DATABASE HEALTH INDEX - DASHBOARD

Area: SOUTHLAND M&O Date: 25/11/2013

KEY: On or exceeding target

One grade, or between 0 and 15 below captured value Greater than one grade, or 15 below captured value

		Date:	25/11/2013			Performano	e	
Description Company		Category	Measures	Result		Expected		Expected Value
Manage			Major capital projects completed v RAMM (in last 6 -30 months)	see	attached repo		value	
Submitted Subm		Capital Projects	Minor capital or safety improvement projects v RAMM (in last 6 -30 months)	see	attached repo	ort	-	-
March Section Sectio			% of Network surfaced in RAMM over previous 4 – 15 months	9.7%	Grade 1	Grade 1		
Model Services Ser			% Surfaces at least 50% older than expected age	0.0%	Grade 1	Grade 2		
Processor Proc		Surfacing	% of Network with no surfacing	0.0%	Grade 1	Grade 1	100	81
Processor of Langes Processor of the manages by point 1.0	>		Illogical Records inc. % (SAC with chipseal, Low and high widths, Alignment of traffic volumes v pavement use)	0.8%	Grade 1	Grade 1		
Processor of Langes Processor of the manages by point 1.0	nto		Proportion of Network with layer Information	93.9%	Grade 1	Grade 3		
Processor of Langes Processor of the manages by point 1.0	live Inve	Pavement Layer			Grade 3		80	77
Processor of Langes Processor of the manages by point 1.0	sset	•	· · · ·		Grade 1	Grade 1		
Part		Road Marking		see	attached repo	ort	-	-
Part	gew		Proportion of very short (< 20m) TLs	0.1%	Grade 1	Grade 1		
Procedure of 11.5 with 4 50% conteged of manus surfacering 10.5 kg Conde 2 1			Proportion of very long (> 2000m) TLs	4.4%	Grade 1	Grade 1		
Procession of Administration	ပိ	Treatment Length	Proportion of TLs with < 80% coverage of major surfacing	10.3%	Grade 2	Grade 1	68	85
Procession of Administration			% updated in last 5 years	0.6%	Grade 5	Grade 2		
Programme Prog				25/11/2013	-	-		
Programme		Forward Works	Proportion of network identified for treatment in next ten years (from FWP)	76.1%	Grade 2	Grade 2		
Processing and proc			FWP v surfacings (% surfacings in last year conflicting with first 2 years of FWP excluding 2nd coats)	0.0%	Grade 1	Grade 1	59	90
Participation Participatio				0.0%	Grade 5	Grade 1		
Name		Carriageway Rating	**	99.1%	Grade 1	Grade 1	99	90
Second S		<u> </u>		100.0%	Grade 1	Grade 1		
Second Company Seco		High Speed Data		1.2%	Grade 5	Grade 1	67	90
Mariteriannea Activity Spread of location in previous 4 - 15 months v Regional Average 100.01% Grade 2 2 83 83 83 83 83 84 84 84					Grade 1	Grade 1		
Non-informance Separated Focusion in previous 4 - 15 months (proportion located at carriageway shart) Separated Focusion in previous 4 - 15 months (proportion located at carriageway shart) Separated Focusion in previous 4 - 15 months Separated Focusion Separated Focusio				100.0%	Grade 1	Grade 2		
Maintenance Activity	ţ							
No.	д Da			see		ort	83	83
No.	ecte	Activity	·					
Miscellaneous No. of feet pts with layer data recorded 67 no. - - - - - - - - -	S		% of Maintenance Activity where fault type is "Unknown"	20.7%	Grade 3	Grade 1		
No. of LTPP sites recorded in RAMM			· · · · · · · · · · · · · · · · · · ·			-		
Traffic Count Latest ADT Estimates 2011/2013 - - 99 70				3	no.	-	-	-
No. Large Clusters v No. 6 Bridges > 50m in length in BDS 0.0% Grade 5 Grade 1			Latest ADT Counts	31/12/2012	-	-	99	
No. of Pavement Type "Bridge" v No. of Bridges > 50m in length in BDS 0.0% Grade 5 Grade 1 No. Large Culvrets v No. BDS 12.1% Grade 5 Grade 2 Retaining Walls 0.0			Latest ADT Estimates	20/11/2013	-	-		70
No. Large Culverts v No. BDS			% loading estimate (i.e. not default)	98.8%	Grade 1	Grade 2		
Retaining Walls Ganthies (see attached report for locations)			No. of Pavement Type "Bridge" v No. of Bridges > 50m in length in BDS	0.0%	Grade 5	Grade 1		
Structures Gantries (see attached report for locations)			No. Large Culverts v No. BDS	12.1%	Grade 5	Grade 2		
Gantries (see attached report for locations)			Retaining Walls 60 no					
End Treatments in RAMM		Structures	Gantries (see attached report for locations)	-	Ь	65		
Culverts per km v Regional Average (Rural)			Barriers in RAMM (m)	20725	m	-		
Page Catchpits per km v Regional Average (Urban) 139.4% Grade 1 Grade 2 75 80			End Treatments in RAMM	see	attached repo			
Drainage Manholes per km v Regional Average (Urban) 100.0% Grade 1 Grade 2 75 80			Culverts per km v Regional Average (Rural)	114.3%	Grade 1	Grade 2		
Subsoil Drains per km v Regional Average (Rural) 73.6% Grade 2 Grade 2 % of Drainage (Construction Date in previous 4 – 15 months) 0.0% Grade 4 Grade 2 67 77			Catchpits per km v Regional Average (Urban)	139.4%	Grade 1	Grade 2		
Weight Surface Water Channels Surface		Drainage	Manholes per km v Regional Average (Urban)	100.0%	Grade 1	Grade 2	75	80
Surface Water Channels			Subsoil Drains per km v Regional Average (Rural)	73.6%	Grade 2	Grade 2		
Signs Per Nitr V Regional Average Large Signs > 4.0m² (see attached report for quantity by type) 49 no. -			% of Drainage (Construction Date in previous 4 – 15 months)	0.0%	Grade 4	Grade 2		
Signs Per Nitr V Regional Average Large Signs > 4.0m² (see attached report for quantity by type) 49 no. -	ntor		Surfaced SWC per km v Regional Average (Urban)	105.3%	Grade 1	Grade 2		
Signs Per Nitr V Regional Average Large Signs > 4.0m² (see attached report for quantity by type) 49 no. -	Inve		Earth SWC per km v Regional Average (Rural)	129.9%	Grade 1	Grade 2	67	77
Signs Per Nitr V Regional Average Large Signs > 4.0m² (see attached report for quantity by type) 49 no. -	set	J. Idilliolo	Sealed SWC renewal activity (Construction Date in previous 4 – 27 months)	0.0%	Grade 4	Grade 2		
No. Frangible bases in RAMM (no posts in RAMM) Streetlights per km v Regional Average Streetlights Prangible Base type no. Streetlights Streetlights Poles with renewal date in last 4 – 15 months Duplicates or near duplicates plus poles with no light or bracket Footpaths & Cycleways Cycleways Total length of Footpath and Cycleways (see attached tables for listings) Signal Controlled Intersections Signal Controlled Intersections Number of rest areas Number of rest areas Number of rest areas			Signs per km v Regional Average	118.2%	Grade 1	Grade 2		
No. Frangible bases in RAMM (no posts in RAMM) Streetlights per km v Regional Average Streetlights Prangible Base type no. Streetlights Streetlights Poles with renewal date in last 4 – 15 months Duplicates or near duplicates plus poles with no light or bracket Footpaths & Cycleways Cycleways Total length of Footpath and Cycleways (see attached tables for listings) Signal Controlled Intersections Signal Controlled Intersections Number of rest areas Number of rest areas Number of rest areas	ewa		Large Signs >4.0m ² (see attached report for quantity by type)	49	no.	-		
No. Frangible bases in RAMM (no posts in RAMM) Streetlights per km v Regional Average Streetlights Prangible Base type no. Streetlights Streetlights Poles with renewal date in last 4 – 15 months Duplicates or near duplicates plus poles with no light or bracket Footpaths & Cycleways Cycleways Total length of Footpath and Cycleways (see attached tables for listings) Signal Controlled Intersections Signal Controlled Intersections Number of rest areas Number of rest areas Number of rest areas	rriag	Signs		2	no.	-	51	78
Streetlights per km v Regional Average Frangible Base type no. Streetlights Shear Base type no. 9 of Streetlight Poles with renewal date in last 4 – 15 months Duplicates or near duplicates plus poles with no light or bracket Footpaths & Cycleways Total length of Footpath and Cycleways (see attached tables for listings) Signal Controlled Intersections Signal Controlled Intersections Number of rest areas Number of rest areas Streetlights per km v Regional Average 200.0% Grade 1 Grade 2 0.0% Grade 4 Grade 2 0.0% Grade 1 Grade 1 Footpaths & Cycleways See attached report	-Cal		% of Signs with renewal date in last 4 - 15 months	0.1%	Grade 4	Grade 2		
Streetlights Frangible Base type no. Shear Base type no. Shear Base type no. % of Streetlight Poles with renewal date in last 4 – 15 months Duplicates or near duplicates plus poles with no light or bracket Footpaths & Cycleways Total length of Footpath and Cycleways (see attached tables for listings) Signal Controlled Intersections Signal Controlled Intersections (see attached report for locations) Rest Areas Number of rest areas O no 67 82 82 82 82 83 84 85 86 86 87 88 88 88 88 88 88 88	No		No. Frangible bases in RAMM (no posts in RAMM)	0	no.	-		
Streetlights Shear Base type no. % of Streetlight Poles with renewal date in last 4 – 15 months Duplicates or near duplicates plus poles with no light or bracket Footpaths & Cycleways Total length of Footpath and Cycleways (see attached tables for listings) Signal Controlled Intersections Signal Controlled Intersections (see attached report for locations) Rest Areas Number of rest areas Shear Base type no. 0 no 67 82 82 82 82 82 82 82 82 82 82 82 82 82			Streetlights per km v Regional Average	200.0%	Grade 1	Grade 2		
% of Streetlight Poles with renewal date in last 4 – 15 months Duplicates or near duplicates plus poles with no light or bracket Footpaths & Cycleways Total length of Footpath and Cycleways (see attached tables for listings) Signal Controlled Intersections Signal Controlled Intersections (see attached report for locations) Rest Areas Number of rest areas Number of rest areas Number of rest areas O.0% Grade 4 Grade 2 0.0% Grade 1 Forade 1			Frangible Base type no.	0	no.	-		
Duplicates or near duplicates plus poles with no light or bracket Footpaths & Cycleways Total length of Footpath and Cycleways (see attached tables for listings) Signal Controlled Intersections Signal Controlled Intersections (see attached report for locations) Rest Areas Number of rest areas O.0% Grade 1 Grade 1		Streetlights	Shear Base type no.	0	no.	-	67	82
Footpaths & Cycleways Total length of Footpath and Cycleways (see attached tables for listings) Signal Controlled Intersections Signal Controlled Intersections (see attached report for locations) 19 no Rest Areas Number of rest areas			% of Streetlight Poles with renewal date in last 4 – 15 months	0.0%	Grade 4	Grade 2		
Cycleways Signal Controlled Intersections Signal Controlled Intersections Number of rest areas Number of rest areas Signal Controlled Intersections Signal C			Duplicates or near duplicates plus poles with no light or bracket	0.0%	Grade 1	Grade 1		
Signal Controlled Intersections Signal Controlled Intersections (see attached report for locations) 19 no Rest Areas Number of rest areas			Total length of Footpath and Cycleways (see attached tables for listings)					-
Rest Areas Number of rest areas 6 no		Signal Controlled	Signal Controlled Intersections (see attached report for locations)	19	no.	-	-	-
			Number of rest areas	6	no.	-	-	-
						-	-	-
		<u> </u>	·					





DATABASE HEALTH INDEX DASHBOARD - PROJECTS

Area: SOUTHLAND M&O Date: 25/11/2013

In								
	Project Name	SH	RS	Dir	RP		Comments	Year
N	Charlton Park Cemetery Road Intersection Flaglight	1	858	В	6.54	Installation of flag light at the intersection of SH1 and Charlton Park Cemetery Road		10/11
						,	Historical surface records need removed date, pavement layer spec "In-situ Stab" reconstructed "Undisturbed" stab agents	
Р	Kerr Road Seal Extension	1	900	В	2.3	Extension of Kerr Road and SH1 Intersection	missing.	10/11
Υ	Elles Road Turn left bay extension	1	926	ı	1.56	Left turn bay in the increasing direction of Elles Road and SH1.	Markings paint date missing	10/11
N	Bay View Road Lag light	1	926	ı	4.75	Flag light installed at the intersection of Bay View Road and SH1.		10/11
						Threshold treatment of the 100 to 80km/h speed limit before Garston in the increasing direction through the use of signage,		
Υ	Garston Threshold	6	1046	I	6.65	islands and painted flush median.	Markings paint date and sign install dates missing	10/11
N	Josephville- Genure Road intersection widening	6	1095	В	8.48	Increase in intersection width of Josephville- Genure Road and SH6.		10/11
Р	Josephville Hill Slow Bay	6	1095	D	10.28	Added slow Vehicle bay in the decreasing direction at the top of the Josephville Hill	Signs Updated, no installation date. No surfacing or pavement layer details.	10/11
Р	Fox Street Traffic Lights	6	1168	В	6.33	Installation of traffic lights at Fox Street and SH6	Markings and signs no install dates, traffic lights missing	10/11
Р	Three Stones Road intersection widening	93	0	ı	4.38	Widening if seal before the Three Stones SH6 intersection.	No Surfacing or pavement layer details, no marking paint date.	10/11
							Historical surface records need removed date, pavement layer	
Υ	Three Stones Road slow vehicle bay	93	0	I	3.65-4.38	The Realignment and addition of a Slow Vehicle bay in the Increasing direction.	spec "In-situ Stab" stab agents missing and Reconstructed is null. Signs updated, install date. Markings missing paint date.	10/11
P	Gore West Threshold	94	0	D	1.37	Threshold treatment for the west entrance to gore on SH94	Flush median missing, signs no install dates.	10/11
	Sinclair Road Curve Realignment				4.78	Realignment and seal widening of Sinclair Road Curve. Widening of Dunsdale Valley Road and SH96 intersection with		10/11
N	Dunsdale Valley Road Intersection Widening	96	15	D	3.15	the addition of quadrant kerbing.		10/11
Р	Craig Road Right Turn Bay	1	872		2.2	installation of a right turn bay in the increasing direction and a flag light.	Markings paint date missing, no surfacing or pavement layer details, no street light.	11/12
Υ	Garston Guardrail	6	1046	В	6.87-6.93	Guardrail installed on Decreasing side of corner.	Guard Rail install date missing	11/12
							Historical surface records need removed date, pavement layer spec "In-situ Stab" reconstructed "Undisturbed" stab agents	
	Lastial December 1 Dec		4445		6.67	Area widening and addition of right turn bay at Lochiel-	missing. Signs Updated, no install, date. (Flush median entered	11/12
	Lochiel- Branxholme Road Intersection right turn bay Lochiel Corner Guardrail	6	1145 1145		6.67 6.7	Branxholme Road and SH6 corner. Guardrail installed on Decreasing side of corner.	as painted island) no paint date.	11/12 11/12
						Threshold treatment of the 100 to 80km/h speed limit before Makarewa through the use of signage, islands and painted flush		
Υ	Makarewa Threshold	6	1157	I	8.45	median.	Markings, signs and channels no constructed dates	11/12
							Historical surface records need removed date, pavement layer spec "In-situ Stab" stab agents missing and Reconstructed is	
Υ	Glennstuart Guardrail	93	31	В	7.76	Widening if seal and addition of Guardrail in both directions.	null. Guard raill missing install date.	11/12
	Greenhills OverBridge Barrier	1	933		8.41	Installation of W section Barrier on the increasing side the Over bridge.	Guard Rail install date missing	12/13
Υ	Parawa Curves Upgrade	6	1061	В	9 - 11.2	The installation of chevrons and seal widening.	Signs Updated, no installation date.	12/13
							Historical surface records need removed date, pavement layer spec "In-situ Stab" reconstructed "Undisturbed" stab agents	
Υ	Caroline Valley Curve Upgrade	6	1095	В	13.5 -14.5	The installation of chevrons and seal widening.	missing. Signs Updated, no install date.	12/13
N	Yarrow Street Traffic Lights	6	1168	В	7.05 & 7.12	The upgrade of traffic lights to LED		12/13
						Widening of Monaghan Road and SH94 intersection with the	Carriageway Start and end names missing, Historical surface	
Р	Monaghan Road intersection widening	94	0	D	6.85	addition of quadrant kerbing. Active Warning sign for Te Anau School in the increasing and	records need removed date, channels not updated.	12/13
?	Te Anau Active Warning School Signs	94	138	В	1.02 &1.20	Decreasing Directions.		12/13
	Hauroko Active Warning School					Active Warning sign for Hauroko School in the increasing and Decreasing Directions.		12/13
N	Selbourne Street Intersection upgrade	1	858	D	10.6	The installation of a right turn bay seal widening.		13/14
Υ	Ettrick Street Throat Islands	1	923	В	0.78	Installation of throat islands to emphasise give way controls	Signs Updated, no installation date.	13/14
Υ	Crinan Street Throat Islands	1	923	В	1.02	Installation of throat islands to emphasise give way controls	Signs Updated, no installation date.	13/14
N	Invercargill South Threshold	1	926	В	0.4	Threshold treatment for the soth entrance to gore on SH1		13/14
Υ	Siberia Active Warning signs	6	1061	В	0.27 & 2.25	Installation of active warning signs saying "slowdown" for when Icy		13/14
?	Luxmore Pedestrian Crossing	94	78	В	10.4	Installation of a pedestrian drop crossing and central refuge.		13/14
	Planned for 13/14					Add throat island on side road approaches, upgrade curve		
	SH1 Mona Bush Road - Rockdale Road					delineation and improve sight distance where possible, and exstened right turn bay over crest of hill		13/14
	JILL WICHA DUSH NOAU - NOCKUARE NOAU					Install Speed Indication devices (SID's) on each approach		13/14
	Makarewa River Bridge Curve Improvements							10/44
	Makarewa River Bridge Curve Improvements Centre Bush Otapiri Rd Flag Lighting Blackmount Redcliff Road Curve Warning					install flag lighting at the intersection Upgrade curve warning signage Change phasing to remove filter turns and improve the street		13/14 13/14





DATABASE HEALTH INDEX - REGIONAL AVERAGES

Area: SOUTHLAND M&O Date: 25/11/2013

Regional Averages

		Hierarchy					
Asset	Region	High Volume	National Strategic	Regional Strategic	Regional Connector	Regional Distributor	Regional Average
	Regional Average for route type	-	4	3	1	2	
Maintenance Costs	Sth Canterbury	-	2	-	1	1	
(no. of pavement and	Otago Central	-	-	1	0	1	2
surfacing faults per km)	Coastal Otago	-	7	8	1	3	
	Southland	-	-	2	2	2	
	Regional Average for route type	-	5	5	4	5	
Outranta (Dunal)	Sth Canterbury	-	4	-	4	4	
Culverts (Rural) (no. per km)	Otago Central	-	-	5	4	4	5
(110. per kill)	Coastal Otago	-	6	5	2	6	
	Southland	-	-	4	6	6	
	Regional Average for route type	-	11	13	11	9	
Catalanit (Lluban)	Sth Canterbury	-	10	-	8	9	
Catchpit (Urban) (no. per km)	Otago Central	-	-	9	9	0	11
(no. per kin)	Coastal Otago	-	13	11	2	8	
	Southland	-	-	17	12	17	
	Regional Average for route type	-	0	0	0	0	
Manhalaa (urhan)	Sth Canterbury	-	0	-	0	0	
Manholes (urban) (no. per km)	Otago Central	-	-	0	0	0	0
(110. pci kili)	Coastal Otago	-	0	0	0	0	
	Southland	-	-	0	0	0	
	Regional Average for route type	-	0	36	22	14	
Cubacil Drain (Dural)	Sth Canterbury	-	37	-	7	2	
Subsoil Drain (Rural) (m per km)	Otago Central	-	-	0	0	20	34
(III per kill)	Coastal Otago	-	106	194	2	46	
	Southland	-	-	9	20	24	
	Regional Average for route type	-	1645	1554	1457	1307	
Surfaced SWC (Urban)	Sth Canterbury	-	1603	-	1469	1562	
(m per km)	Otago Central	-	-	1374	1352	1626	1495
(III por IIII)	Coastal Otago	-	1695	1437	428	1025	
	Southland	-	-	1702	1548	1299	
	Regional Average for route type	-	1553	1347	1040	1535	
Earth SWC (Rural)	Sth Canterbury	-	1642	-	644	1470	
(m per km)	Otago Central	-	-	1305	1262	1575	1373
(III por IIII)	Coastal Otago	-	1453	1173	352	1607	
	Southland	-	-	1819	1814	1461	
	Regional Average for route type	-	17	14	9	10	
Signs	Sth Canterbury	-	15	-	8	10	
Signs (no. per km)	Otago Central	-	-	12	8	8	12
(por)	Coastal Otago	-	19	16	8	11	
	Southland	-	-	15	13	11	
	Regional Average for route type	-	2	1	0	0	
Strootlights	Sth Canterbury	-	4	-	1	1	
Streetlights (no. per km)	Otago Central	-	-	3	1	1	1
(no. por kin)	Coastal Otago	-	0	0	0	0	
	Southland	-	-	2	0	0	



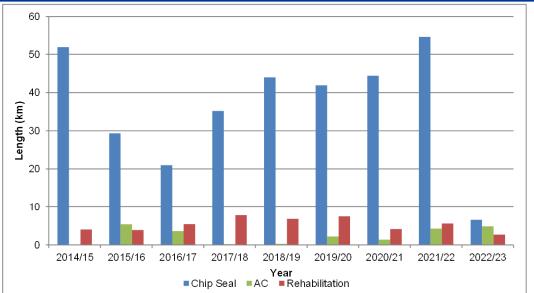


DATABASE HEALTH INDEX DASHBOARD - REPORTS

Area: SOUTHLAND M&O

Date: 25/11/2013

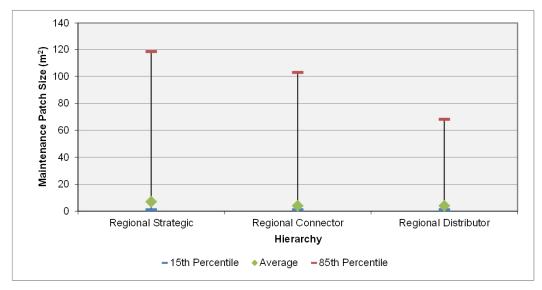
Breakdown of 10 Year FWP by Treatment Type



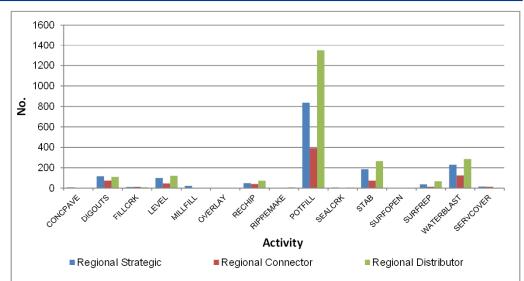
Signalised Intersections in RAMM

Road Name		No.
01S-0920/01.12		1
01S-0920/02.60-D		2
006-1168/02.75-D		7
006-1168/02.75-I		9
	Total	19

Distribution of maintenance patch sizes by Hierarchy



Breakdown of Maintenance Cost Activities last 3 years



Large Signs >4.0m²

Sign Type	No.
Advance direction (Map) - "T" or cross roads	8
Advance direction (Stack) - "T" intersection	3
Feature ""m ON left/right	2
Intersection Direction - "Fingerboard" Street Name S1Intersection Dire	1
Advance Direction - Street name sign	1
Advance direction (Map) - Roundabout	4
Advance direction (Stack) - Cross roads	4
Chevron Curve Indicator	4
Confirmation Destination	2
Four services [Arrow]	1
GIVE WAY	3
Information (Miscellaneous Sign) - User Defined	1
Intersection Direction [Arrow]	2
STOP	1
Slippery Surface (never erected separately)	7
Speed Limit 70km/h with PN-1	1
Speed Limit 80km/h with PN-1	2
Tourist route marker - arrow and route number	1
Warning (Miscellaneous Sign) - User defined	1
Total	49

End Treatments in RAMM

End Treatment Type	No.
Armorflex X 350	58
Breakaway Cable Terminal (Bull Nose)	199
Bridge Plate/Bridge Connector	21
Cable end	8
ET2000	83
Fishtail/Butterfly end	6
MELT(Similar to BCT)	8
Regent	8
Steel Wire Rope End Anchor Block	10
Texas Twist	9
Unknown	2
Total	412





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Area: SOUTHLAND M&O

Date: 25/11/2013

Breakdown of road markings by type

Weigh Stations

Please note that NZTA does not require recording of standard centerline and edgeline lengths and therefore these quantities may not include some or all of these items

Marking Material	length (m)
Paint	226909
Raised Pavement Marker	356
Reflectorised Paint	67689
Thermoplastic - cold	54586
Unknown	14331

Road Name		Location	Side
006-1145/00.64		3950	Right
006-1157/07.94		8269	Left
01S-0858/02.04		3943	Right
01S-0886		14455	Left
01S-0926		6825	Left
094-0063		15441	Left
099-0000/00.52		6181	Right
	Total	7	

Footpath and CycleWays

Gantries

None

Road Name		Location
006-1093-C094		2410
006-1095		95
006-1168/02.75-I		7530
01S-0920/02.60-I		3593
	Total	2





DATABASE HEALTH INDEX - PARAMETERS

	Measures	Description	Data Source	Grading	Greater than	Less than	NZTA Target Grade
Pavement and Foo	otpath Inventory				T		ı
Capital Projects	Major capital projects completed v RAMM (in last 6 -30 months)	Proportion of major capital projects completed within in 6 - 30 months that have been catpured in RAMM	NZTA Regional Office, RAMM	N/A	N/A	N/A	N/A
	Minor capital or safety improvement projects v RAMM (in last 6 -30 months)	Proportion of minor capital or safety improvement projects completed within in 6 - 30 months that have been catpured in RAMM	NZTA Regional Office, RAMM	N/A	N/A	N/A	N/A
	% of Network surfaced in RAMM over previous 4 – 15 months	Total length of Network with surface date between 4-15 months old / total length of network	RAMM surface_structure, carr_way, treatment_length	Grade 1 Grade 2 Grade 3 Grade 4	8% 5% 2%	8% 5% 2%	Grade 1
Surfacing	% Surfaces 50% older than expected age	Total length of Network with surface date > 50% older than expected age / total length of network	RAMM surface_structure, carr_way	Grade 1 Grade 2 Grade 3 Grade 4	3% 7% 15%	3% 7% 15%	Grade 2
Surfacility	% of Network with no surfacing	Total length of Network with no surface material / total length of network	RAMM treatment_length, carr_way	Grade 1 Grade 2 Grade 3 Grade 4	5% 15% 40%	5% 15% 40%	Grade 1
	Illogical records (SAC with chipseal, Low and high widths, Alignment of traffic volumes v pavement use)	No. Records with inconsistencies / No carriageway sections	RAMM carr_way, c_surface, traffic_loading, traffic_loading_dtl	Grade 1 Grade 2 Grade 3 Grade 4	5% 15% 40%	5% 15% 40%	Grade 1
	Proportion with layer information	Total length of Network with layer material / total length of network	RAMM treatment_length, carr_way	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 3
Pavement Layer	New Layer length in 6 – 30 months	Total length of Network with layer date between 6-30 months old / total length of network	RAMM pave_structure, carr_way, treatment_length	Grade 1 Grade 2 Grade 3 Grade 4	5% 3% 1%	5% 3% 1%	Grade 2
	Illogical records (Pavement layers v Incorrect Surfacing)	Total No. illogical Records / total No treatment lengths	RAMM carr_way, treatment_length	Grade 1 Grade 2 Grade 3 Grade 4	5% 15% 40%	5% 15% 40%	Grade 1
Road Marking	Breakdown of road markings by type	Total road marking length by type	RAMM carr_way, markings	N/A	N/A	N/A	N/A
	Proportion of very short < 20m TLs	Total length of Network with length < 20m / total length of network	RAMM carr_way, treatment_length	Grade 1 Grade 2 Grade 3 Grade 4	5% 15% 40%	5% 15% 40%	Grade 1
	Proportion of very long > 2000m TLs	Total length of Network with length > 2000m / total length of network	RAMM carr_way, treatment_length	Grade 1 Grade 2 Grade 3 Grade 4	5% 15% 40%	5% 15% 40%	Grade 1
Treatment Length	Proportion of TLs with < 80% coverage of major surfacing	Total length of Network with < 80% coverage of major surfacings / total length of network	RAMM carr_way, treatment_length	Grade 1 Grade 2 Grade 3 Grade 4	5% 15% 40%	5% 15% 40%	Grade 1
	% updated in last 5 years	Total No treatment lengths updated in last 5 years / total No TL's	RAMM carr_way, treatment_length	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	Date FWP Last Updated	Date FWP last updated	RAMM treatment_length, fw_cell_treatment, fw_programme_cell, fw_programme_hdr, fw_treatment	N/A	N/A	N/A	N/A
Forward Works Programme	Proportion of network identified for treatment in next ten years (date last updated)	the 10 year FWP / total network length	RAMM treatment_length, fw_cell_treatment, fw_programme_cell, fw_programme_hdr, fw_treatment	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
Trogramme	FWP v surfacings (% surfacings in last year conflicting with first 2 years of FWP exc 2nd coats)	Total length of Network with surfacings with dates in last year with a treatment scheduled in first 2 years of FWP (excl 2nd coats) / total length in first 2 years of FWP	RAMM treatment_length, fw_cell_treatment, fw_programme_cell, fw_programme_hdr, fw_treatment	Grade 1 Grade 2 Grade 3 Grade 4	2% 5% 8%	2% 5% 6%	Grade 1
	Evidence of active MIS strategy, reasons for treatments listed and detailed	Total length of Network with MIS strategy present / Total Network Length	RAMM treatment_length, fw_cell_treatment, fw_programme_cell, fw_programme_hdr, fw_treatment	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 1
Collected Data					90%	.,-	
Carriageway Rating	Percentage rated in last year	Total network length rated in the last year / total network length	RAMM carr_way, treatment_length, rating	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	70% 40% 20%	90% 70% 40% 20%	Grade 1
	% network meeting standards for roughness, rutting and texture (Roads surveyed in last year)	Total length of network with roughness, rutting and texture surveyed in the last year / total network length	RAMM carr_way, treatment_length, hsd_rough, hsd_rutting,hsd_texture	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 1
High Speed Data	% network meeting standards for FWD (Roads surveyed in last 5 years)	Total length of network with FWD surveyed in the last 5 years / total network length	RAMM carr_way, treatment_length,falling_weight	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 1
	% network meeting standards for SCRIM (Roads surveyed in last year)	Total length of network with SCRIM surveyed in the last year / total network length	RAMM carr_way, treatment_length,skid_resistance	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 1





DATABASE HEALTH INDEX - PARAMETERS

	Measures	Description	Data Source	Grading	Greater than	Less than	NZTA Target Grade
	Items per km for PA and SU cost	Total number of pavement and surfacing		Grade 1 Grade 2	90% 70%	90%	
	groups in previous 4 – 15 months vs	activity in last 4-15 months/Total Carriageway	RAMM carr_way, mc_cost	Grade 3	40%	70%	Grade 2
	Regional Average	Length vs Regional Average		Grade 4 Grade 5	20%	40% 20%	
	Spread of location in previous 4 - 15	Total number of pavement and surfacing		Grade 1		5%	
	months (proportion located at	activity in last 4-15 months at carriageway	RAMM carr_way, mc_cost	Grade 2 Grade 3	5% 15%	15% 40%	Grade 2
	carriageway start)	start / Total pavement and surfacing activity		Grade 4	40%	4070	
Maintenance	Distribution of maintenance patch	Distribution of maintenance patch sizes by					
Costs	sizes by Hierarchy	State Highway Classification	RAMM carr_way, mc_cost	N/A	N/A	N/A	N/A
		5					
	Breakdown of Maintenance Cost	Breakdown of maintenance cost actvities by type for the last 3 years by State Highway	RAMM carr_way, mc_cost	N/A	N/A	N/A	N/A
	Activities	Classification	_ 3, _				
				Grade 1	-0/	5%	
	% of Maintenance Activity where fault type is "Unknown"	Percentage of maintenance cost activity recorded as unknown for the last 3 years.	RAMM carr_way, mc_cost	Grade 2 Grade 3	5% 15%	15% 40%	Grade 1
		•		Grade 4	40%		
	No. Test Pits with layer data	Total number of test pit records	RAMM carr_way, pave_test_pit_hdr	N/A	N/A	N/A	N/A
	recorded	rotal number of test pit records	TCAMMIN Carr_way, pave_test_pit_ridi	IN/A	IV/A	IV/A	IV/A
Miscellaneous							
	No. of LTPP Sites recorded in RAMM	Total number of LTPP Sites	RAMM carr_way, ud_ltpp	N/A	N/A	N/A	N/A
	T G WHITT						
	Latest ADT Counts	Latest date of counts	RAMM traffic_loading	N/A	N/A	N/A	N/A
Traffic Count	Latest ADT Estimates	Latest date of Estimates	RAMM traffic_loading	N/A	N/A	N/A	N/A
				Grade 1	90%		
	Of least to a serious to Grant and Section	Total no. loading estimates in last year / total	RAMM carriageway, traffic_loading,	Grade 2	70%	90%	One de O
	% loading estimate (i.e. not default)	no carriageway sections	carr_way, traffic_loading_dtl	Grade 3 Grade 4	40% 20%	70% 40%	Grade 2
Non-Carriageway	Accet Inventory			Grade 5		20%	
Non-Carriageway	Asset inventory			Grade 1	90%		
	No. Pavement Type "Bridge" v No.	Total No. Bridge pavement type in RAMM vs Total No. Bridges >50m in length in BDS that	RAMM carr_way, BDS	Grade 2 Grade 3	70% 40%	90% 70%	Grade 1
	Bridges > 50m in length in BDS	carry the State Highway	TONINI Call_way, DDC	Grade 4	20%	40%	Grade 1
				Grade 5 Grade 1	90%	20%	
		Total No. Culverts with an area >= 3.4m ² vs		Grade 2	70%	90%	
	No. Large Culverts v No. BDS	Total No. culverts in BDS	RAMM carr_way, drainage, BDS	Grade 3 Grade 4	40% 20%	70% 40%	Grade 2
				Grade 5	2070	20%	
011							
Structures	Retaining Walls	Total No. Retaining Walls	RAMM carr_way, retaining_wall	N/A	N/A	N/A	N/A
	Gantries	Total No. Gantries	RAMM carr_way, minor_structure	N/A	N/A		N/A
						N/A	
						N/A	
						N/A	
	Barriers in RAMM(m)	Total Length Barriers (excludes SR, HR,	RAMM carr_way, railings	N/A	N/A	N/A	N/A
	Barriers in RAMM(m)	Total Length Barriers (excludes SR, HR, OTHER, GREAT)	RAMM carr_way, railings				N/A
	, ,	OTHER, GREAT)	RAMM carr_way, railings	Grade 1	90%	N/A	N/A
	Culverts per km v Regional Average	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average	RAMM carr_way, railings RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3	90% 70% 40%	N/A 90% 70%	N/A Grade 2
	, ,	OTHER, GREAT) Total No. of culverts per km Rural (Includes		Grade 1 Grade 2 Grade 3 Grade 4	90% 70%	N/A 90% 70% 40%	
	Culverts per km v Regional Average	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km		Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1	90% 70% 40% 20%	N/A 90% 70% 40% 20%	
	Culverts per km v Regional Average (Rural) Catchpits per km v Regional	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average		Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2	90% 70% 40% 20% 90% 70%	N/A 90% 70% 40%	
	Culverts per km v Regional Average (Rural)	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes	RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4	90% 70% 40% 20%	N/A 90% 70% 40% 20% 90% 70% 40%	Grade 2
	Culverts per km v Regional Average (Rural) Catchpits per km v Regional	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional	RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3	90% 70% 40% 20% 90% 70% 40%	N/A 90% 70% 40% 20% 90% 70%	Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban	RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5	90% 70% 40% 20% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban)	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km	RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 5	90% 70% 40% 20% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20%	Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional	RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 5 Grade 1 Grade 5	90% 70% 40% 20% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban)	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 3 Grade 4 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional	RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 3 Grade 4 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban)	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 5 Grade 1 Grade 2 Grade 3 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban) Subsoil Drains per km v benchmark Regional Average (Rural)	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 5 Grade 1 Grade 2 Grade 3 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 5 Grade 1 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban)	Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 5 Grade 1 Grade 2 Grade 3 Grade 3 Grade 4 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 44% 2%	Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban) Subsoil Drains per km v benchmark Regional Average (Rural)	OTHER, GREAT) Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 2 Grade 3 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban) Subsoil Drains per km v benchmark Regional Average (Rural) % of Drainage (Construction Date in previous 4 – 15 months)	Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km Total No. of drainage structures renewed or replaced in last 4-15 months / total no. of drainage structures	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 40% 20% 4% 20% 4% 2% 1%	Grade 2 Grade 2 Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban) Subsoil Drains per km v benchmark Regional Average (Rural)	Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 44% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 4% 20% 4% 2% 1%	Grade 2 Grade 2 Grade 2
Drainage	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban) Subsoil Drains per km v benchmark Regional Average (Rural) % of Drainage (Construction Date in previous 4 – 15 months) Surfaced SWC per km v Regional	Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km Total No. of drainage structures renewed or replaced in last 4-15 months / total no. of drainage structures	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 4% 2% 1% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 40% 20% 4% 20% 4% 2% 1%	Grade 2 Grade 2 Grade 2 Grade 2
	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban) Subsoil Drains per km v benchmark Regional Average (Rural) % of Drainage (Construction Date in previous 4 – 15 months) Surfaced SWC per km v Regional Average (Urban)	Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km Total No. of drainage structures renewed or replaced in last 4-15 months / total no. of drainage structures Length of surfaced SWC per km Urban vs regional average per km	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 5 Grade 1	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 4% 2% 1% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 4% 2% 1% 90% 70% 40% 20%	Grade 2 Grade 2 Grade 2 Grade 2
Drainage Surface Water Channels	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban) Subsoil Drains per km v benchmark Regional Average (Rural) % of Drainage (Construction Date in previous 4 – 15 months) Surfaced SWC per km v Regional Average (Urban)	Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km Total No. of drainage structures renewed or replaced in last 4-15 months / total no. of drainage structures Length of surfaced SWC per km Urban vs regional average per km	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 4% 2% 1% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2 Grade 2 Grade 2
Surface Water	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban) Subsoil Drains per km v benchmark Regional Average (Rural) % of Drainage (Construction Date in previous 4 – 15 months) Surfaced SWC per km v Regional Average (Urban)	Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km Total No. of drainage structures renewed or replaced in last 4-15 months / total no. of drainage structures Length of surfaced SWC per km Urban vs regional average per km	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 4% 2% 1% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2 Grade 2 Grade 2 Grade 2
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Surface Water	Culverts per km v Regional Average (Rural) Catchpits per km v Regional Average (Urban) Manholes per km v Regional Average (Urban) Subsoil Drains per km v benchmark Regional Average (Rural) % of Drainage (Construction Date in previous 4 – 15 months) Surfaced SWC per km v Regional Average (Urban) Earth SWC per km v Regional Average (Rural)	Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km Total No. of catchpits per kmUrban (includes CP1,CP2,CP3,SUMP,GRID, SP) vs regional average per km Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km Length of subsoil drains per km Rural vs regional average per km Total No. of drainage structures renewed or replaced in last 4-15 months / total no. of drainage structures Length of surfaced SWC per km Urban vs regional average per km Length of Earth SWC per kmRural vs regional average per km	RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20% 90% 70% 40% 20%	Grade 2 Grade 2 Grade 2 Grade 2 Grade 2





DATABASE HEALTH INDEX - PARAMETERS

	Measures	Description	Data Source	Grading	Greater than	Less than	NZTA Target Grade
	Signs per km v Regional Average	Total No. of signs per km vs regional average per km	RAMM carr_way, signs	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	Large Signs >4.0m ²	Total No. of large signs with a sign face greater than 4.0m ²	RAMM carr_way, signs	N/A	N/A	N/A	N/A
Signs	ITS VMS	Total No. of ITS Assets (3VMS, 3MVMS, 3VMSS, 3VSS) and its_state = "In Service"	RAMM carr_way, ud_its	N/A	N/A	N/A	N/A
	% of Signs with renewal date in previous 4 – 15 months	Total No. of signs renewed or replaced in last 4-15 months / total number of signs	RAMM carr_way, signs	Grade 1 Grade 2 Grade 3 Grade 4	6% 4% 2%	6% 4% 2%	Grade 2
	No. Frangible bases in RAMM	Total No of signs with frangible bases, type includes (SJ and BP)	RAMM signs, sign_to_post_join, sign_post	N/A	N/A	N/A	N/A
	Streetlights per km v benchmark	Total No. of street lights per km vs regional average per km	RAMM carr_way, sl_pole	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	Frangible Base type no.	Total No. of street lights with frangible bases	RAMM carr_way, sl_pole	N/A	N/A	N/A	N/A
Streetlights	Shear Base type no.	Total No. of street lights with shear bases	RAMM carr_way, sl_pole	N/A	N/A	N/A	N/A
	% of Street lights with renewal date in previous 4 – 15 months	Total No. of street lights renewed or replaced in last 4-15 months / total number of street lights	RAMM carr_way, sl_pole	Grade 1 Grade 2 Grade 3 Grade 4	6% 4% 2%	6% 4% 2%	Grade 2
	Duplicates or near duplicates plus poles with no light or bracket	Total No. Poles with no brackets attached, total No. brackets with no light attached, total No. poles with duplicate road_id, location, offset_side, offset	RAMM carr_way, sl_pole, sl_bracket, sl_light	Grade 1 Grade 2 Grade 3 Grade 4	5% 15% 40%	5% 15% 40%	Grade 1
Footpath & Cycleways	Total Length of footpath and cycleways (see attached tables for listing)	Total length of footpath and cycleways	RAMM carr_way, features	N/A	N/A	N/A	N/A
Signal Controlled intersections	No. Signal Controlled Intersections (see attached report for loactions)	Number of signal Controlled Intersections (SIGINT)	RAMM carr_way, features	N/A	N/A	N/A	N/A
Rest Areas	Number of rest areas	Total No of rest areas	RAMM carr_way, features	N/A	N/A	N/A	N/A
Weigh Station	No. Weigh stations	Number of weighs Stations (WSTAT)	RAMM carr_way, minor_structure	N/A	N/A	N/A	N/A



