DATABASE HEALTH INDEX - DASHBOARD

Area: EAST WAIKATO M&O

Date: 15/10/2013

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

					Performanc	e	
	Category	Measures	Result	Measure	Expected	Category	Expected
	1				Value	g,	Value
Capital Projects		Major capital projects completed v RAMM (in last 6 -30 months)	see a	attached rep	ort	_	-
	.,	Minor capital or safety improvement projects v RAMM (in last 6 -30 months)	see a	attached rep	ort		
		% of Network surfaced in RAMM over previous 4 – 15 months	9.1% Grade 1 Grade 1				
		% Surfaces at least 50% older than expected age	9.9%	Grade 3	Grade 2		
	Surfacing	% of Network with no surfacing	1.2%	Grade 1	Grade 1	85	81
		Ü					
Š		Illogical Records inc. % (SAC with chipseal, Low and high widths, Alignment of traffic volumes v pavement use)	1.5%	Grade 1	Grade 1		
Inventory		Proportion of Network with layer Information	54.5%	Grade 3	Grade 3		
_≥	Pavement Layer	New layer length in previous 6 – 30 months	2.9%	Grade 3	Grade 2	62	77
Asset		Illogical records (Pavement Layers v Incorrect Surfacing)	14.5%	Grade 2	Grade 1		
	Road Marking	Breakdown of road markings by type		attached rep			
wa	TOad Warking			-		-	-
Carriageway		Proportion of very short (< 20m) TLs	0.4%	Grade 1	Grade 1		
Sarr	Treatment Length	Proportion of very long (> 2000m) TLs	0.1%	Grade 1	Grade 1	84	85
	Trodunoni Longar	Proportion of TLs with < 80% coverage of major surfacing	5.4%	Grade 2	Grade 1	0.	00
		% updated in last 5 years	45.8%	Grade 3	Grade 2		
		Date FWP last updated	10/10/2013	_	_		
		Proportion of network identified for treatment in next ten years (from FWP)	133.5%	Grade 1	Grade 2		
	Forward Works Programme	· · · · · · · · · · · · · · · · · · ·				67	90
	Programme	FWP v surfacings (% surfacings in last year conflicting with first 2 years of FWP excluding 2nd coats)	0.0%	Grade 1	Grade 1		
		Evidence of active MIS strategy, reasons for treatments listed and detailed	0.1%	Grade 5	Grade 1		
	Carriageway Rating	Percentage rated in last year	99.0%	Grade 1	Grade 1	99	90
		% network meeting standards for roughness, rutting and texture (Roads surveyed in last year)	100.0%	Grade 1	Grade 1		
	High Speed Data					67	90
	High Speed Data	% network meeting standards for FWD (Roads surveyed in last 5years)	1.4%	Grade 5	Grade 1	67	90
		% network meeting standards for SCRIM (Roads surveyed in last year)	100.0%	Grade 1	Grade 1		
		Items per km for PA and SU cost groups in previous 4 – 15 months v Regional Average	141.7%	Grade 1	Grade 2		
Data		Spread of location in previous 4 - 15 months (proportion located at carriageway start)	0.5%	0.5% Grade 1 Grade 2			
Ö	Maintenance	Distribution of maintenance patch sizes by Hierarchy	see attached report		ort	98	83
cte	Activity	Preakdown of Maintenance Cost Activities		see attached report			I
Collected							
ပ	Miscellaneous Traffic Count	% of Maintenance Activity where fault type is "Unknown"	0.1%	Grade 1	Grade 1		
		No. of test pits with layer data recorded	29/03/1900	no.	-	_	_
		No. of LTPP sites recorded in RAMM	1/01/1900	no.	-		
		Latest ADT Counts	31/12/2012	_	-		
		Latest ADT Estimates	14/10/2013	_	_	99	70
		% loading estimate (i.e. not default)		Crada 1	Crada 2		
		-	98.7%	Grade 1	Grade 2		
		No. of Pavement Type "Bridge" v No. of Bridges > 50m in length in BDS	31.3%	Grade 4	Grade 1		
		No. Large Culverts v No. BDS	150.0%	Grade 1	Grade 2		
	Ctm.ot.moo	Retaining Walls	435	no.	-	66	0.5
	Structures	Gantries (see attached report for locations)	25	no.	-	66	85
		Barriers in RAMM (m)	46140	m	_		
		End Treatments in RAMM			l		
			see attached report				
		Culverts per km v Regional Average (Rural)	113.8%	Grade 1	Grade 2		
		Catchpits per km v Regional Average (Urban)	104.3%	Grade 1	Grade 2		
	Drainage	Manholes per km v Regional Average (Urban)	40.0%	Grade 3	Grade 2	49	80
	1	Subsoil Drains per km v Regional Average (Rural)	2.8%	Grade 5	Grade 2		
	I	% of Drainage (Construction Date in previous 4 – 15 months)	0.1%	Grade 4	Grade 2		
ntory							
ent	Surface Water	Surfaced SWC per km v Regional Average (Urban)	88.1%	Grade 2	Grade 2		
Ī	Channels	Earth SWC per km v Regional Average (Rural)	118.4%	Grade 1	Grade 2	68	77
Asset		Sealed SWC renewal activity (Construction Date in previous 4 – 27 months)	0.7%	Grade 4	Grade 2		
		Signs per km v Regional Average	104.6%	Grade 1	Grade 2		
•wa	1	Large Signs >4.0m ² (see attached report for quantity by type)	114	no.	-		
iage	Signs	ITS VMS	8			56	78
Sarr	Jigi 13			no.	-	30	7.0
Non-Carriageway	I	% of Signs with renewal date in last 4 - 15 months	0.8%	Grade 4	Grade 2		
ž		No. Frangible bases in RAMM (no posts in RAMM)	0	no.	-		
		Streetlights per km v Regional Average	84.6%	Grade 2	Grade 2		
		Frangible Base type no.	1	no.	-		
	Streetlights	Shear Base type no.	582	no.	-	62	82
		% 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 Weigh Stations	Number of rest areas Number of Weigh Stations (see attached report for locations)	34	no.	-	-	-





DATABASE HEALTH INDEX DASHBOARD - PROJECTS

Area: EAST WAIKATO M&O

Date: 15/10/2013

In RAMM (Y/N/P)	Project Name	SH	RS	Dir	RP		Comments	Year
(1/10/1)								
	Pokeno - Managatarata Safety improvements	2	34	В		Minor Improv / Signs		2011/12
Υ	Awaiti weigh pit guard rail	2	61	D	4.8	Minor Improv / Guard rail		2012/13
Υ	Coronation Bridge railing	2	93	В	0.8	Minor Improv / Guard rail		2010/11
Υ	Waihi Cemetry curve improvements	2	93	В	3.1	Minor Improv / Curve	Markings no paint date	2012/13
Υ	Omahine Stream railing	24	0	В	10.98	Minor Improv / Guard rail		2012/13
Υ	Orongo Rd Intersection improvements	25	12	В	9	Minor Improv / Intersection	Markings no paint date	2012/13
Υ	Pipiroa Bridge railing	25	12	В	2.77	Minor Improv / Guard rail		2010/11
Y	Kopu Bridge replacement and realignment	25	22	В	0	Bridge Replacement	Markings no paint date and street lights missing install date.	2011/12
Υ	Tararu Stream Bridege replacement	25	24	В	10.15	Bridge Replacement		2010/11
Υ	Te Puru Stream Bridge replacement	25	42	В	0	Bridge Replacement		2010/11
N/A	Manaia Bridge - pedestrian add on to bridge	25	58	D	13.89	Minor Improv upgrade		2011/12
Υ	Waiwawa Bridge railing	25	143	В	4.7	Minor Improv / Guard rail		2012/13
	Chevron upgrade SH25 various RPs	25		В		Minor Improv / Signs		2012/13
Υ	Waitoki Bridge railing	26	48	В	10.55	Minor Improv / Guard rail		2012/13
Р	SH27 / Paeroa Tahuna RAB	27	27	В	3.9	Capital - new RAB	Historical Surfacings need removed date. Differences with 1st coat and layer displacements, no drainage details, carriageway not updated.	2010/11
N/A	SH26 / 27 RAB (Tatuanui)	27	45	В	0	Capital - new RAB	Data not yet received from capital consultant	2011/12
N	Mangawhero Bridge signs / marking improvements	27	74	В	7.1	Minor Improv / Signs		2012/13





DATABASE HEALTH INDEX - REGIONAL AVERAGES

Area: EAST WAIKATO M&O

Date: 15/10/2013

Regional Averages

		Hierarchy					
Asset	Region	High Volume	National Strategic	Regional Strategic	Regional Connector	Regional Distributor	Regional Average
	Regional Average for route type	3	8	3	3	3	
	West Waikato	4	-	2	2	3	
Maintenance Costs	East Waikato	4	-	4	5	4	1
(no. of pavement and	Central Waikato	3	6	1	3	1	3
surfacing faults per km)	BOP West	3	-	4	9	8	
	PSMC 006	-	-	2	1	1	
	Regional Average for route type	6	8	7	8	8	
	West Waikato	3	-	6	9	8	
Culverts (Rural)	East Waikato	7	-	7	8	11	_
(no. per km)	Central Waikato	7	7	5	4	5	7
	BOP West	9	-	8	6	11	
	PSMC 006	_	-	8	7	7	1
	Regional Average for route type	14	13	12	13	7	
	West Waikato	13	-	9	16	8	
Catchpit (Urban)	East Waikato	6	_	21	14	7	
(no. per km)	Central Waikato	18	13	2	18	6	12
(- /	BOP West	9	-	16	0	0	-
	PSMC 006	_		10	5	9	-
	Regional Average for route type	0	0	2	<u>3</u> 1	2	
	West Waikato	1		1	0	0	-
Marshalaa (hana)	East Waikato		-	·	1	1	-
Manholes (urban)		0	-	0	•	•	1
(no. per km)	Central Waikato	0	0	0	3	0	_
	BOP West	0	-	0	0	0	
	PSMC 006	-	-	3	1	11	
	Regional Average for route type	26	3	21	14	11	_
	West Waikato	50	-	0	23	0	_
Subsoil Drain (Rural)	East Waikato	0	-	0	1	1	16
(m per km)	Central Waikato	5	33	0	19	9	
	BOP West	159	-	0	0	0	
	PSMC 006	-	-	69	38	40	
	Regional Average for route type	1502	1782	1401	1189	924	
	West Waikato	1551	-	1317	1411	808	
()	East Waikato	745	-	1538	1224	914	1281
(m per km)	Central Waikato	1506	1674	202	1489	1003	1201
	BOP West	718	-	1427	0	0	
	PSMC 006	-	-	1488	584	1138	
	Regional Average for route type	588	1092	1063	1292	1329	
	West Waikato	329	-	21	1269	1606	
Earth SWC (Rural)	East Waikato	1307	-	1174	1379	1200	1120
(m per km)	Central Waikato	854	1121	1194	1621	1184	1120
	BOP West	830	-	1160	642	1362	1
	PSMC 006	_	-	973	1238	1700	1
	Regional Average for route type	16	18	18	17	14	
	West Waikato	15	-	28	20	13	
Signs	East Waikato	12	_	21	17	18	1
(no. per km)	Central Waikato	16	16	7	10	8	16
(· - 3· ····/)	BOP West	22	-	23	12	10	1
	PSMC 006			20	19	19	1
		6	0	3	3	19	
	Regional Average for route type						-
01 111 1	West Waikato	10	-	8	4	4	-
Streetlights	East Waikato	2	-	4	3	2	2
(no. per km)	Central Waikato	0	0	0	0	0	
	BOP West	0	-	0	0	1	
	PSMC 006	-	-	4	1	0	





DATABASE HEALTH INDEX DASHBOARD - REPORTS

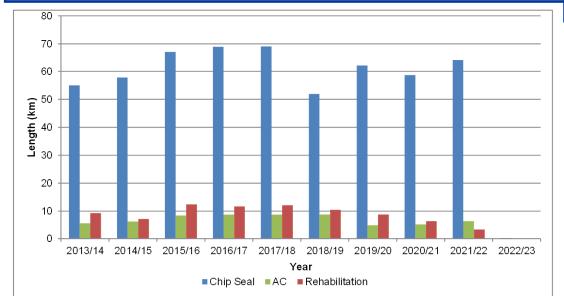
Area: EAST WAIKATO M&O

Date: 15/10/2013



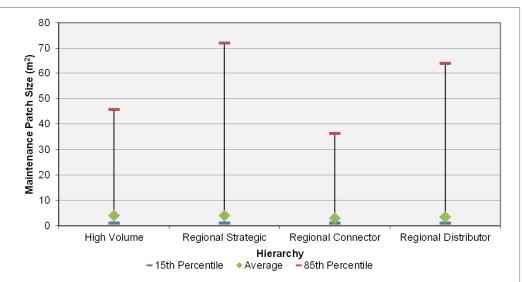
Signalised Intersections in RAMM

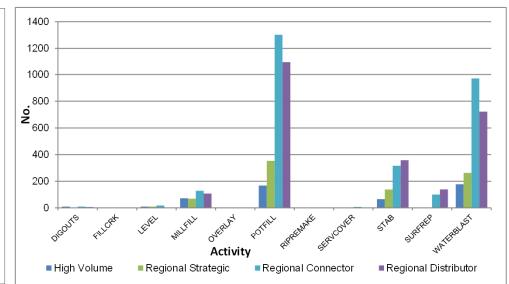




Distribution of maintenance patch sizes by Hierarchy

Breakdown of Maintenance Cost Activities last 3 years





Large Signs >4.0m²

End Treatments in RAMM

Sign Type	No.
Advance direction (Map) - "T" or cross roads	29
Intersection Direction - "T"	9
Advance direction (Map) - Roundabout	12
Advance direction (Stack) - Skew intersection	10
Chevron Board	2
Chevron Board - Advisory speed 45km/h	2
Chevron Board - Advisory speed 75km/h	1
Chevron Board - T Intersections	1
Confirmation Destination	6
DESTINATION (Stack)	2
Diverge	1
Four services [Arrow]	1
Information (Miscellaneous Sign) - User Defined	9
Intersection Direction	3
Intersection Direction - with route marker	6
Place Name	1
ROAD INFORMATION	3
Speed Limit	11
Speed Limit 100km/h	4
Speed Limit 50km/h with PN-1	1
Total	114

End freatment type		NO.
Armorflex X 350	121	
Breakaway Cable Terminal (Bull Nose	239	
Breakaway Cable Terminal Unit		91
Bridge Plate/Bridge Connector		49
Buried in Back Slope		3
Cable end		1
ET2000		23
Fishtail/Butterfly end		7
Fleat 350		66
M23 Compliant		142
Not Applicable		88
Quad Guard		4
Regent		1
SKT 350		15
Terminal end		48
Texas Twist		13
Trailing End Anchor Units		3
Unknown		4
	Total	918

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)
Long Life Flat	30523
Paint	1217554
Raised Pavement Marker	536812
Reflectorised Paint	392308
Thermoplastic Audible	12498
Cold Applied Plastic	241401

Road Name	Location	Side
002-0061	5005	R
002-0093	1774	R
026-0017	5339	L
027-0046	16372	R
029-0048	1373	L
029-0050	21	L
25A-0021	6922	R
	Total	7





DATABASE HEALTH INDEX DASHBOARD - REPORTS

Area: EAST WAIKATO M&O

Date: 15/10/2013

Footpath and CycleWays

Road Name	Location	Notes
025-0022	1023 CYCLE BRIDGE	

Gantries		
Road Name	Location	Side
002-0073	289	1
002-0073	5986	1
002-0073	10342	1
002-0073	12400	1
002-0073	19205	1
024-0000-D	246	1
024-0000-D	834	1
024-0000-I	243	1
024-0000-I	525	1
025-0024	2827	1
025-0156	175	1
025-0156	880	1
025-0172	11593	1
025-0172	11867	1
026-0048	824	1
026-0048	1413	1
026-0060	8173	1
026-0060	8678	1
026-0070	2135	1
027-0027	3721	1
027-0027	4230	1
027-0074	639	1
027-0074	1204	1
029-0042	926	1
029-0042	5630	1
	Total	25





DATABASE HEALTH INDEX - PARAMETERS

	Measures	Description	Data Source	Grading	Greater than	Less than	NZTA Target Grade
Pavement and Fo	otpath 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 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
Ourfacie e	% 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
Surfacing	% 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 4 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	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
Programme	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					000/		
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
	% 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 3 Grade 2 Grade 3 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 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
Maintenance Costs	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 actvities 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
IVISCOILATICOUS	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
	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
	% 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			Grade 1	90%		
	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 2 Grade 3 Grade 4 Grade 5	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
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
	Barriers in RAMM(m)	Total Length Barriers (excludes SR, HR, OTHER, GREAT)	RAMM carr_way, railings	N/A	N/A	N/A	N/A
	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 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	90% 70% 40% 20%	90% 70% 40% 20%	Grade 2
Drainage	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
	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
Surface Water Channels	Earth SWC per km v Regional Average (Rural)	Length of Earth SWC per kmRural 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 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



