication

Land Transport New Zealand annually publishes comparative information on the maintenance of local authority roads. The information in this publication is based on financial assistance claimed from Land Transport NZ in 2006/07 and on the annual achievement returns from each local authority's RAMM database.

This enables a comparison to be made between local authorities and their peers. It is also useful as a benchmark for auditing and for reviewing of maintenance funding allocations.

This publication is also available on our website under *Performance of Land Transport* (<u>http://www.landtransport.govt.nz/performance/index.html</u>)

Enquiries

For further information please contact Sharon Inch at Land Transport NZ's National office in Wellington; ph 04 916 4282, or email <u>sharon.inch@landtransport.govt.nz</u>

Feedback

We are keen to receive your feedback so that improvements can continue to be made. Please contact the manager of performance information at your local Land Transport NZ office.

Northern Region	Chris Hewitt	09 969 9801
Midland Region	Marie Nicol	07 958 7856
Central Region	Nabin Pradhan	04 931 8928
Southern Region	Geoff Holland	03 964 2845

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Road condition

Smooth Travel Exposure (STE)

The smooth travel exposure section gives the STE results from each territorial authority's annual achievement return, plus the trend over the last five years.

Smooth travel exposure measures the proportion (%) of vehicle kilometres travelled in a year that occurs on 'smooth' sealed roads and indicates the quality of the ride experienced by motorists.

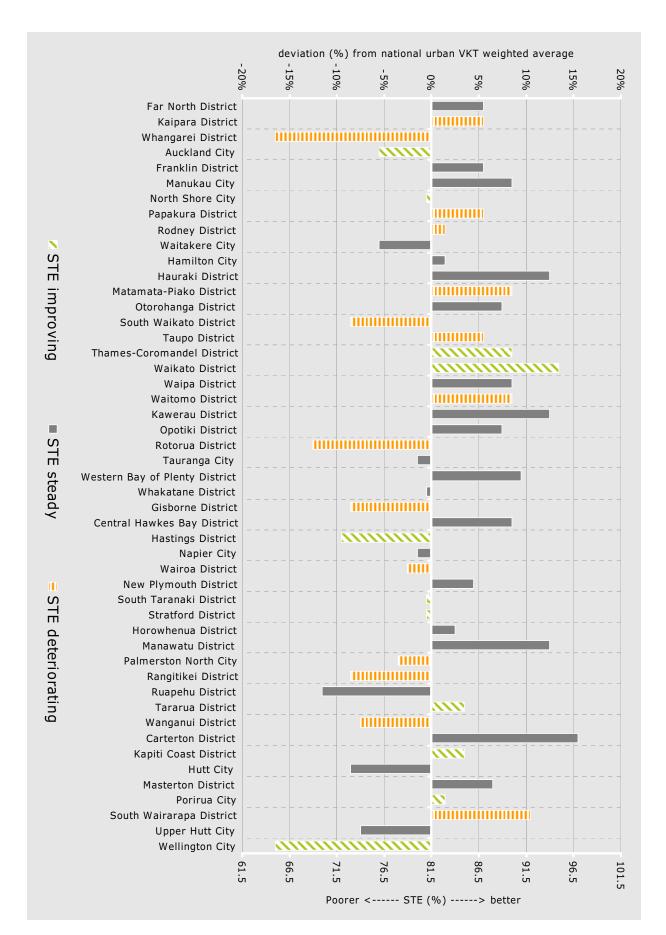
A 'smooth' road is one smoother than a predetermined NAASRA roughness threshold. Thresholds vary with traffic density and road location. Heavily trafficked roads have a lower (smoother) threshold. High volume urban roads have lower roughness thresholds than low volume rural roads.

Results for urban roads, rural roads and the completed sealed network are shown separately, as are North Island and South Island results. Urban roads have a speed limit of 70kph or less. The recent trend in this measure is also shown¹. Where the network is getting rougher the bar is orange, if smoother, lime green. If the network's net smoothness is steady, grey is used.

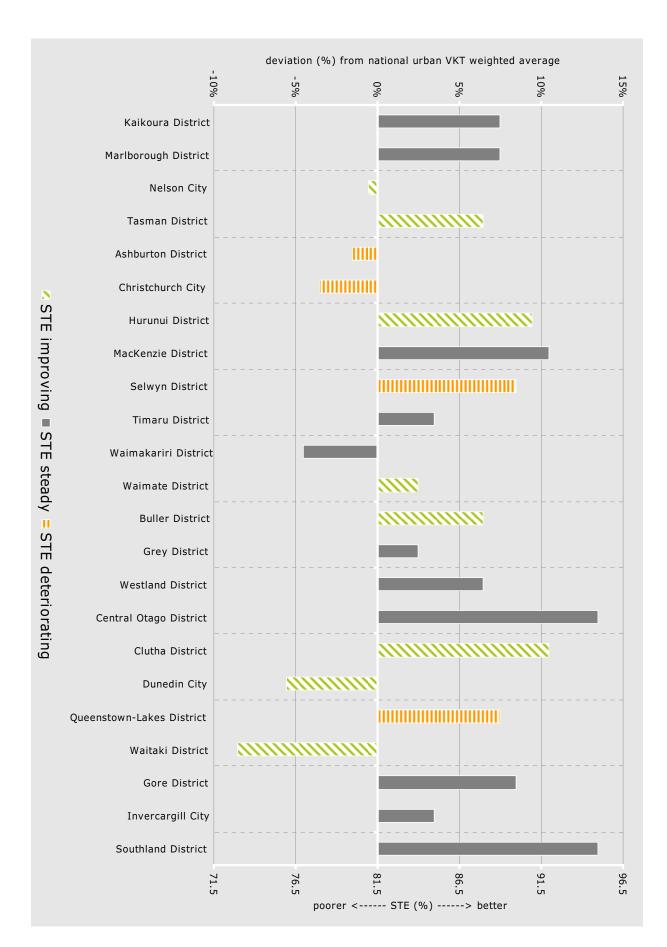
A deteriorating trend for a particular TA (that is, the value of STE has been reducing over time) does not always indicate that corrective action should be taken. Where the value of STE is already high (that is, the busy roads are generally smooth), the optimal value will probably be less than at present and a deteriorating trend is acceptable. The current value and trend in STE gives a 'snapshot' in time and helps us assess the effectiveness (at least in terms of ride quality experienced by users) of the investment made in sealed road maintenance and pavement smoothing in recent years. However, STE alone does not give us sufficient information to judge whether a territorial authority's pavement maintenance practices, including level of intervention, are optimal.

¹This trend shows the slope of the linear regression line for the last five years of data. The range of the measured results, across all local authorities, has been examined to establish the limits of a middle band. The middle band includes half of the total travel. This middle band is defined by a range centred around zero change in the measure per annum—that is, within + or—'X' annual change. The value of 'X' has simply been chosen to capture half of the travel and results falling within this middle band have been classified as 'steady'. Establishing which results will fall in the steady classification is thus arbitrary, but the methodology allows us to identify outliers. Individual local authorities are also able to identify whether the measures for their roads, relative to other local authorities, are within the middle band or whether they fall into an outlier group.

North Island sealed urban network Smooth travel exposure (STE)



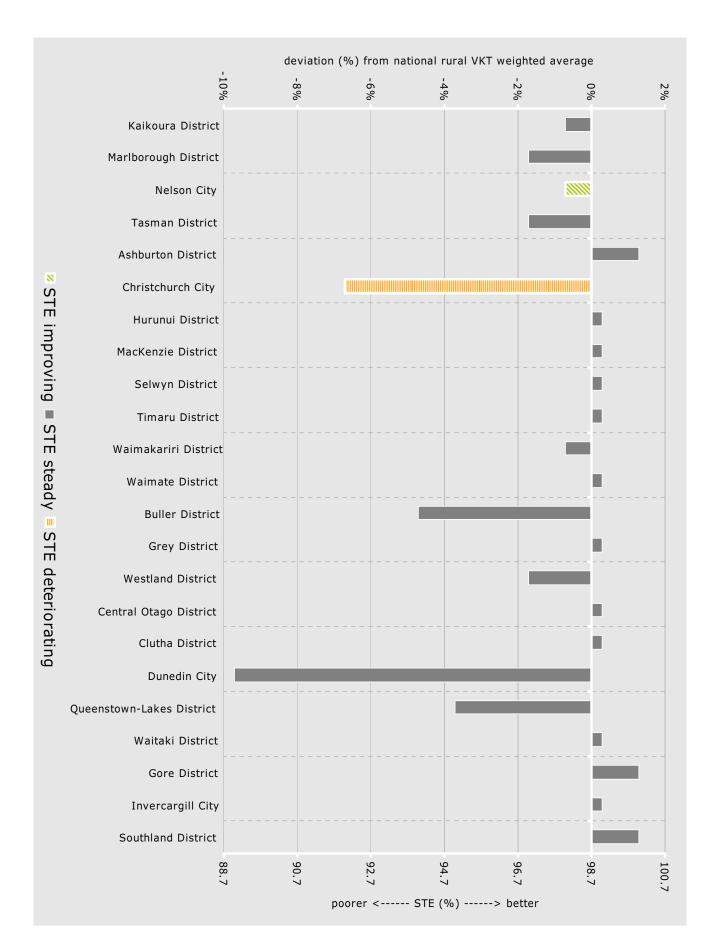
South Island sealed urban network Smooth travel exposure (STE)



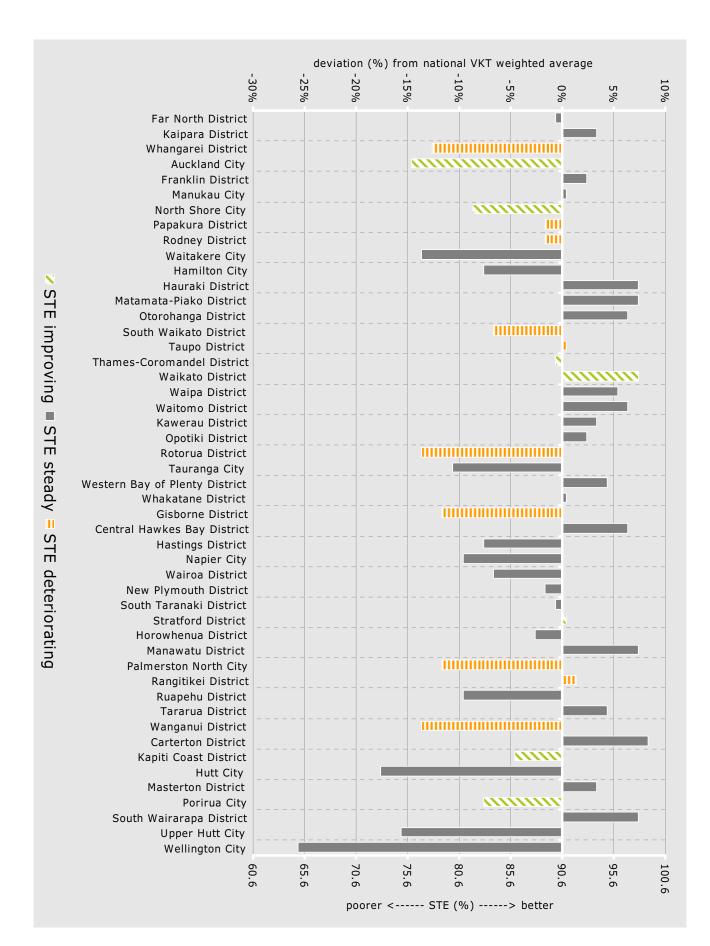
North Island sealed rural network Smooth travel exposure (STE)

- 35%	- 30%	- 25%	- 20%	- 15%	- 10%	- 5%	0%	
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South Wairarapa District	+							
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63.7	68.7	73.7			88.7	93.7		

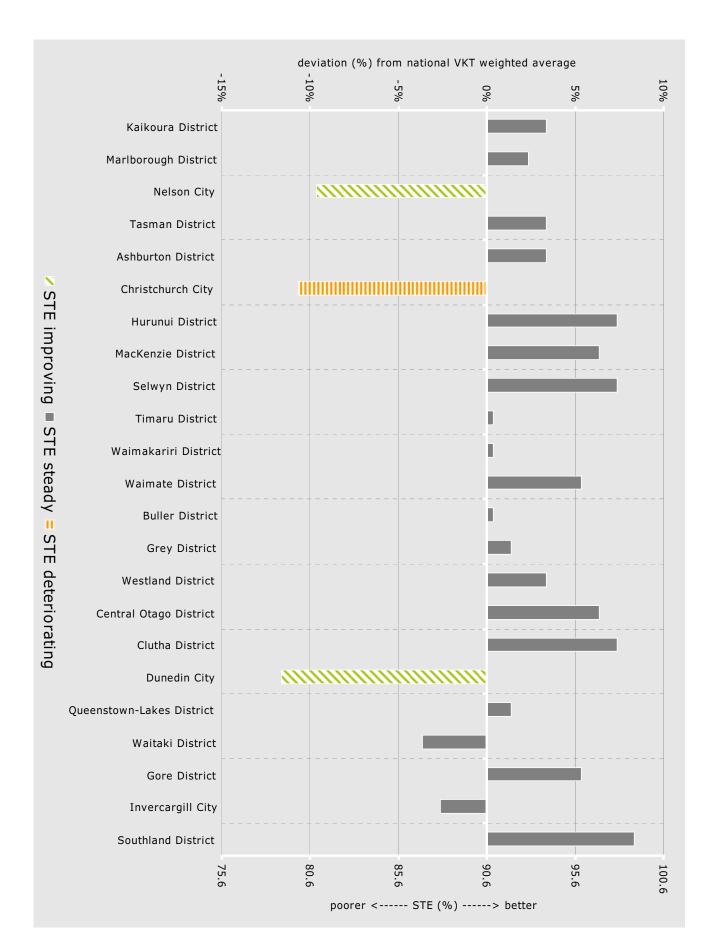
South Island sealed rural network Smooth travel exposure (STE)



North Island sealed network overall Smooth travel exposure (STE)



South Island sealed network overall Smooth travel exposure (STE)



Condition Index (CI)

The Condition Index (CI) is a combined index, a 'weighted sum', of the surface faults in sealed road surfaces. CI combines alligator cracking, scabbing, potholes, pothole patches and flushing.

100 - CI ensures that the higher the number, the better the condition.

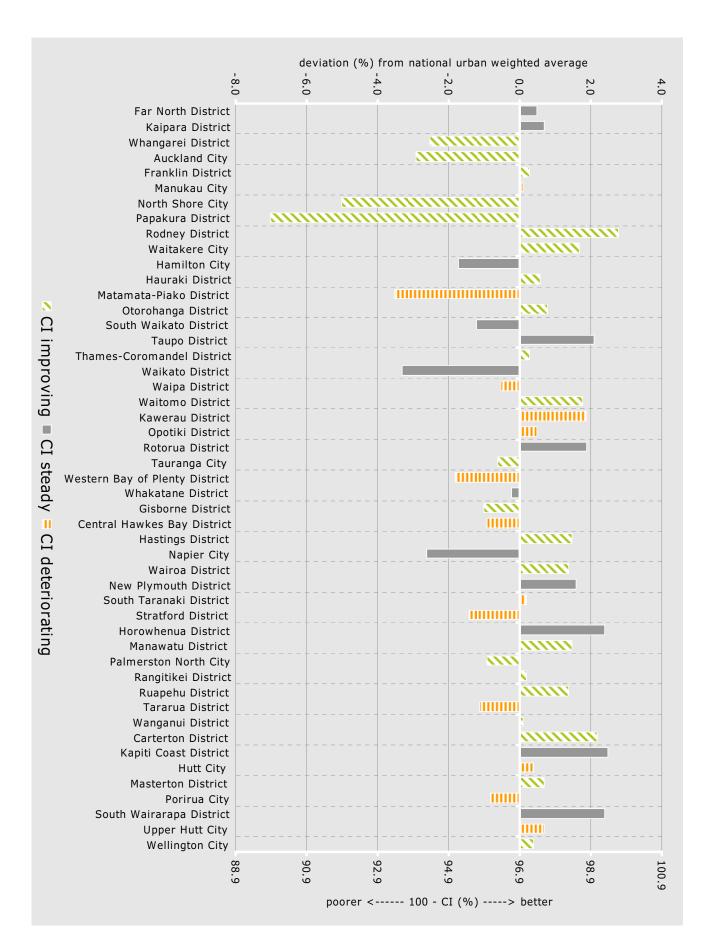
CI and the routine for calculating it using the RAMM software, were introduced in the 2002/03 year.

Results for urban roads, rural roads and the completed sealed network are shown separately, as are North Island and South Island results. Urban roads are defined as having a speed limit of 70kph or less. The recent trend in this measure is also shown². Where the surface condition is deteriorating the bar is orange, if improving, lime green. If the network's surface condition is steady, grey is used.

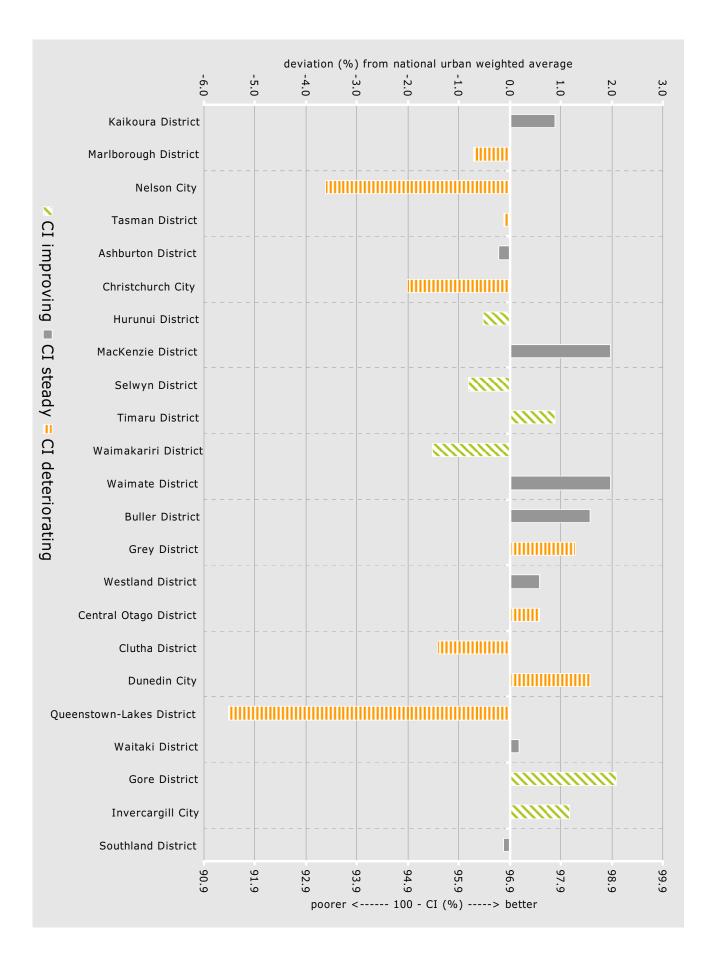
A deteriorating trend for a particular territorial authority (that is, the value of 100 - CI has been decreasing over time) does not always indicate that corrective action should be taken. Where the value of 100 - CI is already high (the surface condition is good) the optimal value will probably be higher than at present and a deteriorating trend is desirable. The current value and trend in 100 - CI give a 'snapshot' in time. Substantially more information (including historical CI data) is needed to judge whether current maintenance practices, including the level of investment, are optimal.

²This trend shows the slope of the linear regression line for the last five years of data. The range of the measured results, across all local authorities, has been examined to establish the limits of a middle band. The middle band includes half of the total travel. This middle band is defined by a range centred around zero change in the measure per annum—that is, within + or—'X' annual change. The value of 'X' has simply been chosen to capture half of the travel and results falling within this middle band have been classified as 'steady'. Establishing which results will fall in the steady classification is thus arbitrary, but the methodology allows us to identify outliers. Individual local authorities are also able to identify whether the measures for their roads, relative to other local authorities, are within the middle band or whether they fall into an outlier group.

North Island sealed urban networks 2006/07 network surface condition



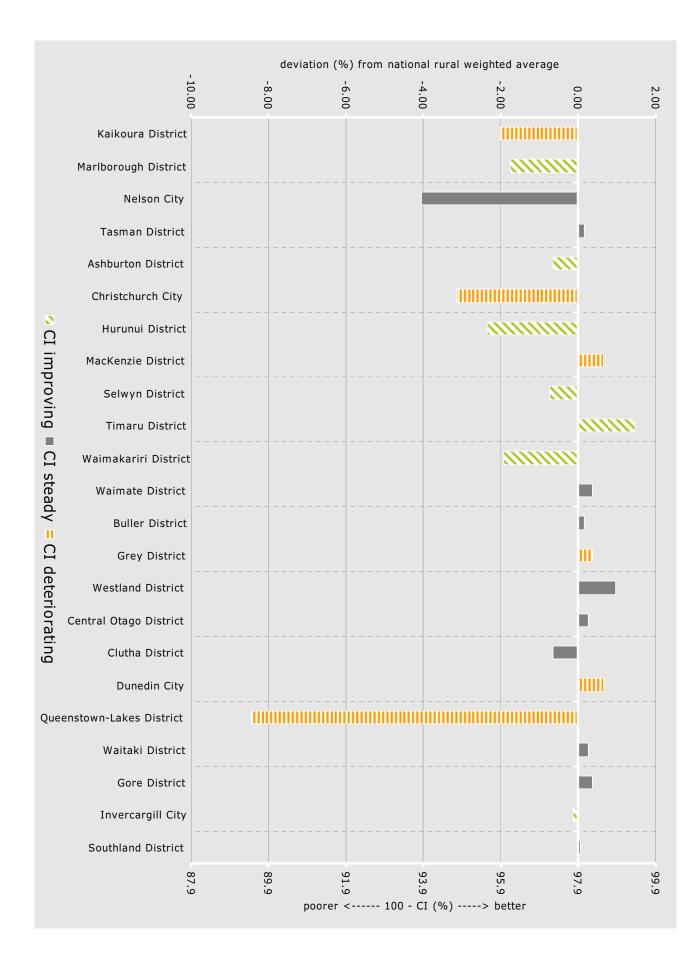
South Island sealed urban networks 2006/07 network surface condition



North Island sealed rural networks 2006/07 surface condition

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	Waitakere City				uuuu	<u> </u>	
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	Otorohanga District						
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	Palmerston North City						
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ora	Carterton District						
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	Porirua City						
	South Wairarapa District						
	Upper Hutt City						
	Wellington City						
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		р	oorer < 1	00 - CI (%) -	> better	-	
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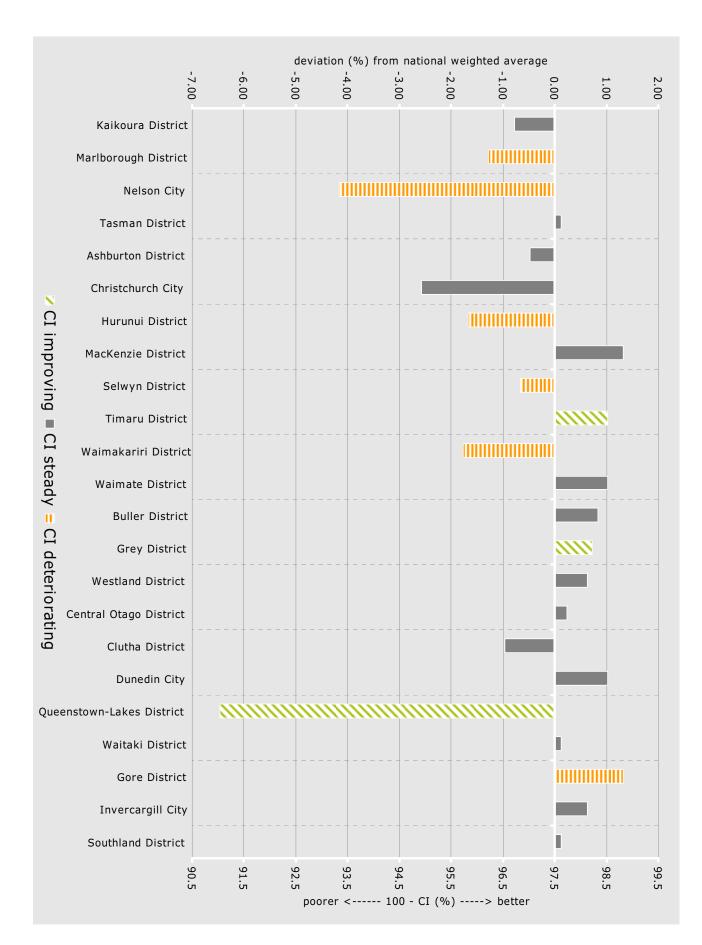
South Island sealed rural networks 2006/07 surface condition



North Island sealed networks overall 2006/07 surface condition

				devi	ation (%) from 1	national	weighte	d avera	ge		
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	Auckland City											
	Franklin Distric					+	+	+				
	Manukau City											
	North Shore City											
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	Rodney District	<u> </u>			+	+	+	+	100		<u> </u>	
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	Hamilton City				+		+	+				
	Hauraki Distric											
	Matamata-Piako Districi					+	+	+				
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рŋ	Hutt City											
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	Porirua City											
	South Wairarapa Distric				+	+		+				
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											5.	й
				ро	orer <	100	- CI (%	o)>	better			

South Island sealed networks overall 2006/07 surface condition



Pavement Integrity Index (PII)

The Pavement Integrity Index (PII) is a combined index of the pavement faults in sealed road surfaces. It is a 'weighted sum' of the pavement defects divided by the total lane length. PII combines surface faults (CI) with rutting and shoving.

100 - PII ensures that the higher the number the greater the pavement integrity.

Pavement integrity index (PII) and the routine for calculating it using the RAMM software, was introduced in the 2003/04 year.

Results for urban roads, rural roads and the completed sealed network are shown separately, as are North Island and South Island results. Urban roads have a speed limit of 70kph or less. The recent trend in this measure is also shown³. Where the pavement integrity is deteriorating the bar is orange, if improving, lime green. If the network pavement integrity is steady, grey is used.

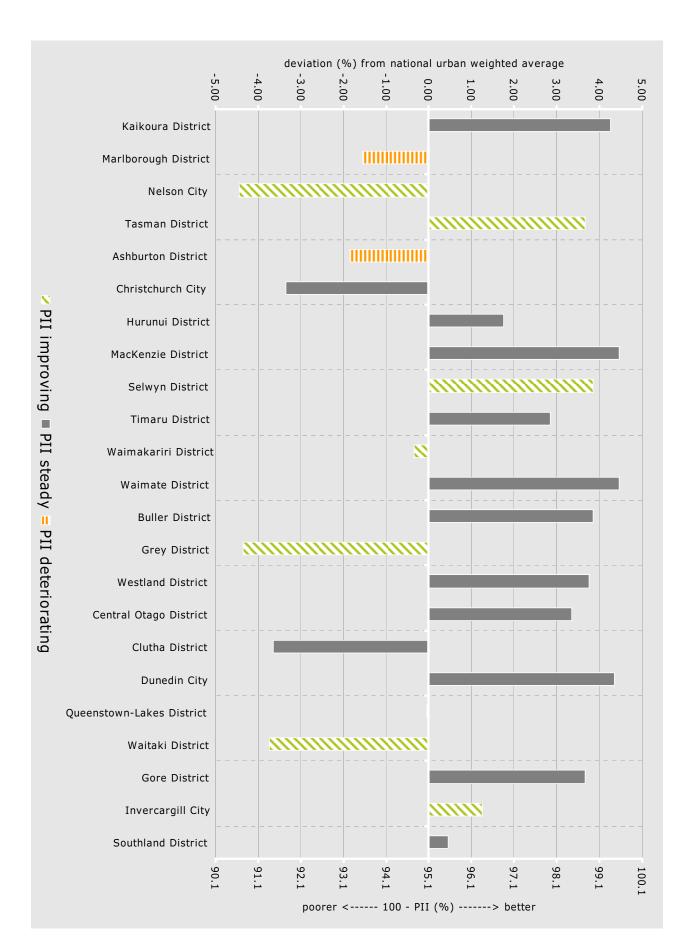
A deteriorating trend for a particular territorial authority (that is, the value of 100 - PII has been decreasing over time) does not always indicate that corrective action should be taken. Where the value of 100 - PII is already high (the pavement integrity is good), the optimal value will probably be higher than at present and a deteriorating trend is desirable. The current value and trend in 100 - PII give a 'snapshot' in time. Substantially more information (including historical PII data) is needed to judge whether current maintenance practices, including the level of investment, are optimal.

³This trend shows the slope of the linear regression line for the last five years of data. The range of the measured results, across all local authorities, has then been examined to establish the limits of a middle band. The middle band includes half of the total travel. This middle band is defined by a range centred around zero change in the measure per annum—that is, within + or—'X' annual change. The value of 'X' has simply been chosen to capture half of the road length and results falling within this middle band have been classified as 'steady'. Establishing which results will fall in the steady classification is thus arbitrary, but the methodology allows us to identify outliers. Individual local authorities are also able to identify whether the measures for their roads, relative to other local authorities, are within the middle band or whether they fall into an outlier group.

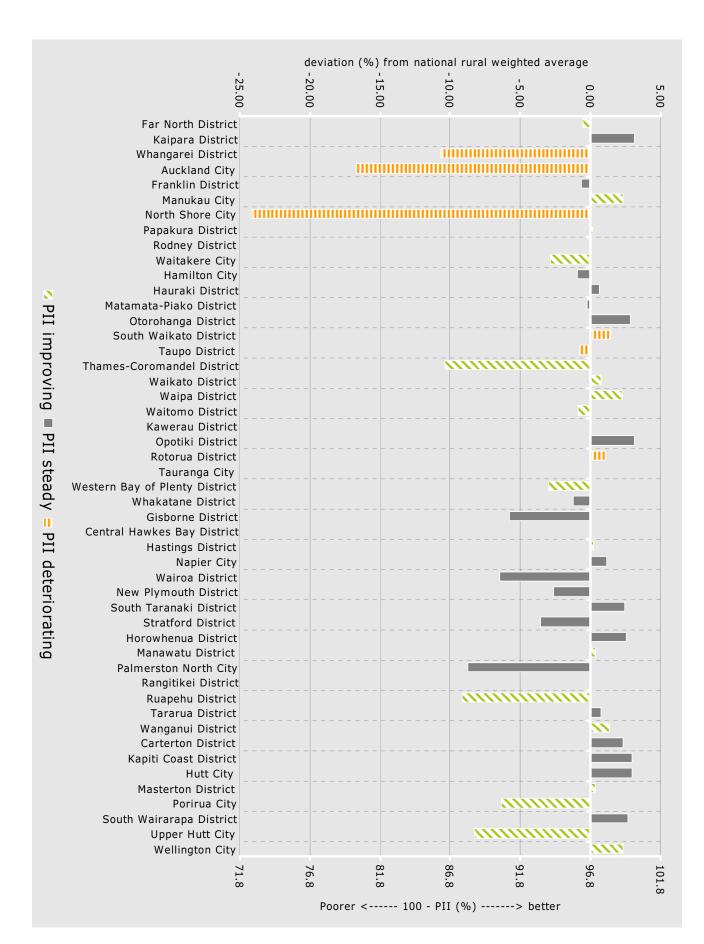
North Island sealed urban network 2006/07 pavement condition

			deviation	(%) from	nationa	l urban v	veighted	average		
	- 12.00	-10.00	-8.(-6.(-4.00	-2.00	0.00	2.00	4.00	6.00
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	Franklin District									
	Manukau City									
	North Shore City									
	Papakura District					+				
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	Hauraki District							1		
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PI	Otorohanga District						N		1110	
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ō	Thames-Coromandel District Waikato District					aan	<u> </u>			
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	Kawerau District								+	
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steady	Western Bay of Plenty District Whakatane District									
	Gisborne District									
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te	Wairoa District						ш			
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Ta	South Taranaki District Stratford District									
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ng	Manawatu District							~~		
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	Wanganui District Carterton District									
	Kapiti Coast District								+	
	Hutt City									
	Masterton District									
	Porirua City									
	South Wairarapa District									
	Upper Hutt City									
	Wellington City	~	~	~	10	10				
	83.1	85.1	87.1	89.1	91.1	93.1	95.1	97.1	99.1	101.1
										<u> </u>
			poorer	< 1	100 - PII	(%)	> bet	ler		

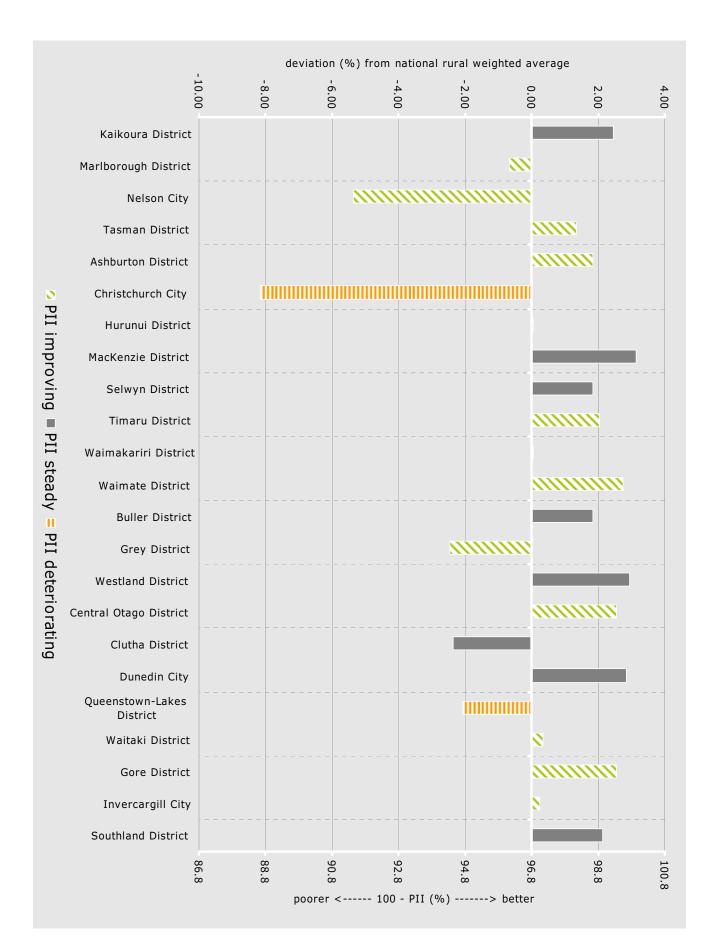
South Island sealed urban network 2006/07 pavement condition



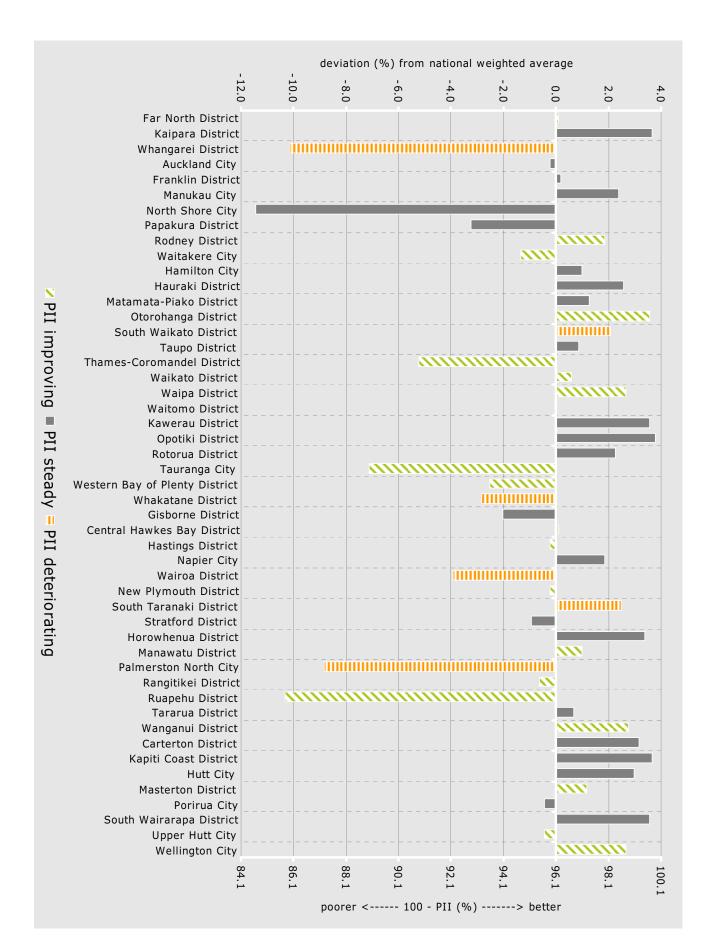
North Island sealed rural network 2006/07 pavement condition



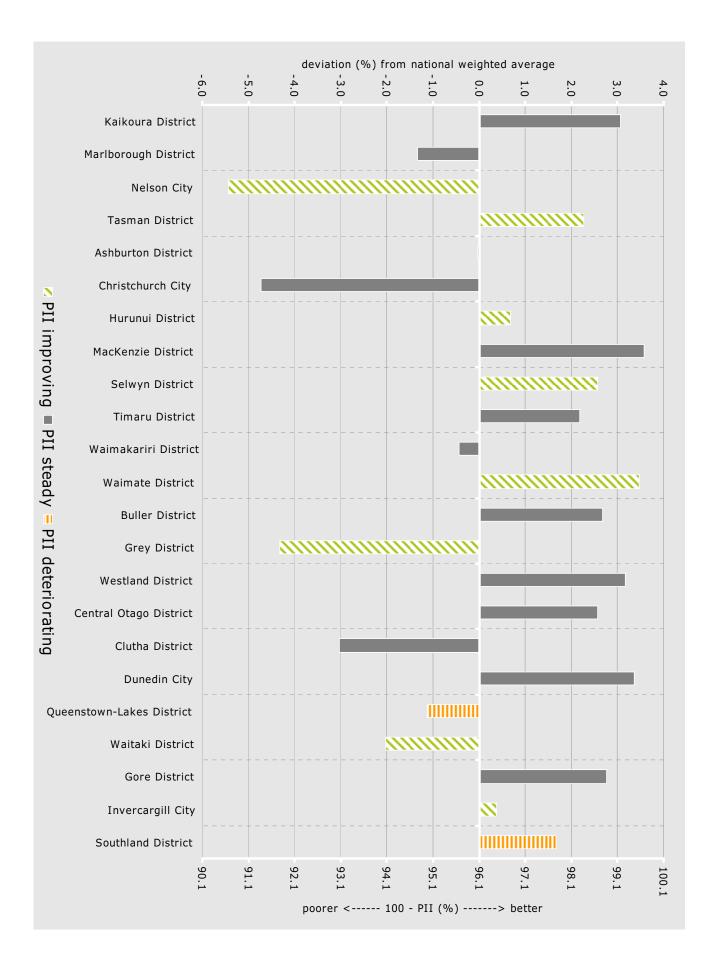
South Island sealed rural network 2006/07 pavement condition



North Island overall network 2006/07 pavement condition



South Island overall network 2006/07 pavement condition

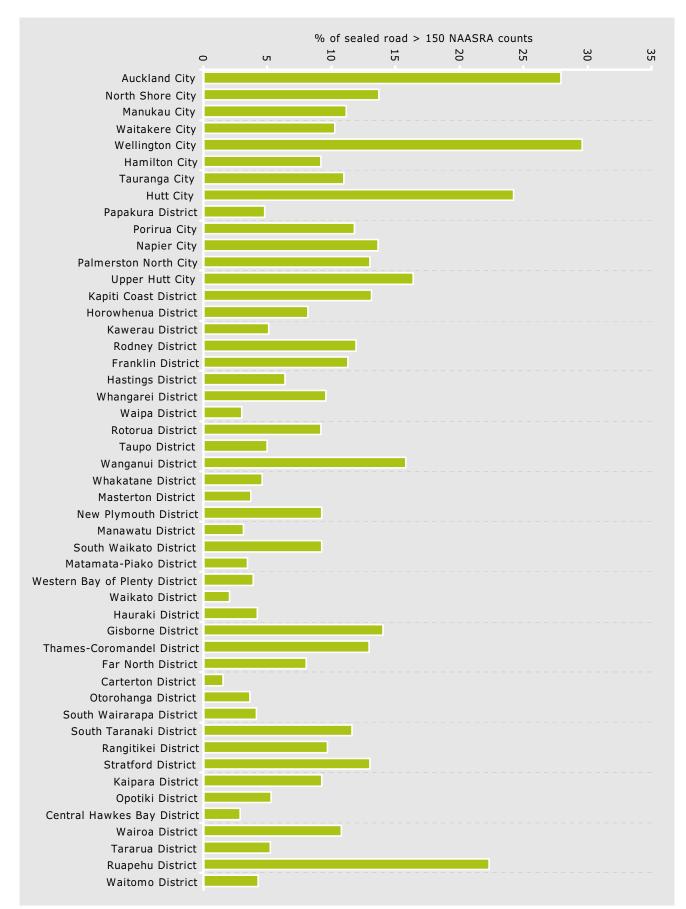


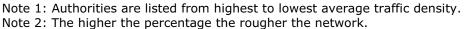
Road Roughness

Road roughness is measured by a system developed by the former National Association of Australian State Roading Authorities (NAASRA). Values are obtained by a special-purpose vehicle travelling down both the outside lanes of a length of road. The rougher the road, the higher the NAASRA counts per lane kilometre.

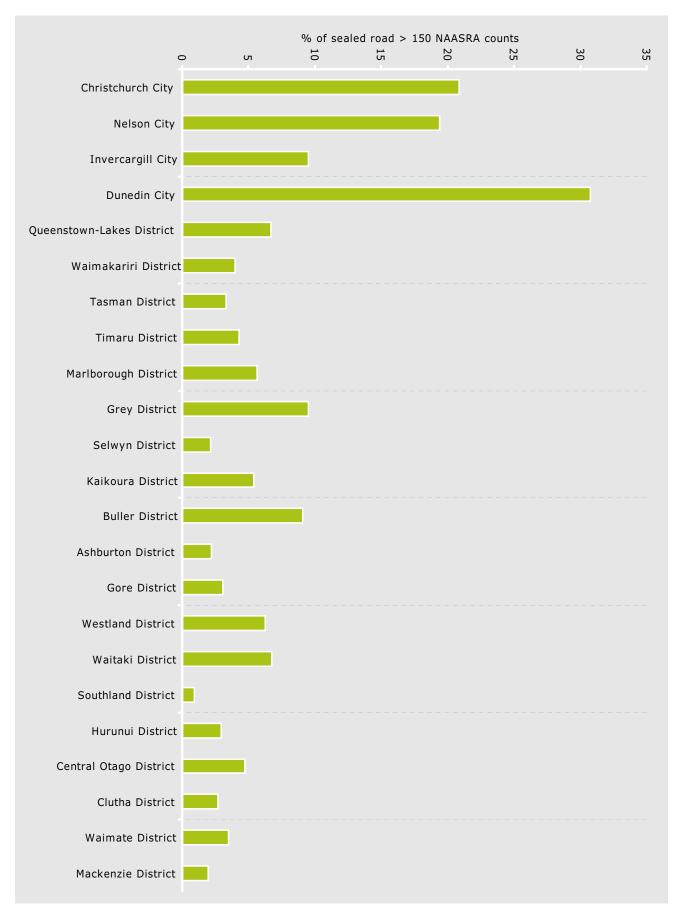
Approved organisations define acceptable levels of service for roughness on their networks. The graphs printed in this document have used a threshold of 150 NAASRA. A NAASRA count of greater than 150 typically indicates a road which is becoming a concern in terms of its roughness and the number of complaints likely to be generated.

Road roughness comparison for North Island authorities for 2006/07





Road roughness comparison for South Island authorities for 2006/07



Note 1: Authorities are listed from highest to lowest average traffic density. Note 2: The higher the percentage the rougher the network.

Unit costs based on traffic volume-2006/2007

Pavement costs—North Island

2 Kaip 3 Wha 4 Auc 5 Fran 6 Mar 7 Nori 8 Pap 9 Rod 10 Wait 11 Har 12 Hau 13 Mat 14 Otol 15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Roto 24 Tau 25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	r North District ipara District ipara District ickland City anklin District anukau City orth Shore City ipakura District anukau District orth Shore City milton City milton City intraki District atamata-Piako District orohanga District uth Waikato District ames-Coro mandel District atikato District atimas District	227,910 81,188 418,157 2,756,942 494,869 1,696,591 996,558 270,231 581,119 970,937 617,672 71,122 144,552 57,188 78,226 149,021 87,128 237,135 231,712	247 144 657 5293 3665 3983 2557 932 3382 2882 2882 329 398 196 464 541 355	13,887 9,683 10,240 42,415 12,279 19,830 13,682 3,606 21,055 11,715 4,061 4,102 5,741 3,394 2,934 2,690 7,661	6.1 119 2.4 15 2.5 12 14 14 13 3.6 12 0.7 5.8 4.0 5.9 3.8 18	8 41 65
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4 Auc 5 Frar 6 Mar 7 Nor 8 Pap 9 Rod 10 Wait 11 Han 12 Hau 13 Mat 14 Otol 15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Rot 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	ckland City anklin District anukau City orth Shore City pakura District adney District atakere City milton City muraki District atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aikato District aikato District	2,756,942 494,869 1,696,591 996,558 270,231 581,119 970,937 617,672 71,122 144,552 57,188 78,226 149,021 87,128 237,135	5293 835 3665 3983 2557 932 3382 2882 2882 329 398 96 464 541 355	42,415 12,279 19,830 13,682 3,606 21,055 11,715 4,061 4,102 5,741 3,394 2,934 2,690	15 2.5 12 14 13 3.6 12 0.7 5.8 4.0 5.9 3.8	65 40 86 73 75 28 83 152 17 25 17
5 Frar 6 Mar 7 Nori 8 Pap 9 Rod 10 Wait 11 Har 12 Hau 13 Mat 14 Oto 15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Rot 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	anklin District anukau City orth Shore City pakura District anuy District andrey District anitakere City milton City milton City muraki District atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aikato District aitomo District	494,869 1,696,591 996,558 270,231 581,119 970,937 617,672 71,122 144,552 57,188 78,226 149,021 87,128 237,135	835 3665 3983 2557 932 3382 2882 329 398 96 464 541 355	12,279 19,830 13,682 3,606 21,055 11,715 4,061 4,102 5,741 3,394 2,934 2,690	2.5 12 14 13 3.6 12 0.7 5.8 4.0 5.9 3.8	40 86 73 75 28 83 152 17 25 17
6 M ar 7 Nori 8 Pap 9 Rod 10 Wait 11 Han 12 Hau 13 Mat 14 Oto 15 Sou 16 Tau 19 Wait 19 Wait 20 Quait 21 Kaw 22 Opo 23 Rott 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	anukau City orth Shore City pakura District ordney District aitakere City milton City uraki District atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aitamo District	1,696,591 996,558 270,231 581,119 970,937 617,672 71,122 144,552 57,188 78,226 149,021 87,128 237,135	3665 3983 2557 932 3382 2882 329 398 196 464 541 355	19,830 13,682 3,606 21,055 11,715 4,061 4,102 5,741 3,394 2,934 2,690	12 14 13 3.6 12 0.7 5.8 4.0 5.9 3.8	86 73 75 28 83 152 17 25 7
7 Nori 8 Pap 9 Rod 10 Wait 11 Han 12 Hau 13 Mat 14 Oto 15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Rotu 24 Tau 25 Wes 26 What 27 Gisb 28 Cen 29 Has 30 Nap 31 Wait	Arth Shore City pakura District ordney District aitakere City milton City uraki District atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aitamo District	996,558 270,231 581,119 970,937 617,672 71,122 144,552 57,188 78,226 149,021 87,128 237,135	3983 2557 932 3382 2882 329 398 196 464 541 355	13,682 3,606 21,055 11,715 4,061 4,102 5,741 3,394 2,934 2,690	14 13 3.6 12 0.7 5.8 4.0 5.9 3.8	73 75 28 83 152 17 25 17
8 Pap 9 Rod 10 Wait 11 Han 12 Hau 13 Mat 14 Otol 15 Sou 16 Tau 17 Thai 18 Wait 20 Wait 21 Kaw 22 Opo 23 Rotu 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	pakura District idney District aitakere City imilton City uraki District atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aipa District aitomo District	270,231 581,119 970,937 617,672 71,122 144,552 57,188 78,226 149,021 87,128 237,135	2557 932 3382 2882 329 398 196 464 541 355	3,606 21,055 11,715 4,061 4,102 5,741 3,394 2,934 2,690	13 3.6 12 0.7 5.8 4.0 5.9 3.8	75 28 83 152 17 25 17
9 R od 10 Wait 11 Har 12 Hau 13 M at 14 Otol 15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Roto 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	indney District aitakere City milton City auraki District atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aipa District aitomo District	581,119 970,937 617,672 71,122 144,552 57,188 78,226 149,021 87,128 237,135	932 3382 2882 329 398 196 464 541 355	21,055 11,715 4,061 4,102 5,741 3,394 2,934 2,690	3.6 12 0.7 5.8 4.0 5.9 3.8	28 83 152 17 25 17
10 Wait 11 Hau 12 Hau 13 Mat 14 Otol 15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Rotr 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	aitakere City imilton City iuraki District atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aipa District aitomo District	970,937 617,672 71,122 144,552 57,188 78,226 149,021 87,128 237,135	3382 2882 329 398 196 464 541 355	11,715 4,061 4,102 5,741 3,394 2,934 2,690	12 0.7 5.8 4.0 5.9 3.8	83 152 17 25 17
11 Han 12 Hau 13 Mat 14 Oto 15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Rotu 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	milton City uraki District atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aipa District aitomo District	617,672 71,122 144,552 57,188 78,226 149,021 87,128 237,135	2882 329 398 196 464 541 355	4,061 4,102 5,741 3,394 2,934 2,690	0.7 5.8 4.0 5.9 3.8	152 17 25 17
12 Hau 13 Mat 14 Oto 15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Rott 24 Tau 25 West 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	uraki District atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aipa District aitomo District	71,122 144,552 57,188 78,226 149,021 87,128 237,135	329 398 196 464 541 355	4,102 5,741 3,394 2,934 2,690	5.8 4.0 5.9 3.8	17 25 17
13 M at 14 Oto 15 Sou 16 Tau 17 Thai 18 Waii 19 Waii 20 Waii 21 Kaw 22 Opo 23 Rotu 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wair	atamata-Piako District orohanga District uth Waikato District upo District ames-Coromandel District aikato District aipa District aitomo District	144,552 57,188 78,226 149,021 87,128 237,135	398 196 464 541 355	5,741 3,394 2,934 2,690	4.0 5.9 3.8	25 17
14 Oto 1 15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Rotu 24 Tau 25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wair	orohanga District uth Waikato District upo District ames-Coromandel District aikato District aipa District aitomo District	57,188 78,226 149,021 87,128 237,135	196 464 541 355	3,394 2,934 2,690	5.9 3.8	17
15 Sou 16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Rotu 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	uth Waikato District upo District ames-Coromandel District aikato District aipa District aitomo District	78,226 149,021 87,128 237,135	464 541 355	2,934 2,690	3.8	
16 Tau 17 Thai 18 Wait 19 Wait 20 Wait 21 Kaw 22 Opo 23 Rotu 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait 32 New	upo District ames-Coromandel District aikato District aipa District aitomo District	149,021 87,128 237,135	541 355	2,690	· · ·	27
17 Thai 18 Waik 19 Waik 20 Waik 21 Kaw 22 Opo 23 Roti 24 Tau 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	ames-Coromandel District aikato District aipa District aitomo District	87,128 237,135	355	,	18	
18 Waik 19 Waip 20 Wait 21 Kaw 22 Opo 23 Rotu 24 Taun 25 Wes 26 What 27 Gist 28 Cen 29 Has 30 Nap 31 Wait	aikato District aipa District aitomo District	237,135		7 661		55
19 Wait 20 Wait 21 Kaw 22 Opo 23 Rott 24 Tau 25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wait 32 New	nipa District nitomo District		390	7,001	8.8	11
20 Wait 21 Kaw 22 Opo 23 Rotu 24 Tau 25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	aitomo District	231,712		12,644	5.3	19
20 Wait 21 Kaw 22 Opo 23 Rotu 24 Tau 25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	aitomo District		601	7,949	3.4	29
22 Opo 23 Rot 24 Tau 25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	District	41,165	112	6,710	16.3	6
23 Rote 24 Tau 25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	werau District	12,098	841	204	1.7	59
23 Rote 24 Tau 25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	otiki District	17,141	135	1,378	8.0	12
24 Taul 25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	torua District	214,953	588	5,861	2.7	37
25 Wes 26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	uranga City	522,129	2869	4,256	0.8	123
26 Wha 27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	estern BOP District	156,388	416	10,438	6.7	15
27 Gist 28 Cen 29 Has 30 Nap 31 Wair 32 New	nakatane District	193,698	589	5,829	3.0	
28 Cen 29 Has 30 Nap 31 Wair 32 New	sborne District	216,899	320	12,488	5.8	
29 Has 30 Nap 31 Wair 32 New	entral Hawkes Bay District	73,112	159	6,465	8.8	
30 Nap 31 Wair 32 New	stings District	442,094	746	8,301	1.9	
31 Wair 32 New	-	286,424	2230	2,347	0.8	
32 New	airoa District	41,361	126	4,890	11.8	
	w Plymouth District	206,934	446	6,542	3.2	32
00 00 0	uth Taranaki District	108,841		7,047	6.5	
34 Stra	atford District	31,815		1,720	5.4	
	rowhenua District	196,897	957	2,747	1.4	
	anawatu District	215,679	413	7,045	3.3	
	Imerston North City	306,583	1789	3,792	1.2	
	ingitikei District	71,161	159	6,465	9.1	
	apehu District	55,974	116	4,586	8.2	
	rarua District	86,154	121		8.0	
	anganui District	169,199	553	5,646	3.3	
	interton District	34,167	216	1,505	4.4	
	piti Coast District	145,854	1040	2,259	4.4	
		498,202	2865	6,054	1.3	
	tt City	498,202	454	4,402	3.3	
	tt City	199,929				143
	asterton District		2309	1,397	0.7	
	asterton District rirua City	44,260	186	2,076	4.7	21
48 Upp 49 Well	asterton District	128,984	1509	1,340	1.0	1

Pavement costs—South Island

		Total Annual Vehicle Kilometres (VKT 000s)	Average Traffic Density on the network (VPD)	Total Pavement & Drainage M tce - work categories 1 - 6 & 40 (\$000)	Drainage Mtce -	Vehicle kilometres per Unit Pavement M tce Costs (VKT/\$)
50	Kaiko ura District	14,312	195	401	2.8	36
51	M arlborough District	137,497	244	5,598	4.1	25
52	Nelson City	212,533	2300	1,974	0.9	108
53	Tasman District	215,525	349	6,565	3.0	33
54	Ashburton District	163,909	171	5,512	3.4	30
56	Christchurch City	1,974,449	2377	20,286	1.0	97
57	Hurunui District	65,719	124	3,830	5.8	17
58	M acKenzie District	18,552	72	1,152	6.2	16
59	Selwyn District	271,159	302	5,083	1.9	53
60	Timaru District	181,236	290	5,486	3.0	33
61	Waimakariri District	211,933	394	4,809	2.3	44
62	Waimate District	36,522	75	1,701	4.7	21
63	Buller District	37,494	172	2,083	5.6	18
64	Grey District	46,801	207	2,308	4.9	20
65	Westland District	37,605	154	2,105	5.6	18
66	Central Otago District	69,923	103	2,907	4.2	24
67	Clutha District	96,515	90	9,176	9.5	11
68	Dunedin City	446,030	697	12,214	2.7	37
69	Queenstown-Lakes District	166,023	522	5,905	3.6	28
70	Waitaki District	92,232	139	4,123	4.5	22
71	Gore District	55,102	169	2,287	4.2	24
72	Invercargill City	212,630	989	4,755	2.2	45
73	Southland District	2 16,5 18	120	13,699	6.3	16

VPD (Vehicles per day) - The number of vehicles observed passing a point on the road in both directions for 24 hours.

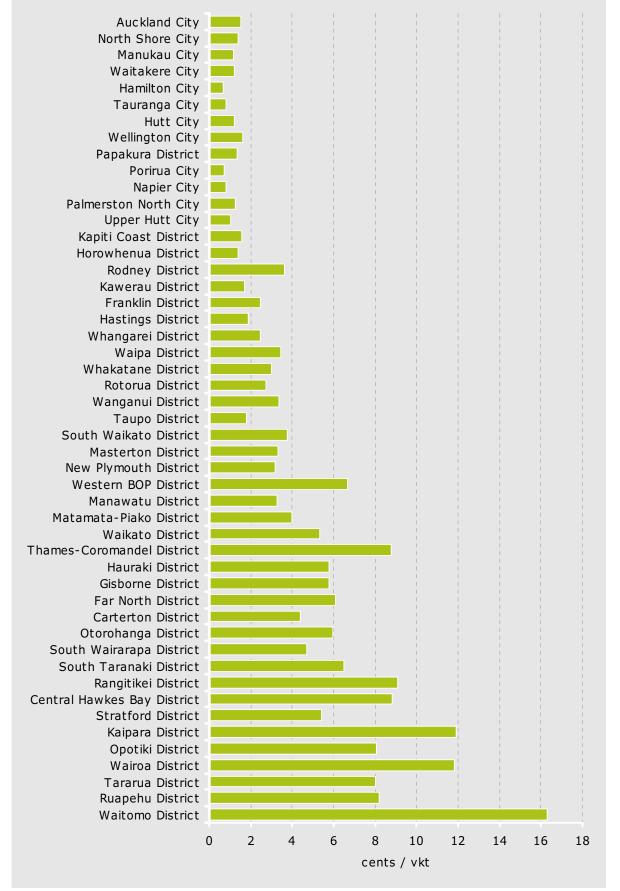
Work categories - Land Transport New Zealand has divided road asset work into activity types called work categories. Claims for funding are allocated to work categories. For further explanation of individual work categories please refer to the Land Transport New Zealand 'Programme and Funding Manual, version 2.1' on our website

http://www.landtransport.govt.nz/funding/programme-and-funding-manual/index.html

Vehicle kilometres travelled (VKT) - Total annual vehicle kilometres travelled in an area. This is calculated from the number of vehicles crossing a point in both directions in a 24 hour period, times the length of the road being travelled. Individual road VKT is added to give a value for the whole road network in that area.

Total pavement and drainage maintenance (work categories 1–6 & 40) costs / vkt

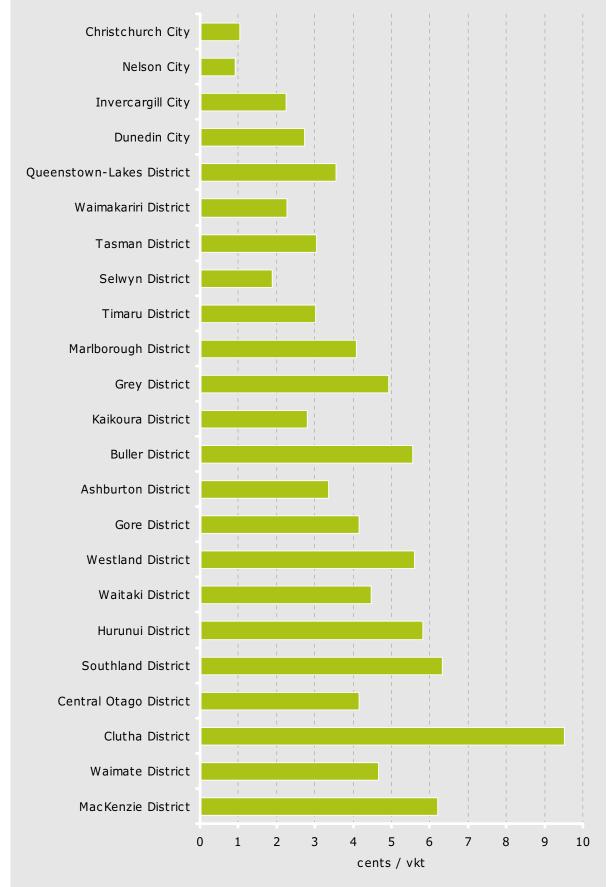
North Island



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Total pavement and drainage maintenance (work categories 1–6 & 40) costs / vkt

South Island



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

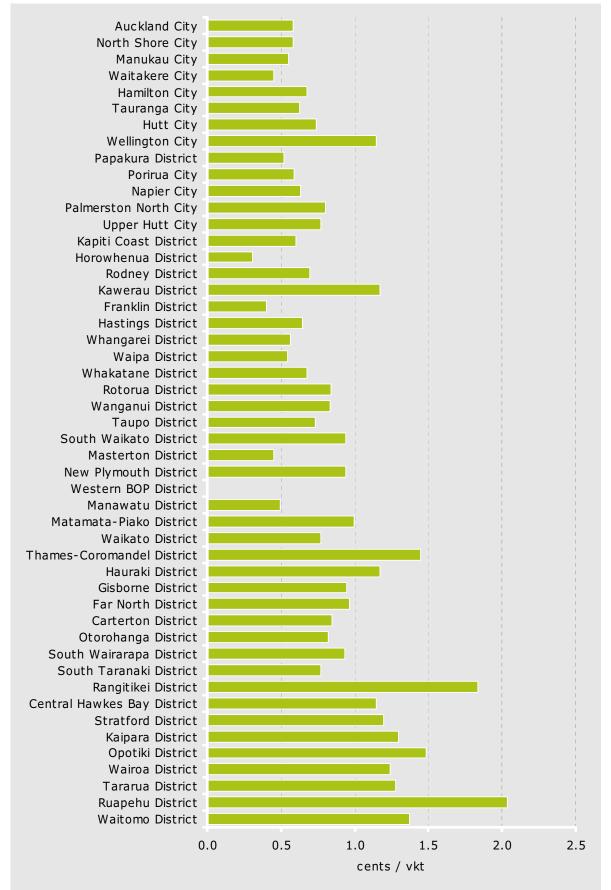
Corridor costs—North Island

		Total Annual Vehicle Kilometres (VKT 000s)	Average Traffic Density on the network (VPD)	Total Corridor Mtce - work categories 10 - 13 (\$000)	Total Corridor Mtce - work categories 10 - 13 (cents/VKT)	Vehicle kilometres per Unit Corridor M tce Costs (VKT/\$)
1	Far North District	227,910	247	2,194	0.96	104
2	Kaipara District	8 1, 18 8	144	1,054	1.30	77
3	Whangarei District	4 18,157	657	2,356	0.56	177
4	Auckland City	2,756,942	5293	16,082	0.58	171
5	Franklin District	494,869	835	1,976	0.40	250
6	M anukau City	1,696,591	3665	9,354	0.55	181
7	North Shore City	996,558	3983	5,816	0.58	171
8	Papakura District	270,231	2557	1,4 10	0.52	192
9	Rodney District	581,119	932	4,044	0.70	144
10	Waitakere City	970,937	3382	4,382	0.45	222
-	Hamilton City	617,672	2882	4,161	0.67	148
12	Hauraki District	71,122	329	833	1.17	85
- 13	Matamata-Piako District	144,552	398	1,437	0.99	101
14	Otorohanga District	57,188	196	468	0.82	122
15	South Waikato District	78,226	464	733	0.94	107
16	Taupo District	149,021	541	1,090	0.34	137
17	Thames-Coromandel District	87,128	355	1,258	1.44	69
18	Waikato District	237,135	390	1,230	0.77	130
19		231,712	601	1,257	0.54	184
	Waipa District		112	,		73
20	Waitomo District	41,165		565 142	1.37	
	Kawerau District	12,098	841			85
22	Opotiki District	17,141	135	254	1.48	67
23	Rotorua District	214,953	588	1,801		119
24	Tauranga City	522,129	2869	3,275	0.63	159
25	Western BOP District	156,388	416	0	0.00	n/a
	Whakatane District	193,698	589	1,314	0.68	147
27	Gisborne District	216,899	320	2,050	0.95	106
28	Central Hawkes Bay District	73,112	159	839	1.15	87
	Hastings District	442,094	746	2,864	0.65	154
	Napier City	286,424	2230	1,809	0.63	158
	Wairo a District	41,361	126	513	1.24	81
	New Plymouth District	206,934	446	1,941	0.94	107
	South Taranaki District	108,841	185	837	0.77	130
	Stratford District	31,815	146			
	Horowhenua District	196,897	957	607	0.31	325
-	M anawatu District	215,679	4 13	1,070	0.50	202
37	Palmerston North City	306,583	1789	2,454	0.80	125
38	Rangitikei District	71,161	159	1,305		55
39	Ruapehu District	55,974	116	1,139	2.03	49
40	Tararua District	86,154	121	1,099	1.28	78
41	Wanganui District	169,199	553	1,405	0.83	120
42	Carterton District	34,167	216	289	0.84	118
43	Kapiti Coast District	145,854	1040	878	0.60	166
44	Hutt City	498,202	2865	3,691	0.74	135
45	M asterton District	132,128	454	593	0.45	223
46	Porirua City	199,929	2309	1,184	0.59	169
47	South Wairarapa District	44,260	186	4 13	0.93	107
48	Upper Hutt City	128,984	1509	998	0.77	129
49	Wellington City	680,847	2732	7,796	1.14	87

Corridor costs—South Island

		Total Annual Vehicle Kilometres (VKT 000s)	Average Traffic Density on the network (VPD)	Total Corridor Mtce - work categories 10 - 13 (\$000)	Total Corridor Mtce - work categories 10 - 13 (cents/VKT)	Vehicle kilometres per Unit Corridor M tce Costs (VKT/\$)
50	Kaiko ura District	14,312	195	107	0.75	133
51	M arlbo ro ugh District	137,497	244	1,355	0.99	102
52	Nelson City	212,533	2300	1,040	0.49	204
53	Tasman District	215,525	349	1,692	0.79	127
54	Ashburton District	163,909	171	1,214	0.74	135
56	Christchurch City	1,974,449	2377	11,685	0.59	169
57	Hurunui District	65,719	124	691	1.05	95
58	M acKenzie District	18,552	72	309	1.67	60
59	Selwyn District	271,159	302	1,592	0.59	170
60	Timaru District	181,236	290	1,362	0.75	133
61	Waimakariri District	211,933	394	1,286	0.61	165
62	Waimate District	36,522	75	225	0.62	163
63	Buller District	37,494	172	661	1.76	57
64	Grey District	46,801	207	815	1.74	57
65	Westland District	37,605	154	379	1.01	99
66	Central Otago District	69,923	103	1,275	1.82	55
67	Clutha District	96,515	90	956	0.99	101
68	Dunedin City	446,030	697	4,689	1.05	95
69	Queenstown-Lakes District	166,023	522	1,800	1.08	92
70	Waitaki District	92,232	139	806	0.87	114
71	Gore District	55,102	169	401	0.73	138
72	Invercargill City	212,630	989	1,473	0.69	144
73	Southland District	216,518	120	1,455	0.67	149

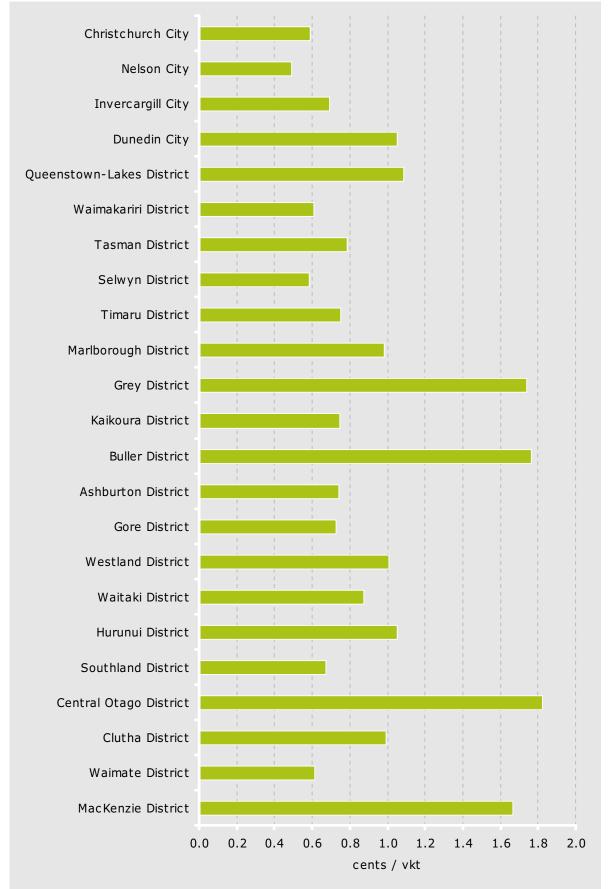
Total corridor maintenance (work categories 10-13) costs / vkt



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Total corridor maintenance (work categories 10-13) costs / vkt

South Island



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

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Tararua Dist	Ruapehu Dist	Rangitikei Dist	Palmerston North City	M anawatu Dist	Horowhenua Dist	Stratford Dist	South Taranaki Dist	New Plymouth Dist	W airo a Dist	Napier City	Hastings Dist	Central Hawke's Bay Dist	Gisborne Dist	Whakatane Dist	Western BoP Dist	Tauranga Dist	Rotorua Dist	Opotiki Dist	Kawerau Dist	Waitomo Dist	Waipa Dist	Waikato Dist	Thames-Coromandel Dist	Taupo Dist	South Waikato Dist	OtorohangaDist	M atamata-Piako Dist	Hauraki Dist	Hamilton City	Waitakere City	Rodney Dist	Papakura Dist	North Shore City	M anukau City	Franklin Dist	Auckland City	Whangarei Dist	Kaipara Dist	Far North Dist	Code Authority Name	Work Categories	
14,484	8,884	13,317	7,101	12,826	4,064	2,620	12,895	11,3 73	10 ,4 13	4,844	12,514	9,148	20,243	9,365	10,747	8,377	8,557	1,900	366	6,736	8,079	17,177	11,075	4,091	4,369	4,293	7,974	6,269	9,846	17,760	27,984	4,977	19,702	29,052	14,424	56,875	18,172	13,185	20,983	Ş	1-30	M aintenance (Output 1)
4	8	8	67	10	29	7	8	24	7	84	18	5	12	14	14	100	25	8	100	5	16	9	40	29	24	4	13	18	92	74	19	62	94	80	13	68	14	7	8	%[1]		%Urban Physical
85	28	60	77	71	85	56	82	81	26	100	89	66	35	76	69	n/a	75	39	n/a	42	91	70	39	82	97	64	93	77	95	81	49	86	56	93	82	37	51	22	27	%[2]		Rural % Sealed
1.86	2.05	1.67	2.55	160	1.90	1.54	1.59	2.47	3.92	2.00	2.15	2.21	4.21	2.48	10.14	2.75	2.66	3.09	1.91	2.83	2.56	2.89	3.92	1.99	2.05	2.36	2.25	2.30	1.71	4.68	4.31	2.85	5.74	3.11	2.64	6.21	3.38	3.80	2.64	\$k/km[3]	1	Rural % Pavement Sealed M tce
0.73	0.52	2.22	1.56	2.14	0.98	0.51	0.98	0.65	0.60	1.6 1	0.80	1.70	1.50	0.62	0.00	2.38	1.11	0.28	0.47	0.63	1.40	2.63	4.51	0.29	1.45	0.41	189	1.76	0.83	1.20	5.45	2.39	3.63	3.81	1.6 1	3.95	1.0 1	2.06	182	\$k/km [3]	2	A rea-wid e Pavement Treatment
0.07	0.13	0.00	0.30	0.01	0.18	0.00	0.39	0.19	0.18	0.51	0.04	0.03	0.00	1.00	0.00	0.16	0.10	0.09	0.75	0.08	0.17	0.18	0.11	0.02	0.16	0.02	0.17	1.40	1.43	1.17	0.05	0.81	0.95	0.97	0.21	3.62	0.16	0.00	0.12	\$k/km[3]	з	Major Drainage Control
1.46	2.24	2.23	2.72	1.60	2.04	1.38	1.69	2.15	2.57	2.55	1.70	1.75	2.44	3.03	0.00	3.25	2.43	1.17	2.05	2.82	1.83	2.62	4.54	1.4 5	2.77	1.82	1.56	1.83	2.96	7.40	2.76	4.27	7.53	5.32	2.46	8.33	2.27	1.45	2.85	\$k/km[4]	4 - 6	Reseals
56.95	54.70	93.67	149.81	4 1.91	176.43	66.69	80.69	210.63	59.50	37.09	33.94	43.20	57.09	45.69	n/a	0.00	30.09	45.70	0.00	12.16	10.20	134.21	14 5.76	28.71	114.75	2 1.77	35.17	24 1.33	16.70	306.46	94.65	173.40	390.90	96.12	77.43	203.36	46.28	73.60	75.07	\$/m[5]	7	Bridge Mtce
3.80	3.70	5.57	7.30	5.04	5.14	3.14	4.53	5.80	5.78	6.72	4.37	5.30	7.02	6.53	10.14	8.54	5.89	4.11	5.18	4.84	5.85	8.02	11.80	3.59	6.51	4.03	5.91	7.60	6.96	14.65	11.67	10.64	18.14	13.37	6.67	22.64	6.05	6.48	5.77	\$k/km[3]	1-7	Total Structural M tce
0.23	8 5. 0	0.53	0.26	0.26	0.27	0.18	0.09	0.30	0.07	0.55	0.47	0.33	0.33	0.58	0.00	1.3 7	0.28	0.28	0.00	0.18	0.19	0.36	0.57	0.30	0.25	0.28	0.57	0.66	0.95	0.64	1.15	1.29	0.6.0	0.82	0.60	0.10	0.35	0.27	0.26	\$k/km [3]	10	A menity /Safety M tce
1.4 1	0.55	1.32	1.36	0.63	0.05	0.77	0.14	0.80	0.68	1.18	0.78	1.00	1.26	1.13	0.00	0.97	0.71	1.60	0.44	1.38	1.32	0.53	0.40	0.77	1.32	1.86	0.65	0.26	1.49	0.70	0.94	1.64	1.40	1.06	0.50	2.71	0.97	0.57	0.30	\$k/km[6]	11	Street Cleaning
		0.28	1.92	0.25	0.46	0.32	0.31	0.60	0.25	0.88	0.70	0.22	0.34	0.30	0.00	2.01		0.22	0.40	0.21	0.54	0.47	0.63	0.44	0.44	0.16		0.37	2.11	2.43	0.68	1.75	3.63	3.07	0.36	5.31	0.68	0.29	0.36	\$k/km [3]	12	Traffic Services
1.63	2.83	2.17	3.18	1.91	1.14	1.4 0	1.20	1.80	3.35	3.26	2.54	1.2.2	2.48	2.95	0.00	2.23	3.54	1.4 0	2.76	2.24	1.64	2.54	1.30	1.64	2.48	2.18	2.63	1.8 9	2.88	2.70	2.00	1.3 4	3.13	3.32	1.4 3	3.93	1.29	1.27	3.24	\$k/km [6]	13	Carriag eway Lighting
0.00	0.00	0.00	64.49	0.00	0.00	0.00	0.00	0.00	0.00	0.55	11.32	0.00	0.00	0.00	0.00	8.00	27.60	0.00	0.00	0.00	0.00	0.00	0.00	5.52	0.00	0.00	0.00	0.00	12.25	18.90	0.00	0.00	0.00	23.78	0.00	70.00	0.00	0.00	0.00	\$k[7]	14	Cycleway Mtce
0.56	0.86	1.0 7	5.23	0.75	1.08	0.64	0.52	1.53	0.57	5.15	1.76	0.67	1.11	1.46	0.00	6.57	1.80	0.73	3.60	0.56	1.19	1.09	1.87	1.4.4	1.59	0.58	1.45	1.4 1	7.09	5.58	2.37	4.88	8.49	7.38	1.2.2	11.28	1.35	0.68	0.87	\$k/km[3]	10 - 13	Total Corridor Mtce
7.9%	17.4%	8.1%	8.3%	11.5%	4.8%	9.0%	10.9%	13.5%	12.4%	12.8%	15.0 %	8.7%	9.8%	13.0%	1.1%	9.7%	8.1%	5.5%	5.4 %	7.2%	7.8%	8.3%	9.7%	7.1%	11.0 %	10.0%	7.9%	9.9%	16.0%	7.2%	8.7%	9.6%	7.4%	9.4%	10.6%	10.3%	11.3 %	6.9%	8.1%	%[8]	17	Professional Services
	0.00	0.00	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	1.85	1.70	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.85	0.92	2.18	2.15	2.51	1.03	8.27	0.00	0.00	0.00	\$k/km[3]	40	Pavement Smoothing
3.53	3.47	5.29	8.08	4.93	4.88	2.88	4.37	5.15	5.46	6.67	5.11	5.12	6.74	6.48	10.14	8.54	5.85	3.96	5.18	6.65	7.53	7.59	11.39	3.56	6.36	4.24	5.78	6.94	6.92	14.91	12.33	12.46	19.97	15.65	7.57	29.74	5.87	6.25	5.49	\$k/km[3]	1-6&40	Total Pavement and Drainage M tce
0.37	0.96	0.59	1.14	0.75	0.32	0.38	0.62	1.14	0.90	1.77	1.09	0.57	0.88	1.19	0.12	1.64	0.68	0.28	0.50		0.60	0.83	1.4 7	0.38	1.01	0.51	0.64	0.99	2.68	1.56	1.33	1.66	2.12	2.16	0.93	3.91	0.95	0.53	0.58	\$k/km [3]	17	Professional Services

Unit costs based on network length-2006/07

[4] \$000 per kilometre of sealed roads.

[3] \$000 per kilometre of road.

[2] Proportion of the rural network length that is sealed in %.

[1] Proportion of network length classed as urban in %.

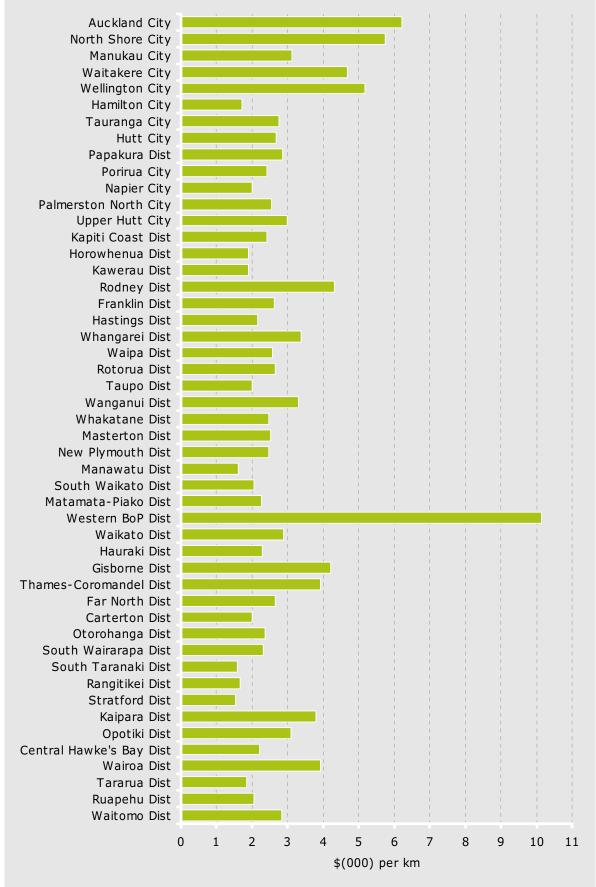
[8] % of total maintenance block allocation (WCs 1 –17)

[6] \$000 per kilometre of urban sealed network.[7] \$000

[5] \$ per metre of bridge.

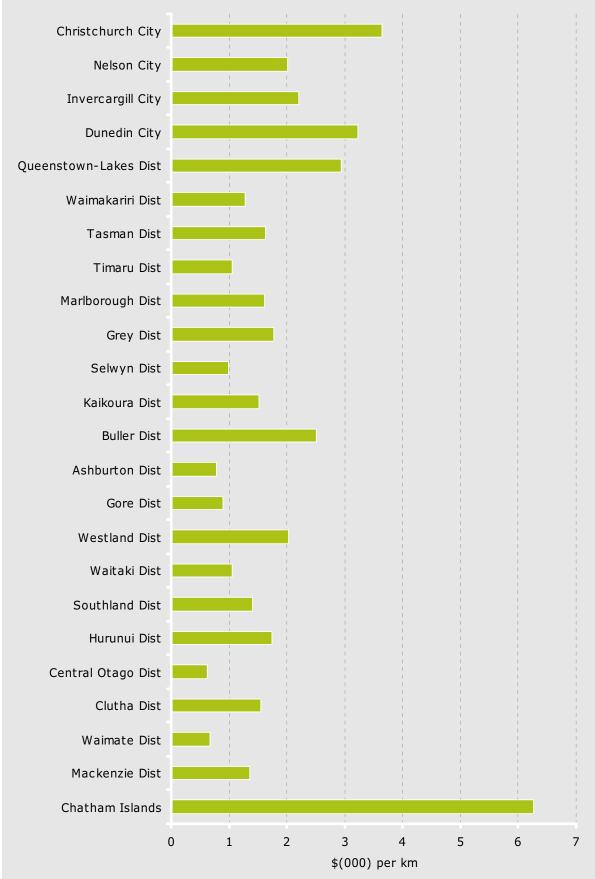
74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	54	53	52	51	50	49	48	47	46	45	44	43	42	41	Code		
Chatham Islands	Southland Dist	Invercargill City	Gore Dist	Waitaki Dist	Queenstown-Lakes Dist	Duned in City	Clutha Dist	Central Otago Dist	Westland Dist	Grey Dist	Buller Dist	Waimate Dist	Waimakariri Dist	Timaru Dist	Selwyn Dist	M ackenzie Dist	Hurunui Dist	Christchurch City	Ashburton Dist	Tasman Dist	Nelson City	M arlborough Dist	Kaiko ura Dist	Wellington City	Upper Hutt City	South Wairarapa Dist	Porirua City	M asterton Dist	Hutt City	Kapiti Coast Dist	Carterton Dist	Wanganui Dist	Authority Name	Work Categories	
2,254	17,485	6,865	3,096	5,666	8,645	19,972	11,795	5,234	3,106	4,463	3,409	2,291	7,152	9,617	7,151	1,6 10	5,015	37,637	7,283	10,256	3,616	8,199	591	22,141	2,689	4,603	3,193	6,424	13,096	3,913	2,526	17,861	Sk	1- 30	M aintenance (Output 1)
4	5	49	9	9	23	40	5	7	6	21	17	3	11	13	6	8	5	67	6	10	83	12	10	92	65	8	82	14	94	60	6	27	%[1]		%Urban Physical
3	37	59	34	36	44	36	24	20	47	52	37	54	47	48	51	22	37	54	53	49	65	51	44	66	86	52	95	59	100	68	62	53	%[2]		Rural % Sealed
6.26	1.40	2.21	0.89	1.05	2.94	3.24	1.55	0.63	2.02	1.78	2.51	0.67	1.28	1.06	1.00	1.36	1.74	3.65	0.79	1.63	2.01	1.6 1	1.52	5.16	2.99	2.31	2.41	2.53	2.69	2.41	2.00	3.31	\$k/km [3]	-	Rural % Pavement Sealed Mtce
3.13	0.70	1.99	0.36	0.20	1.29	1.0 7	0.95	0.50	0.00	0.30	0.00	0.05	0.61	0.42	0.37	0.17	0.24	1.0 1	0.17	0.85	1.75	0.54	0.00	0.55	0.00	0.21	0.47	1.58	1.6 7	0.31	0.69	0.30	\$k/km [3]	2	Area-wide Pavement Treatment
0.39	0.01	0.60	0.29	0.12	0.25	0.40	0.10	0.01	0.10	0.10	0.16	0.02	0.46	0.19	0.01	0.00	0.03	1.19	0.13	0.28	1.54	0.06	0.00	2.43	0.89	0.08	0.00	0.14	0.34	0.00	0.00	1.02	\$k/km[3]	з	Major Drainage Control
0.00	1.66	4.15	2.60	2.23	3.87	2.22	1.87	1.69	1.87	2.58	1.54	0.94	1.72	2.72	1.27	0.36	1.52	3.43	1.8 3	2.08	2.68	2.48	0.97	3.78	1.87	1.0 2	2.61	1.96	7.28	2.88	1.23	3.22	\$k/km [4]	4 - 6	Reseals
466.34	34.04	41.84	37.22	15.23	126.22	366.77	83.40	110.54	77.33	56.08	41.65	14.94	37.81	89.54	44.52	14.82	7.31	125.02	28.35	61.39	396.77	33.72	15.32	730.32	166.87	15.29	88.11	22.28	76.38	76.99	10.25	166.87	\$/m[5] \$	7	Bridge M tce
10.32	2.85	8.18	2.61	2.29	7.14	6.84	3.26	1.78	3.59	4.05	3.69	1.3 1	3.35	3.42	2.11	1.67	2.67	8.95	2.14	4.15	8.96	3.75	2.08	13.48	6.37	3.26	5.70	5.64	12.27	5.63	3.51	7.22	\$k/km [3] \$	1-7	Total Structural Mtce
0.14	0.08	0.22	0.20	0.11	1.14	0.81	0.11	0.41	0.16	0.55	0.55	0.08	0.24	0.14	0.15	0.14	0.27	0.65	0.11	0.46	0.28	0.38	0.24	1.04	0.30	0.18	0.79	0.22	0.87	0.23	0.27	0.25	\$k/km[3] \$	10	Amenity /Safety Mtce
4.68	0.83	0.70	0.76	1.08	0.91	1.18	0.72	0.75	1.19	0.60	0.71	0.10	1.15	1.10	0.86	1.34	0.74	2.29	1.95	0.45	0.91	0.81	0.70	2.40	1.40	0.61	0.57	0.98	1.59	0.43	1.29	0.82	\$k/km[6] \$	11	Street Cleaning
0.56	0.16	0.78	0.13	0.13	0.49	0.84	0.13	0.13	0.17	0.32	0.32	0.06	0.32	0.28	0.29	0.14	0.14	0.95	0.13	0.37	1.52	0.19	0.10	4.43	1.31	0.32	1.12	0.21	1.54	0.82	0.24	0.41	\$k/km [3]	12	ces
0.45	0.73	2.37	0.63	1.38	1.14	1.53	1.56	1.34	1.64	1.84	0.84	0.74	1.75	1.9 1	2.56	0.99	0.71	3.05	1.8 1	1.28	1.88	1.8 1	1.35	4.09	2.68	0.95	3.19	1.29	4.12	1.64	1.36	3.00	\$k/km[6]	13	Carriageway Cycleway Lighting M tce
0.00	0.00	20.77	0.00	0.33	0.00	11.00	0.00	0.00	0.00	0.00	0.00	0.00	5.34	0.90	5.80	0.00	0.00	144.57	4.23	16.00	24.88	9.93	0.00	25.74	0.70	0.00	2.97	0.00	1.67	24.74	0.00	20.55	\$k[7]	14	Cycleway M tce
0.86	0.29	2.50	0.45	0.44	2.07	2.68	0.32	0.69	0.57	1.3 1	1.10	0.17	0.87	0.80	0.65	0.44	0.48	5.14	0.46	1.00	4.11	0.88	0.53	11.4 2	4.26	0.63	4.99	0.74	7.75	2.29	0.67	1.68	\$k/km [3]	10 - 13	Total Corridor Mtce
3.1%	10.9%	7.9%	11.3 %	12.1%	7.3 %	14.7%	10.5%	12.6%	10.4 %	8.9%	10.3 %	13.1%	12.6%	11.8 %	4.4%	7.5%	8.9%	10.6 %	6.0%	13.1%	7.8%	6.5%	11.2 %	15.9 %	7.2 %	9.9%	12.8%	6.2%	13.7%	12.0%	10.6%	14.7%	%[8]	17	Professional Pavement Services Smoothing
0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	4.38	0.00	0.00	0.42	0.00	0.74	0.42	0.00	0.02	\$k/km [3]	40	Pavement Smoothing
9.78	2.76	8.08	2.56	2.27	6.79	6.97	3.11	1.57	3.15	3.72	3.48	1.27	3.26	3.21	2.07	1.63	2.64	8.92	2.10	3.88	7.80	3.62	2.00	16.29	5.73	3.18	5.89	5.52	12.72	5.88	3.48	6.73	\$k/km[3]	1-6&40	Total Pavement and Drainage M tce
0.36	0.39	0.92	0.39	0.38	0.73	1.64	0.42	0.35	0.48	0.53	0.55	0.23	0.61	0.56	0.13	0.17	0.31	1.69	0.17	0.78	1.12	0.32	0.33	4.72	0.83	0.43	1.58	0.42	3.18	1.10	0.50	1.54	\$k/km [3]	17	Professional Services

Pavement maintenance - work category 1 Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

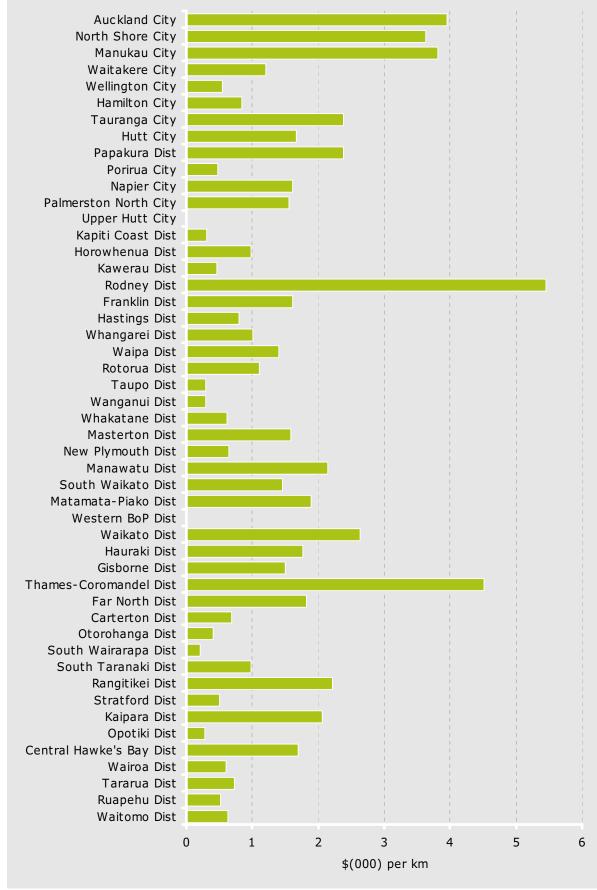
Pavement maintenance - work category 1 Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Area wide pavement treatment - work category 2

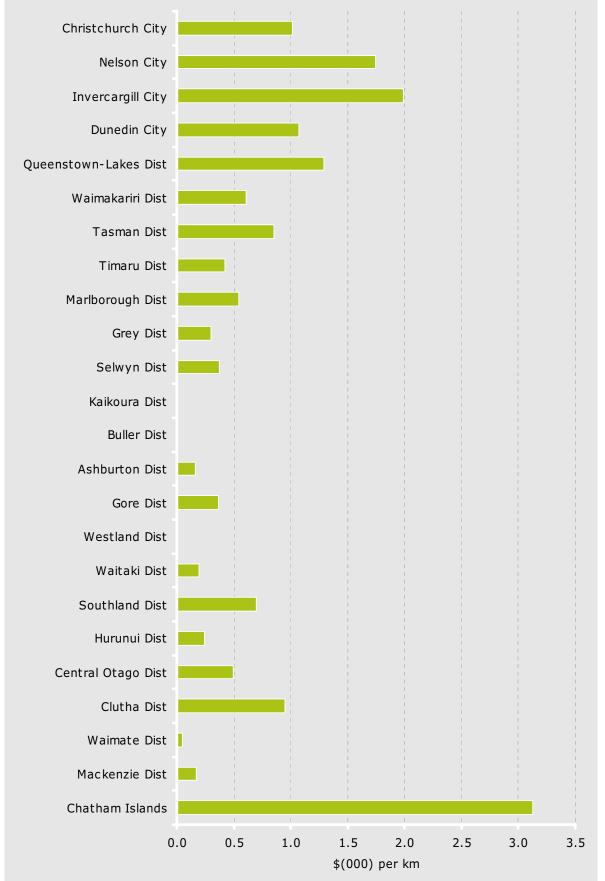
Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Area wide pavement treatment - work category 2

Actual expenditure per kilometre of road (\$000/ km)

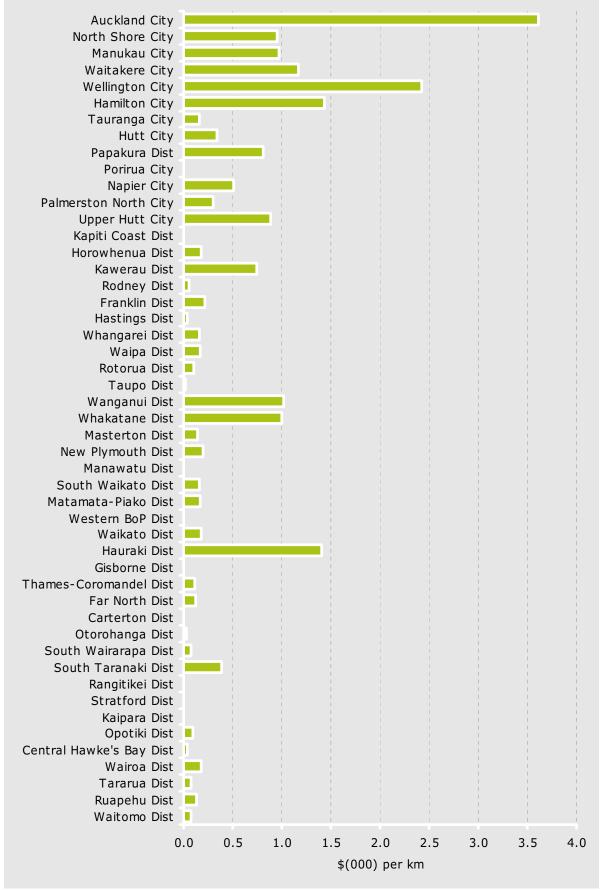


Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Major drainage control - work category 3

Actual expenditure per kilometre of road (\$000/ km)

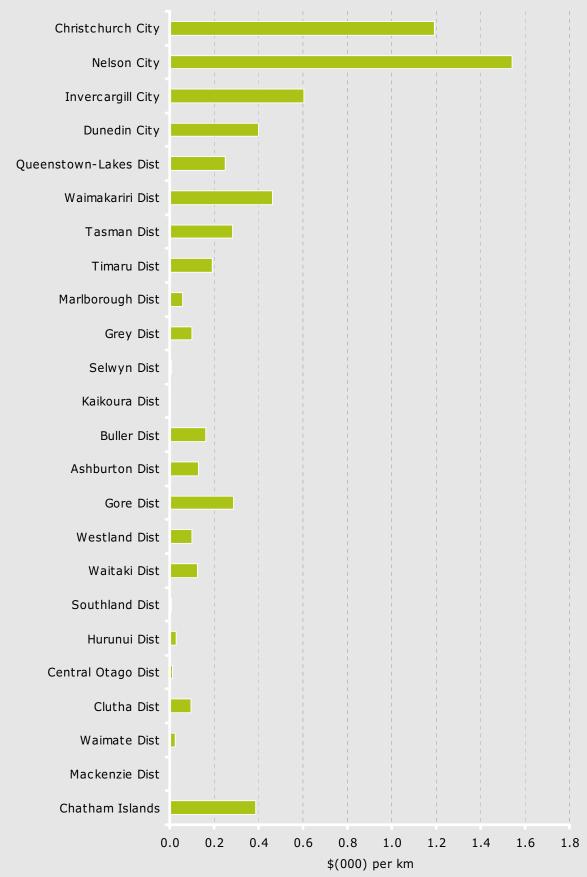
North Island



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Major drainage control - work category 3 Actual expenditure per kilometre of road (\$000/ km)

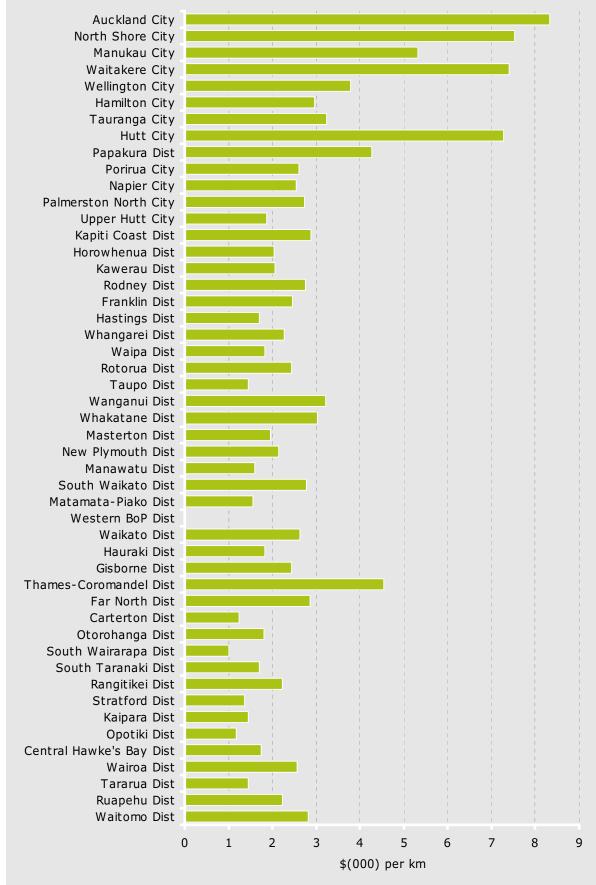




Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Reseals - work categories 4 - 6

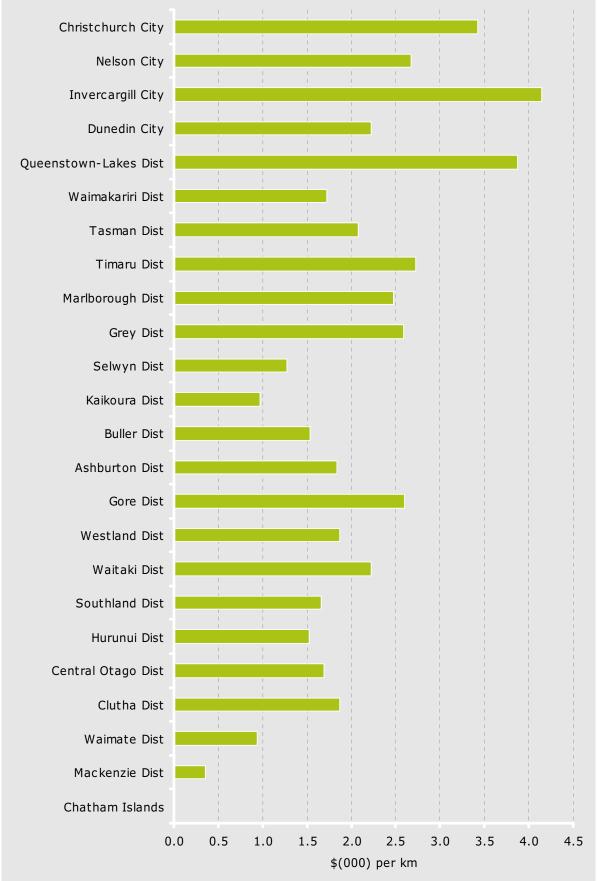
Actual expenditure per kilometre of sealed road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Reseals - work categories 4 - 6

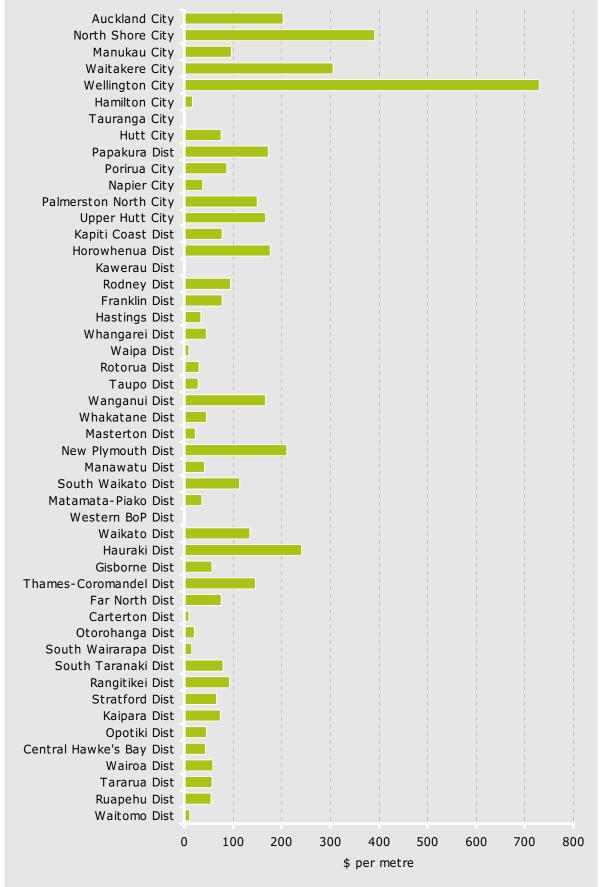
Actual expenditure per kilometre of sealed road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Bridge maintenance - work category 7

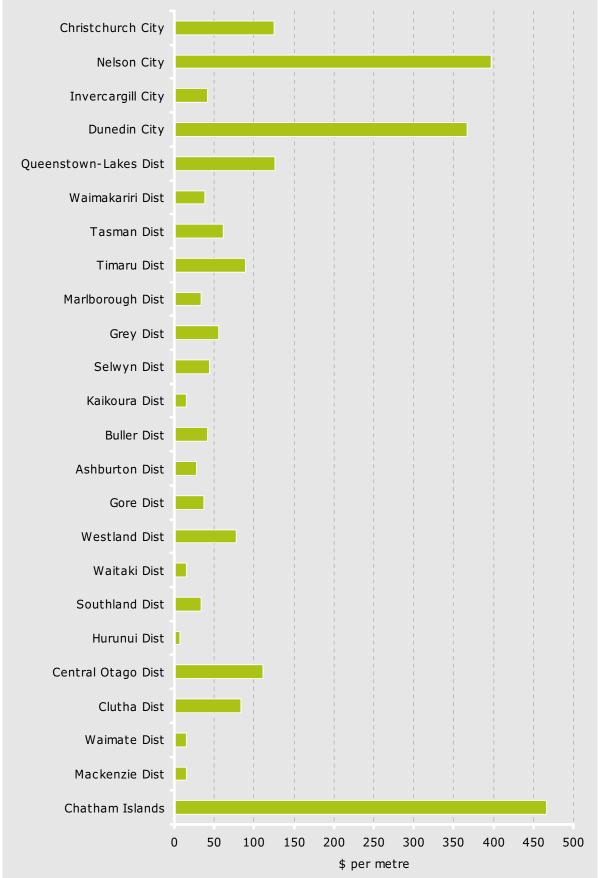
Actual expenditure per metre of bridge ($\$ m)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Bridge maintenance - work category 7

Actual expenditure per metre of bridge (\$/ m)

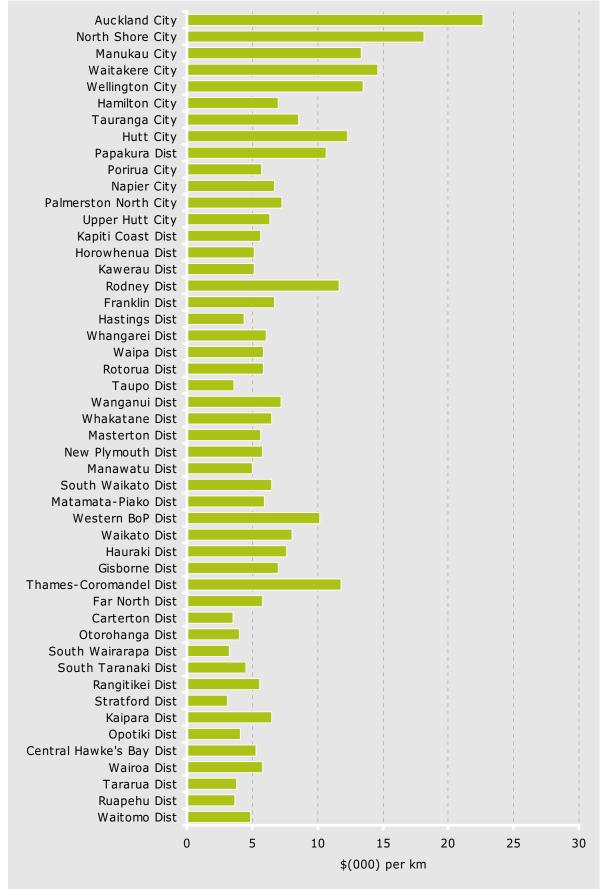


Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Total structural maintenance - work categories 1–7

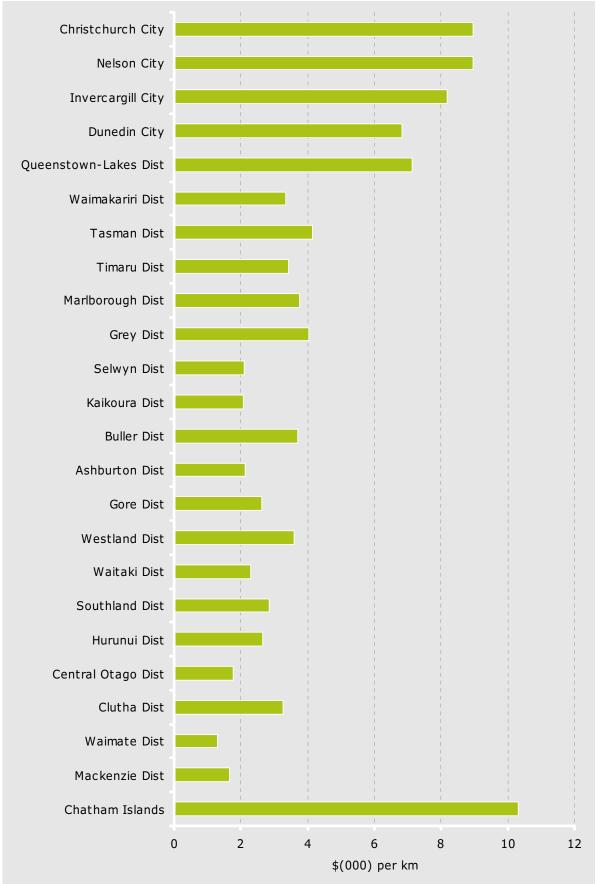
Actual expenditure per kilometre of road (\$000/ km)

North Island



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

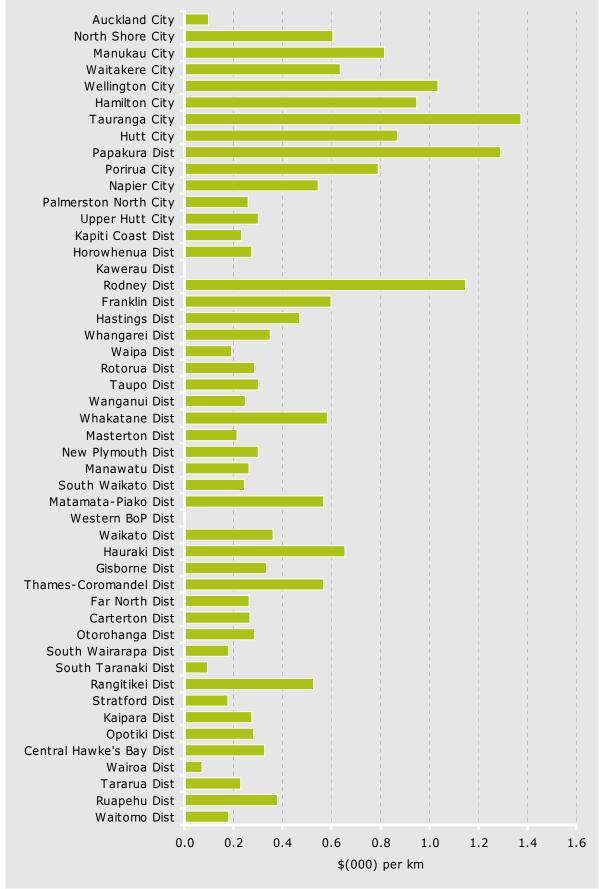
Total structural maintenance - work categories 1–7 Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Amenity/Safety Maintenance - work category 10

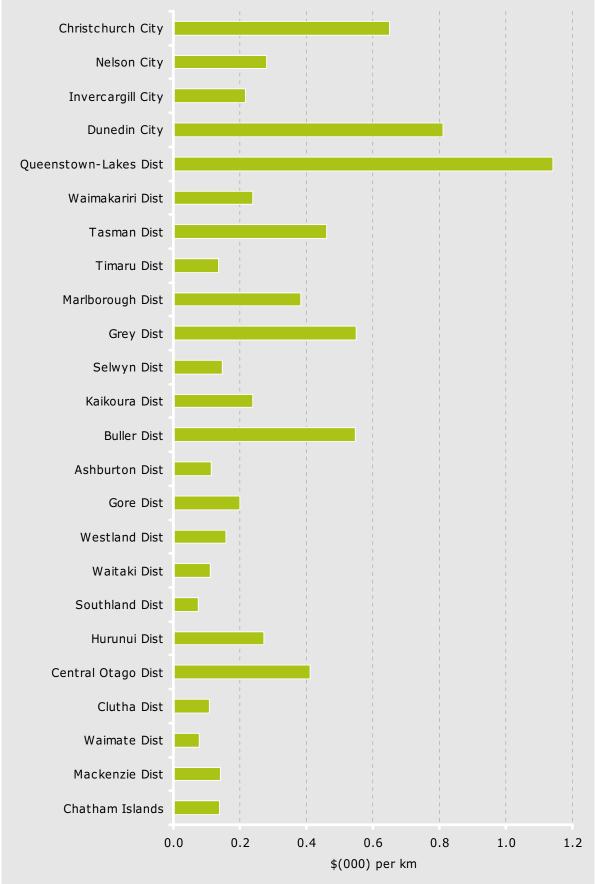
Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Amenity/Safety Maintenance - work category 10

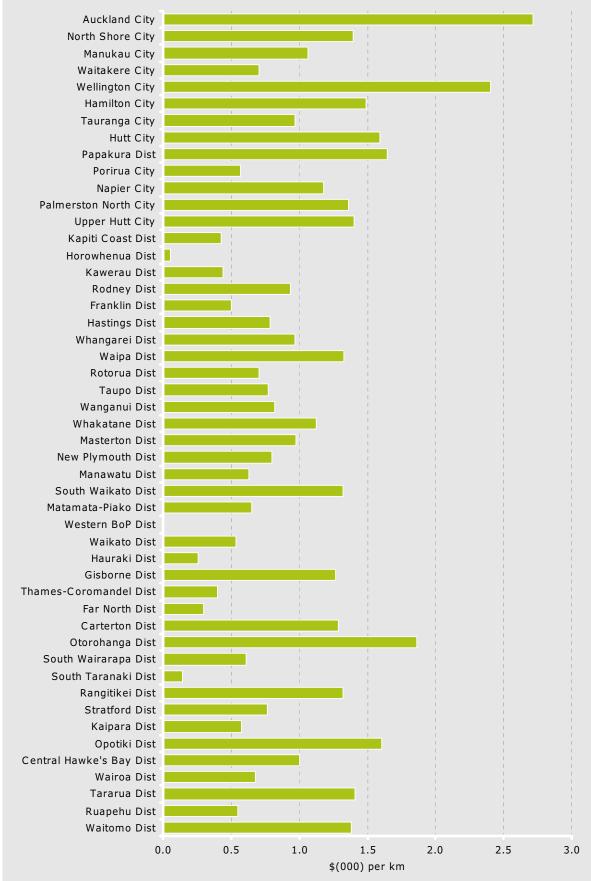
Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Street Cleaning - work category 11

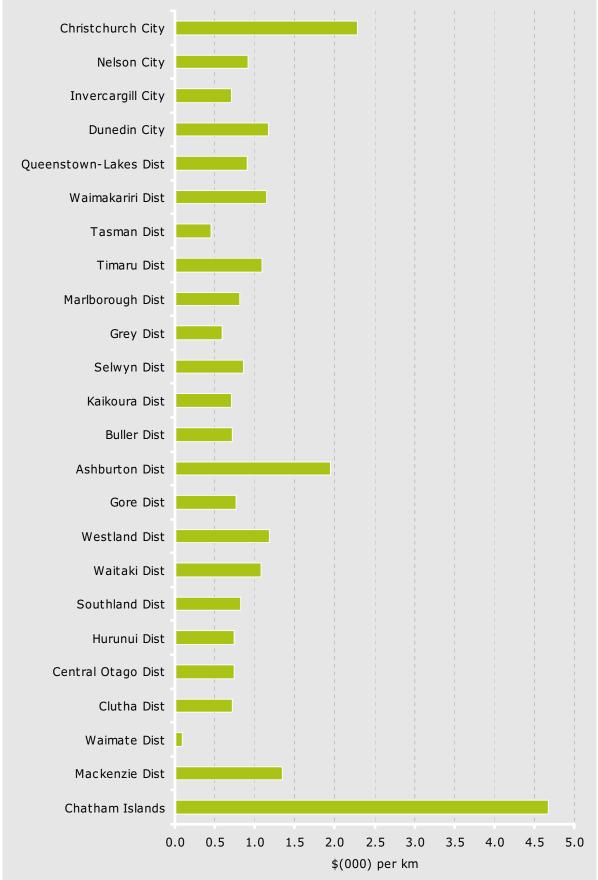
Actual expenditure per kilometre of urban sealed road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Street Cleaning - work category 11

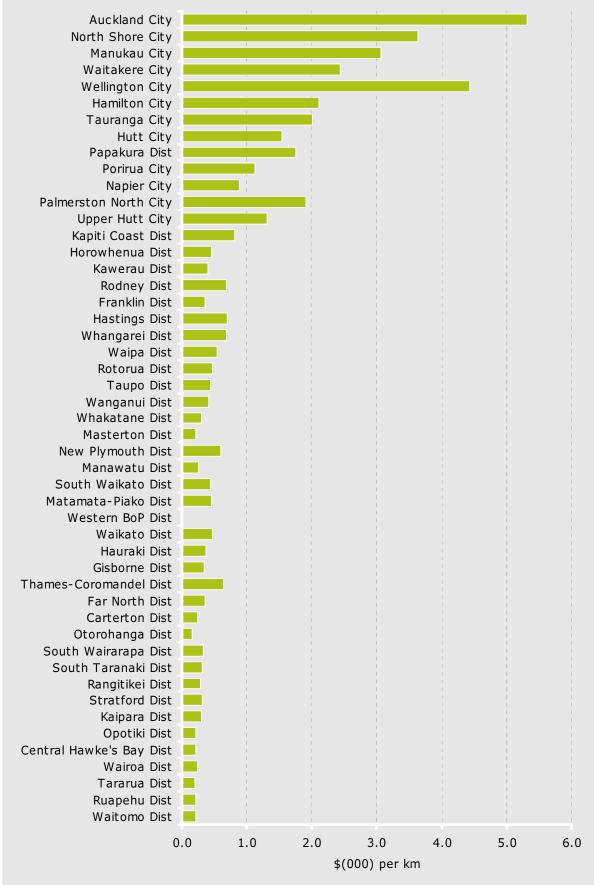
Actual expenditure per kilometre of urban sealed road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Traffic Services - work category 12

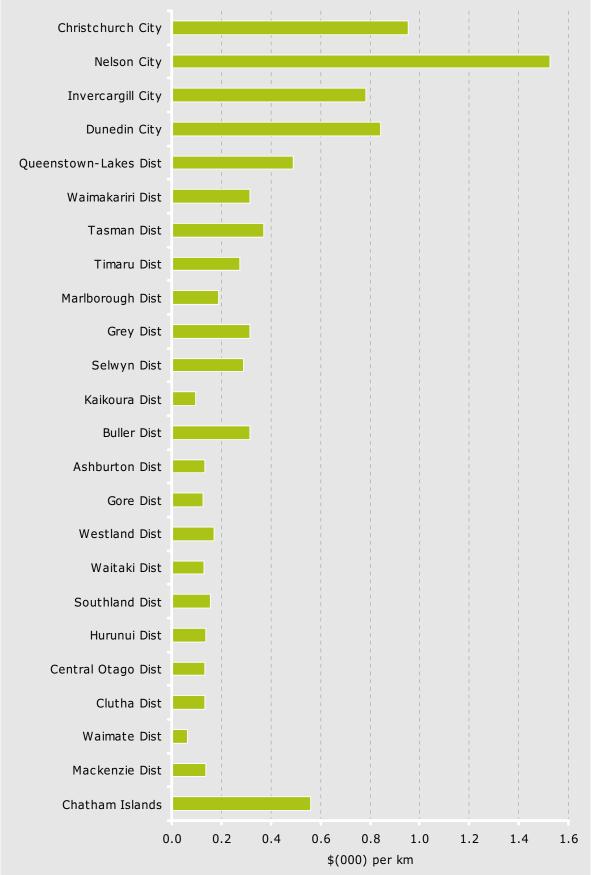
Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Traffic Services - work category 12

Actual expenditure per kilometre of road (\$000/ km)

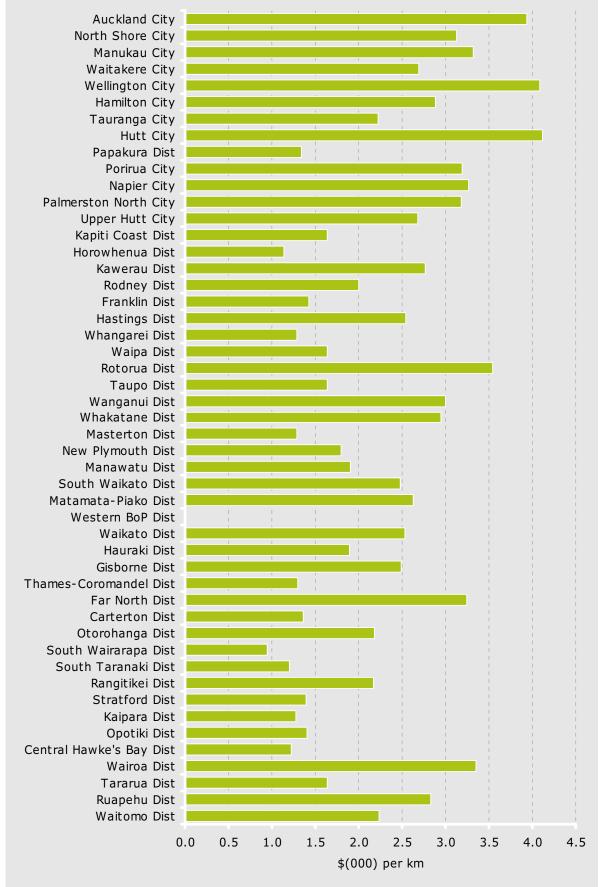


Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Carriageway Lighting - work category 13

Actual expenditure per kilometre of urban road (\$000/ km)

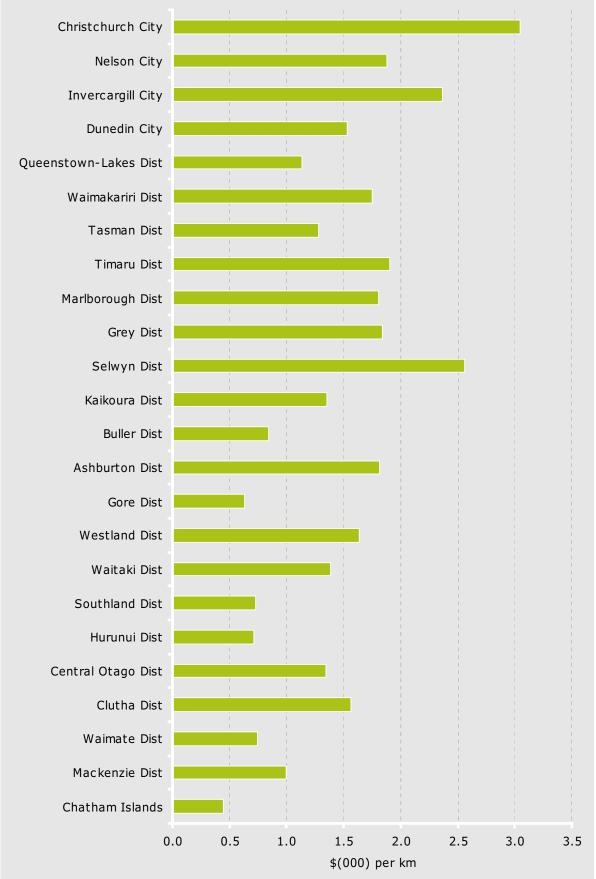
North Island



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

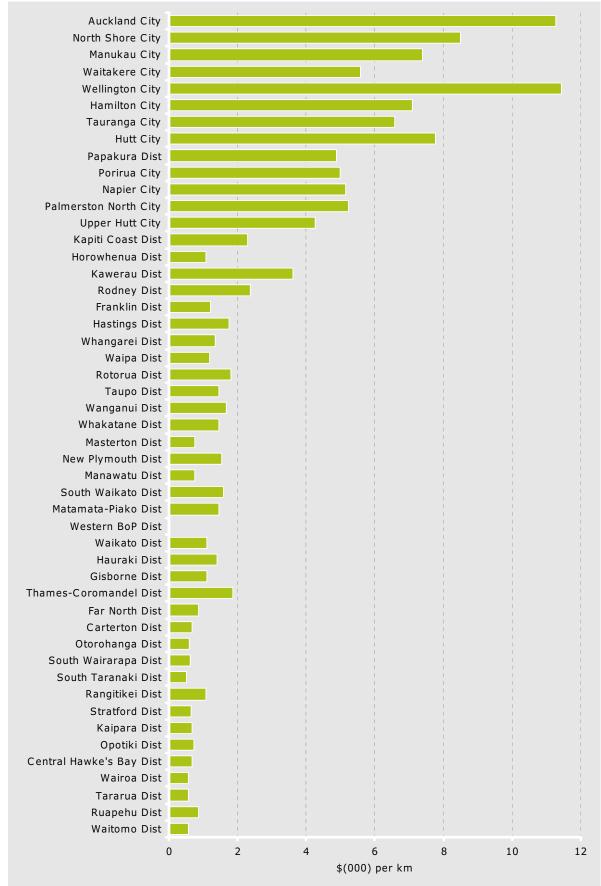
Carriageway Lighting - work category 13

Actual expenditure per kilometre of urban road (\$000/ km)



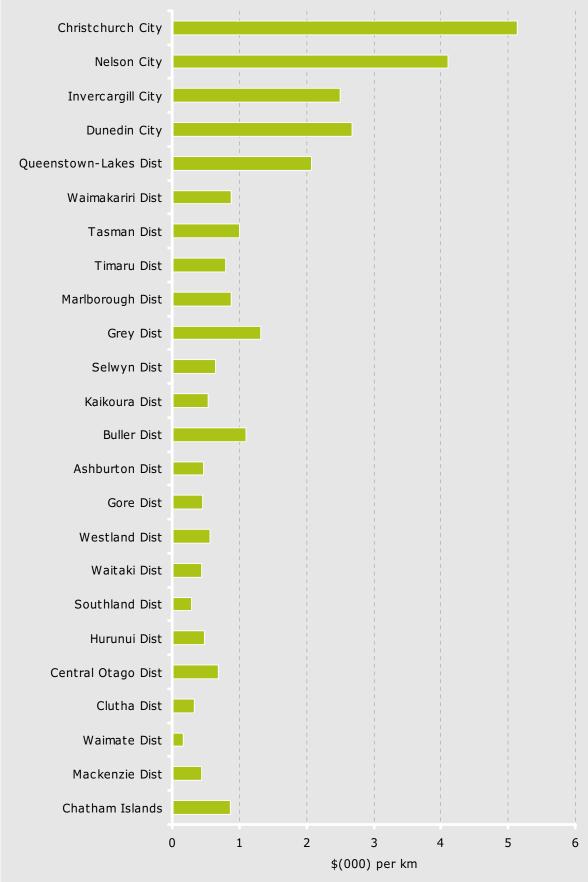
Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Total Corridor Maintenance - work categories 10 - 13 Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

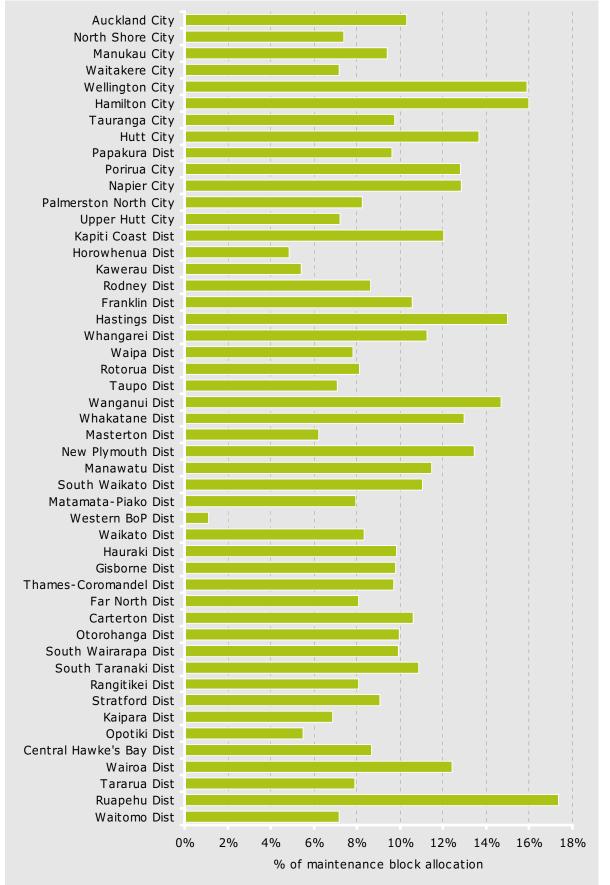
Total Corridor Maintenance - work categories 10 - 13 Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Professional Services - work category 17

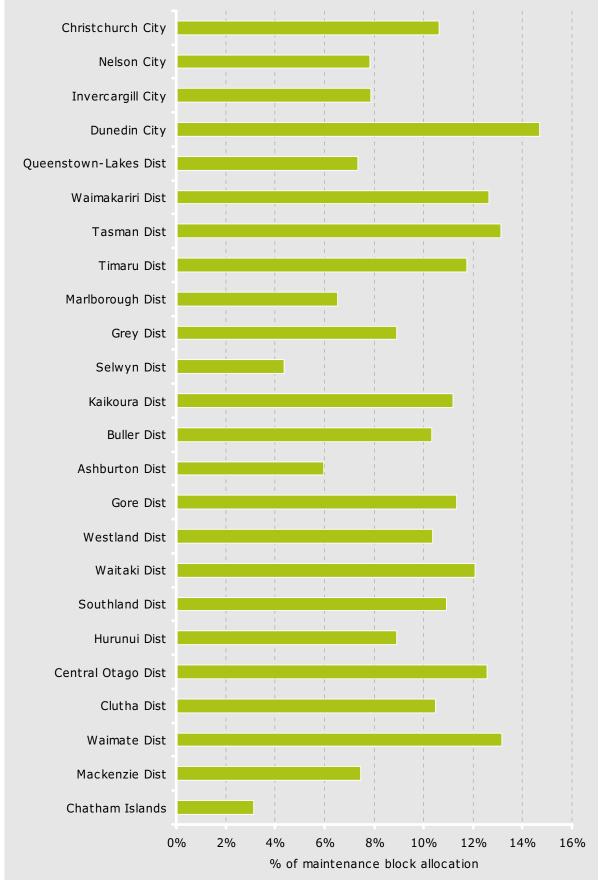
as a % of maintenance block allocation (work categories 1-17)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Professional Services - work category 17

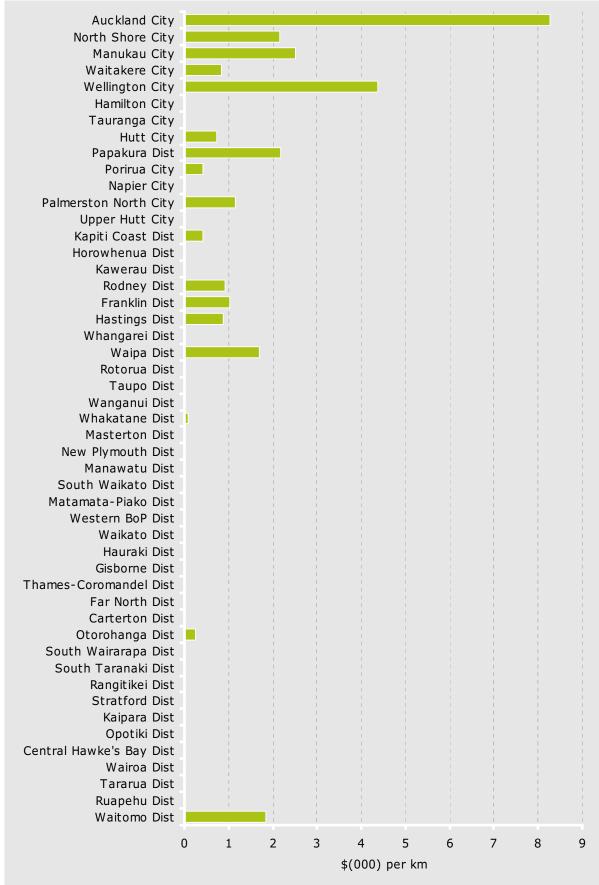
as a % of maintenance block allocation (work categories 1-17)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Pavement smoothing - work category 40

Actual expenditure per kilometre of road (\$000/ km)



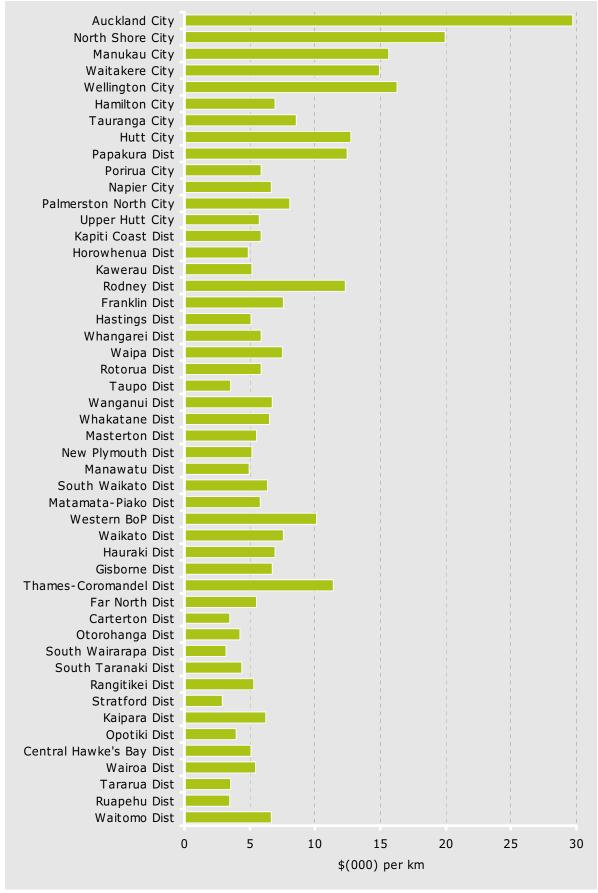
Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Pavement smoothing - work category 40 Actual expenditure per kilometre of road (\$000/ km)



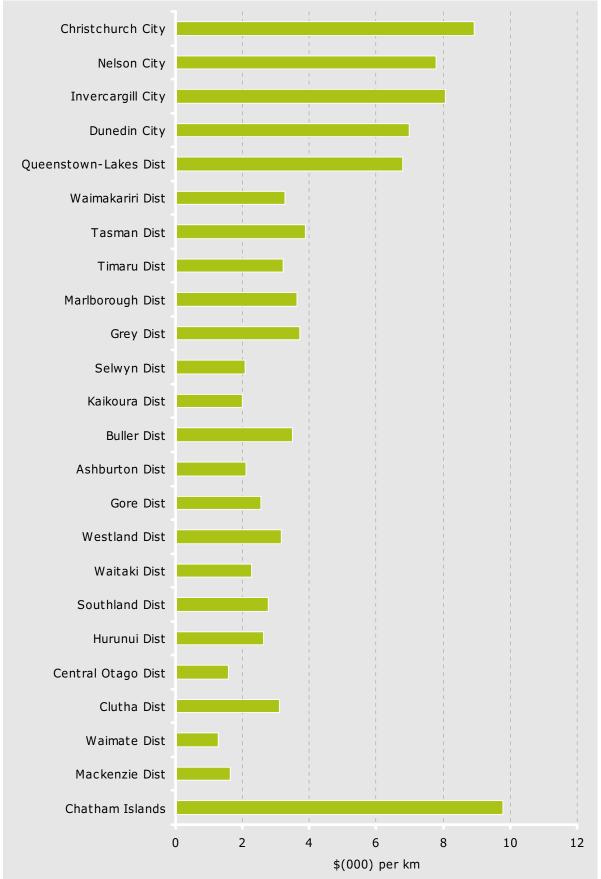
Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Total pavement and drainage mtce - work categories 1—6 & 40 Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

Total pavement and drainage mtce - work categories 1—6 & 40 Actual expenditure per kilometre of road (\$000/ km)



Note 1: Authorities are listed from highest to lowest average traffic density Note 2 : Expenditure taken from final claim

