

DATABASE HEALTH INDEX - DASHBOARD

Area: PSMC 006
Date: 5/09/2013

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

Category	Measures	Performance					
		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	14.5%	Grade 1	Grade 1	93	81
		% Surfaces at least 50% older than expected age	5.6%	Grade 2	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)	0.8%	Grade 1	Grade 1		
	Pavement Layer	Proportion of Network with layer Information	85.0%	Grade 2	Grade 3	75	77
		New layer length in previous 6 – 30 months	5.7%	Grade 1	Grade 2		
		Illogical records (Pavement Layers v Incorrect Surfacing)	29.3%	Grade 3	Grade 1		
	Road Marking	Breakdown of road markings by type	see attached report			-	-
Treatment Length	Proportion of very short (< 20m) TLs	0.3%	Grade 1	Grade 1	79	85	
	Proportion of very long (> 2000m) TLs	0.4%	Grade 1	Grade 1			
	Proportion of TLs with < 80% coverage of major surfacing	12.8%	Grade 2	Grade 1			
	% updated in last 5 years	44.2%	Grade 3	Grade 2			
Forward Works Programme	Date FWP last updated	30/07/2012	-	-	67	90	
	Proportion of network identified for treatment in next ten years (from FWP)	102.9%	Grade 1	Grade 2			
	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	0.0%	Grade 5	Grade 1			
Collected Data	Carriageway Rating	Percentage rated in last year	38.4%	Grade 4	Grade 1	38	90
	High Speed Data	% network meeting standards for roughness, rutting and texture (Roads surveyed in last year)	100.0%	Grade 1	Grade 1	67	90
		% network meeting standards for FWD (Roads surveyed in last 5 years)	2.1%	Grade 5	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	40.0%	Grade 3	Grade 2	66	83
		Spread of location in previous 4 - 15 months (proportion located at carriageway start)	0.2%	Grade 1	Grade 2		
		Distribution of maintenance patch sizes by Hierarchy	see attached report				
		Breakdown of Maintenance Cost Activities	see attached report				
	Miscellaneous	No. of test pits with layer data recorded	256	no.	-	-	-
		No. of LTPP sites recorded in RAMM	3	no.	-	-	-
Traffic Count	Latest ADT Counts	31/12/2012	-	-	86	70	
	Latest ADT Estimates	31/12/2011	-	-			
	% loading estimate (i.e. not default)	86.3%	Grade 2	Grade 2			
Non-Carriageway Asset Inventory	Structures	No. of Pavement Type "Bridge" v No. of Bridges > 50m in length in BDS	80.0%	Grade 2	Grade 1	72	85
		No. Large Culverts v No. BDS	63.2%	Grade 3	Grade 2		
		Retaining Walls	156	no.	-		
		Gantries (see attached report for locations)	0	no.	-		
		Barriers in RAMM (m)	27586	m	-		
		End Treatments in RAMM	see attached report				
	Drainage	Culverts per km v Regional Average (Rural)	95.7%	Grade 1	Grade 2	72	80
		Catchpits per km v Regional Average (Urban)	64.9%	Grade 3	Grade 2		
		Manholes per km v Regional Average (Urban)	750.0%	Grade 1	Grade 2		
		Subsoil Drains per km v Regional Average (Rural)	1470.0%	Grade 1	Grade 2		
		% of Drainage (Construction Date in previous 4 – 15 months)	0.7%	Grade 4	Grade 2		
	Surface Water Channels	Surfaced SWC per km v Regional Average (Urban)	89.9%	Grade 2	Grade 2	87	77
		Earth SWC per km v Regional Average (Rural)	107.7%	Grade 1	Grade 2		
		Sealed SWC renewal activity (Construction Date in previous 4 – 27 months)	2.9%	Grade 2	Grade 2		
	Signs	Signs per km v Regional Average	131.8%	Grade 1	Grade 2	60	78
		Large Signs >4.0m ² (see attached report for quantity by type)	55	no.	-		
		ITS VMS	1	no.	-		
		% of Signs with renewal date in last 4 - 15 months	1.3%	Grade 4	Grade 2		
No. Frangible bases in RAMM (no posts in RAMM)		0	no.	-			
Streetlights	Streetlights per km v Regional Average	83.3%	Grade 2	Grade 2	61	82	
	Frangible Base type no.	3	no.	-			
	Shear Base type no.	294	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	12	no.	-	-	-	
Weigh Stations	Number of Weigh Stations (see attached report for locations)	4	no.	-	-	-	

DATABASE HEALTH INDEX DASHBOARD - PROJECTS

Area: PSMC 006
Date: 5/09/2013

In RAMM (Y/N/P)	Project Name	SH	RS	Dir	RP		Comments	Year
Y	SH 3-21 Intersection Improvements	3	10	L	0	What New Structures were installed	reconfiguration of intersection layout	2011
Y	SH 3 Ohaupo South Passing Lane Shortening with 10/11 Reseal	3	16	B	350		passing lane shortening	2011
P	SH 3 Piopio Forest AWT 10/11 Safety Works	3	88	B	140	22-840 1st coat 5/2013 Pavement and barriers not updated	rehabilitation minor safety improvements incl. pavement widening, culvert extensions, guardrail	2011
P	SH 3 Kuratahi St Piopio AWT 10/11 Safety Works - Guardrail	3	88	B	415	22-840 1st coat 5/2013 Pavement and barriers not updated	rehabilitation minor safety improvements incl. pavement widening, culvert extensions, guardrail	2011
N	SH 3 Mangaotaki Bluffs AWT 10/11 Safety Works	3	103	B	465		rehabilitation minor safety improvements incl. pavement widening, culvert extensions, guardrail	2011
N	SH 3 Torotoro Rd North AWT 10/11 Safety Works - Bank Trimming	3	103	B	730		rehabilitation minor safety improvements incl. pavement widening	2011
Y	Mangaotaki Drop Out	3	103	L	8540		mass block retaining wall	2011
Y	SH 3 Awakino Tunnel South AWT 10/11 Safety Works - Guardrail	3	133	B	145		rehabilitation minor safety improvements incl. pavement widening, culvert extensions, guardrail	2011
N	SH 3 Arorangi Reserve AWT 10/11 Safety Works	3	133	B	500		rehabilitation minor safety improvements incl. pavement widening, kerb and channel, guardrail	2011
Y	Mokau Bluffs Overslip	3	140	L	17000		draped mesh, concrete shoulder barriers,	2011
N	SH 4 Pukerimu Rd AWT 10/11 Safety Works	4	0	B	360		rehabilitation minor safety improvements incl. pavement widening, culvert extensions	2011
P	SH 4 Snake Gully AWT 10/11 Safety Works	4	15	B	435	0-459 Pavement Layer and culv extn details missing	rehabilitation minor safety improvements incl. pavement widening, culvert extensions	2011
N	SH 30 Bennydale East AWT 10/11 Safety Works - Guardrail	30	30	B	185		rehabilitation minor safety improvements incl. pavement widening, kerb and channel, guardrail	2011
Y	Double Puti Culvert Slip	31	47	R	4470		timber retaining wall	2011
P	SH 37 Fullerton Road AWT 10/11 Safety Works	37	0	B	195	Surface and Pavement Layer not updated	rehabilitation minor safety improvements incl. pavement widening, culvert extensions, kerb and channel	2011
P	SH 39 Bird Rd South AWT 10/11 Safety Works	39	33	B	325	0-453 No pavement layer or drainage	rehabilitation minor safety improvements incl. pavement widening, kerb and channel	2011
Y	Arorangi Reserve Slump	3	133	R	4080		timber retaining wall	2012
N	Okoko Underslip SH31	31	14	B	10200		minor drainage improvements	2012
Y	Kauri Reserve Retaining Wall 2 (3.5)	31	31	B	3500	Date constructed missing	back to back timber retaining walls	2012
Y	Kauri Reserve Retaining Wall 1 (5.2)	31	31	B	5200	Date constructed missing	back to back timber retaining walls	2012
Y	Hall Underslip	31	31	R	5850		timber retaining wall	2012
Y	Kiwi Road North Cracking	39	43	L	7815		timber retaining wall / guardrail	2012
Y	Meads & Pukenui Overslip SH3	3	76	L	6000	Drainage table not updated	rockwalls, drainage improvements	2013
N	SH 3 Bexley Quarry AWT	3	140	B	200	No Railing at this displacement	guardrail extension	2013
N	SH 4 Madonna Falls 1, 2 & 3 AWT	4	0	B	255		rehabilitation minor safety improvements incl. pavement widening, kerb and channel, guardrail	2013
P	Kopaki Rehab	4	15	B	165	0-459 Pavement Layer details missing	rehabilitation minor safety improvements incl. pavement widening	2013
N	SH 30 Kopaki Forest AWT	30	14	B	680		and channel, guardrail	2013
N	SH 30 Christmas Orchard AWT	30	14	B	820		rehabilitation minor safety improvements incl. pavement widening, drainage improvements	2013
Y	Raglan Road 2012	31	47	R	5360		timber retaining wall	2013
N	SH 39 Maisey Road AWT	39	18	B	273		rehabilitation minor safety improvements incl. pavement widening	2013

DATABASE HEALTH INDEX - REGIONAL AVERAGES

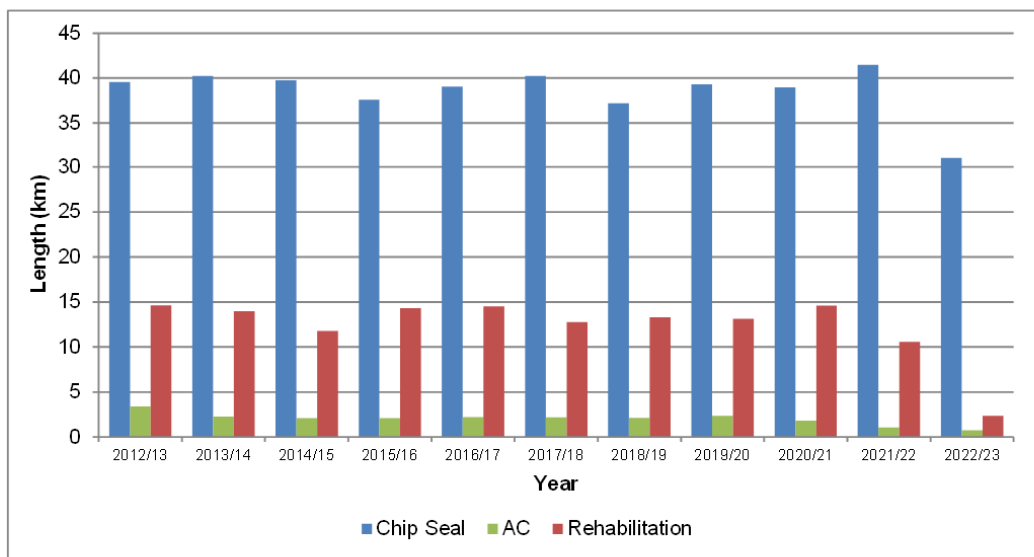
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Regional Averages							
Asset	Region	Hierarchy					Regional Average
		High Volume	National Strategic	Regional Strategic	Regional Connector	Regional Distributor	
Maintenance Costs (no. of pavement and surfacing faults per km)	Regional Average for route type	4	8	3	4	3	4
	West Waikato	4	-	2	2	3	
	East Waikato	6	-	3	5	3	
	Central Waikato	3	8	1	1	2	
	BOP West	-	6	6	8	8	
	PSMC 006	-	-	2	1	1	
Culverts (Rural) (no. per km)	Regional Average for route type	6	8	7	8	8	7
	West Waikato	3	-	6	9	8	
	East Waikato	15	-	7	8	11	
	Central Waikato	7	8	5	4	4	
	BOP West	-	12	9	6	13	
	PSMC 006	-	-	8	7	7	
Catchpit (Urban) (no. per km)	Regional Average for route type	14	13	14	14	9	12
	West Waikato	13	-	9	16	8	
	East Waikato	0	-	21	13	10	
	Central Waikato	0	11	10	16	9	
	BOP West	-	8	13	0	0	
	PSMC 006	-	-	10	5	9	
Manholes (urban) (no. per km)	Regional Average for route type	0	0	0	1	1	1
	West Waikato	5	0	4	-	0	
	East Waikato	0	0	2	-	1	
	Central Waikato	0	1	0	1	0	
	BOP West	-	0	0	2	1	
	PSMC 006	-	-	3	1	11	
Subsoil Drain (Rural) (m per km)	Regional Average for route type	28	3	0	8	2	9
	West Waikato	50	-	0	23	0	
	East Waikato	0	-	0	1	1	
	Central Waikato	5	3	0	0	3	
	BOP West	-	0	0	0	0	
	PSMC 006	-	-	69	38	40	
Surfaced SWC (Urban) (m per km)	Regional Average for route type	1505	1782	1315	1288	967	1291
	West Waikato	1551	-	1317	1411	808	
	East Waikato	0	-	1538	1189	989	
	Central Waikato	1506	1782	202	1279	1003	
	BOP West	-	1155	1243	0	0	
	PSMC 006	-	-	1488	584	1138	
Earth SWC (Rural) (m per km)	Regional Average for route type	613	1092	1104	1316	1210	1081
	West Waikato	329	21	1269	-	1606	
	East Waikato	782	-	1031	1407	1174	
	Central Waikato	854	1092	1194	1344	1116	
	BOP West	-	1207	1259	642	1671	
	PSMC 006	-	-	973	1238	1700	
Signs (no. per km)	Regional Average for route type	16	18	16	16	12	15
	West Waikato	15	-	28	20	13	
	East Waikato	18	-	22	16	18	
	Central Waikato	16	18	7	8	7	
	BOP West	-	20	21	12	8	
	PSMC 006	-	-	20	19	19	
Streetlights (no. per km)	Regional Average for route type	6	0	2	3	1	3
	West Waikato	10	-	8	4	4	
	East Waikato	2	-	5	3	2	
	Central Waikato	0	0	0	0	0	
	BOP West	-	0	0	0	0	
	PSMC 006	-	-	4	1	0	

DATABASE HEALTH INDEX DASHBOARD - REPORTS

Area: PSMC 006
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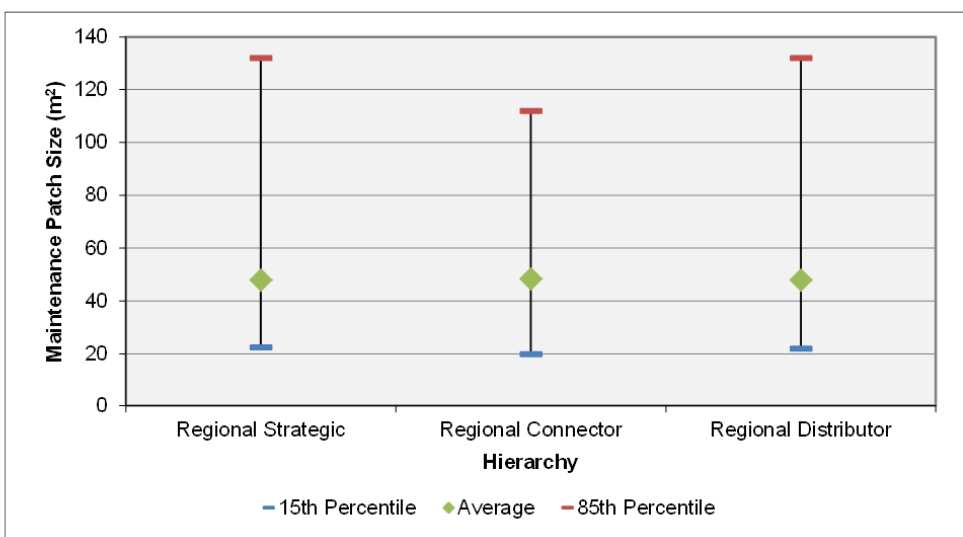
Breakdown of 10 Year FWP by Treatment Type



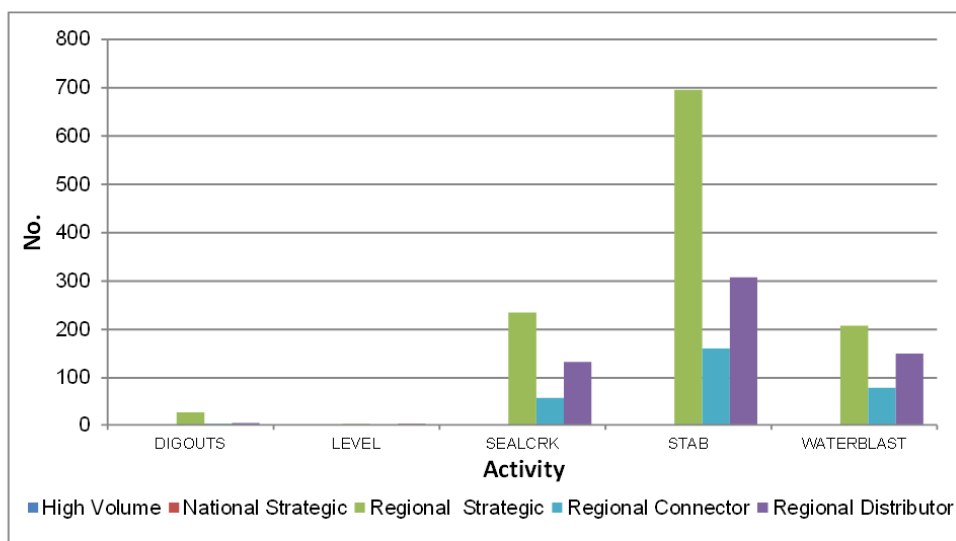
Signalised Intersections in RAMM

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	1
Advance direction (Stack) - "T" intersection	15
Intersection Direction - "T"	3
Advance Direction (T Intersect tail on side)	1
Advance direction (Stack) - Cross roads	2
Confirmation Destination	1
Intersection Direction	1
Slippery Surface - WHEN FROSTY	2
Speed Limit 50km/h with PN-1	2
Threshold Sign - Place Name + Speed Limit	22
Tourist Heritage Trail	1
Welcome To	4
Total	55

End Treatments in RAMM

End Treatment Type	No.
Armorflex X 350	99
Breakaway Cable Terminal (Bull Nose)	87
Bridge Plate/Bridge Connector	72
Buried in Back Slope	22
ET2000	8
Fishtail/Butterfly end	2
Fleat 350	156
M23 Compliant	2
SKT 350	2
Texas Twist	1
Unknown	6
Total	457

Breakdown of road markings by type

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)
Cold Applied Plastic	53425
Long Life Flat	22048
Paint	1129080
Raised Pavement Marker	436211
Reflectorised Paint	42666
Thermoplastic - cold	208
Thermoplastic Audible	2110
Unknown	52

Weigh Stations

Road Name	Location	Side
003-0036	1027	R
003-0036	13641	R
003-0065	7448	R
003-0076	10236	L

Footpath and CycleWays

None

Gantries

None

DATABASE HEALTH INDEX - PARAMETERS

Measures		Description	Data Source	Grading	Greater than	Less than	NZTA Target Grade
Pavement and Footpath 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) 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	RAMM carr_way, signs	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