

DATABASE HEALTH INDEX - DASHBOARD

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

Area: Hawkes Bay M&O
Date: 27/11/2013

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	6.8%	Grade 2	Grade 1	90	81
		% Surfaces at least 50% older than expected age	8.1%	Grade 3	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)	0.5%	Grade 1	Grade 1		
	Pavement Layer	Proportion of Network with layer Information	98.7%	Grade 1	Grade 3	93	77
		New layer length in previous 6 – 30 months	4.1%	Grade 2	Grade 2		
		Illogical records (Pavement Layers v Incorrect Surfacing)	1.1%	Grade 1	Grade 1		
	Road Marking	Breakdown of road markings by type	see attached report			-	-
	Treatment Length	Proportion of very short (< 20m) TLs	1.6%	Grade 1	Grade 1	64	85
		Proportion of very long (> 2000m) TLs	0.9%	Grade 1	Grade 1		
		Proportion of TLs with < 80% coverage of major surfacing	19.3%	Grade 3	Grade 1		
		% updated in last 5 years	0.5%	Grade 5	Grade 2		
Forward Works Programme	Date FWP last updated	11/10/2013	-	-	91	90	
	Proportion of network identified for treatment in next ten years (from FWP)	149.3%	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	71.9%	Grade 2	Grade 1			
Collected Data	Carriageway Rating	Percentage rated in last year	99.2%	Grade 1	Grade 1	99	90
	High Speed Data	% network meeting standards for roughness, rutting and texture (Roads surveyed in last year)	0.0%	Grade 5	Grade 1	1	90
		% network meeting standards for FWD (Roads surveyed in last 5years)	2.1%	Grade 5	Grade 1		
		% network meeting standards for SCRIM (Roads surveyed in last year)	0.0%	Grade 5	Grade 1		
	Maintenance Activity	Items per km for PA and SU cost groups in previous 4 – 15 months v Regional Average	93.3%	Grade 1	Grade 2	85	83
		Spread of location in previous 4 - 15 months (proportion located at carriageway start)	4.4%	Grade 1	Grade 2		
		Distribution of maintenance patch sizes by Hierarchy	see attached report				
		Breakdown of Maintenance Cost Activities	see attached report				
	Miscellaneous	% of Maintenance Activity where fault type is "Unknown"	14.6%	Grade 2	Grade 1		
		No. of test pits with layer data recorded	0	no.	-	-	-
	Traffic Count	No. of LTPP sites recorded in RAMM	6	no.	-		
		Latest ADT Counts	31/12/2012	-	-	100	70
		Latest ADT Estimates	20/11/2013	-	-		
	% loading estimate (i.e. not default)	99.6%	Grade 1	Grade 2			
Non-Carriageway Asset Inventory	Structures	No. of Pavement Type "Bridge" v No. of Bridges > 50m in length in BDS	5.9%	Grade 5	Grade 1	38	85
		No. Large Culverts v No. BDS	70.0%	Grade 2	Grade 2		
		Retaining Walls	463	no.	-		
		Gantries (see attached report for locations)	0	no.	-		
		Barriers in RAMM (m)	36971	m	-		
		End Treatments in RAMM	see attached report				
	Drainage	Culverts per km v Regional Average (Rural)	81.8%	Grade 2	Grade 2	80	80
		Catchpits per km v Regional Average (Urban)	97.7%	Grade 1	Grade 2		
		Manholes per km v Regional Average (Urban)	200.0%	Grade 1	Grade 2		
		Subsoil Drains per km v Regional Average (Rural)	170.4%	Grade 1	Grade 2		
		% of Drainage (Construction Date in previous 4 – 15 months)	0.5%	Grade 4	Grade 2		
	Surface Water Channels	Surfaced SWC per km v Regional Average (Urban)	122.8%	Grade 1	Grade 2	60	77
		Earth SWC per km v Regional Average (Rural)	59.4%	Grade 3	Grade 2		
		Sealed SWC renewal activity (Construction Date in previous 4 – 27 months)	0.9%	Grade 4	Grade 2		
Signs	Signs per km v Regional Average	104.3%	Grade 1	Grade 2	81	78	
	Large Signs >4.0m ² (see attached report for quantity by type)	109	no.	-			
	ITS VMS	1	no.	-			
	% of Signs with renewal date in last 4 - 15 months	4.2%	Grade 2	Grade 2			
	No. Frangible bases in RAMM (no posts in RAMM)	0	no.	-			
Streetlights	Streetlights per km v Regional Average	218.2%	Grade 1	Grade 2	67	82	
	Frangible Base type no.	17	no.	-			
	Shear Base type no.	469	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)	2	no.	-	-	-	
Rest Areas	Number of rest areas	1	no.	-	-	-	
Weigh Stations	Number of Weigh Stations (see attached report for locations)	7	no.	-	-	-	

DATABASE HEALTH INDEX DASHBOARD - PROJECTS

Area: **Hawkes Bay M&O**
Date: **27/11/2013**

In RAMM (Y/N/P)	Project Name	SH	RS	Dir	RP	Comments	Year	
Y	Mohaka Hill Descent Guardrail	2	562		2.83-2.96		10/11	
Y	North of McKenzies Armco Culvert Guardrail	2	577		12.14-12.21		10/11	
Y	McKenzies Armco Culvert Guardrail	2	577		12.16-12.38		10/11	
Y	Curve at North End of Waikare Gorge Guardrail	2	577		13.62-13.67		10/11	
Y	Curve at South End of Waikare Gorge Guardrail	2	577		15.51-15.62		10/11	
Y	South Pampas Curve Seal Widening	2	577		7.07-7.54		10/11	
Y	North Side of Devils Elbow Guardrail	2	608		8.07-8.31		10/11	
Y	Bay View North Speed Threshold	2	638		2.1	Markings paint date missing	10/11	
Y	Bay View South Speed Threshold	2	638		5.42	Markings paint date missing	10/11	
N	Clear Zoning	2	678		1.00-11.60		10/11	
Y	Herbert Street Road Crossings, Waipukurau	2	707		12.81	Drainage no construction date	10/11	
Y	South of Nunneries Rest Area Guardrail Lengthening	5	190		3.75		10/11	
Y	North of Te Haroto Marae Guardrail	5	204		7.24-7.67		10/11	
Y	Palmer Road Sight Improvements Earthworks	5	233		2.71-2.94	Marking paint date missing	10/11	
N	Widening Earthworks	5	233		6.08-6.31		10/11	
N	Rangiahua Road Intersection	38	179		2.98		10/11	
N	Taradale Road Pedestrian Refuge	50	3		0.19		10/11	
	Expressway Lighting South of Taradale Road	50	5		0.2		10/11	
Y	South of Omaranui Road Speed Threshold	50	12		2.8		10/11	
N	Taits Road Intersection Flag Light	50	33		4.32		10/11	
Y	Fermies Drain	50A	0		2.26	Side Culvert in RAMM @ 2.268	10/11	
Y	Tangoio School Curve Guardrail	2	626		2.12-2.30		11/12	
Y	SH 2 / 5 Junction	2	638		0.00-0.23	Markings paint date missing	11/12	
N	Franklin Road Guardrails	2	638		2.11-2.57		11/12	
Y	Airport Entrance Markings	2	638		8.04-8.43	Markings paint date missing	11/12	
Y	Pandora Bridge Markings	2	647		1.22-1.53	Markings paint date missing	11/12	
Y	Hyderabad Road Flush Median	2	650		0.08-0.39	Markings paint date missing	11/12	
Y	Waitangi Bridge Cycle Warning Signs	2	650		8.31-8.58		11/12	
Y	Clive Bridge Cycle Markings	2	661		0.10-0.48		11/12	
Y	Kennels Corner Guardrails	2	678		3.31-4.15		11/12	
Y	Otane Cemetary Curve	2	691		14.71-14.89		11/12	
Y	Pukehou School Upgarde	2	691		9.17-9.46	Channels no constructed date, light no installed date and markings paint date missing	11/12	
Y	Bridge Street / Ossian Street Right Turn Bay	50	0		2.76-2.90	Markings paint date missing	11/12	
N	Pakipaki School SAWS Signs	50A	0		15.55-15.96		11/12	
Y	Prydes AWPT Safety Improvements	2	516		4.65-5.07		12/13	
Y	Waihua Hill Summit AWPT Safety Improvements	2	544		7.79-8.24		12/13	
Y	Whirinaki Bluff Wire Rope Barrier LHS	2	626		7.14-7.51		12/13	
Y	Turfrey Road to Airport Wide Centre Line	2	638		7.01-7.94	Markings paint date missing	12/13	
Y	Te Aute Hill Passing Lane Wire Rope Barrier LHS	2	691		5.51-5.68		12/13	
Y	SH 2 Signs Upgrade (533.6.36 to 743/7.59)	2					12/13	
Y	Nth Hukatara nd Hukatara AWPT Safety Improvements	5	204		2.94-3.45		12/13	
Y	Glengarry Hill Descent Guardrail	5	233		8.13-8.50	8.52-8.75	12/13	
Y	Ahuriri Bypass	50	0		1.60-2.55	Markings paint date missing	12/13	
N	Expressway Meeanee Road Overbridge Queue Warning Sign	50	5		3.5		12/13	
Y	Expressway Meeanee Road Free Left Turn Removal	50	5		3.7		12/13	
N	Expressway Meeanee Road to Meeanee Road Wide Centre Line	50	5		1.16-3.02		12/13	
N	Expressway Tannery Creek Guardrail Upgrade	50	5		1.37-1.60		12/13	
Y	Expressway Burness Road Guardrail Upgrade	50	5		2.70-2.96	Railing constructed date missing	12/13	
N	Makaroro Road South I and II AWPT's Safety Improment	50	49		16.60-17.20		12/13	
N	Gis - Nap Passing Ops Stage IV	2	483	Nth & Sth	7.40-7.90	Shaws Cut	Pavement reconstructed stab agents missing	1/01/2014
P	Gis - Nap Passing Ops Stage III	2	544	Nth & Sth	7.48-7.78	Waihua Hill	Markings, Retaining Walls, Signs and Channels are updated	1/02/2014
N	Gis - Nap Passing Ops Stage II	2	592	Nth & Sth	11.55-10.97 and 14.79-14.50	Nth Kahika & Tutira		1/01/2014
N	Gis - Nap Passing Ops Stage I	2	608	Nth & Sth	11.60-11.90	Te Ngaru & Aropanui		1/12/2013
N	SH 2 Poukawa Swamp P/L	2	678	Sth	0.12		12/12/2013	
Y	SH 2 Te Mahanga S/B P/L	2	678	Sth	6.70-7.86		1/03/2013	
Y	SH2 Te Mahanga P/L	2	678	Nth	8.46-8.78		5/11/2013	
N	SH2 P/L Sth SH 50	2	743	Sth	0.17	Stock U/Pass Included	12/10/2013	
Y	SH 38 Mangakino Br Repl	38	161	Nth &	9.28-9.59	Wooden Br replaced with Armco	9.28-9.36 & 9.45-9.59 Pavement reconstructed	5/12/2013

DATABASE HEALTH INDEX - REGIONAL AVERAGES

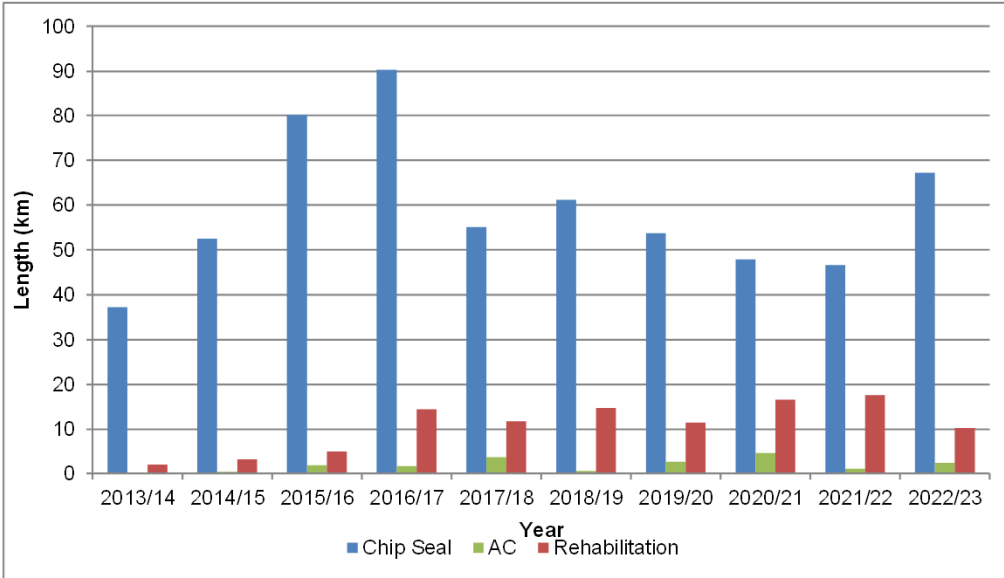
Area: Hawkes Bay M&O
Date: 27/11/2013

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	2	4	5	5	5
	Napier	4	2	4	-	4	
	Gisborne	-	-	7	5	9	
	East Waikato	4	-	4	5	4	
	BOP West	3	-	4	9	8	
	BOP East	-	-	7	5	5	
Culverts (Rural) (no. per km)	Regional Average for route type	8	7	9	8	9	9
	Napier	4	7	9	-	7	
	Gisborne	-	-	8	11	9	
	East Waikato	7	-	7	8	11	
	BOP West	9	-	8	6	11	
	BOP East	-	-	9	8	7	
Catchpit (Urban) (no. per km)	Regional Average for route type	9	12	15	10	8	10
	Napier	11	12	11	-	9	
	Gisborne	-	-	0	6	5	
	East Waikato	6	-	21	14	7	
	BOP West	9	-	8	6	11	
	BOP East	-	-	16	7	6	
Manholes (urban) (no. per km)	Regional Average for route type	0	0	1	1	1	1
	Napier	1	0	2	-	1	
	Gisborne	-	-	0	1	0	
	East Waikato	0	-	0	1	1	
	BOP West	0	-	0	0	0	
	BOP East	-	-	0	0	0	
Subsoil Drain (Rural) (m per km)	Regional Average for route type	10	34	136	27	43	61
	Napier	107	34	224	-	15	
	Gisborne	-	-	151	93	148	
	East Waikato	0	-	0	4	2	
	BOP West	159	-	0	0	0	
	BOP East	-	-	8	34	3	
Surfaced SWC (Urban) (m per km)	Regional Average for route type	1389	1447	1620	1175	923	1137
	Napier	1723	1447	1815	-	1623	
	Gisborne	-	-	0	426	784	
	East Waikato	745	-	1538	1224	914	
	BOP West	718	-	1427	0	0	
	BOP East	-	-	1637	1237	520	
Earth SWC (Rural) (m per km)	Regional Average for route type	991	523	751	1315	1131	1050
	Napier	313	522	448	-	734	
	Gisborne	-	-	1087	1403	1328	
	East Waikato	1307	-	1174	1379	1200	
	BOP West	830	-	1160	642	1362	
	BOP East	-	-	1379	1283	1117	
Signs (no. per km)	Regional Average for route type	22	14	18	16	15	16
	Napier	28	14	16	-	14	
	Gisborne	-	-	19	20	15	
	East Waikato	12	-	21	17	18	
	BOP West	22	-	23	12	10	
	BOP East	-	-	18	15	12	
Streetlights (no. per km)	Regional Average for route type	5	2	2	1	2	2
	Napier	19	2	1	-	2	
	Gisborne	-	-	0	1	2	
	East Waikato	2	-	4	3	2	
	BOP West	0	-	0	0	1	
	BOP East	-	-	0	0	0	

DATABASE HEALTH INDEX DASHBOARD - REPORTS

Area: Hawkes Bay M&O
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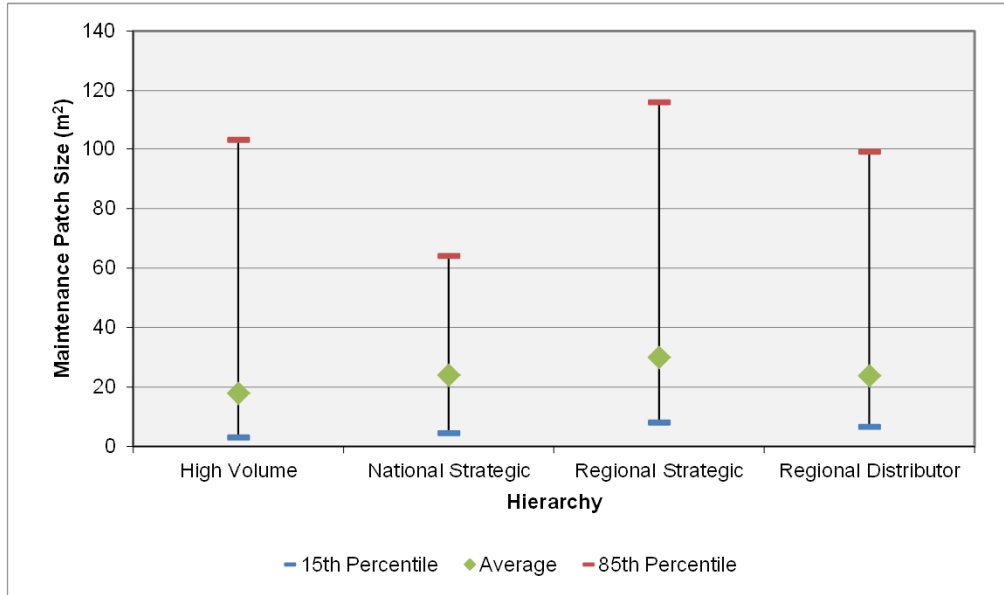
Breakdown of 10 Year FWP by Treatment Type



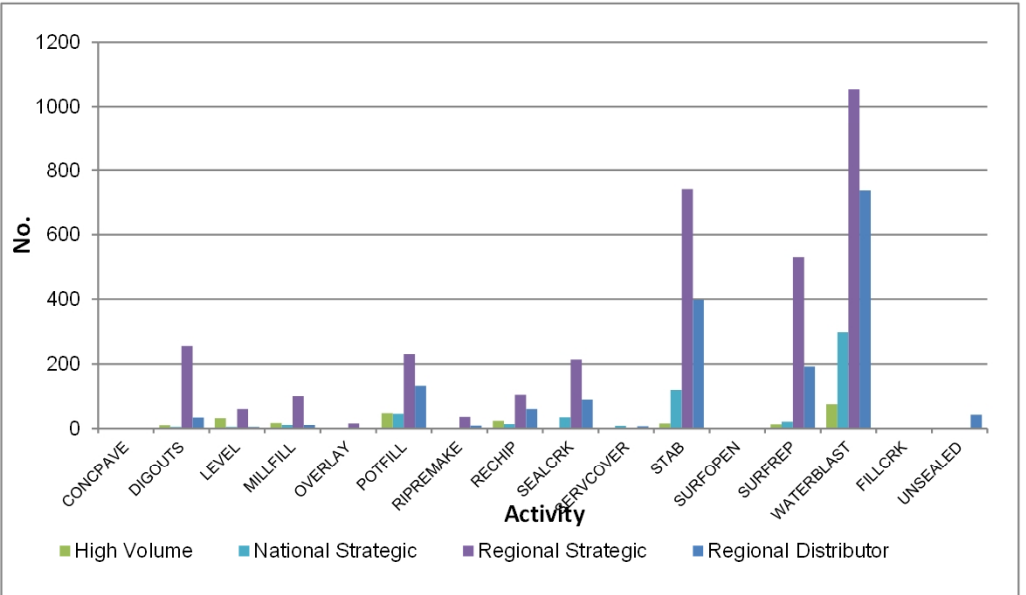
Signalised Intersections in RAMM

Road Name	No.
050-0005/06.04-I	1
050-0005/06.04-D	1
Total	2

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	26
Advance direction (Stack) - "T" intersection	3
TOURIST DRIVE TURN side "_____"m	2
Advance direction (Map) - Roundabout	25
Advance direction (Stack) - Cross roads	3
Advance direction (Stack) - Skew intersection	4
Chevron Board - Advisory speed 35km/h	1
Chevron Board - T Intersections	1
Confirmation Destination	2
Fire Hazard (Grapefruit sign)	1
Four services [Chevron]	1
Intersection Direction	1
Intersection Direction - Urban	1
Intersection Direction - with route marker	1
Major tourist attractions - special information	4
Place Name	2
ROAD INFORMATION	2
Speed Limit 50km/h	14
Speed Limit 70km/h with PN-1	6
Speed Limit 80km/h with PN-1	2
Warning (Miscellaneous Sign) - User defined	3
Warning (Miscellaneous Sign) - User defined	2
Welcome To	2
Total	109

End Treatments in RAMM

End Treatment Type	No.
Armorflex X 350	101
Breakaway Cable Terminal Unit	2
Buried in Back Slope	1
Breakaway Cable Terminal (Bull Nose)	123
Bridge Plate/Bridge Connector	79
ET2000	25
Fishtail/Butterfly end	1
Fleat 350	112
Not Applicable	8
Regent	4
Steel Wire Rope End Anchor Block	4
Texas Twist	19
Terminal end	9
Unknown	17
Total	505

DATABASE HEALTH INDEX DASHBOARD - REPORTS

Area: Hawkes Bay M&O

Date: 27/11/2013

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)
Paint	154219
Raised Pavement Marker	3846
Reflectorised Paint	70577
Cold Applied Plastic	47524
Unknown	1636730

Road Name	Location	Side
002-0533	4180	Right
002-0638	7710	Left
002-0650/08.35	9600	Right
002-0678	2782	Left
002-0707	8600	Left
005-0249	11710	Left
050-0017	100	Right
Total	7	

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