

DATABASE HEALTH INDEX - DASHBOARD

Area: NTH CANTERBURY M&O
Date: 27/11/2013

KEY:
On or exceeding target
One grade, or between 0 and 15 below captured value
Greater than one grade, or 15 below captured value

		Performance						
Category	Measures	Result	Measure	Expected Value	Category	Expected Value		
Carriageway Asset Inventory	Capital Projects	Major capital projects completed v RAMM (in last 6 -30 months)			see attached report		-	-
		Minor capital or safety improvement projects v RAMM (in last 6 -30 months)			see attached report		-	-
	Surfacing	% of Network surfaced in RAMM over previous 4 – 15 months		6.1%	Grade 2	Grade 1	90	81
		% Surfaces at least 50% older than expected age		0.0%	Grade 1	Grade 2		
		% of Network with no surfacing		0.0%	Grade 1	Grade 1		
		Illogical Records inc. % (SAC with chipseal, Low and high widths, Alignment of traffic volumes v pavement use)		0.6%	Grade 1	Grade 1		
	Pavement Layer	Proportion of Network with layer Information		44.3%	Grade 3	Grade 3	71	77
		New layer length in previous 6 – 30 months		3.7%	Grade 2	Grade 2		
		Illogical records (Pavement Layers v Incorrect Surfacing)		4.7%	Grade 1	Grade 1		
	Road Marking	Breakdown of road markings by type			see attached report		-	-
	Treatment Length	Proportion of very short (< 20m) TLs		2.1%	Grade 1	Grade 1	80	85
		Proportion of very long (> 2000m) TLs		2.0%	Grade 1	Grade 1		
Proportion of TLs with < 80% coverage of major surfacing		10.6%	Grade 2	Grade 1				
% updated in last 5 years		47.5%	Grade 3	Grade 2				
Forward Works Programme	Date FWP last updated		26/11/2013	-	-	63	90	
	Proportion of network identified for treatment in next ten years (from FWP)		89.9%	Grade 2	Grade 2			
	FWP v surfacings (% surfacings in last year conflicting with first 2 years of FWP excluding 2nd coats)		0.1%	Grade 1	Grade 1			
	Evidence of active MIS strategy, reasons for treatments listed and detailed		0.0%	Grade 5	Grade 1			
Carriageway Rating	Percentage rated in last year			0.0%	Grade 5	Grade 1	0	90
High Speed Data	% network meeting standards for roughness, rutting and texture (Roads surveyed in last year)			100.0%	Grade 1	Grade 1	100	90
	% network meeting standards for FWD (Roads surveyed in last 5years)			99.2%	Grade 1	Grade 1		
	% network meeting standards for SCRIM (Roads surveyed in last year)			100.0%	Grade 1	Grade 1		
Maintenance Activity	Items per km for PA and SU cost groups in previous 4 – 15 months v Regional Average			80.0%	Grade 2	Grade 2	76	83
	Spread of location in previous 4 - 15 months (proportion located at carriageway start)			22.1%	Grade 3	Grade 2		
	Distribution of maintenance patch sizes by Hierarchy			see attached report				
	Breakdown of Maintenance Cost Activities			see attached report				
	% of Maintenance Activity where fault type is "Unknown"			12.6%	Grade 2	Grade 1		
Miscellaneous	No. of test pits with layer data recorded			64	no.	-	-	-
	No. of LTPP sites recorded in RAMM			2	no.	-	-	-
Traffic Count	Latest ADT Counts			31/12/2012	-	-	99	70
	Latest ADT Estimates			20/11/2013	-	-		
	% loading estimate (i.e. not default)			99.3%	Grade 1	Grade 2		
Structures	No. of Pavement Type "Bridge" v No. of Bridges > 50m in length in BDS			112.1%	Grade 1	Grade 1	54	85
	No. Large Culverts v No. BDS			8.2%	Grade 5	Grade 2		
	Retaining Walls			126	no.	-		
	Gantries (see attached report for locations)			0	no.	-		
	Barriers in RAMM (m)			40060	m	-		
	End Treatments in RAMM			see attached report				
Drainage	Culverts per km v Regional Average (Rural)			94.1%	Grade 1	Grade 2	58	80
	Catchpits per km v Regional Average (Urban)			51.4%	Grade 3	Grade 2		
	Manholes per km v Regional Average (Urban)			100.0%	Grade 1	Grade 2		
	Subsoil Drains per km v Regional Average (Rural)			33.0%	Grade 4	Grade 2		
	% of Drainage (Construction Date in previous 4 – 15 months)			0.3%	Grade 4	Grade 2		
Surface Water Channels	Surfaced SWC per km v Regional Average (Urban)			60.4%	Grade 3	Grade 2	57	77
	Earth SWC per km v Regional Average (Rural)			92.3%	Grade 1	Grade 2		
	Sealed SWC renewal activity (Construction Date in previous 4 – 27 months)			0.7%	Grade 4	Grade 2		
Signs	Signs per km v Regional Average			103.9%	Grade 1	Grade 2	52	78
	Large Signs >4.0m ² (see attached report for quantity by type)			99	no.	-		
	ITS VMS			9	no.	-		
	% of Signs with renewal date in last 4 - 15 months			0.2%	Grade 4	Grade 2		
	No. Frangible bases in RAMM (no posts in RAMM)			32	no.	-		
Streetlights	Streetlights per km v Regional Average			0.0%	Grade 5	Grade 2	33	82
	Frangible Base type no.			0	no.	-		
	Shear Base type no.			0	no.	-		
	% of Streetlight Poles with renewal date in last 4 – 15 months			0.0%	Grade 4	Grade 2		
	Duplicates or near duplicates plus poles with no light or bracket			0.0%	Grade 1	Grade 1		
Footpaths & Cycleways	Total length of Footpath and Cycleways (see attached tables for listings)			see attached report		-	-	
Signal Controlled Intersections	Signal Controlled Intersections (see attached report for locations)			0	no.	-	-	-
Rest Areas	Number of rest areas			7	no.	-	-	-
Weigh Stations	Number of Weigh Stations (see attached report for locations)			4	no.	-	-	-

DATABASE HEALTH INDEX DASHBOARD - PROJECTS

Area: NTH CANTERBURY M&O

Date: 27/11/2013

In RAMM (Y/N/P)	Project Name	SH	RS	Dir	RP	Comments	Year
Y	SH1Shingle Fans	1	104		6.5-7.7	Upgrade of 3 temp bridges / fords to new structures	10/11
Y	Limestone North	1	185		4.7-5.1	Guardrail, plus some rock removal and minor	10/11
Y	Wyllies and Omihi Bridges	1	273		0-5.858	completion of the widening and guardrail	No Widening in RAMM 10/11
N	Amberley Truck Stop	1	284	D	9.7	Installing truck stop	11/12
N	Hurunui River Bridge	7	28		0-0.5	Guardrail on approaches	11/12
N	Calf Creek Bridge	7	78		7.97-8	Guardrail approaches and across bridge and bank cutting on western approach.	11/12
N	Tai Tapu Kea Crossing	75	14		0.31	provide a compliant kea crossing facility: - Rebuild kerb extension on the true left to longer shape - Alter roadmarkings to suit kea crossing layout - Upgrade and install new signage to suit kea crossing layout	11/12
Y	Oaro and Okarahia Hills Curve Delineation	1	185		0.1-1.5	Review and upgrade curve delineation - notably chevrons and curve advisory speeds and signage.	12/13
N	Okarahia to Conway Side Projection	1	185		0.5-1.6	Curve Improvements	12/13
N	Omihi Slow Vehicle Bay Extension	1	262		3.08-3.5	Extend the southbound 2 lane section over the top of the crest curve onto the straighter section of highway.	12/13
N	Waterfall Creek	7	78		1-1.3	Replace steel bridge rail with guardrail. Install guardrail on a bridge approaches and tie in to existing guardrail at RP 78/1.02	12/13
N	Porters Pass Guardrail (Stage 2)	73	76		2.85-5.77	Install side protection - guardrail	12/13
N	Porters Pass Guardrail (Stage 1)	73	76		2.86-3.43	Install side protection - guardrail	12/13
N	Craigieburn Guardrail (Stage 1)	73	90		14.76-15.13	Install side protection - guardrail	12/13
Y	Thomas River Bridge Replacement	73	90		4-4.5	Replace bridge with large culvert to provide two lanes with shoulder and guardrail. Road level at bridge will be increased by approx. 2m. Cut in slope at north approach corner will reduce slope height and remove some vegetation. This will reduce shading in alpine area.	12/13
N	Paddys Bend East End Guardrail	73	121		4.85-5.08	Install W section guardrail around outside of two curves and join end of existing W section guardrail.	12/13
N	Paddys Bend Guardrail	73	121		5.39-5.62	Install W section guardrail to fill in gap between existing W section guardrails	12/13
N	35 km/hr Curve East of the Hilltop	75	61		5-5.14	Extend culvert and widen seal on the inside of the curve - possibly trim embankment bank as well.	12/13
N	Glentunnel to Darfield Delineation	77	79		0-14.89	Installing RRPMS along this section of State Highway including the replacement of damaged markers due to winter maintenance over a 10 year period.	12/13
N	Cnr South Medway Rd	7A	0		1.3-1.5	Install guardrail side protection around outside of curve.	12/13

DATABASE HEALTH INDEX - REGIONAL AVERAGES

Area: NTH CANTERBURY M&O
Date: 27/11/2013

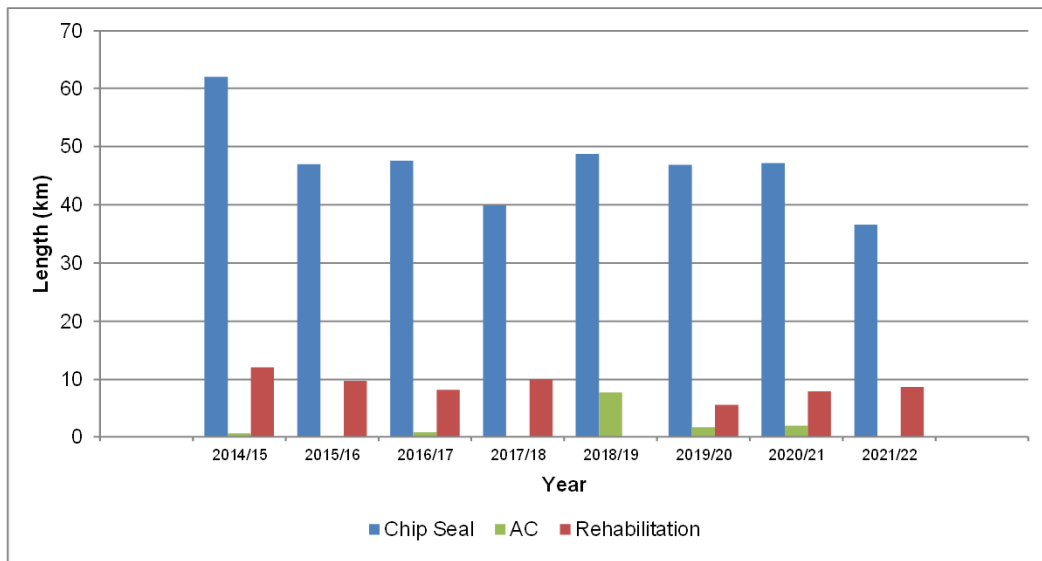
Regional Averages		Hierarchy					Regional Average
Asset	Region	High Volume	National Strategic	Regional Strategic	Regional Connector	Regional Distributor	
Maintenance Costs (no. of pavement and surfacing faults per km)	Regional Average for route type	-	3	4	1	2	3
	Sth Canterbury	-	2	-	1	1	
	Nth Canterbury	-	2	2	2	2	
	Coastal Otago	-	7	8	1	3	
	Marlborough	-	3	1	-	2	
Culverts (Rural) (no. per km)	Regional Average for route type	-	4	4	4	5	4
	Sth Canterbury	-	4	-	4	4	
	Nth Canterbury	-	4	3	5	4	
	Coastal Otago	-	6	5	2	6	
	Marlborough	-	4	4	-	3	
Catchpit (Urban) (no. per km)	Regional Average for route type	-	10	8	10	7	9
	Sth Canterbury	-	10	-	8	9	
	Nth Canterbury	-	6	4	4	4	
	Coastal Otago	-	13	11	2	8	
	Marlborough	-	6	4	-	0	
Manholes (urban) (no. per km)	Regional Average for route type	-	0	0	0	0	0
	Sth Canterbury	-	0	-	0	0	
	Nth Canterbury	-	0	0	0	0	
	Coastal Otago	-	0	0	0	0	
	Marlborough	-	0	0	-	0	
Subsoil Drain (Rural) (m per km)	Regional Average for route type	-	58	88	12	27	42
	Sth Canterbury	-	37	-	7	2	
	Nth Canterbury	-	40	0	0	21	
	Coastal Otago	-	106	194	2	46	
	Marlborough	-	103	29	-	3	
Surfaced SWC (Urban) (m per km)	Regional Average for route type	-	1358	1140	1402	1062	1297
	Sth Canterbury	-	1603	-	1469	1562	
	Nth Canterbury	-	1277	527	705	488	
	Coastal Otago	-	1695	1437	428	1025	
	Marlborough	-	1164	1463	-	0	
Earth SWC (Rural) (m per km)	Regional Average for route type	-	1130	1076	673	1353	1118
	Sth Canterbury	-	1642	-	644	1470	
	Nth Canterbury	-	805	1142	959	1002	
	Coastal Otago	-	1453	1173	352	1607	
	Marlborough	-	747	783	-	636	
Signs (no. per km)	Regional Average for route type	-	15	14	11	11	13
	Sth Canterbury	-	15	-	8	10	
	Nth Canterbury	-	10	13	16	14	
	Coastal Otago	-	19	16	8	11	
	Marlborough	-	15	13	-	7	
Streetlights (no. per km)	Regional Average for route type	-	1	0	0	0	0
	Sth Canterbury	-	4	-	1	1	
	Nth Canterbury	-	0	0	0	0	
	Coastal Otago	-	0	0	0	0	
	Marlborough	-	0	0	-	0	

DATABASE HEALTH INDEX DASHBOARD - REPORTS

Area: **NTH CANTERBURY M&O**

Date: **27/11/2013**

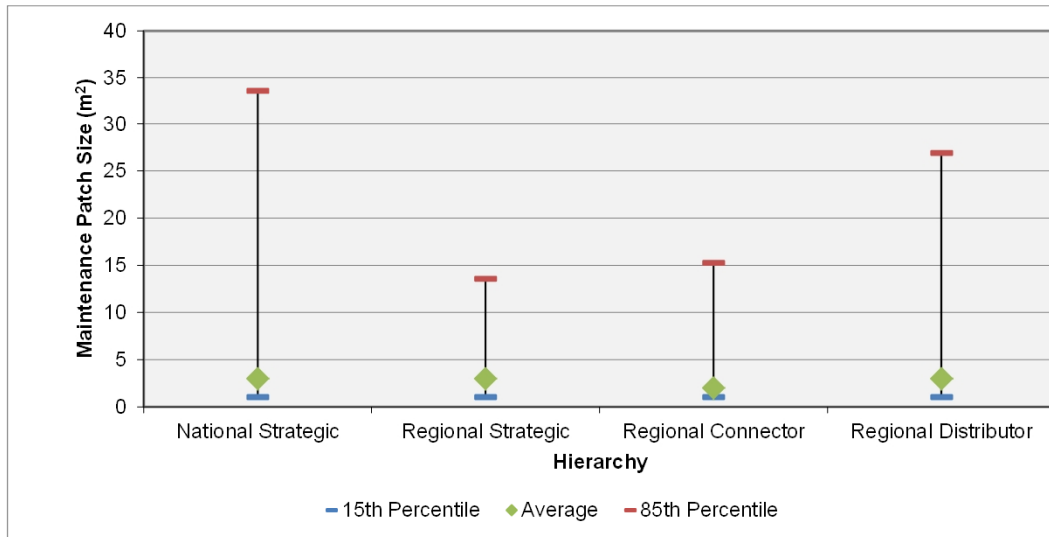
Breakdown of 10 Year FWP by Treatment Type



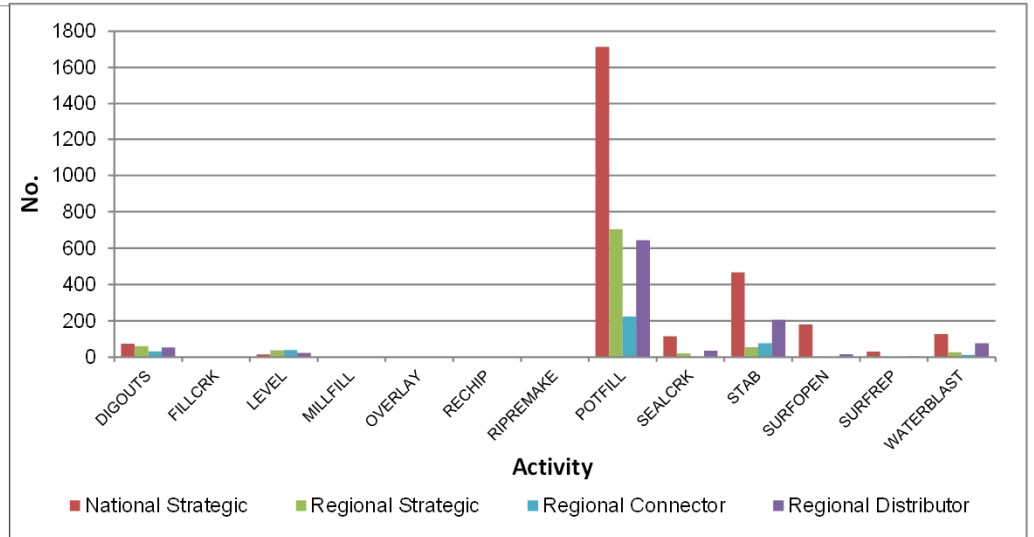
Signalised Intersections in RAMM

None

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	2
Feature "____"m ON left/right	3
Feature TURN left/right "____"m	2
Four services TURN left/right "____"m	1
TOURIST DRIVE "____"km FOLLOW route marker	2
TOURIST DRIVE TURN side "____"m	2
Advance direction (Stack) - Cross roads	1
Advanced lane direction [Arrow]	4
Advanced lane direction [Message]	12
Chevron Board	1
Chevron Board - Advisory speed 45km/h	1
Chevron Board - Advisory speed 75km/h	1
Confirmation Destination	13
Information (Miscellaneous Sign) - User Defined	2
Intersection Direction - route marker with St.name sign	3
Major tourist attractions - special information	1
Motorist Amentities	3
Position sign - Two line description with chevron	1
ROAD INFORMATION	2
Reverse Curve - Less Than 60 degrees	1
Speed Limit 100km/h	3
Speed Limit 50km/h	4
Speed Limit 50km/h with PN-1	12
Speed Limit 70km/h	6
Speed Limit 70km/h with PN-1	4
Speed Limit 80km/h with PN-1	4
Total	99

End Treatments in RAMM

End Treatment Type	No.
Armorflex X 350	57
Armorwire Terminal End	6
Breakaway Cable Terminal (Bull Nose)	266
Bridge Plate/Bridge Connector	83
Buried in Back Slope	2
Cable end	22
ET2000	7
Fishtail/Butterfly end	29
Fleat 350	79
Great System Crash Units	12
M23 Compliant	17
Not Applicable	24
Terminal end	154
Texas Twist	38
Total	796

DATABASE HEALTH INDEX DASHBOARD - REPORTS

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Breakdown of road markings by type	Weigh Stations
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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)
Long Life Flat	76,718
Paint	417,892
Raised Pavement Marker	90,440
Reflectorised Paint	1,024,063
Thermoplastic - cold	148,256
Thermoplastic Audible	30,329
Unknown	576,243

Road Name	Location	Side
007-0028	14943	Left
01S-0104	12810	Left
01S-0284	3320	Left
073-0068	3995	Right
Total	4	

Footpath and CycleWays	Gantries
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None

None

DATABASE HEALTH INDEX - PARAMETERS

Measures		Description	Data Source	Grading	Greater than	Less than	NZTA Target Grade
Pavement Inventory							
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 captured 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 captured in RAMM	NZTA Regional Office, RAMM	N/A	N/A	N/A	N/A
Surfacing	% 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
	% 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
	% 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
Pavement Layer	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
	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
Treatment Length	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
	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
Forward Works Programme	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
	Proportion of network identified for treatment in next ten years (date last updated)	Length of network identified for treatment in 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
	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							
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	90% 70% 40% 20%	90% 70% 40% 20%	Grade 1
High Speed Data	% 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
	% 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	
Maintenance Costs	Items per km for PA and SU cost groups in previous 4 – 15 months vs Regional Average	Total number of pavement and surfacing activity in last 4-15 months/Total Carriageway Length vs Regional Average	RAMM carr_way, mc_cost	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	Spread of location in previous 4 - 15 months (proportion located at carriageway start)	Total number of pavement and surfacing activity in last 4-15 months at carriageway start / Total pavement and surfacing activity	RAMM carr_way, mc_cost	Grade 1 Grade 2 Grade 3 Grade 4	5% 15% 40%	5% 15% 40%	Grade 2
	Distribution of maintenance patch sizes by Hierarchy	Distribution of maintenance patch sizes by State Highway Classification	RAMM carr_way, mc_cost	N/A	N/A	N/A	N/A
	Breakdown of Maintenance Cost Activities	Breakdown of maintenance cost activities by type for the last 3 years by State Highway Classification	RAMM carr_way, mc_cost	N/A	N/A	N/A	N/A
	% 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 1 Grade 2 Grade 3 Grade 4	5% 15% 40%	5% 15% 40%	Grade 1
Miscellaneous	No. Test Pits with layer data recorded	Total number of test pit records	RAMM carr_way, pave_test_pit_hdr	N/A	N/A	N/A	N/A
	No. of LTPP Sites recorded in RAMM	Total number of LTPP Sites	RAMM carr_way, ud_ltp	N/A	N/A	N/A	N/A
Traffic Count	Latest ADT Counts	Latest date of counts	RAMM traffic_loading	N/A	N/A	N/A	N/A
	Latest ADT Estimates	Latest date of Estimates	RAMM traffic_loading	N/A	N/A	N/A	N/A
	% loading estimate (i.e. not default)	Total no. loading estimates in last year / total no carriageway sections	RAMM carriageway, traffic_loading, carr_way, traffic_loading_dtl	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
Non-Carriageway Asset Inventory							
Structures	No. Pavement Type "Bridge" v No. Bridges > 50m in length in BDS	Total No. Bridge pavement type in RAMM vs Total No. Bridges >50m in length in BDS that carry the State Highway	RAMM carr_way, BDS	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 1
	No. Large Culverts v No. BDS	Total No. Culverts with an area >= 3.4m ² vs Total No. culverts in BDS	RAMM carr_way, drainage, BDS	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	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
	Barriers in RAMM(m)	Total Length Barriers (excludes SR, HR, OTHER, GREAT)	RAMM carr_way, railings	N/A	N/A	N/A	N/A
Drainage	Culverts per km v Regional Average (Rural)	Total No. of culverts per km Rural (Includes CUL, SDCUL, OFCUL) vs regional average per km	RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	Catchpits per km v Regional Average (Urban)	Total No. of catchpits per km Urban (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	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	Manholes per km v Regional Average (Urban)	Total No. of manholes per km Urban (includes MHOLE, DCHM) vs regional average per km	RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	Subsoil Drains per km v benchmark Regional Average (Rural)	Length of subsoil drains per km Rural vs regional average per km	RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	% of Drainage (Construction Date in previous 4 – 15 months)	Total No. of drainage structures renewed or replaced in last 4-15 months / total no. of drainage structures	RAMM carr_way, drainage	Grade 1 Grade 2 Grade 3 Grade 4	4% 2% 1%	4% 2% 1%	Grade 2
Surface Water Channels	Surfaced SWC per km v Regional Average (Urban)	Length of surfaced SWC per km Urban vs regional average per km	RAMM carr_way, sw_channel	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	Earth SWC per km v Regional Average (Rural)	Length of Earth SWC per km Rural vs regional average per km	RAMM carr_way, sw_channel	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
	Sealed SWC Renewal Activity (Construction Date in previous 4 – 27 months)	Length of surfaced SWC renewed or replaced in last 4-15 months / total length of surfaced SWC	RAMM carr_way, sw_channel	Grade 1 Grade 2 Grade 3 Grade 4	4% 2% 1%	4% 2% 1%	Grade 2

DATABASE HEALTH INDEX - PARAMETERS

	Measures	Description	Data Source	Grading	Greater than	Less than	NZTA Target Grade
Signs	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
	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	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
	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