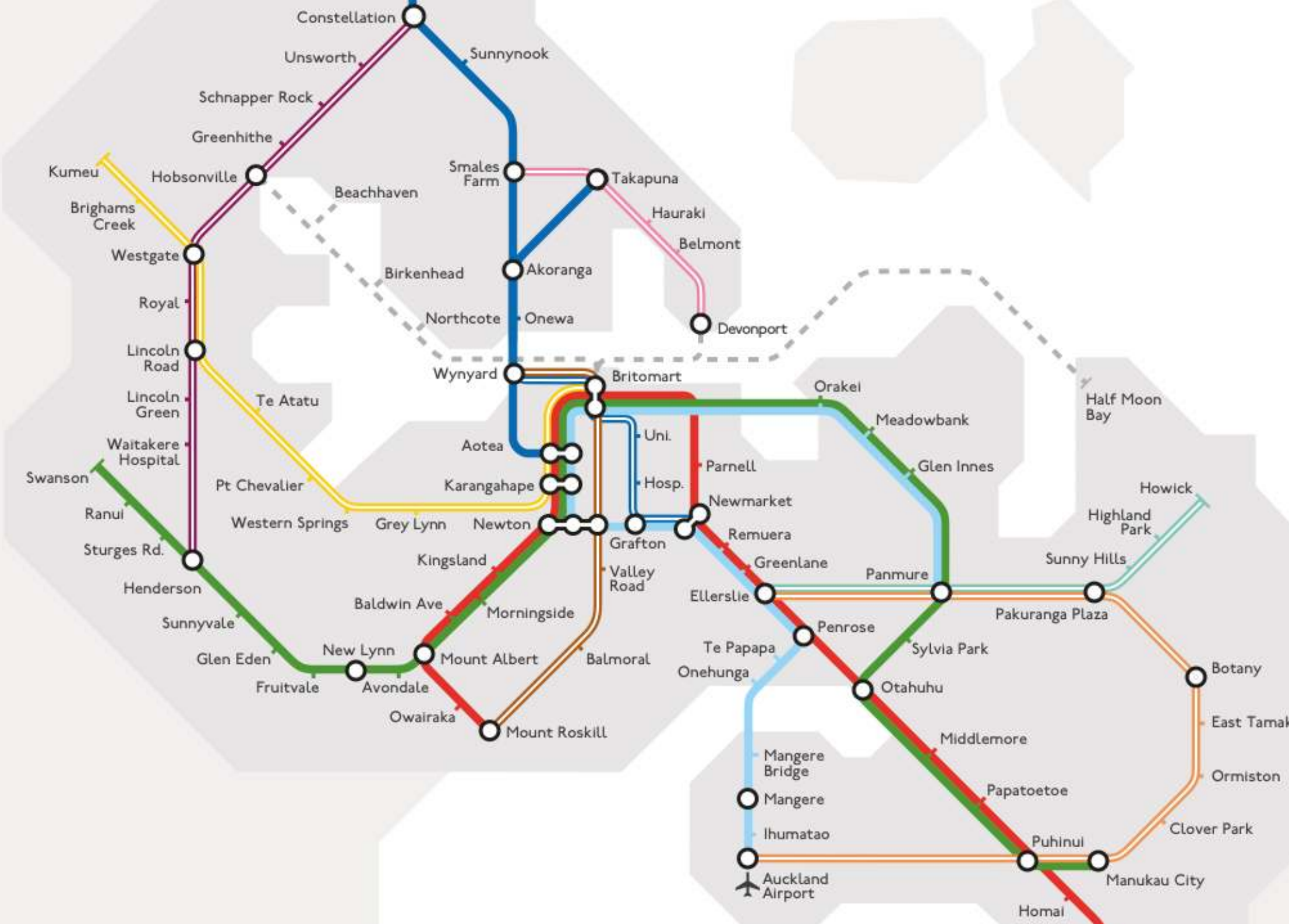


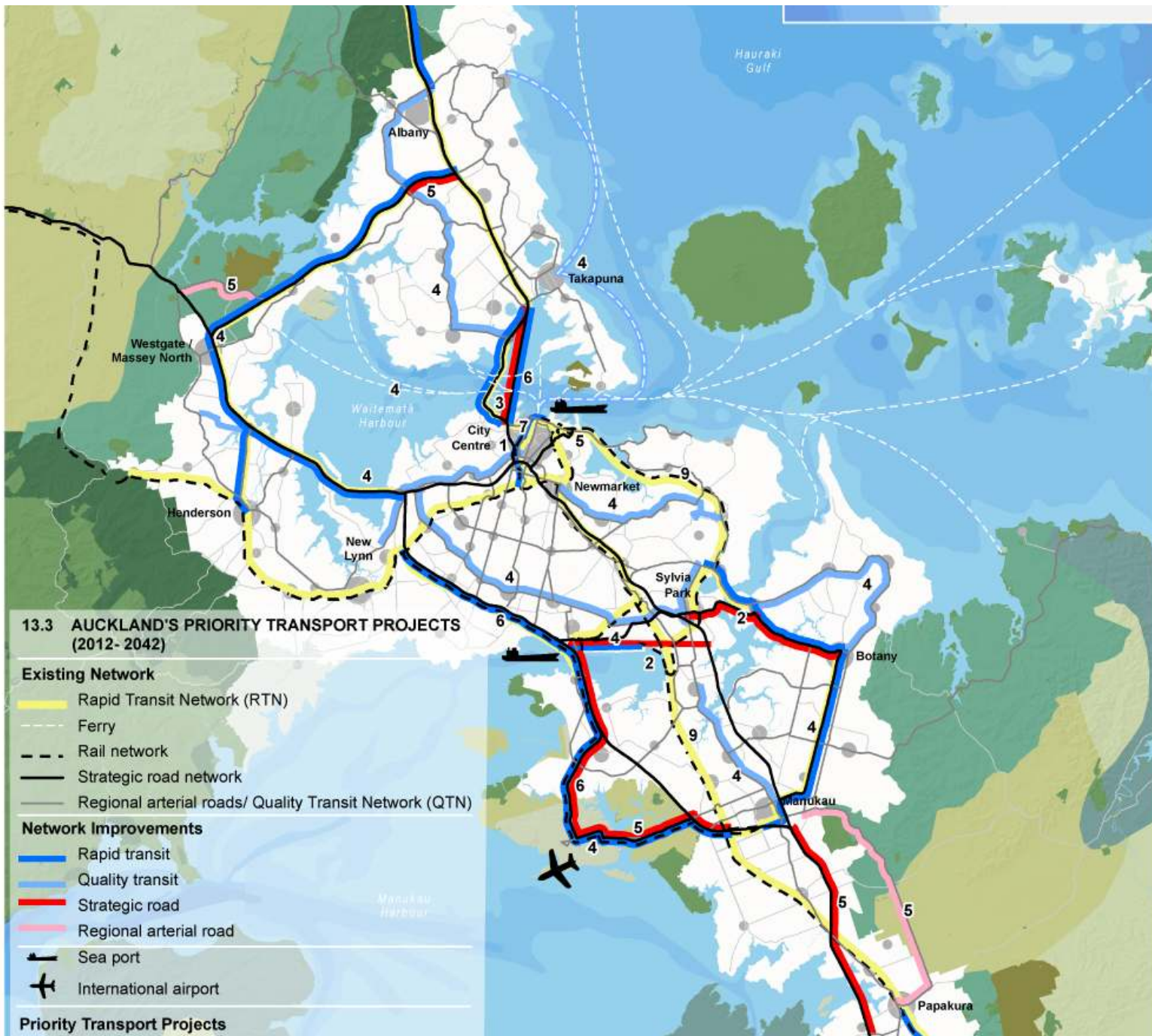
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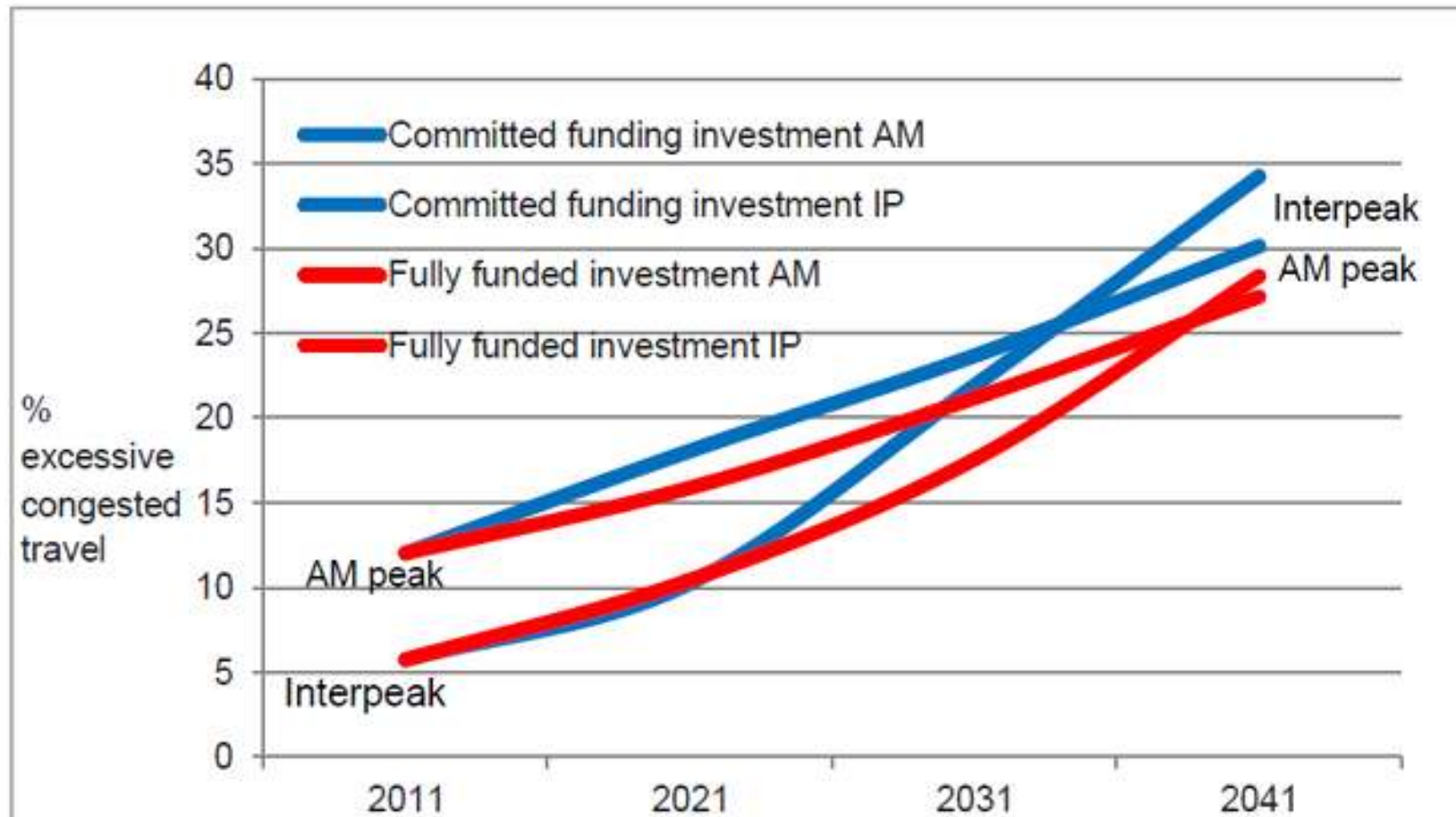




Integrated Transport Programme

- Based off projects in the Auckland Plan
- Models the impact of proposed transport investments
- \$68 billion in total spending, half on capital expenditure
- But what are the outcomes?

Congestion far worse than today – fully funded scenario makes little difference



CO2 emissions increase rather than decline

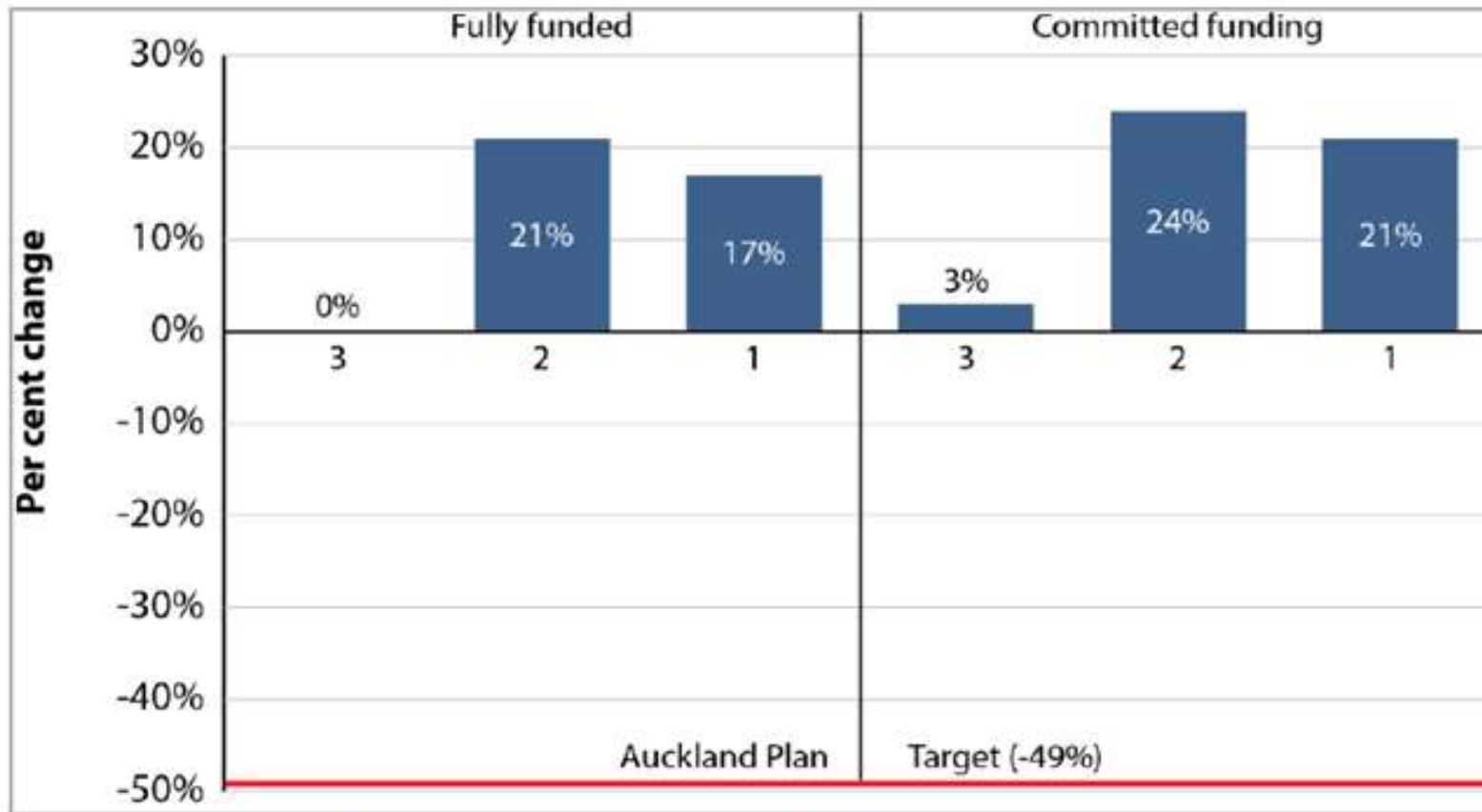


Figure 9: Growth in Co2 emissions: Present to 2040

Why are the ITP results so Bad?

- Continues transport strategies of last 60 years
- 70% of Capital Expenditure on more roads
- Not Visionary: Doesn't reflect current trends, continues to invest in unbalanced network
- Reinforces Auto-dependency: Missing PT projects delayed too long

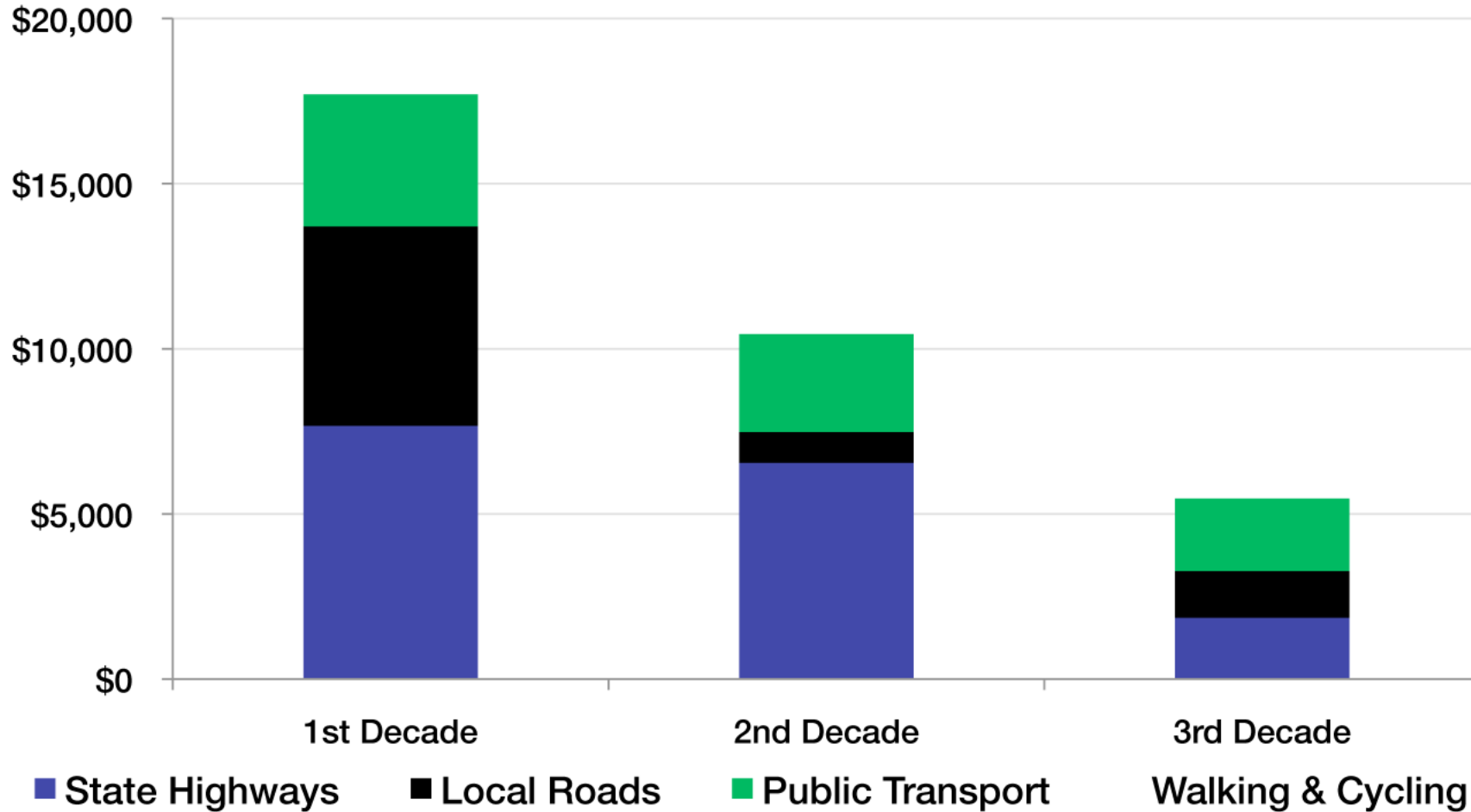
Roading Projects 2012-2041	
Major projects	\$m
Western Ring Route completion - Waterview to Westgate	\$1,970
SH1 widening Manurewa to Papakura	\$516
SH20A widening	\$235
Mill Road	\$239
AMETI	\$2,600
PENLINK	\$203
SH1 Constellation to Greville	\$36
SH1/SH18 direct connection ramps	\$500
SH20B four-laning	\$235
East West Link	\$632
Additional Waitamata Harbour Crossing	\$4,800
SH18 eastbound widening	\$30
St Lukes Rd Interchange	\$59
Tiverton-Wolverton	\$33
Albany Hwy upgrade	\$665
Lake Road upgrade	\$120
SH1 6-laning Albany to Orewa	\$1,100
SH20 Mangere to Puhinui 6-laning	\$180
Great South Road - Church to Portage	\$440
Great South Road - Atkinson to Tamaki River Bridge	\$240
Great South Road - Te Irirangi to Redoubt	\$140
Puhoi to Wellsford Motorway	\$1,760
SH16 4-laning Brigham Creek to Waimauku	\$150
Pukekohe Eastern Arterial	\$50
Warkworth Western Collector	\$4
Major projects total (\$m)	\$16,937
Auckland wide projects	\$m
Other urban arterial upgrades	\$2,500
Greenfields arterial roads	\$1,200
Greenfields state highway upgrades	\$1,800
Rail grade separations	\$350
Auckland wide projects total (\$m)	\$5,850
Grand Total (\$m)	\$22,787

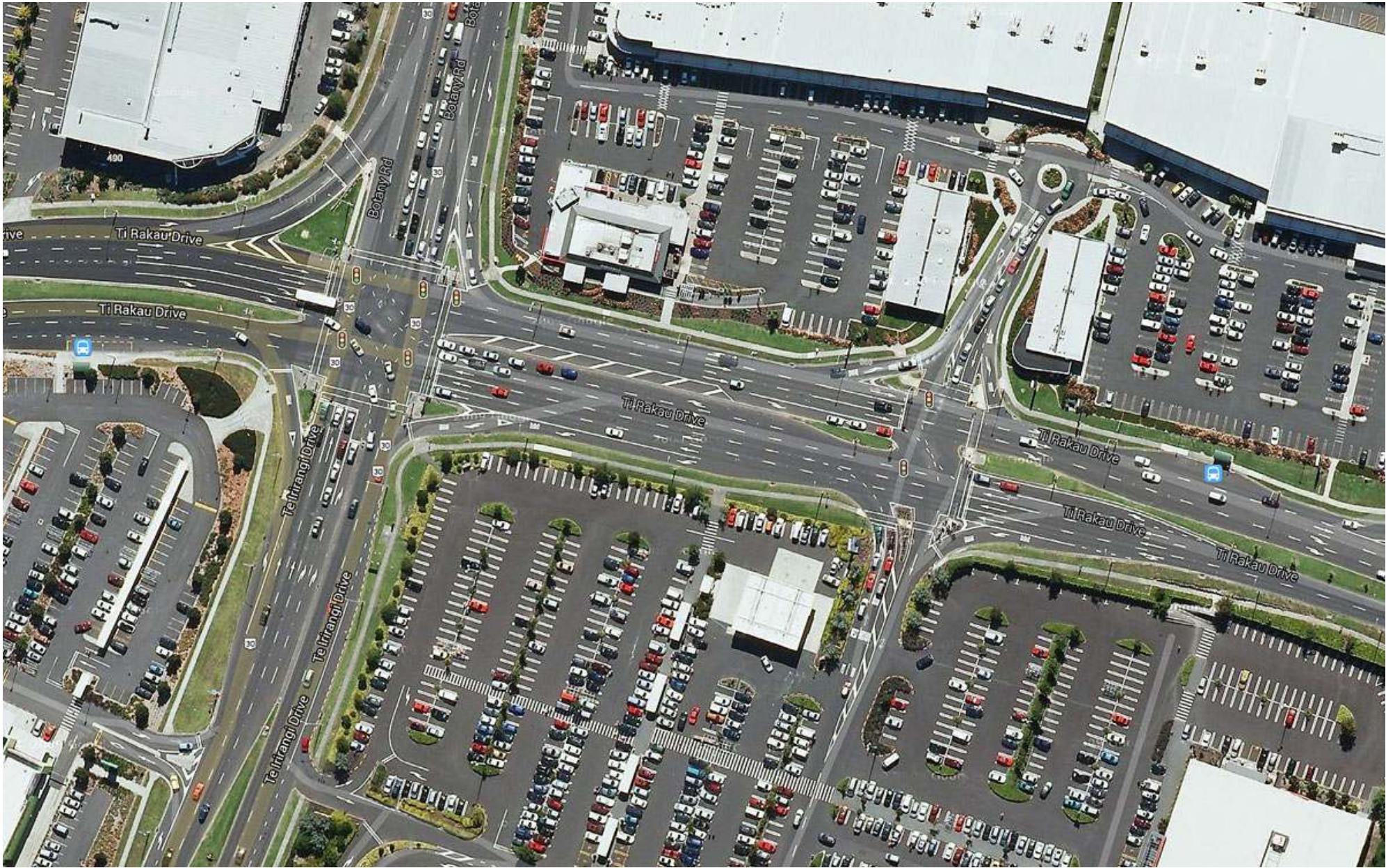
Public Transport Projects 2012-2041	
Major projects	\$m
City Rail Link	\$2,617
Northern Busway Extension	\$750
Bayswater Ferry Terminal upgrade	\$12
Dominion Road upgrade	\$82
Half Moon Bay Ferry Terminal upgrade	\$12
Southeastern Busway*	\$650
Botany - Manukau Rapid Transit	\$22
Manukau Bus Interchange	\$19
Third Rail Line: Westfield - Papakura	\$320
Third Rail Line: Britomart - Westfield	\$200
Airport Eastern Rail Link	\$602
Airport Northern Rail Link	\$491
Avondale-Onehunga/Southdown Rail Extension	\$1,000
Papakura-Pukekohe Electrification and stations	\$141
Constellation-Westgate-Waterview Busway	\$450
City Centre bus Improvements	\$250
SH20 Bus lanes and service improvements	UNKNOWN
Major projects total (\$m)	\$6,968
Auckland wide projects	\$m
Rail park and rides	\$100
Electric Multiple Unit rolling stock and depot	\$980
Integrated ticketing and fares	\$10
Real time information upgrade	\$17
Greenfields public transport infrastructure	\$400
Auckland wide projects total (\$m)	\$1,507
Grand Total (\$m)	\$8,475

* Cost not included in total as included in overall AMETI project

Integrated Transport Programme

ITP Capital Expenditure (Millions)









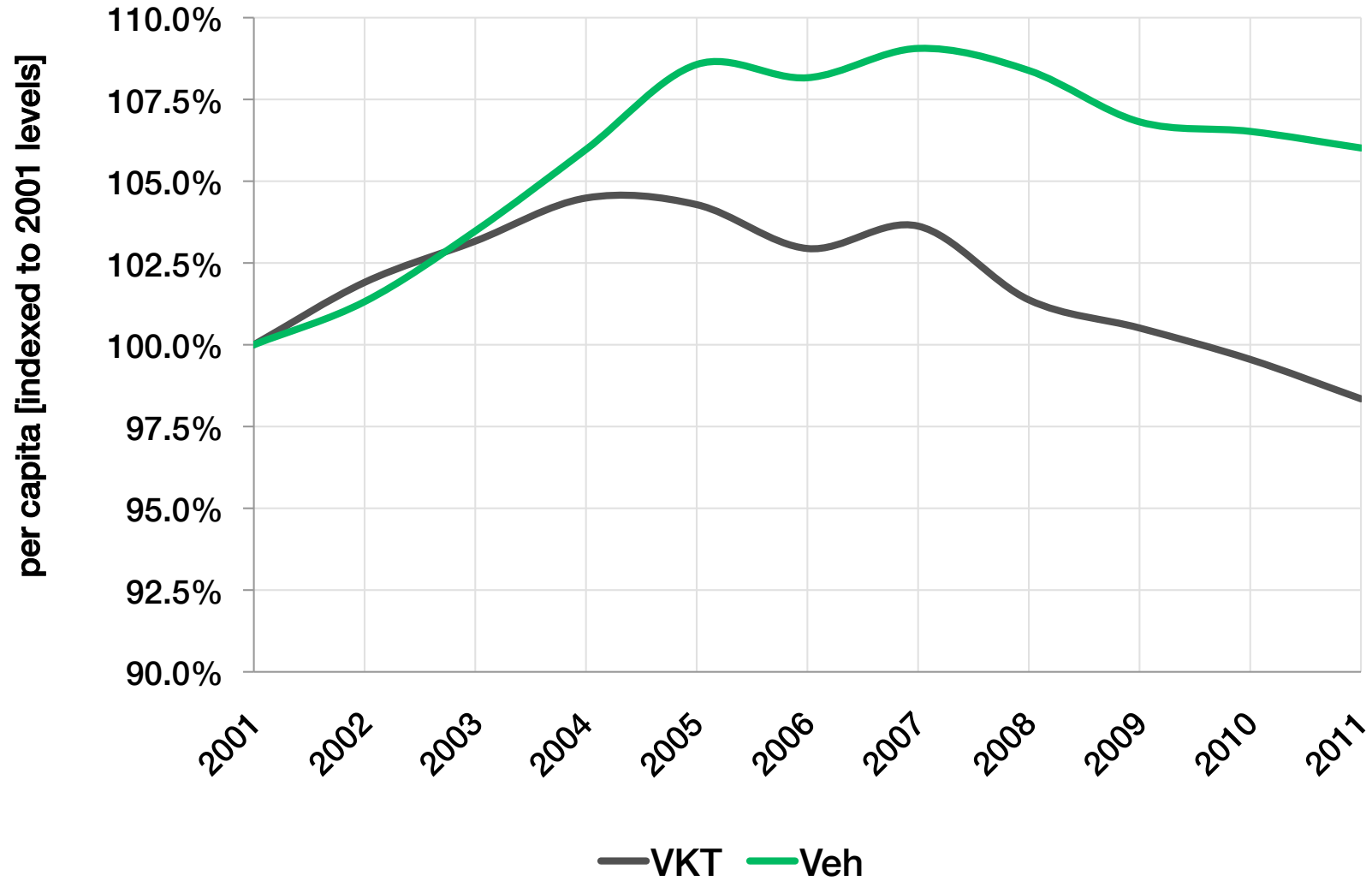
The ITP needs a rethink

- How to better deliver on Auckland Plan targets?
- How to provide better value for money?
- How to provide Auckland with the transport network it needs at 2-2.5 million people?
- How to meet the changing demands for urban connection.
- How to provide Aucklanders with real transport choice?

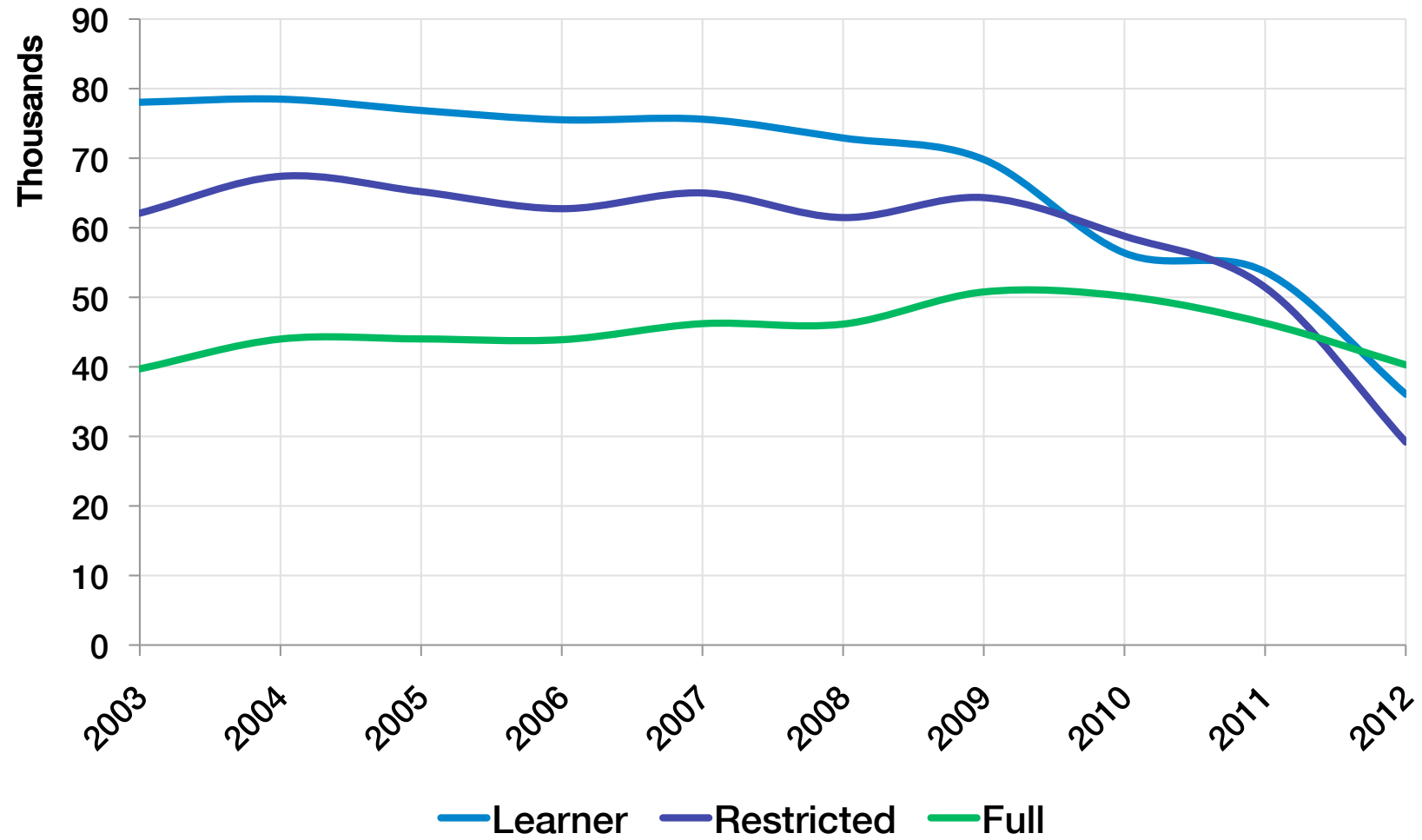
Changing Travel Trends

- ITP doesn't follow current transport trends
- Generational changes occurring
- Trends aren't unique to New Zealand

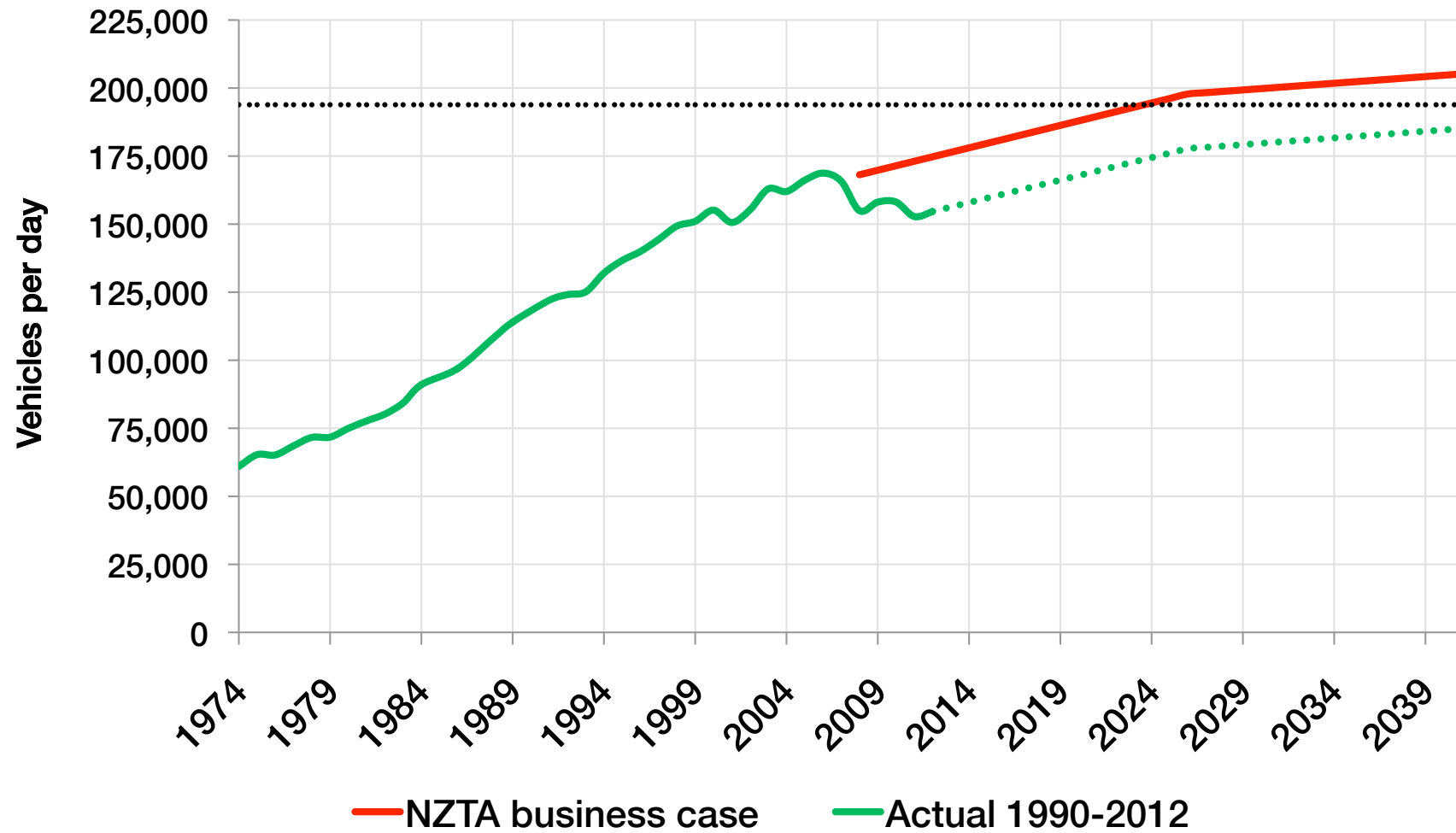
- Driving demands down



- Fewer driver licences issued

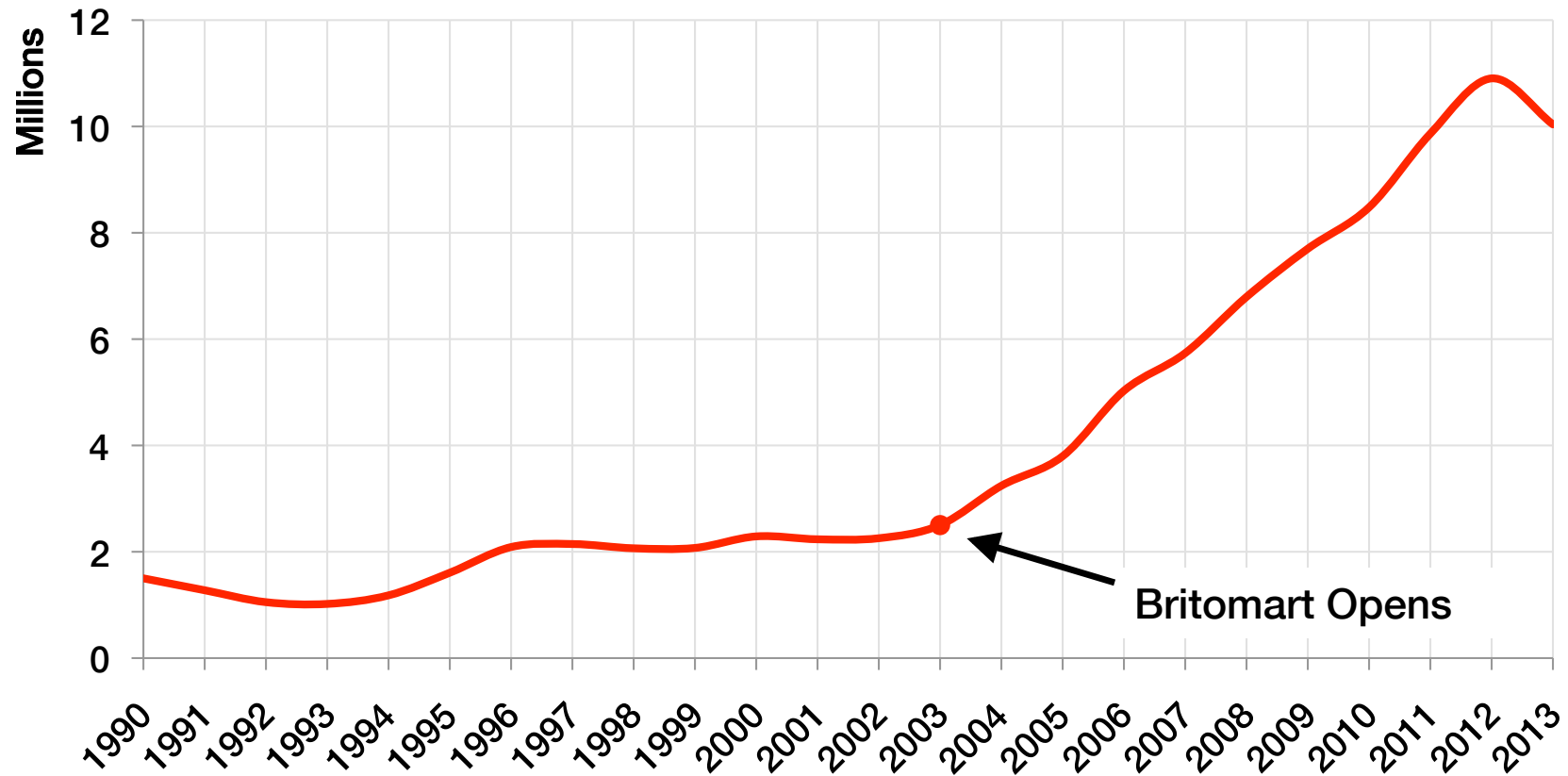


- Harbour Bridge actual vs. predicted



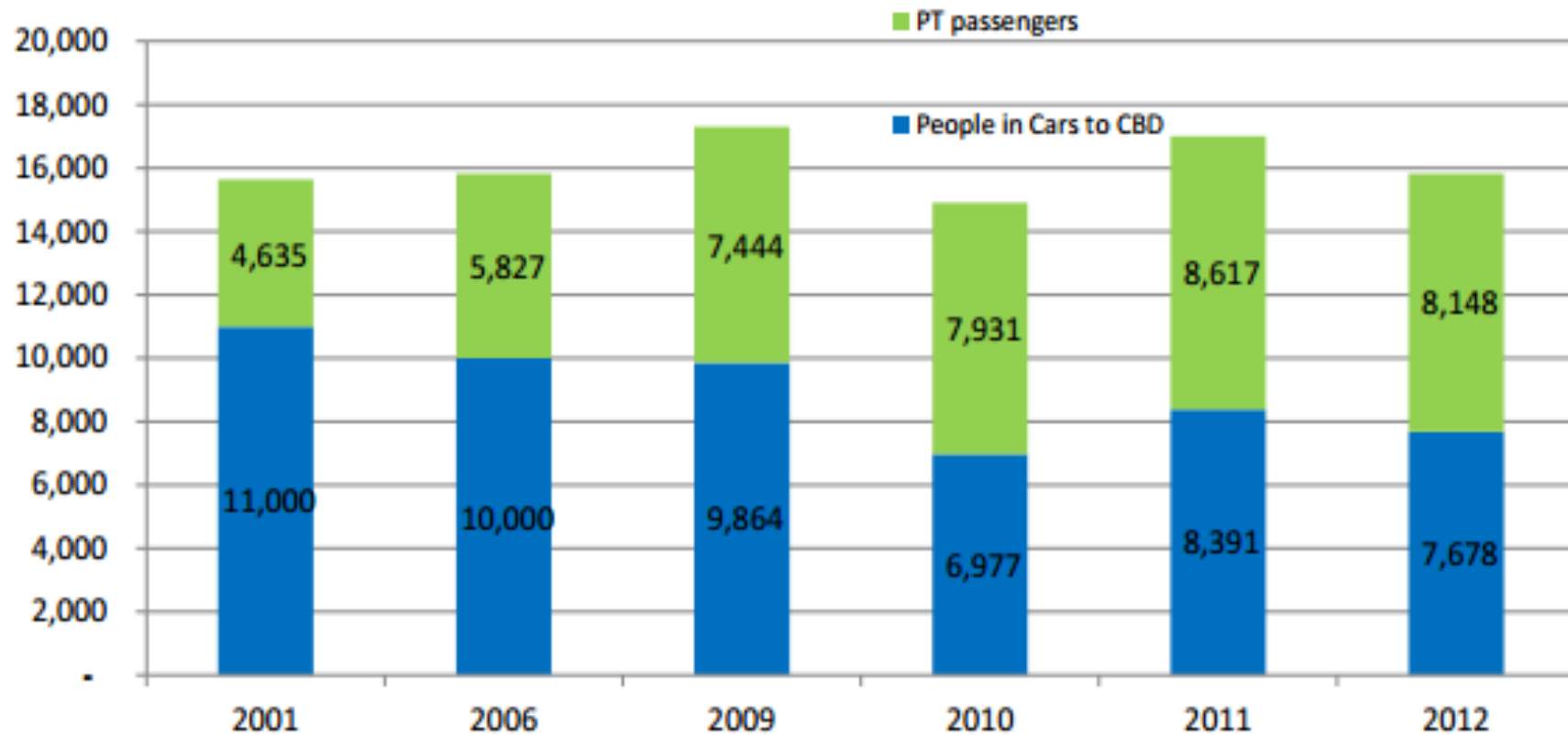
- Britomart opens in 2003
- Exceeded 2021 predicted usage in 2011

Annual Rail Patronage



- Northern Busway opens 2008
- AM Peak bus trips across Harbour Bridge increase from 18% to 41%

Person trips over the harbour bridge to the CBD 7-9 AM



Impact of investment in RTN

76% of the growth in public transport to the city centre since 2001 has been in Rail and the Northern Busway

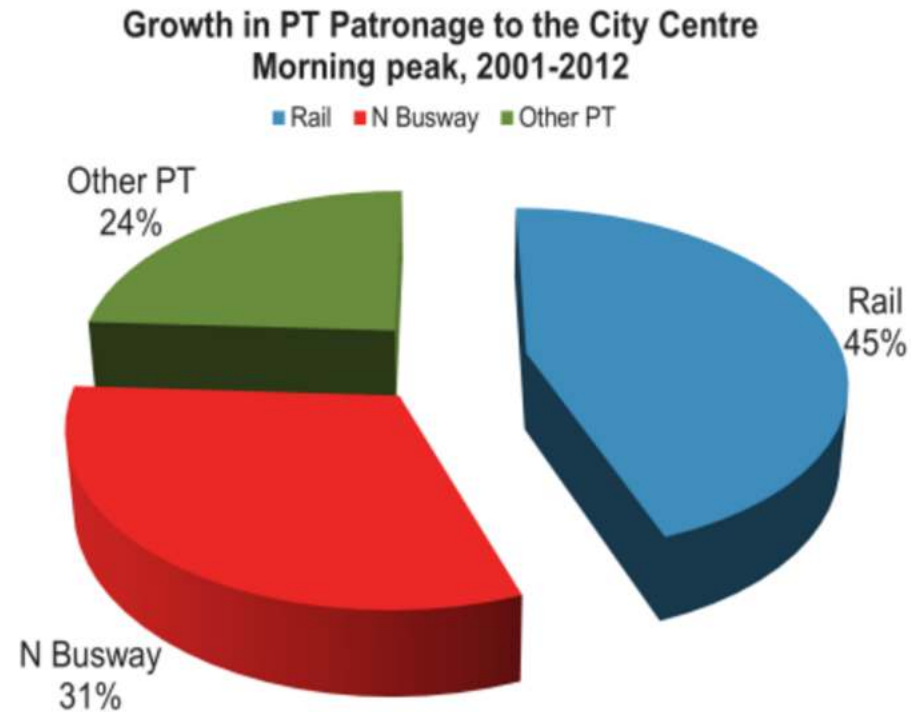
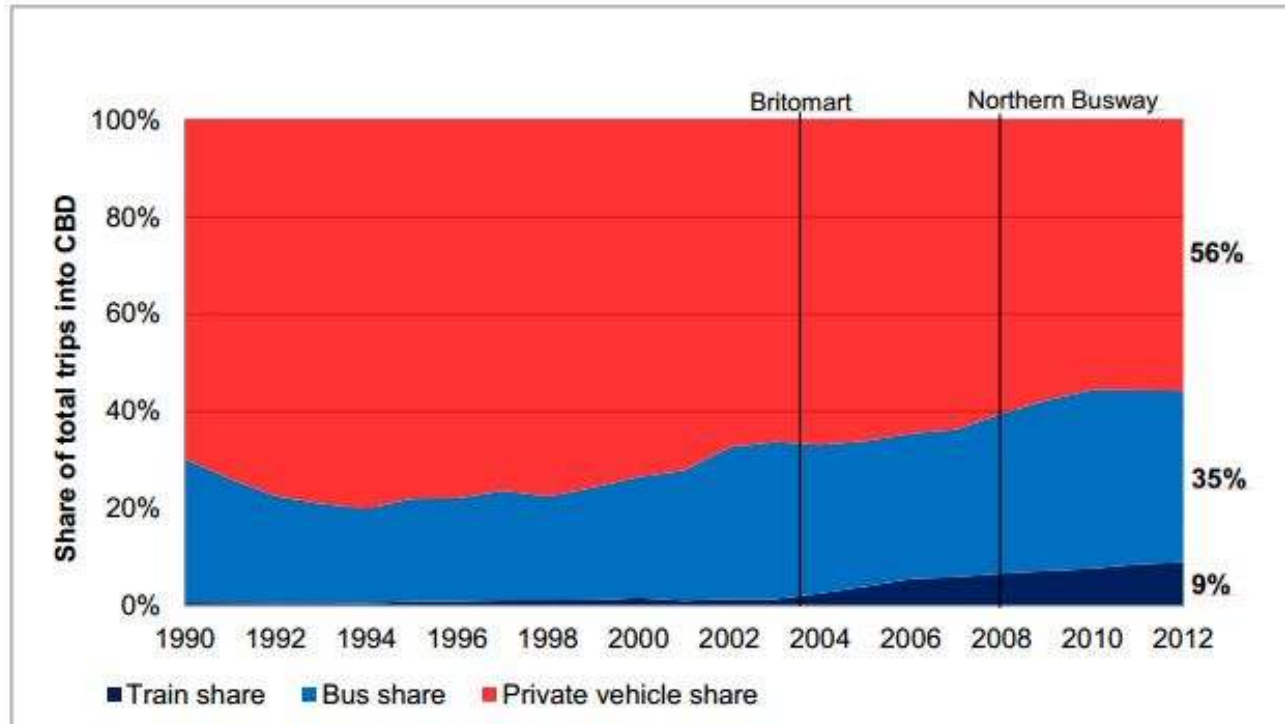
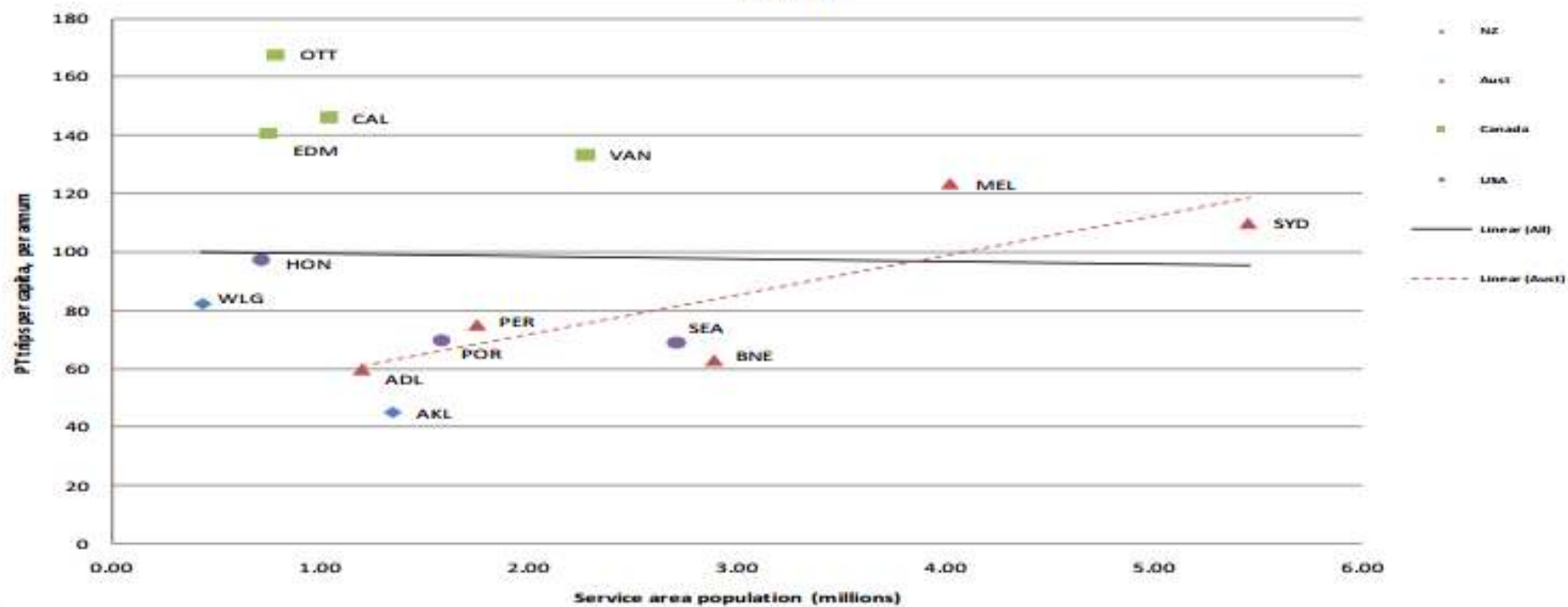


Figure 4.2: Estimated mode shares, morning peak travel to Auckland city centre



Source: AT data, PwC calculations.

Fig 3.2: PT annual patronage/cap by population, metro areas, 2008-2010*



*09/10 data for AKL, WLG, PER, ADL; *08/09 data for SYD, MEL, BNE

*2008 data for VAN, OTT, CAL, EDM, SEA, POR, HON

“Auckland, it should be noted, is in the same low range as the US cities in [Public Transport] service quantity per capita and considerably below all the other Australian/NZ cities. This probably reflects decades in which public transport has been given a relatively low priority.”

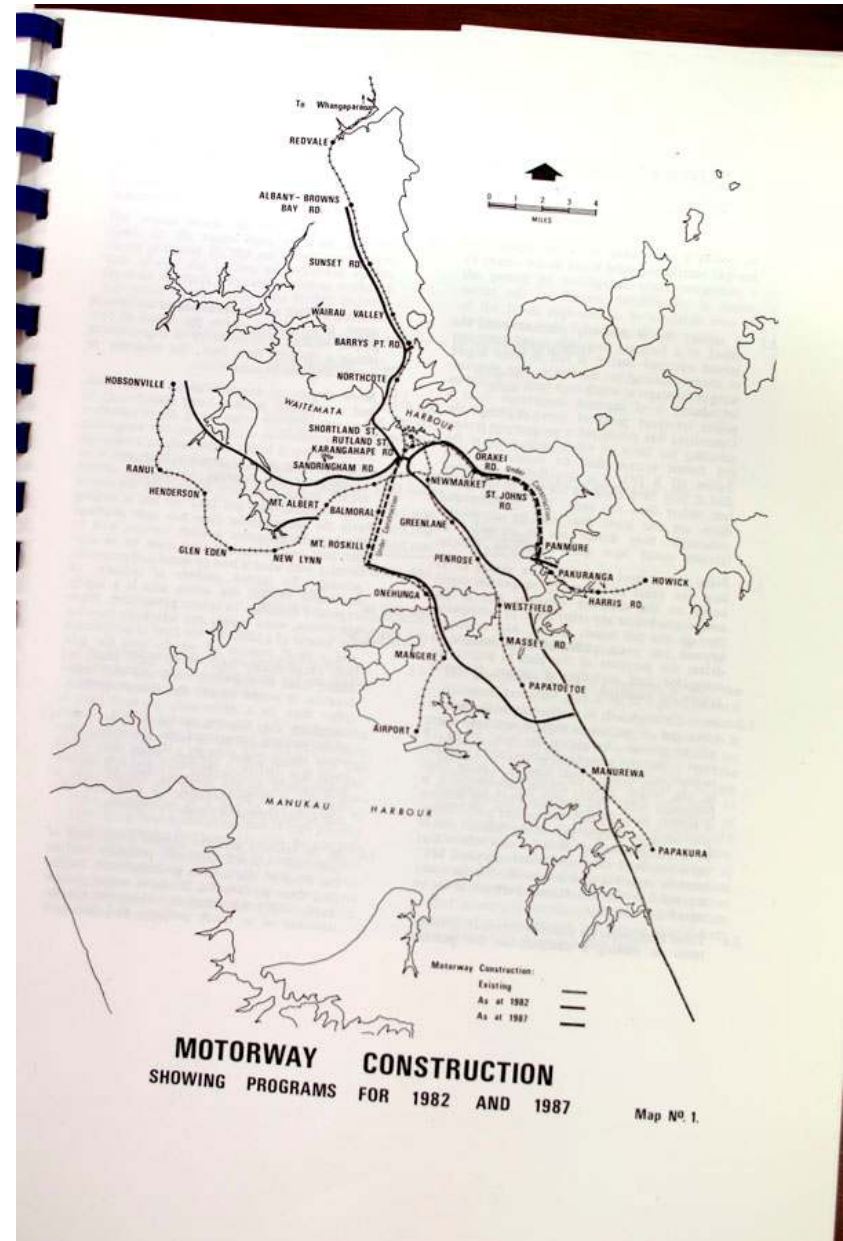
2011 Benchmark Study, Ian Wallis and Associates

A motorway only city was never the advice

De Leuw Cather 1965: Build motorways 'after the completion of the rapid transit network'

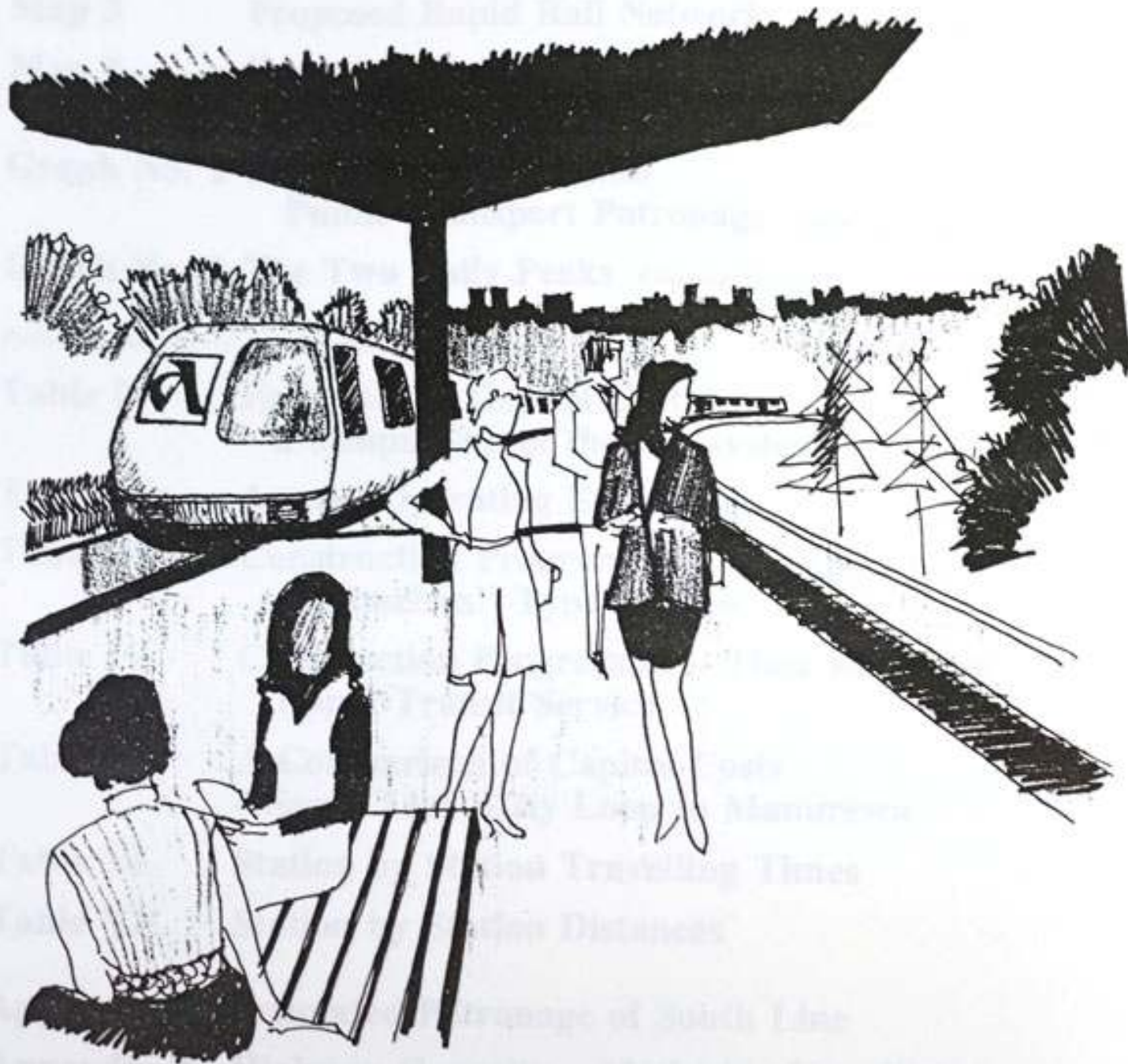
It is time to build this balance in Auckland

Investment in missing full Rapid Transit Network urgent priority



What did the study conclude was a key cause of AKL's underperformance?

- Relative to most of the comparator cities, a smaller proportion of AKL's PT travel is undertaken on 'rapid transit' services (ie services, whether rail-based or bus-based, that are largely segregated from general road traffic, and consequently have higher operating speeds and generally greater reliability):
 - A smaller proportion of AKL's PT travel is on rail-based services than is the case in any of the other Aust/NZ cities.
 - Additionally, AKL has only one true rapid transit bus corridor (Northern Busway), which is less than most of the other cities with a heavy bus emphasis (eg OTT, BNE).



The Revolution Begins



What is the Congestion Free Network?

- Separate right-of-way (busway, railway, light-rail etc.)
- High frequency – *turn up and go* with no need for timetables
- A connected and coherent network that fills in the gaps between current “bits and pieces”
- Top tier system supported by Frequent and Local PT Networks
- Most importantly – it’s **CONGESTION FREE**

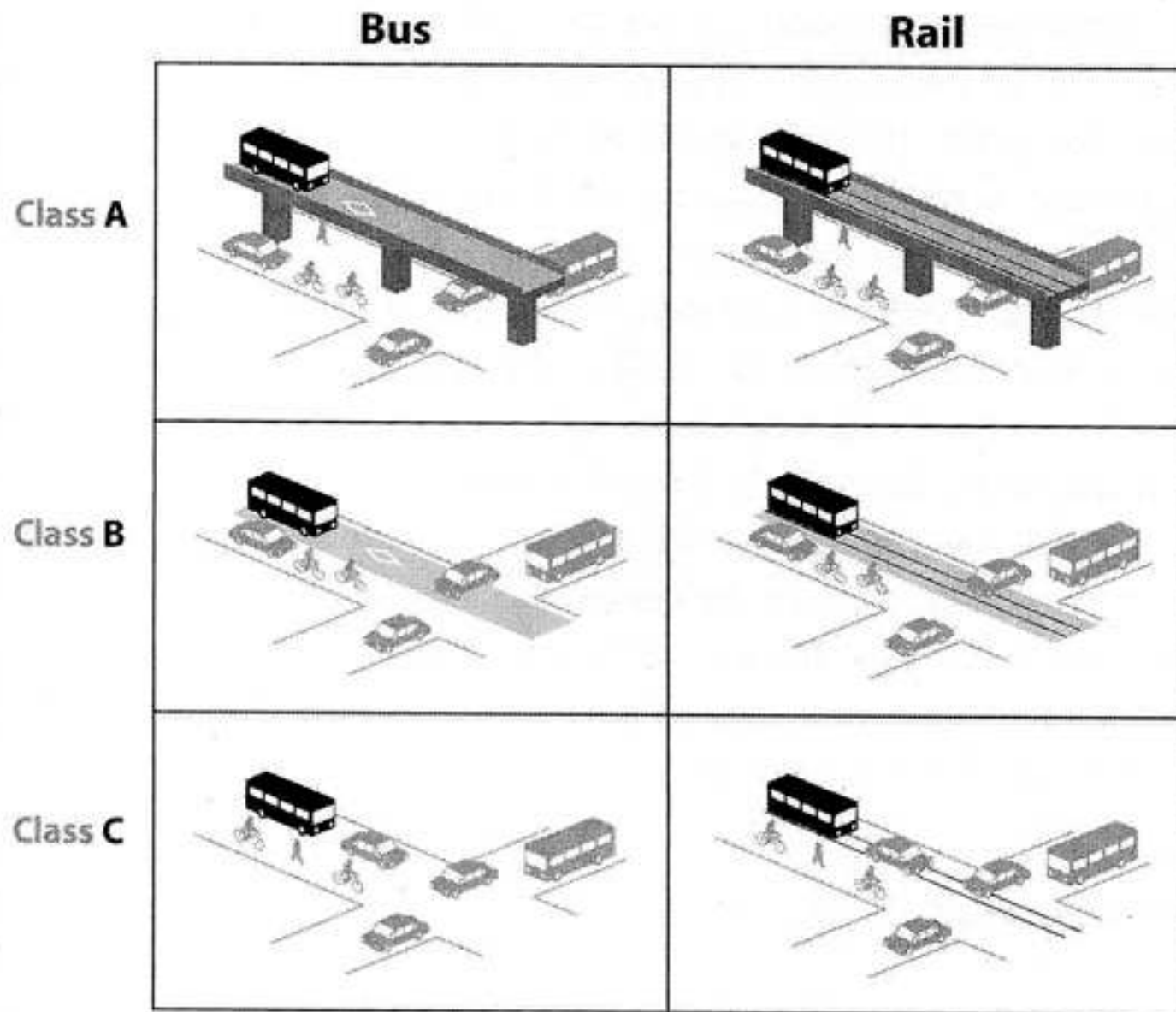


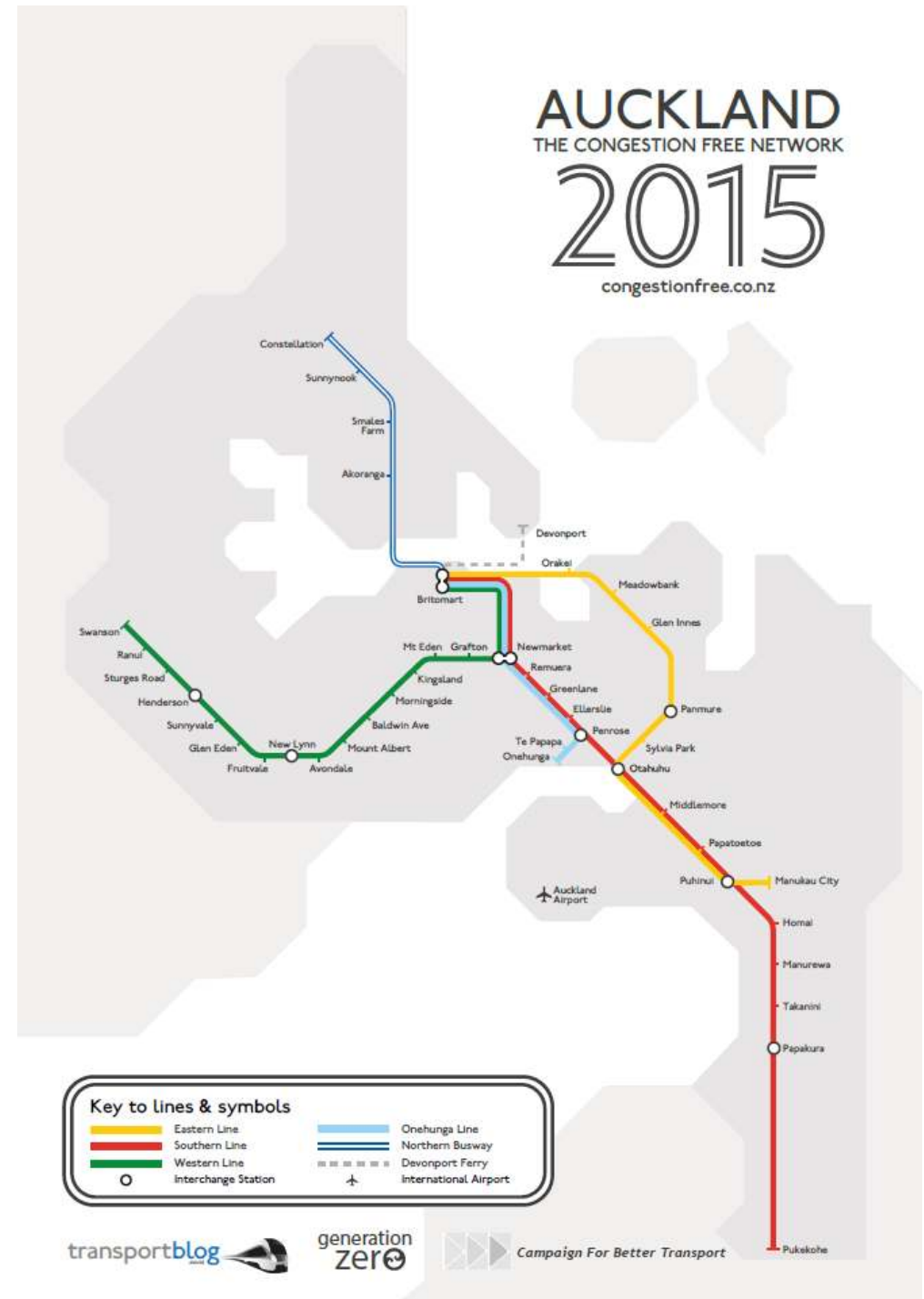
Figure 8-1 Three types of running way for bus or rail. *Credit: Alfred Twu*

Our Alternative



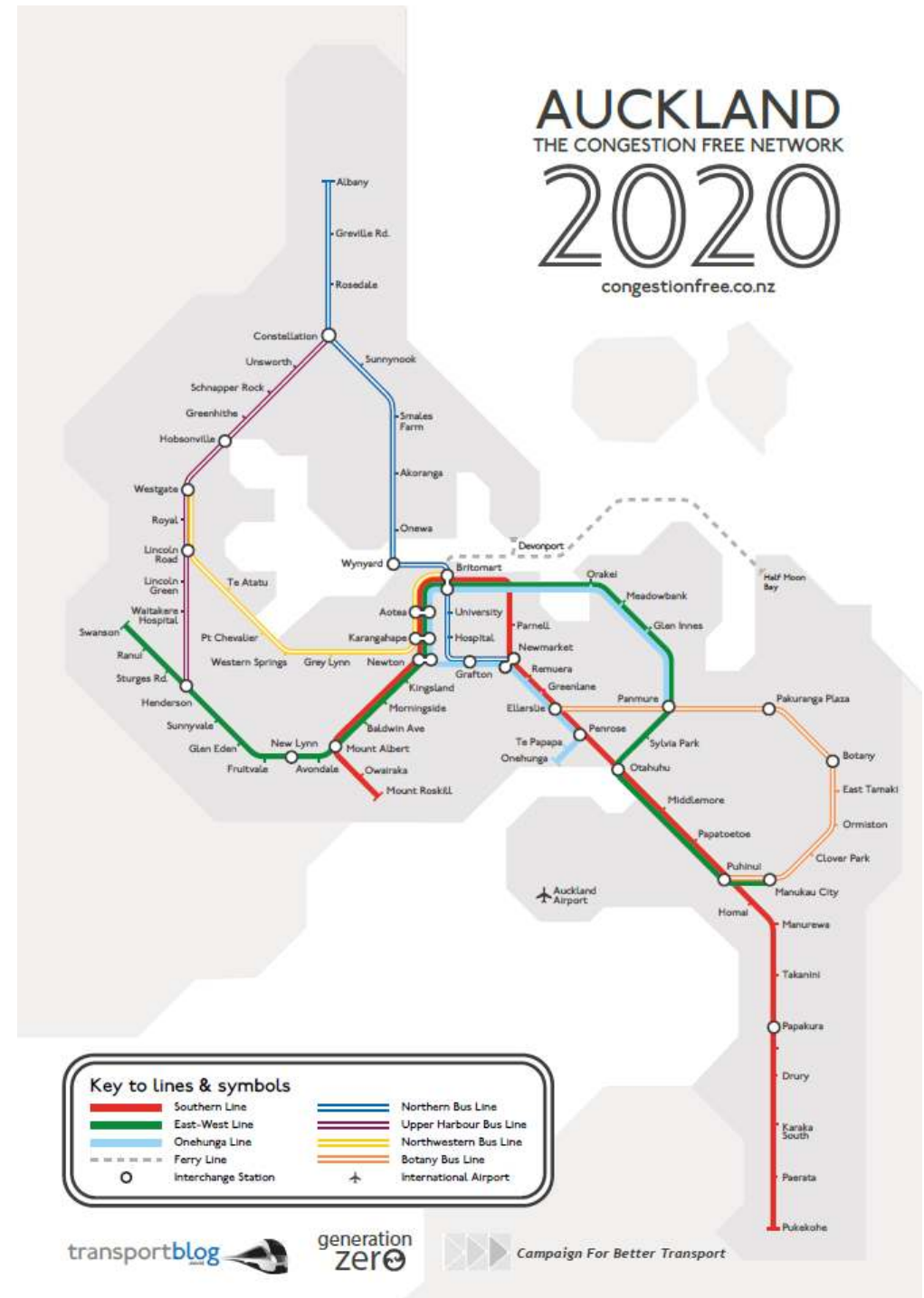
2015 Network:

- Existing rail network post electrification
- Existing Northern Busway (noting gaps north of Constellation and south of Akoranga)
- Devonport Ferry



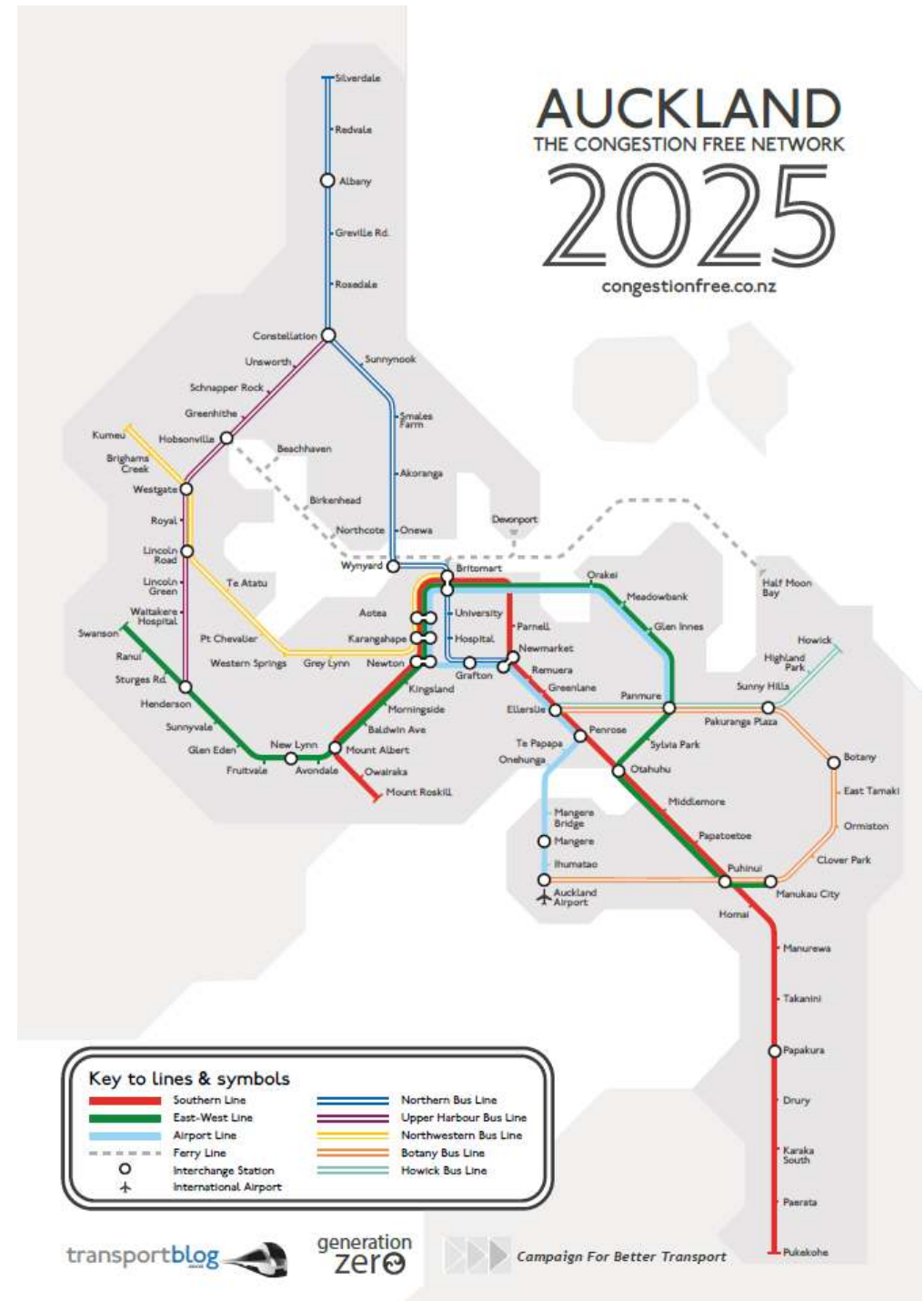
2020 Network:

- City Rail Link
- Mt Roskill branch railway line
- Electrification to Pukekohe + new stations
- Northern Busway extended to Albany and through CBD to Newmarket
- Busway along SH16 and high level priority along Great North Road (Pt Chev to city)
- Upper Harbour bus line from Henderson to Albany via SH18
- AMETI busway (Panmure-Botany) + Botany-Manukau bus improvements
- Higher frequency ferries (especially to Half Moon Bay)



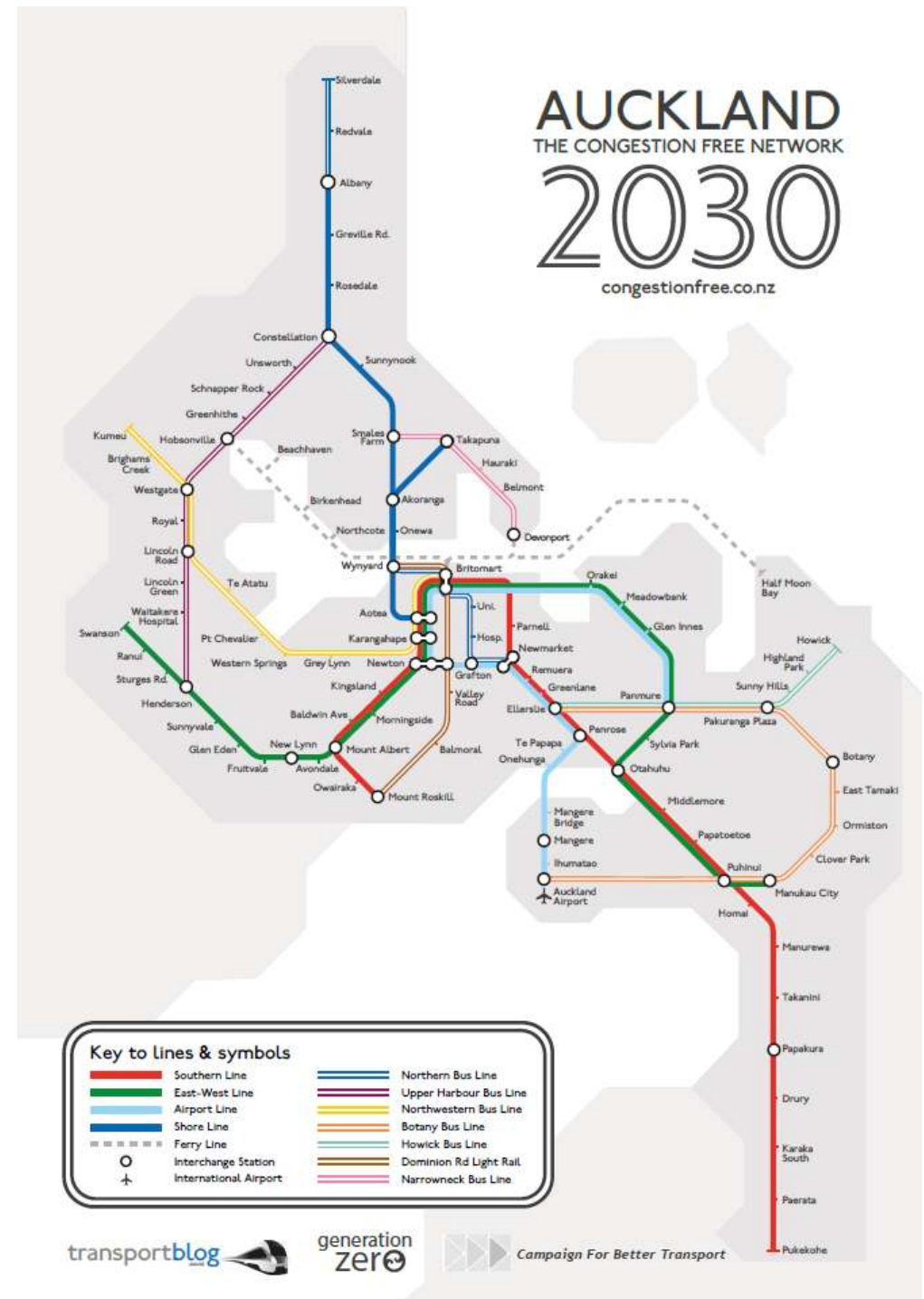
2025 Network:

- Airport Line + bus link between airport & Manukau
- Southeast bus line extended to Howick
- Northwest busway extended to Kumeu
- Northern busway extended to Silverdale
- Enhanced ferry frequencies to Hobsonville & Beachhaven



2030 Network:

- North Shore rail (potentially using Skytrain technology)
- Dominion Road Light Rail
- Lake Rd extensive bus priority



How is the CFN different?

- Many similar elements to what's in the Auckland Plan (CRL, rail to airport, AMETI etc.)
- It prioritises investment in the 'Missing Modes' over Business as Usual
- The CFN looks at a whole network and brings forward investment in key projects:
 - SH16 busway by 2020 rather than in 3rd decade
 - Northern busway extended to Albany by 2020 rather than in 2nd decade
 - North Shore rail by 2030 rather than beyond scope of Auckland Plan
 - Also includes investment in the complimentary Active Modes
- CFN also excludes poor value for money PT projects:
 - Airport – Manukau rail
 - Mt Roskill – Onehunga section of Avondale-Southdown line

Coverage

- **Within 1km of a station**
 - 40% of regional population
 - 43% of regional jobs



- Touches on all major employment areas



What does high quality PT in cities do for the economy?

"Every time a metro area added about 4 seats to rail and bus per 1,000 residents, the central city ended up with 320 more employees per square mile, an increase of 19 percent. Adding 85 rail miles delivered a 7 percent increase. A 10 percent expansion in transit service (by adding either rail and bus seats or rail miles) produced a wage increase between \$53 and \$194 per worker per year in the city centre. The gross metropolitan product rose between 1 and 2 percent, too."

<http://www.theatlanticcities.com/jobs-and-economy/2013/08/public-transit-worth-way-more-city-you-think/6532/>

How much will it cost

- Costs based off ITP or recent projects

Timeframe	Project	Cost \$m	ITP Budget
2013 to 2020	City Rail Link	\$2,200	
	Papakura-Pukekohe Electrification and new stations	\$102	
	Rail Avondale to Mt Roskill	\$150	
	Electric Trains	\$980	
	Northern Busway Extension - Constellation to Albany	\$250	
	City Centre bus Improvements	\$250	
	Constellation-Westgate-Waterview Busway	\$450	
	AMETI	\$700	
	2013 - 2020 Total	\$5,082	\$12,565

Timeframe	Project	Cost \$m	ITP Budget
2020 to 2025	Airport Northern Rail Link	\$700	
	Airport Eastern Bus Link	\$235	
	Pakuranga to Howick Bus Priority	\$150	
	SH16 Westgate to Huapai Extension	\$150	
	Northern Busway Albany to Silverdale	\$300	
	Ferries	\$30	
	2020 - 2025 Total	\$1,565	\$6,794
2020 to 2025	North Shore Line	\$3,000	
	Dominion Rd	\$140	
	Lake Rd	\$120	
	2025 - 2030 Total	\$3,260	\$5,340
	Grand Total	\$9,907	\$24,669

**We will get more of whatever we invest in,
so what do we want more of?**



campbell LIVE



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The Congestion Free Network proposal



By Lachlan Forsyth  Reporter

Wednesday 31 Jul 2013 7:00p.m.

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