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: AUCK ALLIANCE
Date: 27/02/2014

	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 in the last year	8.0%	Grade 1	Grade 1	85	84
		% Surfaces at least 50% older than expected age	8.0%	Grade 3	Grade 2		
		% of Network with no surfacing	0.7%	Grade 1	Grade 1		
		Illogical Records inc. % (SAC with chipseal, Low and high widths, Alignment of traffic volumes v pavement use)	0.2%	Grade 1	Grade 1		
	Pavement Layer	Proportion of Network with layer Information	87.3%	Grade 2	Grade 3	68	77
		New layer length in previous 6 – 30 months	0.9%	Grade 4	Grade 2		
		Illogical records (Pavement Layers v Incorrect Surfacing)	0.0%	Grade 1	Grade 1		
	Road Marking	Breakdown of road markings by type	see attached report			-	-
	Treatment Length	Proportion of very short (< 20m) TLs	0.5%	Grade 1	Grade 1	70	85
		Proportion of very long (> 2000m) TLs	3.4%	Grade 1	Grade 1		
		Proportion of TLs with < 80% coverage of major surfacing	46.9%	Grade 4	Grade 1		
		% updated in last 5 years	82.6%	Grade 2	Grade 2		
	Forward Works Programme	Date FWP last updated	31/01/2014	-	-	100	90
		Proportion of network identified for treatment in next ten years (from FWP)	119.3%	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	100.0%	Grade 1	Grade 1		
Collected Data	Carriageway Rating	Percentage rated in last year	99.5%	Grade 1	Grade 1	99	90
	High Speed Data	% network meeting standards for roughness, rutting and texture (Roads surveyed in last year)	99.4%	Grade 1	Grade 1	91	90
		% network meeting standards for FWD (Roads surveyed in last 5years)	73.6%	Grade 2	Grade 1		
		% network meeting standards for SCRIM (Roads surveyed in last year)	99.4%	Grade 1	Grade 1		
	Maintenance Activity	Items per km for PA and SU cost groups in previous 4 – 15 months v Regional Average	0.0%	Grade 5	Grade 2	30	83
		Spread of location in previous 4 - 15 months (proportion located at carriageway start)	13.4%	Grade 2	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"	45.5%	Grade 4	Grade 1		
	Miscellaneous	No. of test pits with layer data recorded	44	no.	-	-	-
		No. of LTPP sites recorded in RAMM	4	no.	-		
	Traffic Count	Latest ADT Counts	31/12/2012	-	-	100	70
		Latest ADT Estimates	26/02/2014	-	-		
		% loading estimate (i.e. not default)	99.8%	Grade 1	Grade 2		
Non-Carriageway Asset Inventory	Structures	No. of Pavement Type "Bridge" v No. of Bridges > 50m in length in BDS	96.2%	Grade 1	Grade 1	93	85
		No. Large Culverts v No. BDS	90.0%	Grade 1	Grade 2		
		Retaining Walls	331	no.	-		
		Gantries (see attached report for locations)	477	no.	-		
		Barriers in RAMM (m)	460883	m	-		
		End Treatments in RAMM	see attached report				
	Drainage	Culverts per km v Regional Average (Rural)	90.0%	Grade 1	Grade 2	72	80
		Catchpits per km v Regional Average (Urban)	72.0%	Grade 2	Grade 2		
		Manholes per km v Regional Average (Urban)	466.7%	Grade 1	Grade 2		
		Subsoil Drains per km v Regional Average (Rural)	220.0%	Grade 1	Grade 2		
		% of Drainage (Construction Date in previous 4 – 15 months)	0.0%	Grade 4	Grade 2		
	Surface Water Channels	Surfaced SWC per km v Regional Average (Urban)	74.0%	Grade 2	Grade 2	62	77
		Earth SWC per km v Regional Average (Rural)	97.3%	Grade 1	Grade 2		
		Sealed SWC renewal activity (Construction Date in previous 4 – 27 months)	0.6%	Grade 4	Grade 2		
	Signs	Signs per km v Regional Average	110.8%	Grade 1	Grade 2	53	78
		Large Signs >4.0m^2 (see attached report for quantity by type)	672	no.	-		
		ITS VMS	22	no.	-		
		% of Signs with renewal date in last 4 - 15 months	0.4%	Grade 4	Grade 2		
		No. Frangible bases in RAMM (no posts in RAMM)	0	no.	-		
	Streetlights	Streetlights per km v Regional Average	200.0%	Grade 1	Grade 2	100	82
		Frangible Base type no.	752	no.	-		
		Shear Base type no.	4938	no.	-		
		% of Streetlight Poles with renewal date in last 4 – 15 months	7.5%	Grade 1	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	1	no.	-	-	-
	Weigh Stations	Number of Weigh Stations (see attached report for locations)	4	no.	-	-	-

DATABASE HEALTH INDEX DASHBOARD - PROJECTS

Area: AUCK ALLIANCE
Date: 27/02/2014

In RAMM (Y/N/P)	Project Name	SH	RS	Dir	RP		Comments	Year
Y	Newton Rd Signage and Road Marking Upgrade						Markings have no painted date, signs have no installed date	1/06/2012
N	Underneath Newton Bridge (Incr) WB SH1 to SH16 link	16	0	I	3.44-3.48			1/06/2012
Y	SH22 RP 8.90-I (southbound) LHS (Incr) SB	22	0	I	8.88-8.91	8.5-8.8		1/06/2012
Y	SH1 X419-R3-OFF Northcote Rd NB off	01N	419	R3	0-0.22			1/06/2012
Y	Playgrounds Stafford Park Stafford St NB Off-Ramp (high risk) (Dec) NB	01N	423	R1	0.31-0.39			1/06/2012
Y	Underneath Newton Bridge (Incr) Port off ramp	01N	428	R1	1.32-1.25			1/06/2012
N	Takanini Rail overbridge Northbound	01N	431		11.1-11.2			1/03/2013
Y	SH1 431/4.83-D N of Penrose Rd	01N	431	D	4.82-4.94			1/06/2012
	Power Pylon SH1 600m South of Ellerslie Panmure Roundabout (Dec) NB	01N	431	D	4.8-4.9			1/02/2013
Y	Site 14 Silvia Park Rail Over Bridge North Bound median	01N	431	D	7.6-7.7			1/02/2013
N	SH1 X-441-R1-OFF Princes St Off Ramp Gore Area	01N	441	R1	0.06-0.07			1/06/2012
N	Power pylon SH1 700m South of Papakura Interchange (Dec) NB	01N	448	D	3.56-3.7			20/05/2013
N	Playgrounds Takanini NB off-ramp (Dec) NB	01N	448		5.55-5.7			1/04/2013
Y	1500 m North of Papakura interchange (Dec) NB	01N	448	D	8.45-8.55			1/12/2012
Y	Power pylon SH1 350m South of Papakura Interchange (Dec) NB	01N	448	D	9.7-9.8			20/05/2013
N	SH1N Ramarama Gullies	01N	461	I	0.22-4.8			1/06/2013
N	Additional Ramarama Site	01N	461	I	3.05-3.3			1/06/2013
N	Sunken Catchpits Decreasing direction	01N	461	Both	6.82-9.35			1/05/2013
Y	SH1 X475-R3-ON gore area between ramps 2 & 3 from SH2	01N	478	R3	0.25-0.20			1/06/2012
Y	Back to back Razorback SB Off-Ramp (Incr) NB	ramp 01N	477	R1	0.01-0.08			1/06/2012
N	SH20 0/5.89-D 120m N Portage Rd UP	SH20	0	D	5.89			1/06/2012
Y	SH20 0/8.566-D at SH20A Interchange	SH20	0	D	8.56			1/06/2012
Y	SH20-20A Guardrail (Dec) SB SH20-0000-D/9240	SH20	0	D	9.32-9.24			1/06/2012
N	SH20 Bader Dr Underpass Piers	SH20	0	D	9.61-9.78			1/03/2013
	SH20 Central Park Footbridge Piers	SH20	20	D	10.-53-40.43			1/03/2013
Y	SH22 Lighting between Crown & Adams. CRS Recommendation. (Both) EB&WB	SH22	0	Both	10.5-12.9			1/05/2013
Y	SH22 Barrier Opposite Wesley College (Dec) EB	SH22	0	D	8.25-8.55			1/03/2013
N	SH22 unprotected drop install g/r	SH22	0		8.78-8.85			1/02/2013
Y	SH22 protect LOC near railway tracks (Incr) SB	SH22	22	I	11.48-11.58			1/03/2013
P	Hobsonville	18	17	Both	0 - 5300		Pavement layer and street light details missing	Completion 2011
N	Westgate footbridge	16	7	I	9600			Completion 2013
N	Newmarket viaduct	01N	431	I	636 - 2220			Completion 2012
Y	VPT	1	414	D	10960 -13340			Completion 2012
Y	Papakura Interchange	1	448	I	9772 - 10330			Completion 2013
Y	MHX	20	10	I	770 - 5073			Completion 2012
P	Neilson Street	20	13	R3	200 - 450		carriageway end name missing, no pavement details, drainage and railings construction date missing, sign's install date missing	Completion 2011
N	Greenlane auxiliary lane	01N	431	I	637 - 1825			Completion 2011
N	Walmsley Rd	20A	0	I	260 - 535			Completion 2012
Y	Maioro Street	20	10	I	300 - 9300			Completion 2012

DATABASE HEALTH INDEX - REGIONAL AVERAGES

Area: **AUCK ALLIANCE**
Date: **27/02/2014**

Regional Averages

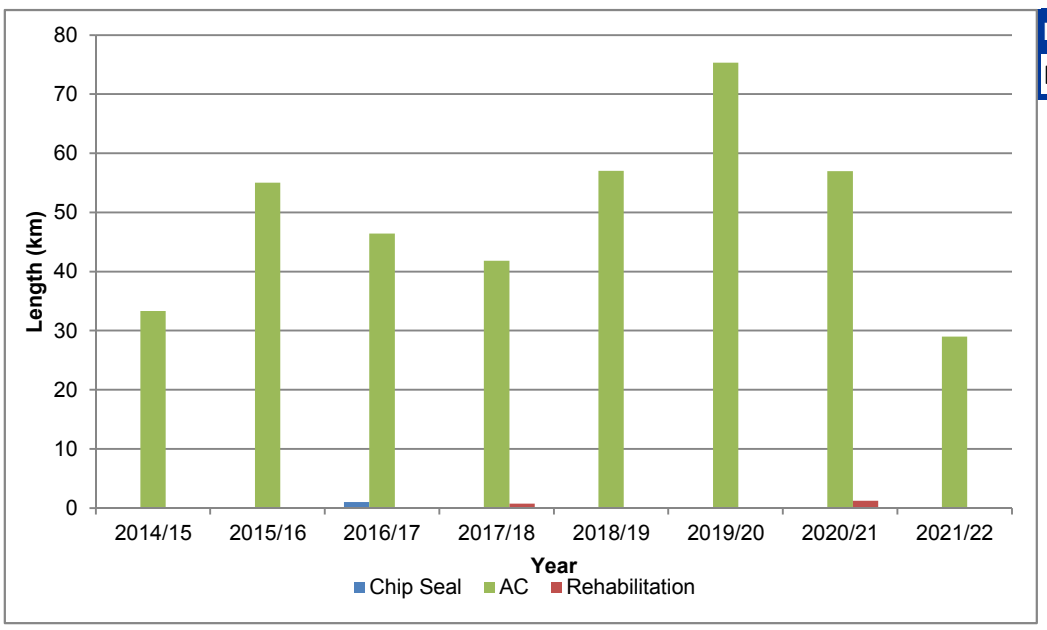
Asset	Region	Hierarchy					Regional Average
		High Volume	National Strategic	Regional Strategic	Regional Connector	Regional Distributor	
Maintenance Costs (no. of pavement and surfacing faults per km)	**Regional Average for route type**	**1**	**4**	**3**	**1**	**4**	3
	Auckland Alliance	0	-	-	0	-	
	Northland	4	16	8	-	6	
	West Waikato	2	-	3	2	1	
	Christchurch	0	0	0	0	-	
	Wellington	4	1	5	-	5	
Culverts (Rural) (no. per km)	**Regional Average for route type**	**3**	**5**	**7**	**7**	**9**	7
	Auckland Alliance	3	-	-	6	-	
	Northland	9	9	14	-	11	
	West Waikato	5	-	10	8	8	
	Christchurch	1	1	3	3	-	
	Wellington	3	2	8	-	8	
Catchpit (Urban) (no. per km)	**Regional Average for route type**	**12**	**9**	**10**	**13**	**11**	11
	Auckland Alliance	12	-	-	6	-	
	Northland	14	12	19	-	12	
	West Waikato	10	-	11	14	7	
	Christchurch	12	9	22	14	-	
	Wellington	15	13	10	-	15	
Manholes (urban) (no. per km)	**Regional Average for route type**	**3**	**1**	**2**	**0**	**3**	2
	Auckland Alliance	11	-	-	3	-	
	Northland	21	6	0	-	3	
	West Waikato	1	-	1	0	0	
	Christchurch	1	0	10	0	-	
	Wellington	5	0	4	-	0	
Subsoil Drain (Rural) (m per km)	**Regional Average for route type**	**73**	**82**	**57**	**32**	**74**	65
	Auckland Alliance	127	-	-	104	-	
	Northland	218	248	205	-	90	
	West Waikato	3	-	0	23	0	
	Christchurch	0	0	0	0	-	
	Wellington	22	6	43	-	201	
Surfaced SWC (Urban) (m per km)	**Regional Average for route type**	**1228**	**1084**	**1473**	**1288**	**1002**	1240
	Auckland Alliance	931	-	-	932	-	
	Northland	1193	1244	2464	-	1078	
	West Waikato	1004	-	1733	1253	560	
	Christchurch	1461	977	969	1629	-	
	Wellington	1546	1561	1697	-	1215	
Earth SWC (Rural) (m per km)	**Regional Average for route type**	**441**	**793**	**1052**	**1121**	**1134**	1072
	Auckland Alliance	280	-	-	1240	-	
	Northland	516	1041	714	-	1143	
	West Waikato	733	-	39	1214	1633	
	Christchurch	544	825	1334	1224	-	
	Wellington	467	75	1178	-	992	
Signs (no. per km)	**Regional Average for route type**	**18**	**16**	**20**	**19**	**15**	16
	Auckland Alliance	17	-	-	24	-	
	Northland	32	23	19	-	15	
	West Waikato	14	-	35	19	13	
	Christchurch	21	21	17	28	-	
	Wellington	23	19	28	-	30	
Streetlights (no. per km)	**Regional Average for route type**	**10**	**2**	**3**	**3**	**1**	2
	Auckland Alliance	13	-	-	13	-	
	Northland	6	4	5	-	2	
	West Waikato	9	-	12	4	3	
	Christchurch	0	0	0	0	-	
	Wellington	13	8	6	-	2	

DATABASE HEALTH INDEX DASHBOARD - REPORTS

Area: **AUCK ALLIANCE**

Date: **27/02/2014**

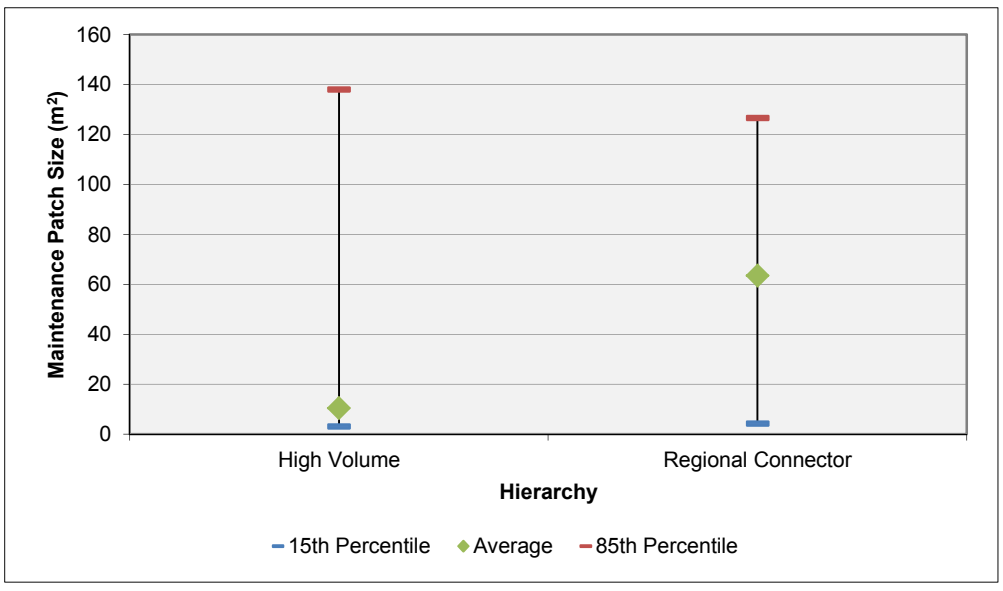
Breakdown of 10 Year FWP by Treatment Type



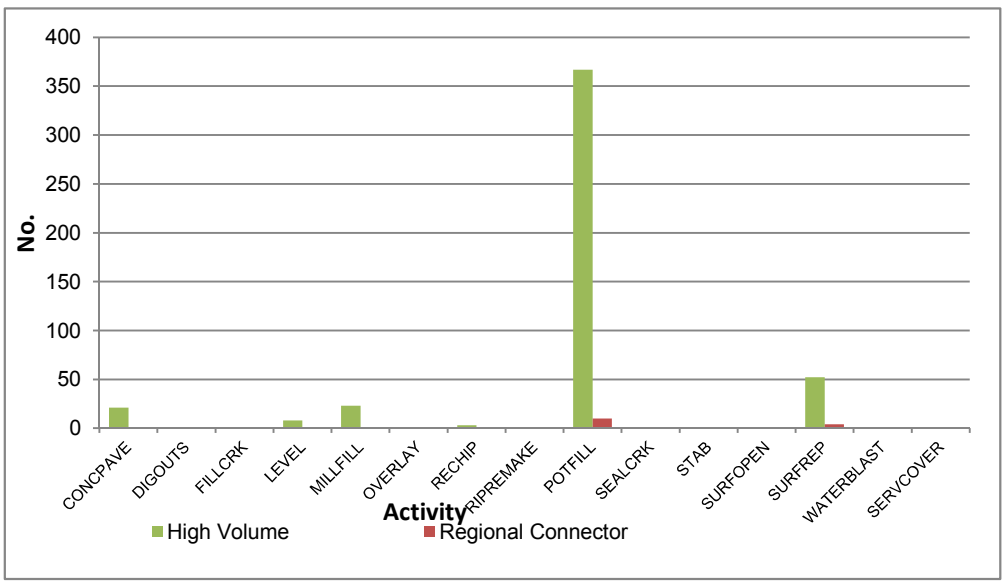
Signalised Intersections in RAMM

Road Name	Total
Entire Network	359

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	7
Advance direction (Stack) - "T" intersection	8
Bus LANE "_____" (Specified time)	2
Feature TURN left/right "_____"m	1
Four services "_____"m ON left/right	1
Four services TURN left/right "_____"m	6
Intersection Direction - "T"	1
One service TURN left/right "_____"m	1
SLOW VEHICLE BAY "_____"m	1
TOURIST DRIVE "_____"km FOLLOW route marker	2
Advance Direction - Street name sign	3
Advance Exit	90
Advance Exit (Overhead)	124
Advance direction (Map) - Roundabout	17
Advance direction (Stack) - Cross roads	13
Advance direction (Stack) - Skew intersection	11
Advanced lane direction [Arrow]	23
Advanced lane direction [Message]	36
Bus LANE AHEAD	2
Chevron Board	1
Confirmation Destination	24
Confirmatory Destination	89
DESTINATION (Stack)	4
EXIT	3
Exit (Overhead)	5
Exit Direction	31
Exit Direction (Overhead)	61
GIVE WAY	1

End Treatments in RAMM

End Treatment Type	No.
Armorflex X 350	209
Armorwire Terminal End	6
Breakaway Cable Terminal Unit	8
Breakaway Cable Terminal (Bull Nose)	499
Bridge Plate/Bridge Connector	406
Brifen Terminal	0
Buried in Back Slope	1
Cable end	2
CAT 350	27
ET2000	0
Fishtail/Butterfly end	341
Fleat 350	228
Great System Crash Units	7
M23 Compliant	119
Not Applicable	1301
Steel Wire Rope End Anchor Block	51
TAU II	17
Terminal end	738
Trailing End Anchor Units	13
TR Attenuating Crash Cushion	1
Texas Twist	4
Unknown	185
Total	4163

Large Signs >4.0m^2

Sign Type	No.
Information (Miscellaneous Sign) - User Defined	25
Intersection Direction	1
Intersection Direction [Arrow] and St. name sign	4
Intersection Direction - Urban	2
Intersection Direction - with route marker	7
Intersection Direction [Arrow]	5
LANE ENDS 200 metres	14
MOTORWAY BEGINS	3
MOTORWAY ENDS	3
MOTORWAY ENDS 400 m	1
Major tourist attractions - special information	1
Motorist Amentities	1
SLOW - LANE CONTROL	1
SLOW VEHICLE BAY [Arrow]	6
Speed Limit 50km/h with PN-1	2
Threshold Sign - Place Name + Speed Limit	10
Tourist Heritage Trail	1
USE LEFT LANE UNLESS PASSING	1
Warning (Miscellaneous Sign) - User defined	15
Warning (Miscellaneous Sign) - User defined	1
Total	672

End Treatments in RAMM

End Treatment Type	No.

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	389,970
Epoxy resin (for coloured surfacings)	131
Raised Pavement Marker	832,170
Paint	221,081
Reflectorised Paint	179,691
Thermoplastic Audible	398,564
Thermoplastic - cold	115,919
Long Life Flat	58,996
Long Life Profile	51,061
Unknown	17,759

Weigh Stations

Road Name	Location	Side
01N-0414-I	8556	Left
01N-0423-R1	159	Left
01N-0461/01.31-I	2245	Centre
022-0000/00.14-D	518	Right
Total	4	

Footpath and CycleWays

Road Name	Location	Notes
01N-0462-R4	0	0
01N-0462-R2	0	50m length

Gantries

Road Name	Total
Entire Network	477

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 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
Surfacing	% of Network surfaced in RAMM over previous 4 – 15 months	Total length of Network with surface date in the last year / 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 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
	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
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 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
	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 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	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