

**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:** WELLINGTON  
**Date:** 12/12/2013

		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		2.8%	Grade 3	Grade 1	71	81	
		% Surfaces at least 50% older than expected age		11.2%	Grade 3	Grade 2			
		% of Network with no surfacing		2.3%	Grade 1	Grade 1			
		Illogical Records inc. % (SAC with chipseal, Low and high widths, Alignment of traffic volumes v pavement use)		2.2%	Grade 1	Grade 1			
	Pavement Layer	Proportion of Network with layer Information		52.9%	Grade 3	Grade 3	59	77	
		New layer length in previous 6 – 30 months		1.6%	Grade 3	Grade 2			
		Illogical records (Pavement Layers v Incorrect Surfacing)		3.9%	Grade 1	Grade 1			
	Road Marking	Breakdown of road markings by type			see attached report		-	-	
	Treatment Length	Proportion of very short (< 20m) TLs		0.1%	Grade 1	Grade 1	88	85	
		Proportion of very long (> 2000m) TLs		0.0%	Grade 1	Grade 1			
		Proportion of TLs with < 80% coverage of major surfacing		14.3%	Grade 2	Grade 1			
		% updated in last 5 years		82.2%	Grade 2	Grade 2			
Forward Works Programme	Date FWP last updated		14/11/2013	-	-	90	90		
	Proportion of network identified for treatment in next ten years (from FWP)		103.4%	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		70.0%	Grade 3	Grade 1				
Carriageway Rating	Percentage rated in last year			96.8%	Grade 1	Grade 1	97	90	
High Speed Data	% network meeting standards for roughness, rutting and texture (Roads surveyed in last year)			74.8%	Grade 2	Grade 1	71	90	
	% network meeting standards for FWD (Roads surveyed in last 5years)			63.2%	Grade 3	Grade 1			
	% network meeting standards for SCRIM (Roads surveyed in last year)			74.8%	Grade 2	Grade 1			
Maintenance Activity	Items per km for PA and SU cost groups in previous 4 – 15 months v Regional Average			150.0%	Grade 1	Grade 2	98	83	
	Spread of location in previous 4 - 15 months (proportion located at carriageway start)			0.7%	Grade 1	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"			0.7%	Grade 1	Grade 1			
Miscellaneous	No. of test pits with layer data recorded			41	no.	-	-	-	
	No. of LTPP sites recorded in RAMM			2	no.	-	-	-	
Traffic Count	Latest ADT Counts			31/12/2012	-	-	99	70	
	Latest ADT Estimates			11/12/2013	-	-			
	% loading estimate (i.e. not default)			99.1%	Grade 1	Grade 2			
Non-Carriageway Asset Inventory	Structures	No. of Pavement Type "Bridge" v No. of Bridges > 50m in length in BDS			60.0%	Grade 3	Grade 1	34	85
		No. Large Culverts v No. BDS			7.5%	Grade 5	Grade 2		
		Retaining Walls			245	no.	-		
		Gantries (see attached report for locations)			44	no.	-		
		Barriers in RAMM (m)			168696	m	-		
		End Treatments in RAMM			see attached report				
	Drainage	Culverts per km v Regional Average (Rural)			84.0%	Grade 2	Grade 2	76	80
		Catchpits per km v Regional Average (Urban)			123.8%	Grade 1	Grade 2		
		Manholes per km v Regional Average (Urban)			128.6%	Grade 1	Grade 2		
		Subsoil Drains per km v Regional Average (Rural)			90.7%	Grade 1	Grade 2		
% of Drainage (Construction Date in previous 4 – 15 months)			0.1%	Grade 4	Grade 2				
Surface Water Channels	Surfaced SWC per km v Regional Average (Urban)			98.8%	Grade 1	Grade 2	72	77	
	Earth SWC per km v Regional Average (Rural)			77.1%	Grade 2	Grade 2			
	Sealed SWC renewal activity (Construction Date in previous 4 – 27 months)			1.7%	Grade 3	Grade 2			
Signs	Signs per km v Regional Average			138.9%	Grade 1	Grade 2	69	78	
	Large Signs >4.0m <sup>2</sup> (see attached report for quantity by type)			236	no.	-			
	ITS VMS			57	no.	-			
	% of Signs with renewal date in last 4 - 15 months			2.5%	Grade 3	Grade 2			
	No. Frangible bases in RAMM (no posts in RAMM)			252	no.	-			
Streetlights	Streetlights per km v Regional Average			161.1%	Grade 1	Grade 2	67	82	
	Frangible Base type no.			26	no.	-			
	Shear Base type no.			995	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)			13	no.	-	-	-	
Rest Areas	Number of rest areas			7	no.	-	-	-	
Weigh Stations	Number of Weigh Stations (see attached report for locations)			9	no.	-	-	-	

## DATABASE HEALTH INDEX DASHBOARD - PROJECTS

Area: **WELLINGTON**  
Date: **12/12/2013**

### Major capital projects completed v RAMM (in last 6 -30 months)

In RAMM (Y/N/P)	Project Name	SH	RS	Dir	RP	Comments	Year
Y	Muldoons Re-alignment	2	931		0.2-1.4		12/13
N	Memorial Park Underpass Phase 1	01N	1075	D	0.9-1.3		12/13
Y	Waterfall Rd Median Barrier	01N	1023	I&D	5.2-5.4	Barrier construction date "25/12/2010"	11/12
N	Ngaurangi 4 Laning	01N	1068	I	0-0.6	0-215 4 lanes No Pavement structure or surfacing details, construction dates missing in drainage, markings etc	11/12
N/A	Terrace Tunnel	01N	1068		5.7-6.1	M&E Not Recorded in RAMM	11/12
Y	P2P Clearway	01N	1035		13.0-15.0		11/12
P	River Road	2	946	I&D	9.3-12.8	9220-12865 D Missing surface and pavement structure details	10/11
Y	Horokiwi Median	2	962/12.86	D	12.7	Start Name missing in Carriageway table (end name from previous section 002-0962-D Missing)	10/11

### Minor safety works v RAMM (in last 6 -30 months)

In RAMM (Y/N/P)	Project Name	SH	RS	Dir	RP	Comments	Year	
N	Mikimiki Barrier	002	0858	B	11424		12/13	
Y	Opaki	002	0873	L	8255	"No Engine Braking"	12/13	
N	Renal St RAB Upgrade	002	0883	B	1412-1440		12/13	
Y	Whakatiki St	002	0946/07.69	I	7870	Speed Limit Sign	12/13	
Y	Rimutaka Barriers installation	002	0921 & 0931	B			12/13	
Y	Petone Bowl Entrance Barrier	002	962	I	11753-11877		12/13	
Y	ATP	002					12/13	
Y	Transpower Barriers	058	0000	B	1016-1300	Installed Jan 2013	12/13	
Y	Drop out temp speed limit	058	0000/02.80	B	10250-13445	Speed Limit Signs	12/13	
Y	Barriers	058	0000				12/13	
Y	Ngaio Rd	01N	1012	B	4455	Give Way x2 keep left	12/13	
Y	Beach Rd Paekakariki Int	01N	1023/08.22	B	10623-10721		12/13	
Y	Pukerua Bay 'Toilet Signs'	01N	1035				12/13	
	Misc Sign Upgrades	01N				To be completed	12/13	
Y	ATP	01N					12/13	
Y	Norfolk Rd "Give Way" x2	002	0883	R	6705-6710		11/12	
Y	Whakatiki St dura-post installation	002	0946	I&D		Not Recorded in RAMM	11/12	
Y	Sign Upgrades	058	0000	B		Various new signs June 2012	11/12	
Y	SH1 P2P Clearways	01N	1035				11/12	
Y	Newlands Rd Off Ramp Signs and Markings	01N	1066		R1 & R5	Signs and edgeline	11/12	
Y	Otaki Puffin Crossing	01N	0995	B	5425		11/12	
Y	SH Off ramp 'wrong way' signage					12 signs installed 12 Off Ramps	11/12	
Y	Wairarapa crossing points (Carterton)	002	905	B	4045-4225	New signs installed	10/11	
Y	Cashmere Oaks Streetlighting	002	0873	R	8734-8934		10/11	
Y	Waihakeke/Hughes Line	002	0883	N	12303-12820	19442-19634	Markings No Painted Date	10/11
Y	Masterton Cycle Marking	002	0883	L&R	5435-5709		10/11	
Y	Wiltons Rd	002	0883		8398-8733	8398-8733	Markings No Painted Date	10/11
Y	Wairarapa crossing points (Greytown)	002	0883/05.78	B	15982-16127		New signs installed	10/11
Y	Rimutaka Barriers	002	0931	B	1107-3338		10/11	
Y	Akatarawa Intersection Improvements	002	0946	B	2600-3200	Markings, Catchipit. Channels No constructed date	10/11	
N	Moonshine curve alignment	002	0946			Decreasing side has no surface data	10/11	
Y	Dowse-Petone Speed Limit Change	002	0962	I&D	11312-12228		10/11	
Y	Horokiwi Road Intersection	002	0962	Dir	12580-12845	No pavement layer details for entire RS I&D	10/11	
Y	Petone VMS	002	0962			HOROKIWI_CYCLE PETONE_CYCLE_SIGN	10/11	
Y	Belmont School Barrier	002	0962-I	I	5111-5284		10/11	
Y	Petone Off Ramp Cycle signs	002	0974-R1	L&R	60		10/11	
Y	Grounell HSRS	002	962	I	5750-5830	HSRS PSKID	10/11	
Y	Petone HSRS	002	962	I	11950-12055	HSRS PSKID	10/11	
Y	Tauherenikau Bridge Barrier & SACWS	053	0000	B	4354-4427	Bridge Railing with missing construction date SACWC installation dates missing	10/11	
Y	Haywards Hill widening/dish channel	058	0000/02.80	B	13310-13482		10/11	
Y	Postgate Drive RAB	058	0000/02.80	B	13495-13662		10/11	
Y	Waikanae Wide centreline trial	01N	1012	B	3816-4416	Painted Date Missing	10/11	
Y	Raumati Rd PW Signs	01N	1023	R	440	PW Sign x1 Road Narrows	10/11	
Y	Sang Sue Streetlighting	01N	1023			Streetlighting ? Has been updated 03/2012	10/11	
Y	Raumati Rd LTB Remarking	01N	1023	B		Markings No Painted Date	10/11	
Y	Kaiwharawhara Barrier	01N	1068	I&D	2005-2236		10/11	
P?	Forest Lakes	01N	0995	B	986-1400?		10/11	
Y	Takapu Rd Visibility Improvements	01N	1050/0630	I&D		Markings updated	10/11	
Y	Calabar Road Separation Kerb	01N	1076/02.08	I&D	3045- 3223		10/11	

## DATABASE HEALTH INDEX - REGIONAL AVERAGES

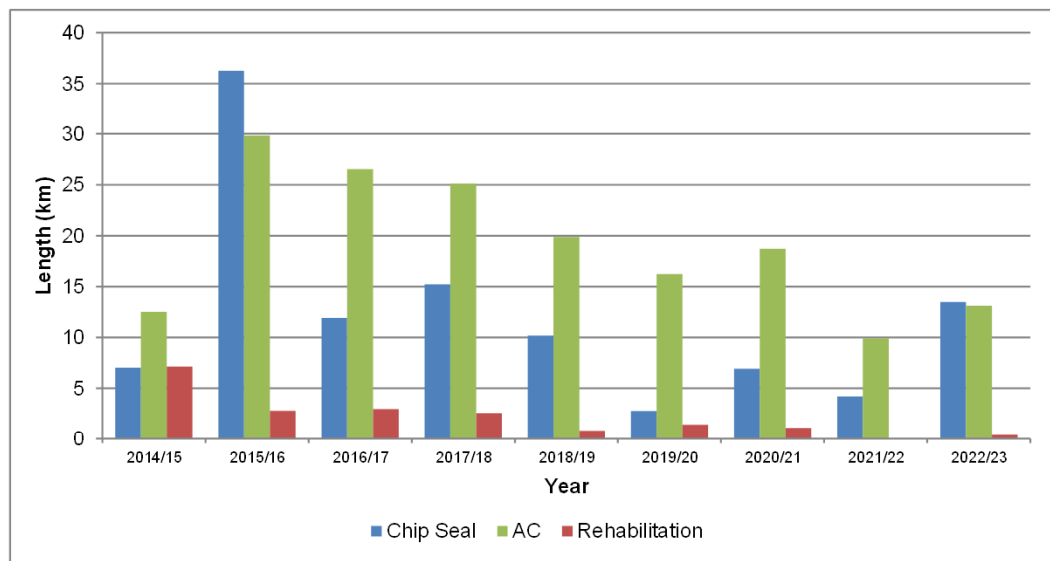
**Area:** WELLINGTON  
**Date:** 12/12/2013

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)	<b>Regional Average for route type</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>3</b>	2
	Wellington	4	1	5	-	5	
	Hawkes Bay	4	2	4	-	4	
	Taranaki M&O	-	-	5	6	2	
	Gisborne	-	-	7	5	9	
	Manawatu Whanganui M&O	0	1	1	1	2	
Culverts (Rural) (no. per km)	<b>Regional Average for route type</b>	<b>3</b>	<b>6</b>	<b>8</b>	<b>7</b>	<b>8</b>	7
	Wellington	3	2	8	-	8	
	Hawkes Bay	4	7	9	-	7	
	Taranaki M&O	-	-	7	8	9	
	Gisborne	-	-	8	11	9	
	Manawatu Whanganui M&O	4	6	7	5	7	
Catchpit (Urban) (no. per km)	<b>Regional Average for route type</b>	<b>13</b>	<b>11</b>	<b>9</b>	<b>13</b>	<b>9</b>	11
	Wellington	14	13	10	-	15	
	Hawkes Bay	11	12	11	-	9	
	Taranaki M&O	-	-	9	4	13	
	Gisborne	-	-	0	6	5	
	Manawatu Whanganui M&O	0	10	11	16	11	
Manholes (urban) (no. per km)	<b>Regional Average for route type</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	1
	Wellington	5	0	4	-	0	
	Hawkes Bay	1	0	2	-	1	
	Taranaki M&O	-	-	1	2	1	
	Gisborne	-	-	0	1	0	
	Manawatu Whanganui M&O	0	2	1	1	0	
Subsoil Drain (Rural) (m per km)	<b>Regional Average for route type</b>	<b>25</b>	<b>65</b>	<b>150</b>	<b>49</b>	<b>60</b>	84
	Wellington	22	6	43	-	201	
	Hawkes Bay	107	34	224	-	15	
	Taranaki M&O	-	-	138	14	16	
	Gisborne	-	-	151	93	148	
	Manawatu Whanganui M&O	0	82	110	14	72	
Surfaced SWC (Urban) (m per km)	<b>Regional Average for route type</b>	<b>1529</b>	<b>1570</b>	<b>1592</b>	<b>1223</b>	<b>1401</b>	1516
	Wellington	1546	1561	1697	-	1215	
	Hawkes Bay	1723	1447	1815	-	1623	
	Taranaki M&O	-	-	1458	1755	1733	
	Gisborne	-	-	0	426	784	
	Manawatu Whanganui M&O	0	1606	1652	1377	1772	
Earth SWC (Rural) (m per km)	<b>Regional Average for route type</b>	<b>488</b>	<b>944</b>	<b>933</b>	<b>1471</b>	<b>1151</b>	1034
	Wellington	467	75	1178	-	992	
	Hawkes Bay	313	522	448	-	734	
	Taranaki M&O	-	-	1214	1606	1239	
	Gisborne	-	-	1087	1403	1328	
	Manawatu Whanganui M&O	869	1171	1160	941	1109	
Signs (no. per km)	<b>Regional Average for route type</b>	<b>23</b>	<b>16</b>	<b>16</b>	<b>15</b>	<b>17</b>	17
	Wellington	23	19	28	-	30	
	Hawkes Bay	28	14	16	-	14	
	Taranaki M&O	-	-	11	12	21	
	Gisborne	-	-	19	20	15	
	Manawatu Whanganui M&O	27	17	14	14	14	
Streetlights (no. per km)	<b>Regional Average for route type</b>	<b>13</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	2
	Wellington	13	8	6	-	2	
	Hawkes Bay	19	2	1	-	2	
	Taranaki M&O	-	-	1	0	0	
	Gisborne	-	-	0	1	2	
	Manawatu Whanganui M&O	5	1	1	1	0	

## DATABASE HEALTH INDEX DASHBOARD - REPORTS

**Area:** WELLINGTON  
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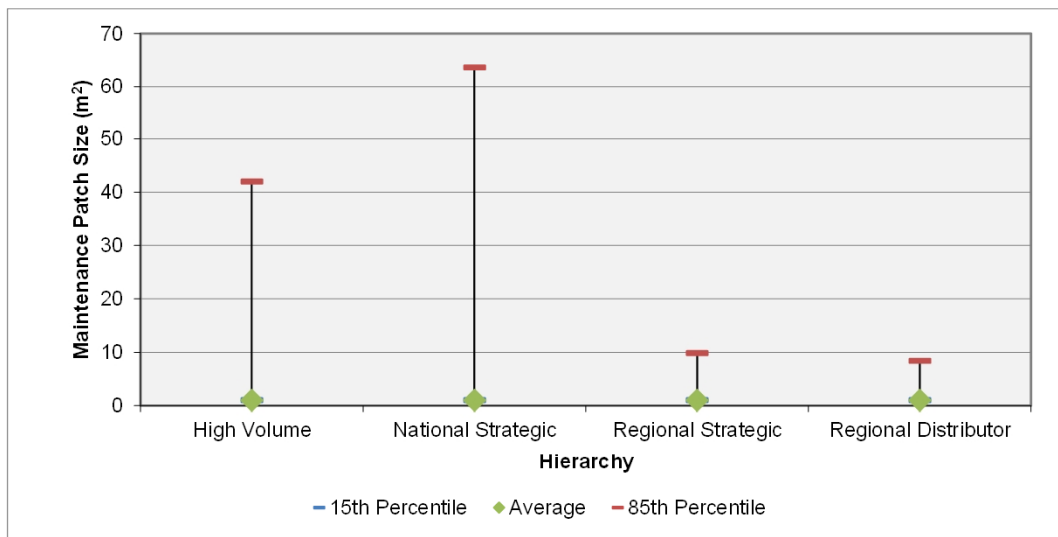
### Breakdown of 10 Year FWP by Treatment Type



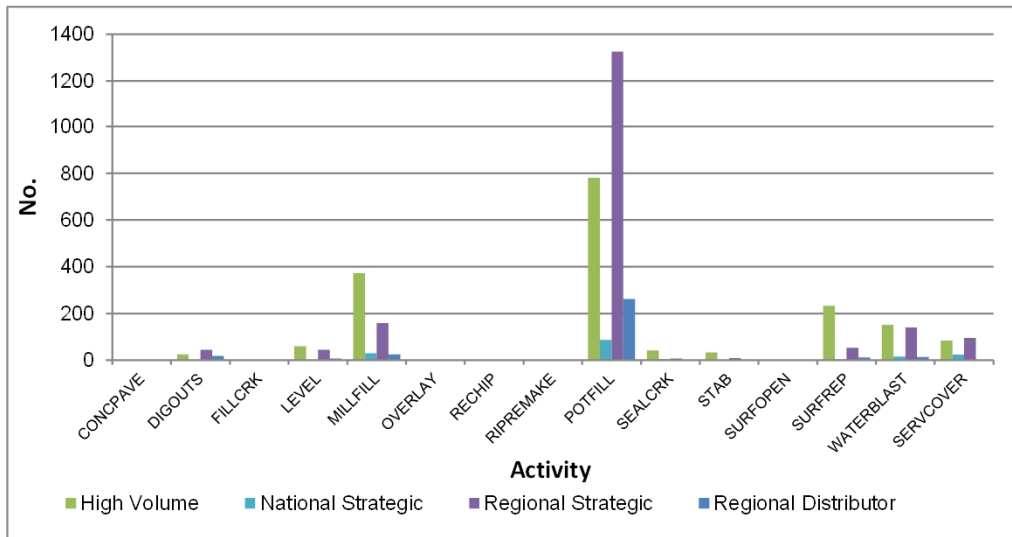
### Signalised Intersections in RAMM

Road Name	No.
01N-1075/00.13-D	2
002-0946/13.01-I	2
002-0948-R1	1
002-0948-R2	1
01N-1035/13.37	2
01N-1035/08.69-I	1
002-0959-R2	2
002-0959-R1	1
01N-1052-R2	1
<b>Total</b>	<b>13</b>

### 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	11
Advance direction (Stack) - "T" intersection	3
Feature "____"m ON left/right	1
Feature TURN left/right "____"m	2
Two services TURN left/right "____"m	2
Advance Exit	20
Advance Exit (Overhead)	24
Advance direction (Map) - Roundabout	29
Advance direction (Stack) - Cross roads	14
Advance direction (Stack) - Skew intersection	2
Advanced lane direction [Arrow]	17
Advanced lane direction [Message]	13
Confirmation Destination	27
Exit Direction	7
Exit Direction (Overhead)	3
Information (Miscellaneous Sign) - User Defined	1
Intersection Direction	1
Intersection Direction - Urban	1
Intersection Direction - with route marker	1
Intersection Direction [Arrow]	1
ROAD INFORMATION	1
Slippery Surface (never erected separately)	1
Speed Limit 50km/h	1
Threshold Sign - Place Name + Speed Limit	50
Warning (Miscellaneous Sign) - User defined	2
Warning (Miscellaneous Sign) - User defined	1
<b>Total</b>	<b>236</b>

### End Treatments in RAMM

End Treatment Type	No.
Armorflex X 350	59
Breakaway Cable Terminal Unit	72
Bridge Plate/Bridge Connector	116
Brifen Terminal	14
Buried in Back Slope	69
ET2000	41
Fishtail/Butterfly end	20
Fleat 350	56
Steel Wire Rope End Anchor Block	27
Unknown	9
<b>Total</b>	<b>483</b>

## DATABASE HEALTH INDEX DASHBOARD - REPORTS

**Area:** WELLINGTON

**Date:** 12/12/2013

<b>Breakdown of road markings by type</b>	<b>Weigh Stations</b>
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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)
Cold Applied Plastic	301330
Epoxy resin (for coloured surfacings)	1867
Paint	120798
Raised Pavement Marker	439646
Reflectorised Paint	629398
Thermoplastic - cold	73634
Thermoplastic - hot	587
Thermoplastic Audible	18875
Unknown	314

Road Name	Location	Side
002-0858	6660	Right
002-0883/05.78	6960	Right
002-0946/07.69-I	8153	Left
002-0946/07.69-I	8217	Left
002-0962-D	650	Right
002-0962-I	3413	Left
002-0962/12.86-D	14742	Right
01N-1035/08.69-D	12180	Right
01N-1035/08.69-I	12098	Left
<b>Total</b>	<b>9</b>	

<b>Footpath and CycleWays</b>	<b>Gantries</b>
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None

Road Name	Location
002-0946/13.02-D	13462
002-0946/13.02-D	14252
002-0962-D	10017
002-0962-I	9587
002-0962-I	11735
002-0962-I	11928
002-0962/12.85-I	14791
002-0962/12.85-I	16582
002-0972-R1	195
01N-1035/08.69-D	12957
01N-1035/13.37	13429
01N-1035/13.37	14056
01N-1035/13.37	14361
01N-1035/13.37	14632
01N-1035/13.37	14837
01N-1035/15.12-I	15116
01N-1035/15.12-I	15580
01N-1050-D	2494
01N-1050-I	2528
01N-1050-I	3180
01N-1050/06.30-I	9006
01N-1060-D	5979
01N-1060-D	6517
01N-1060-I	4065
01N-1060-I	4315
01N-1060-I	5005
01N-1060-I	5500
01N-1060-I	6250
01N-1060-I	6951
01N-1060-I	7315
01N-1068-D	15
01N-1068-D	201
01N-1068-D	2140
01N-1068-D	3656
01N-1068-D	5544
01N-1068-I	803
01N-1068-I	1547
01N-1068-I	2154
01N-1068-I	2506
01N-1068-I	2901
01N-1068-I	3393
01N-1068-I	3651
01N-1068-I	3766
01N-1068-I	4700
<b>Total</b>	<b>44</b>

## DATABASE HEALTH INDEX - PARAMETERS

Measures		Description	Data Source	Grading	Greater than	Less than	NZTA Target Grade
<b>Pavement Inventory</b>							
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
<b>Collected Data</b>							
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
<b>Non-Carriageway Asset Inventory</b>							
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 <sup>2</sup> 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 <sup>2</sup>	Total No. of large signs with a sign face greater than 4.0m <sup>2</sup>	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