

# One Size Doesn't Fit All

## Reconciling Overlapping Transport Networks in a Constrained Urban Environment

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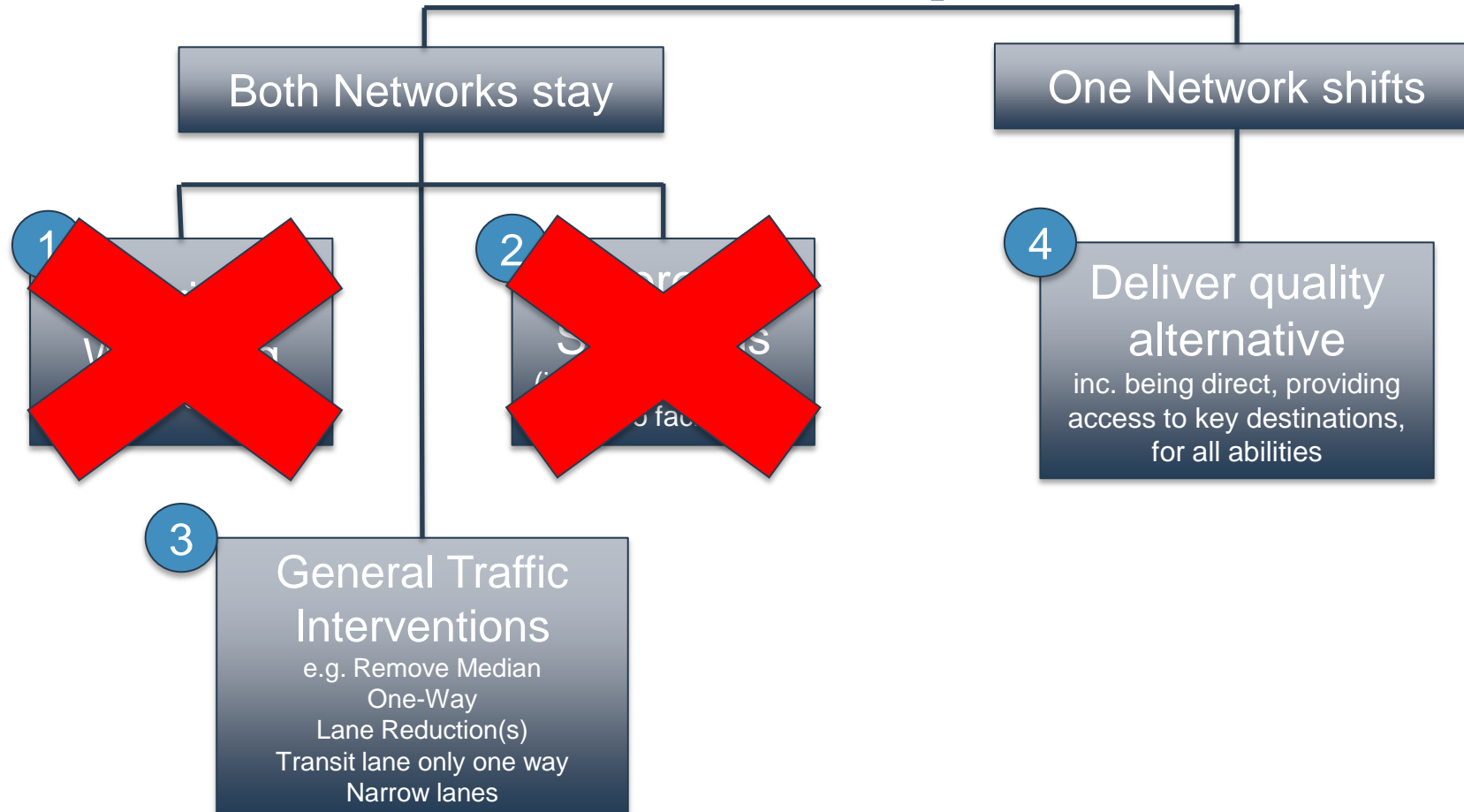
IPENZ Transportation Group Conference  
24 March 2015



# Problem Statements

1. AT has significant overlap in the proposed modal networks
2. Proposed completed modal network maps that are unlikely to be delivered to required standard as shown
3. Corridor Management Plans (CMPs) have been making a call on the priority, individual corridor by corridor, without resolving implications at a modal network level
4. AT is missing opportunities (e.g. renewals, bus lanes, cycle facilities, CMPs) in these corridors without clear and *shared agreement* on their intended future priority

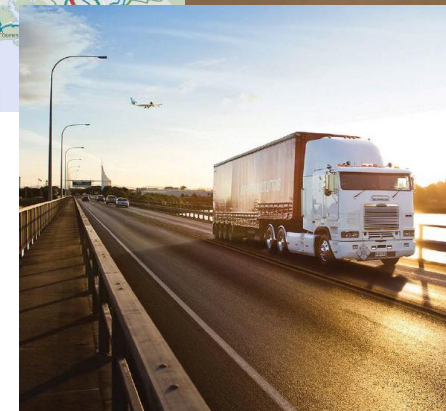
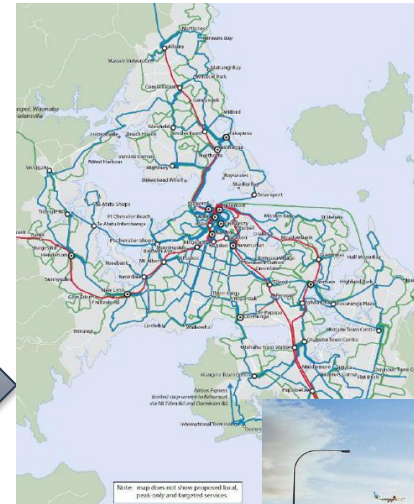
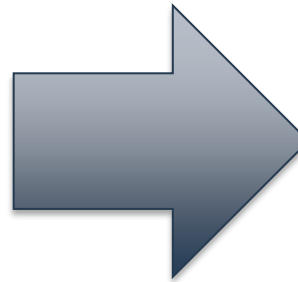
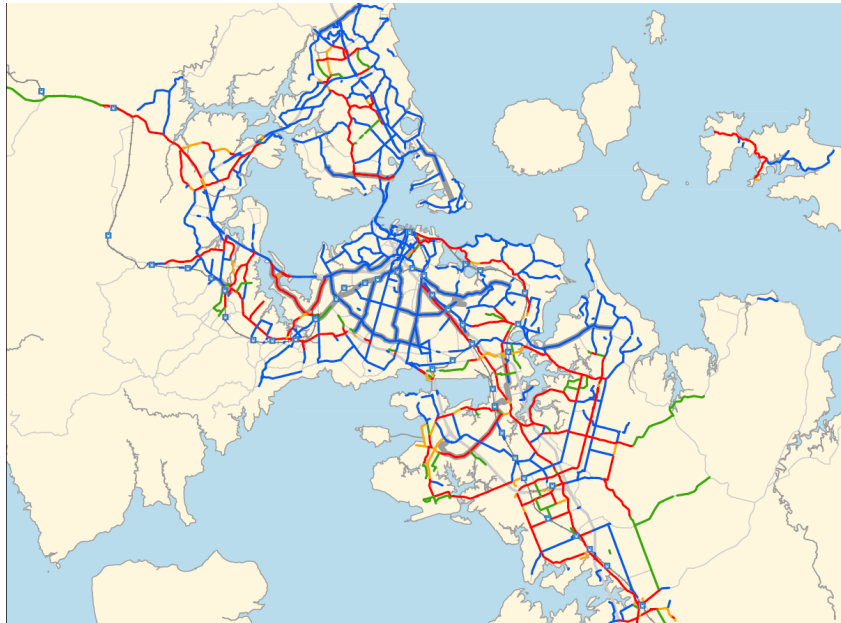
# Options to address each case of overlap



# Draft principles in approaching the options

- All generally require parking removal
- Town centre treatments excluded- to be considered separately
- If an alternative is to be provided:
  - It is to be invested in properly
  - Confident cyclists can still use main corridor
- Lack of funding to widen corridors (in the isthmus) to accommodate all transport networks

# Success looks like



A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	JJ	JK	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ
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# Scope of work

Outside of  
local Road  
Network

3

## General Traffic Interventions

e.g. Remove Median, One-Way, Lane Reduction(s), Transit lane only one way, Narrow lanes

4

## Deliver quality alternative

inc. being direct, providing access to key destinations, for all abilities

Investigate  
Rail  
Corridor

Investigate  
Motorway  
Corridor

Investigating  
Tidal Vehicle  
Lanes

Median  
Investigations

Neighbourhood  
Greenways/Bicycle  
Blvds

Level of Traffic  
Stress

Major Network  
Changes e.g.  
Waterview  
Opening

Locations of  
oversupply e.g.  
Nelson St

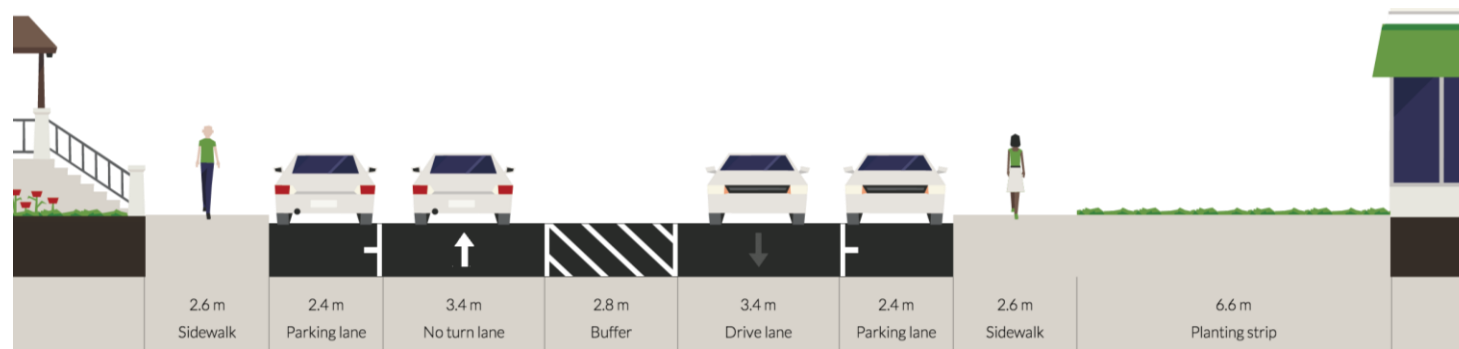
Local Board  
Greenway  
Plans

Parallel Public  
Transport  
Routes

# Investigate Rail & Motorway Corridors



# Investigating Medians



3

# Tidal Vehicle Lanes

## Auckland Harbour Bridge



## Johnston Street, Melbourne



# Major Network Changes

e.g. Waterview opening - Where extra capacity might be being created

Table 6.5 – Predicted Daily Flows on Arterial Routes

Location	Scenarios						
	2006	2016 DM	2016 OPT	Change	2026 DM	2026 OPT	Change
Manukau Road (south of Greenlane)	31,400	30,900	28,900	-2,000 (-6%)	30,900	28,500	-2,400 (-8%)
Gilies Avenue	16,200	17,900	12,100	-5,800 (-32%)	20,100	10,700	-9,400 (-47%)
Mt Eden Road	22,300	22,100	19,900	-2,200 (-10%)	21,700	19,000	-2,700 (-12%)
New North Road	29,800	28,600	29,600	1,000 (3%)	28,200	29,200	1,000 (4%)
Dominion Road	16,900	21,600	16,900	-4,700 (-22%)	21,600	16,800	-4,800 (-22%)
Sandringham Road	14,700	15,600	13,200	-2,400 (-15%)	15,400	12,900	-2,500 (-16%)
Tiverton/Wolverton	17,800	27,300	23,700	-3,600 (-13%)	28,400	24,300	-4,100 (-14%)
Mt Albert Road	18,600	16,600	14,300	-2,300 (-14%)	16,400	13,000	-3,400 (-21%)
Carrington Road	28,100	30,800	23,000	-7,800 (-25%)	32,400	23,000	-9,400 (-29%)
Great North Road (West of New Lynn)	37,000	35,800	33,100	-2,700 (-8%)	37,800	34,700	-3,100 (-8%)
Great North Road (north of Blockhouse Bay Road)	48,200	46,700	42,700	-4,000 (-9%)	46,300	42,200	-4,100 (-9%)
Rosebank Road	25,000	25,700	25,800	100 (0%)	27,200	27,400	200 (1%)
Blockhouse Bay Road	13,600	15,100	10,300	-4,800 (-32%)	15,200	10,300	-4,900 (-32%)
St Lukes Road	30,600	34,400	27,700	-6,700 (-19%)	34,600	26,500	-8,100 (-23%)
Te Atatu Road	42,800	43,300	46,200	2,900 (7%)	44,100	48,400	4,300 (10%)
Lincoln Road	44,800	44,400	44,200	-200 (0%)	48,800	49,900	1,100 (2%)

The average reduction across these radial routes is over 12% in 2016 and 14% in 2026 when the project is in place.

works



20-49% reduction across some roads

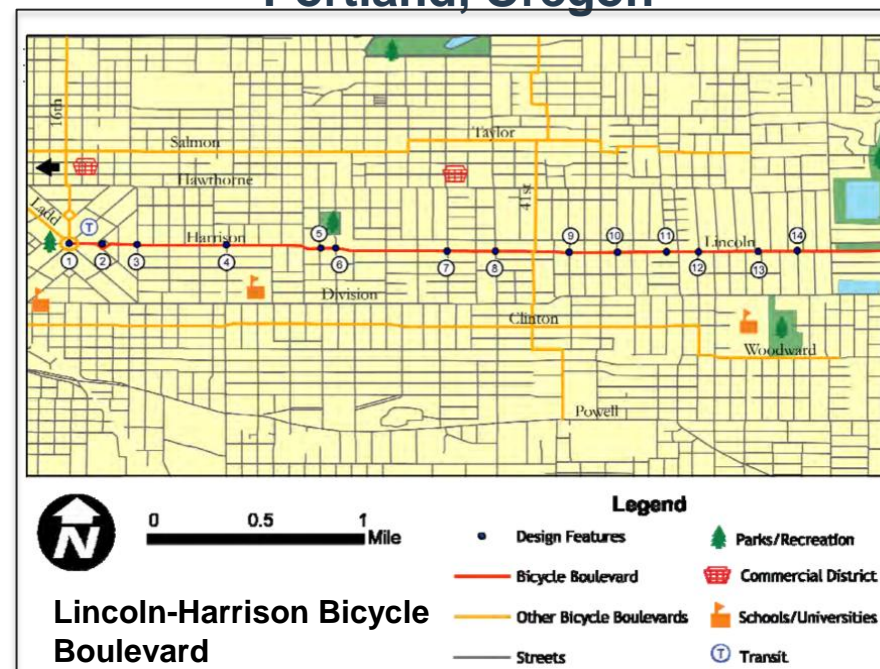
# Neighbourhood Greenways/Bicycle Boulevards

## Dominion Road



- Potential for a more direct parallel route that is useful to commuters

## Portland, Oregon

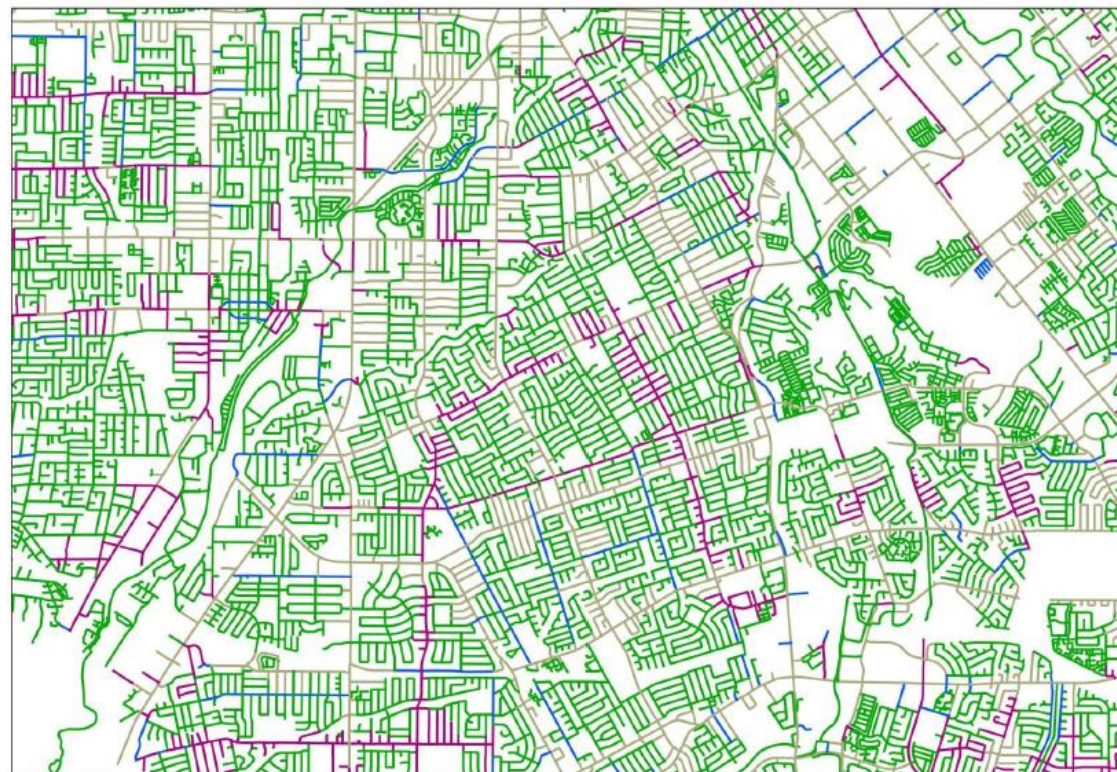
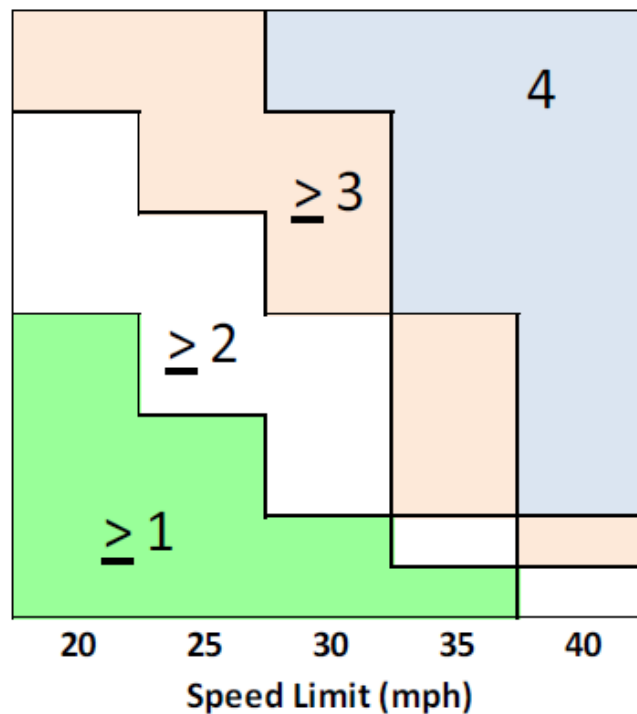


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# Level of Traffic Stress Analysis

Traffic volume  
(veh/day)

up to 6000  
up to 5500  
up to 5000  
up to 4500  
up to 4000  
up to 3500  
up to 3000  
up to 2500  
up to 2000  
up to 1500  
up to 1000  
up to 500

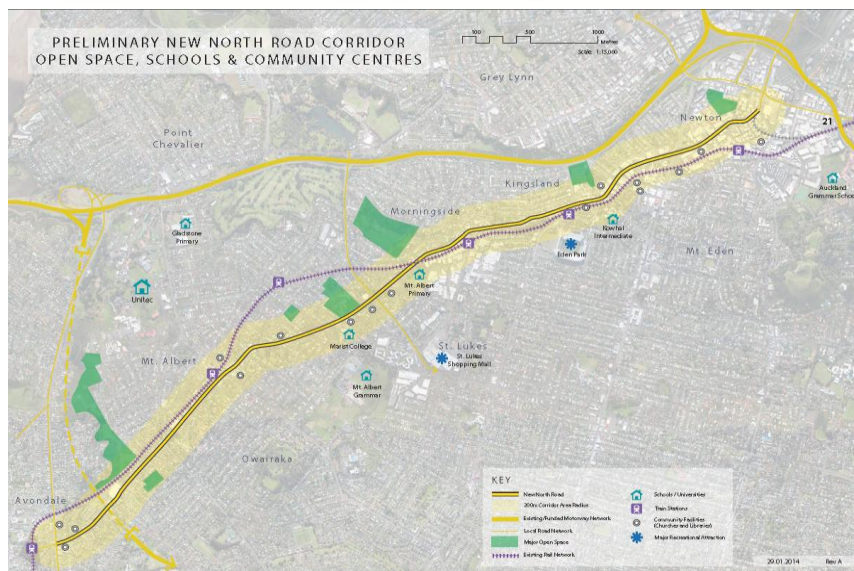


(green = LST 1, blue = LTS 2, purple = LTS 3, tan = LTS 4)

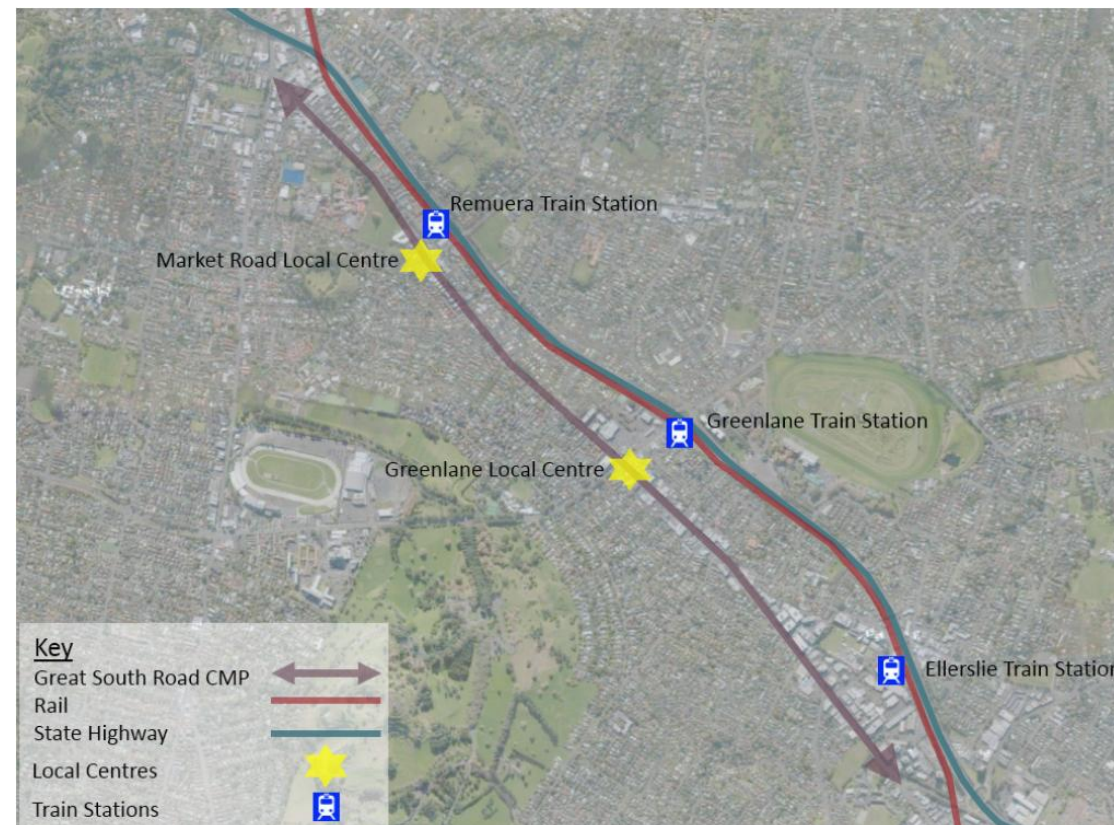
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# Parallel Public Transport Services

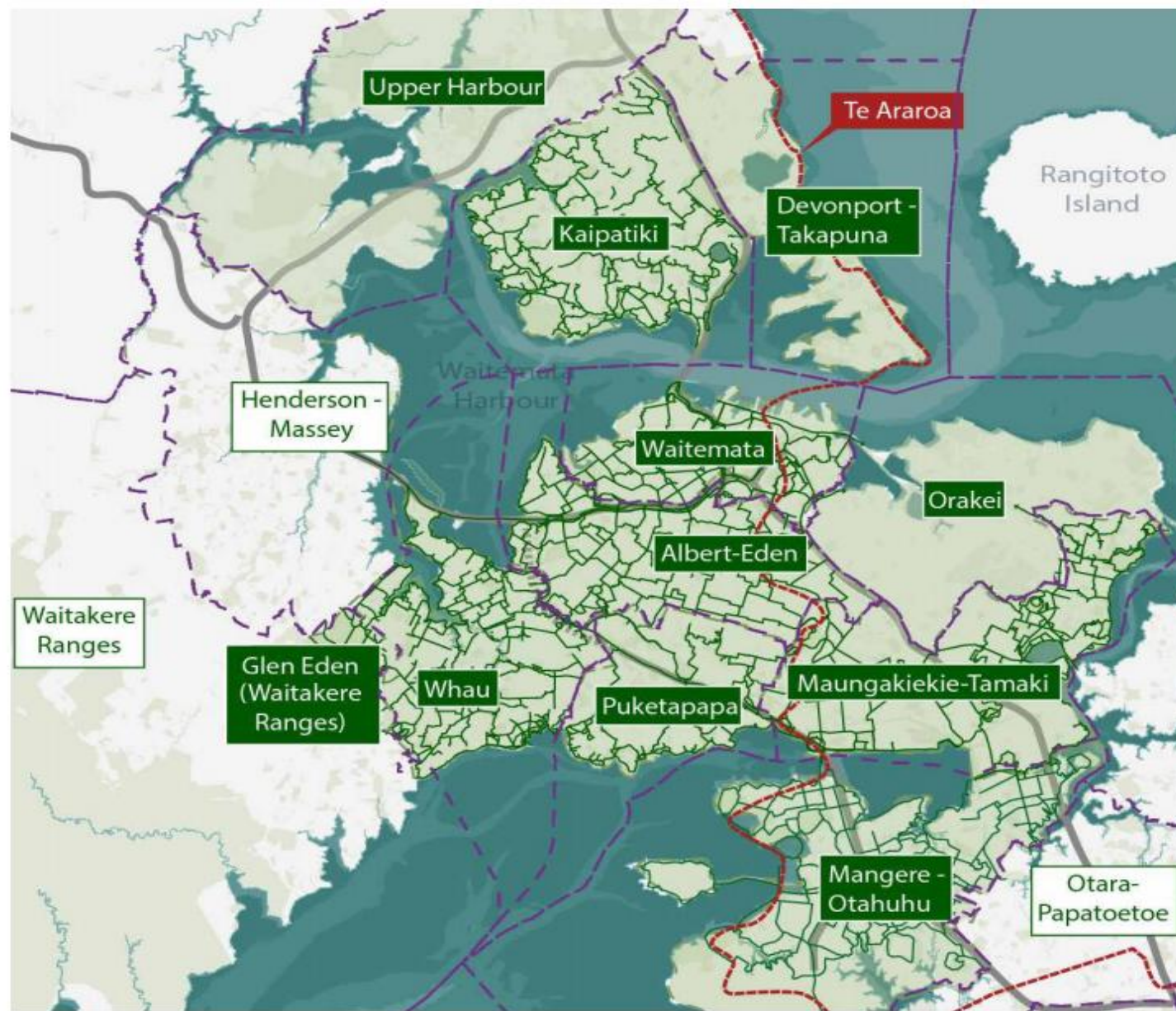
## New North Rd



## Great South Road



# Local Board Greenway Plans



# Conclusions

- Multi-modal network approach
- Clear objectives and principles
- In God We Trust, Everyone Else Bring Data
- Evaluate the options and make an informed decision

# Thank you.

# City Wide Planning

