Seductive Congestion

The Art of the Successful 21st Century City

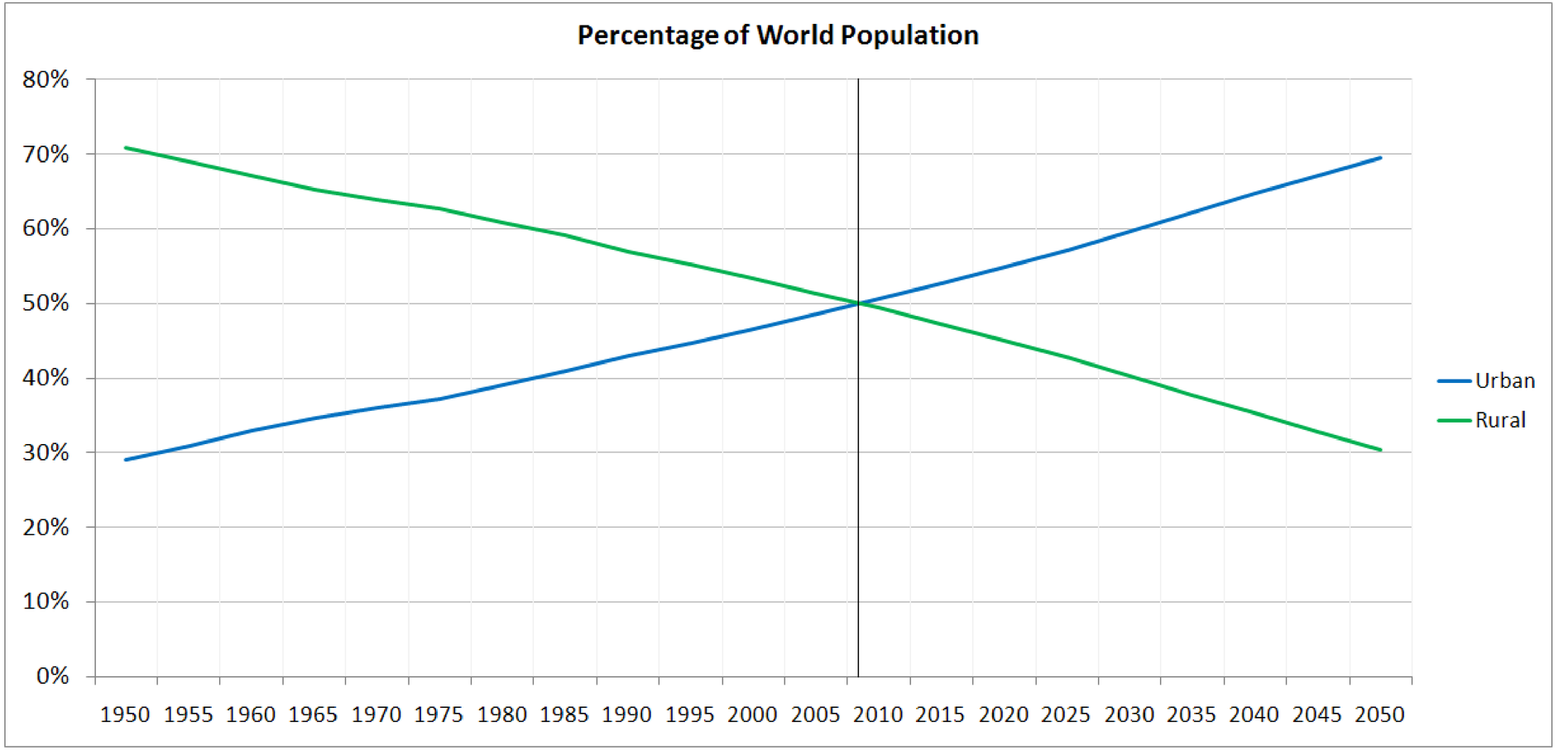
transportblog.co.nz

Patrick Reynolds 2016

PROVOCATIONS:

Anomalous Auckland: Are we on the right path?

Do we really understand the nature of the successful city?
Are we building the right city for the conditions of this century?
Are the opportunities and challenges offered by our one city of scale
properly understood?
Are we nibble enough in our institutions to react to discontinuities from last century?



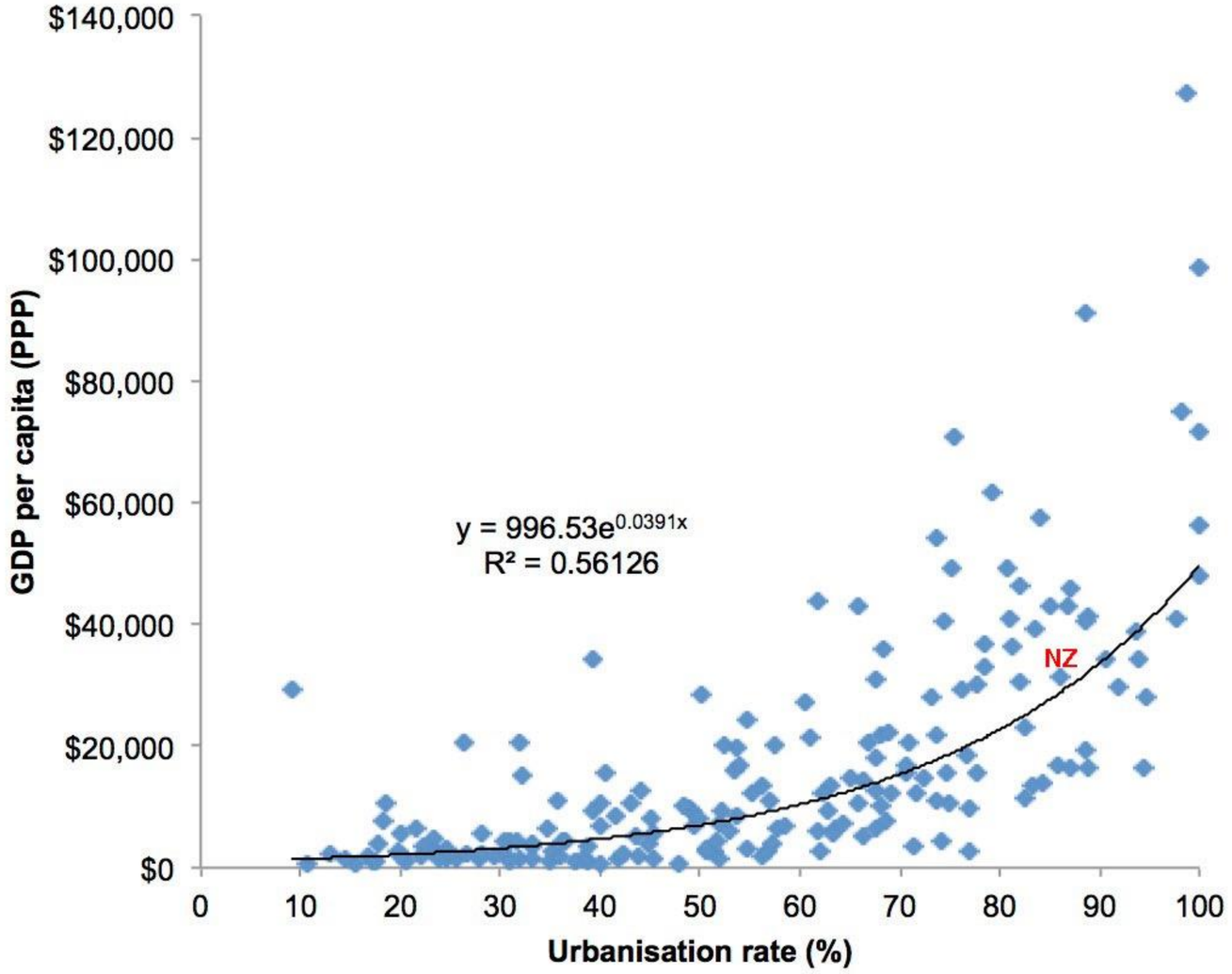
Data Source: United Nations, http://esa.un.org/unup/p2k0data.asp

'There is a near-perfect correlation between urbanisation and prosperity across nations.'

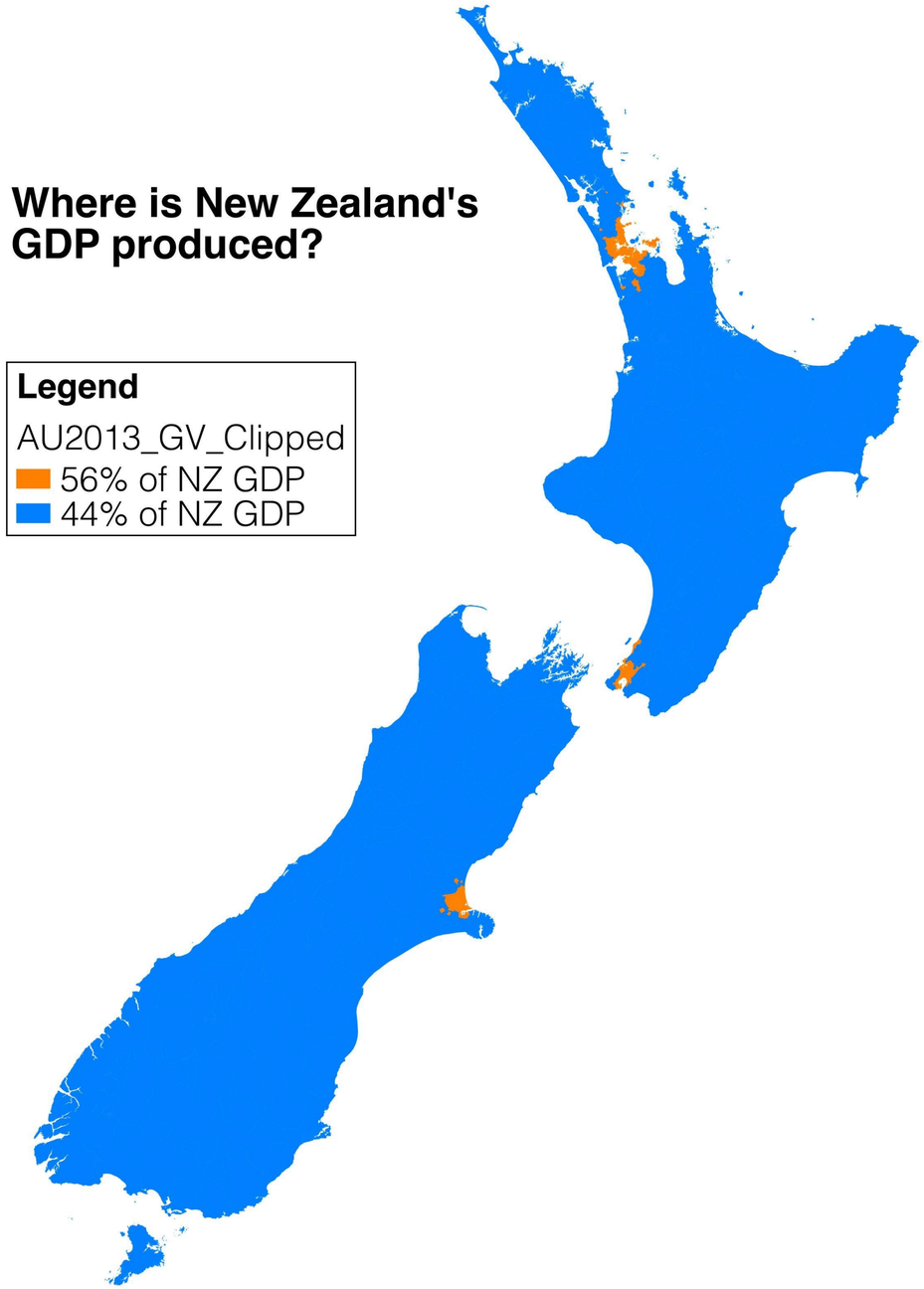
-Ed Glaeser

GDP per capita and urbanisation rates, 2010

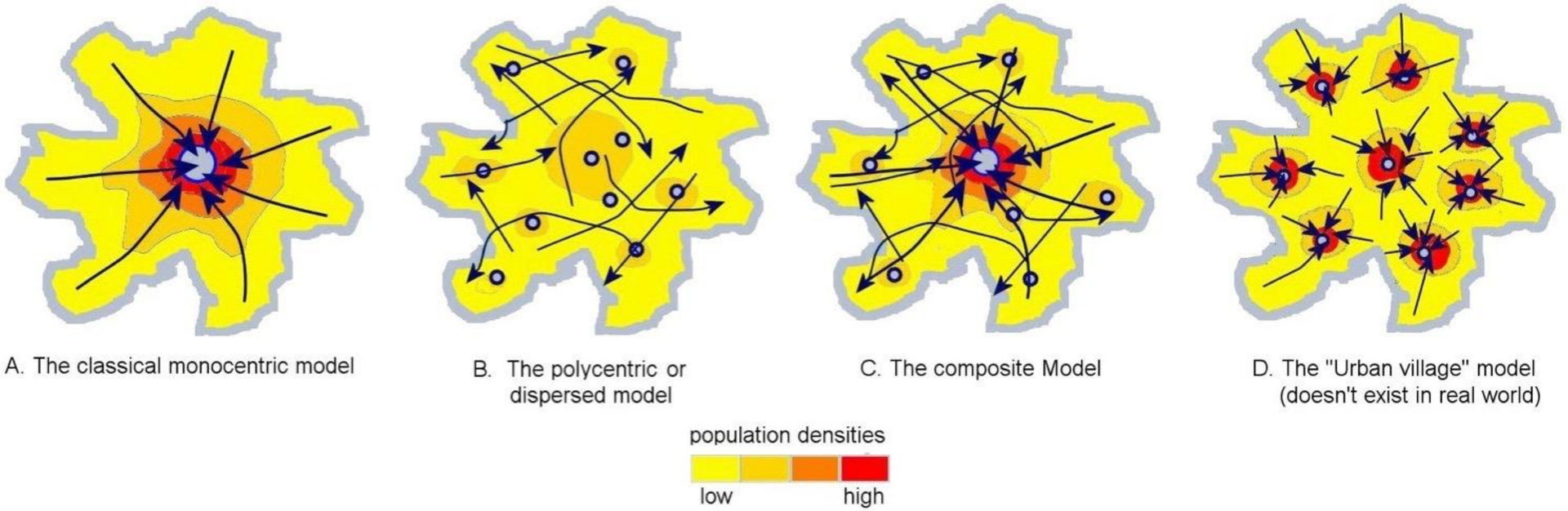
Source: World Bank data



Where is New Zealand's GDP produced?



The spatial distribution of jobs and population generate patterns of commuting trips



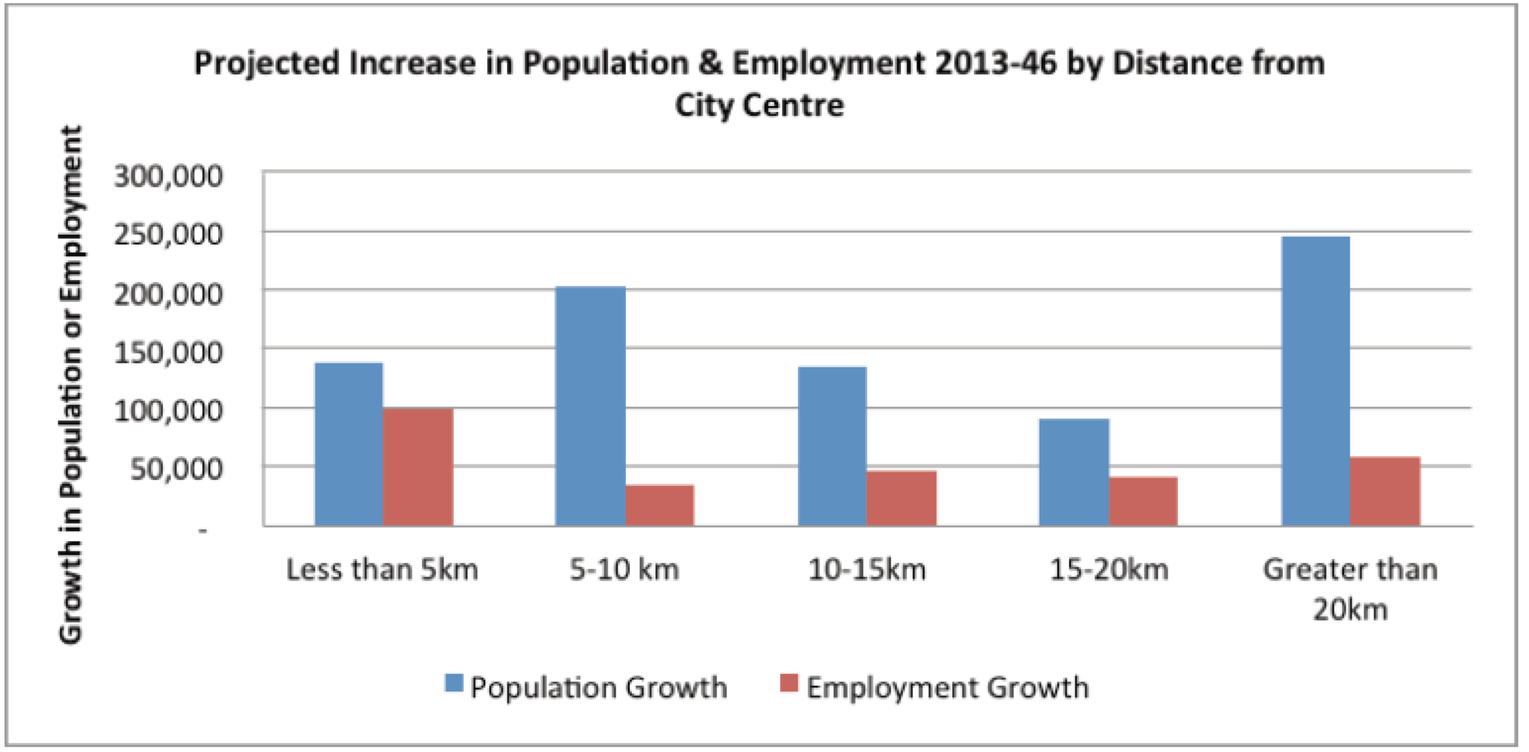
A. The classical monocentric model

B. The polycentric or dispersed model

C. The composite Model

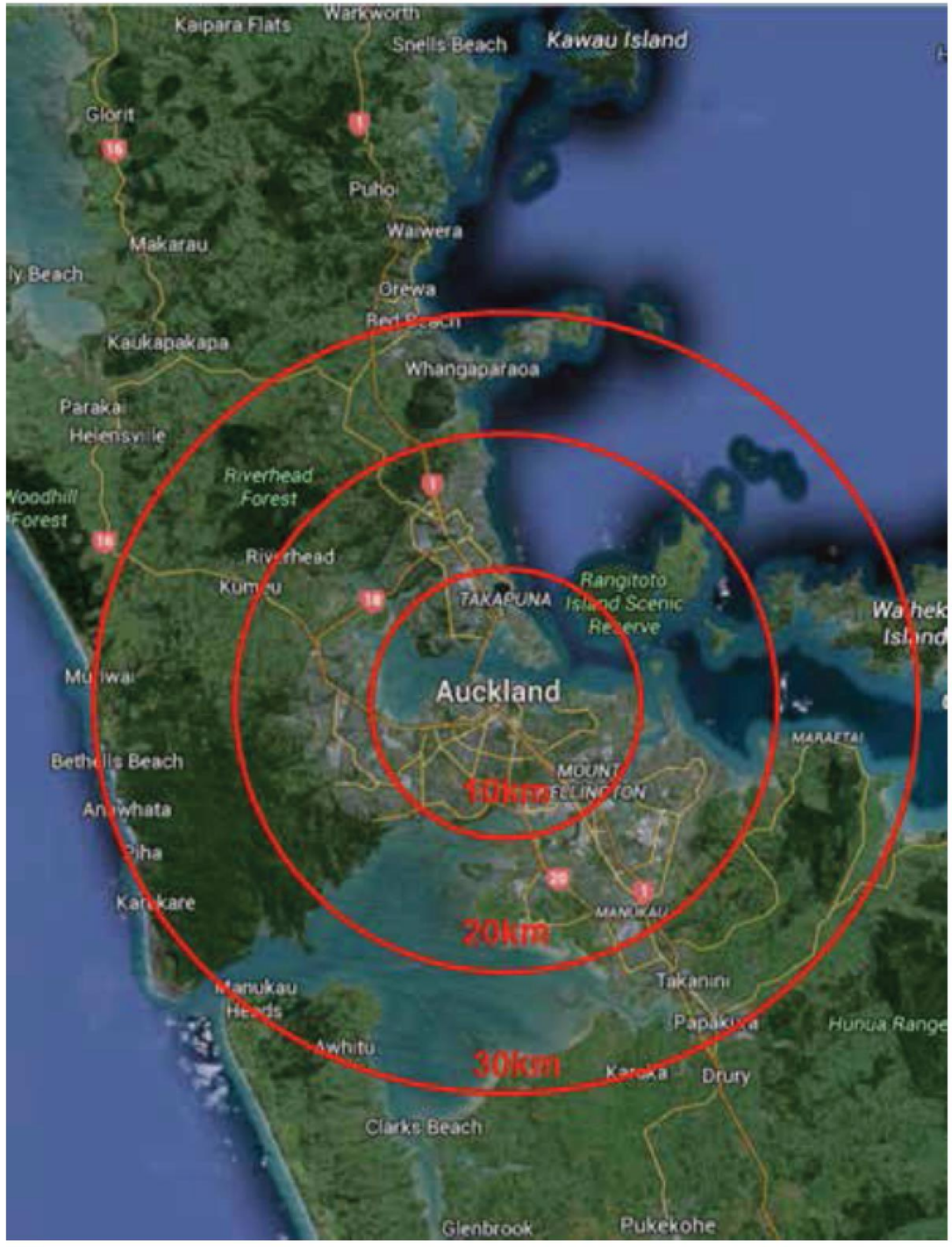
D. The "Urban village" model (doesn't exist in real world)

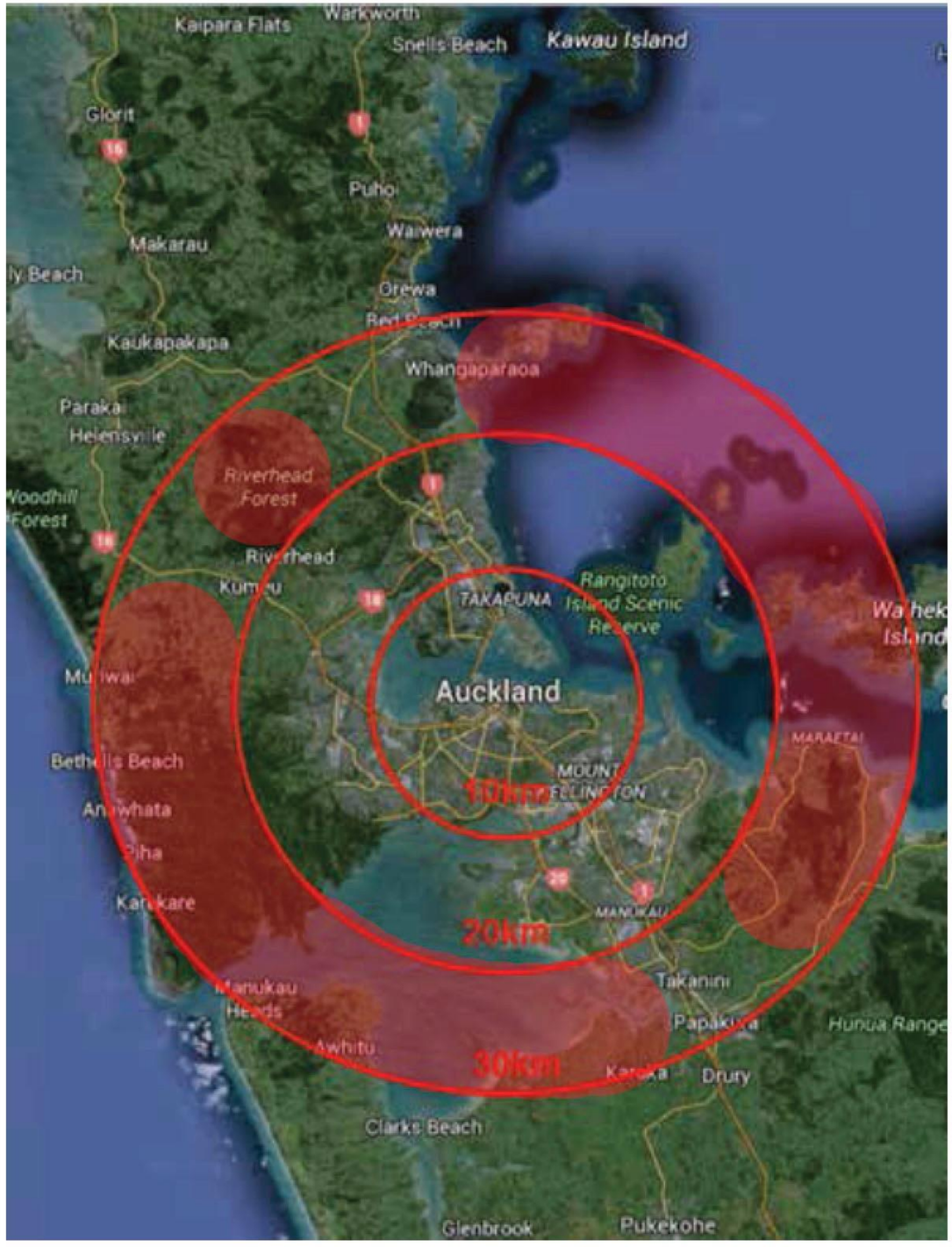
The trends are further illustrated in the graph below by comparing the level of population and employment growth over the next 30 years occurring in 5 km bands from the city centre.



Source: Auckland Council land-use projections

These projected household and employment growth trends will place significant pressure on the transport network through longer trip lengths, especially to major centres. The low level of growth in local employment is also likely to make improvements in employment access by car more challenging, as trips lengthen and become relatively more focused towards major centres with constrained access. Furthermore, the high value of land in major centres presents a key challenge of providing significant people-moving capacity without using extensive amounts of space.


Kaipara Flats
Warkworth
Snells Beach
Kawau Island
Glorit
Puhoi
Wainwera
Makarau
Orewa
Kaukapakapa
Whangaparaoa
Paraka
Helensville
Riverhead Forest
Woodhill Forest
Riverhead
Kumeu
TAKAPUNA
Rangitoto Island Scenic Reserve
Auckland
MARAETAI
Bethells Beach
MOUNT EDEN
10km
MANUKAU
20km
Takanini
Manukau Heads
Papakura
Hunua Range
Awhitu
30km
Karaka
Drury
Clarks Beach
Glenbrook
Pukekohe


Kaipara Flats
Warkworth
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Whangaparaoa
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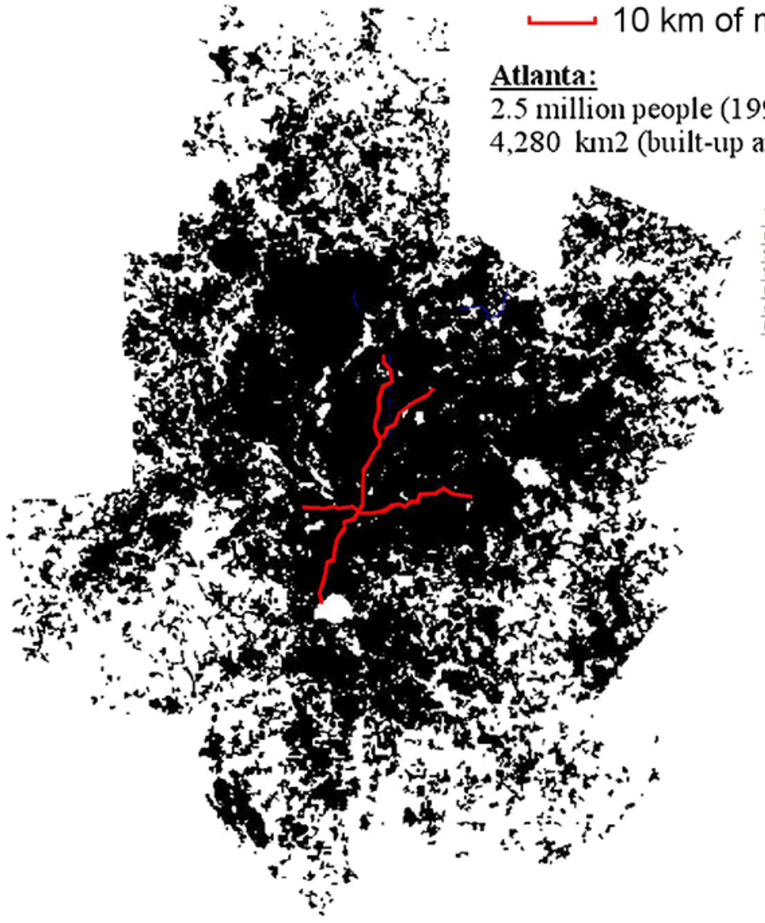
Riverhead Forest
Riverhead
Kumeu
TAKAPUNA
Rangitoto Island Scenic Reserve
Auckland
MARAETAI
Bethells Beach
MOUNT FELINGTON
10km
MANUKAU
20km
Takanini
Manukau Heads
Awhitu
30km
Drury
Hunua Range
Clarks Beach
Glenbrook
Pukekohe

The Built-up Area of Atlanta and Barcelona Represented at the Same Scale

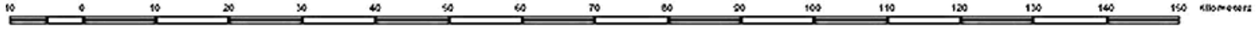
10 km of metro line

Atlanta:
2.5 million people (1990)
4,280 km2 (built-up area)

Transit in Atlanta VS Barcelona	Barcelona	Atlanta
Length of metro lines (km)	99	74
% of population within 600 m from a metro station	60%	4%
% of trips using metro	30%	4.50%
Length of metro line that would be required to serve 60% of atlanta ppopulation (km) :		3400
Number of station required		2800



Barcelona:
2.8 million people (1990)
162 km2 (built-up area)



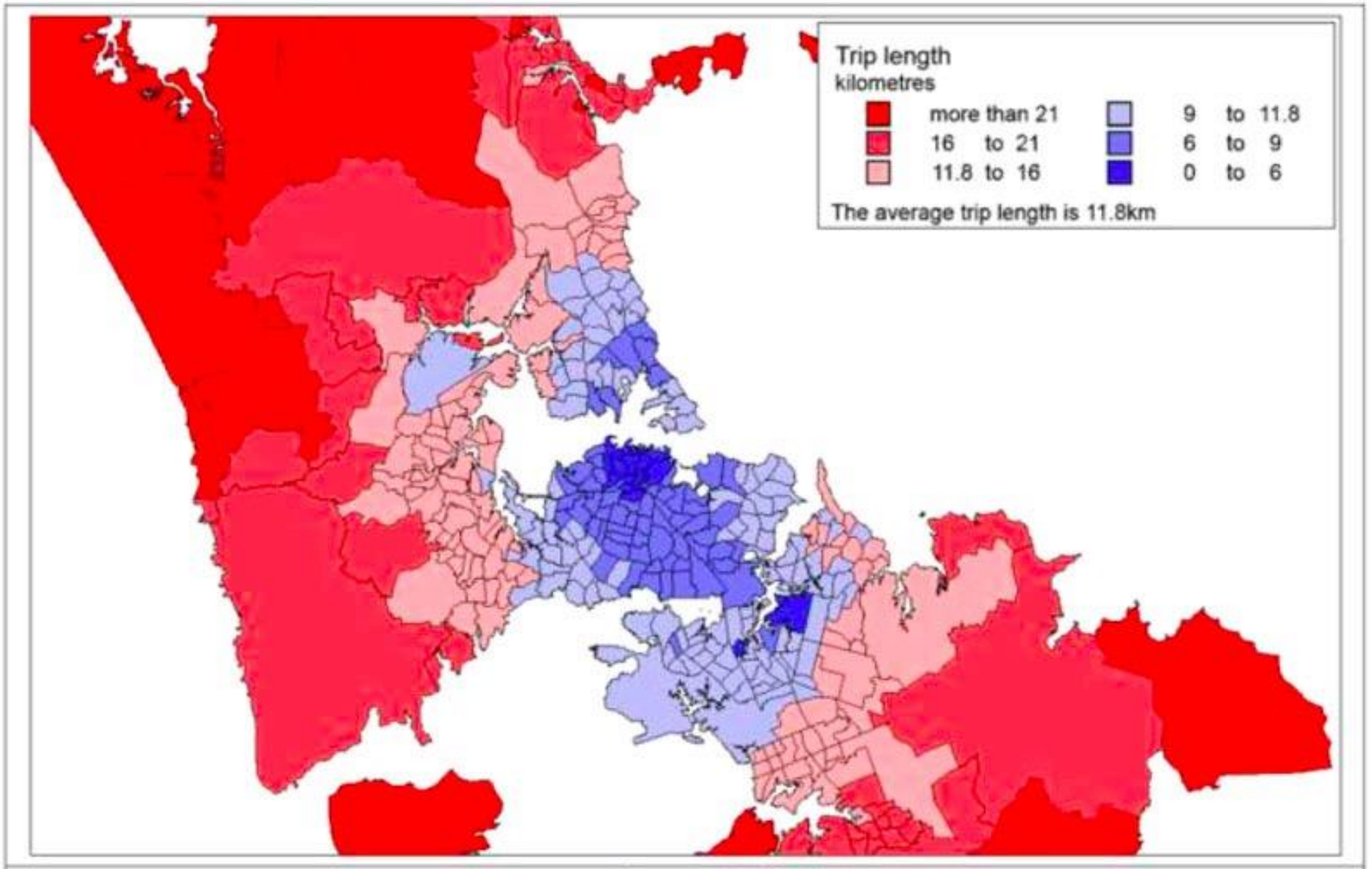
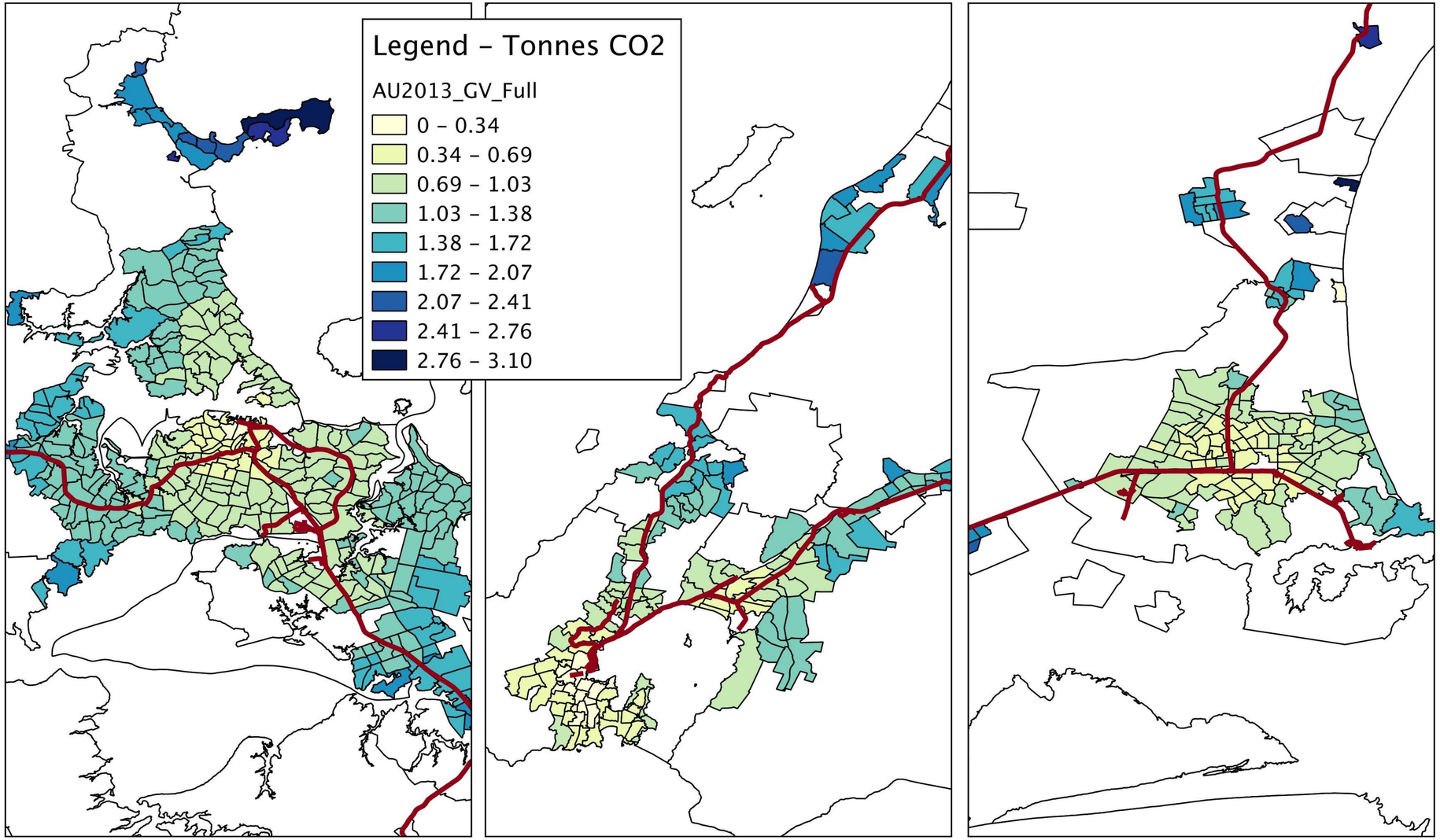


Figure 6.1
Trip Length by Residential Area 2013

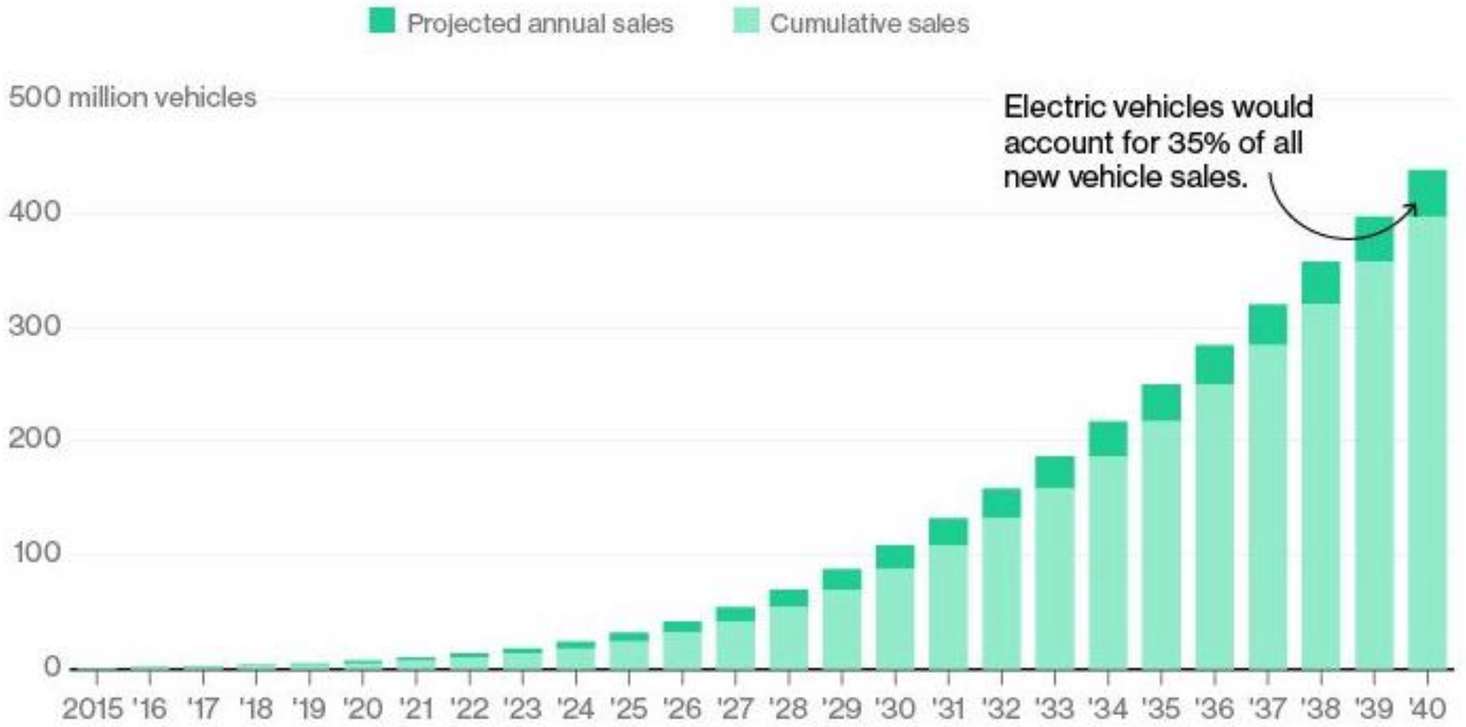
Annual CO2 emissions per commuter in New Zealand cities



Auckland **Wellington** **Christchurch**

The Rise of Electric Cars

By 2022 electric vehicles will cost the same as their internal-combustion counterparts. That's the point of liftoff for sales.



Sources: Data compiled by Bloomberg New Energy Finance, Marklines

Bloomberg

AlexSteffen @AlexSteffen · 2h

If one thinks sustainability is something we can "add on" to our current way of doing things, one doesn't understand the concept very well.

6 12

AlexSteffen @AlexSteffen · 2h

We are soon to see massive, systemic shifts in long-established ways of living. Thinking this is a choice misunderstands planetary reality.

5 6

Patrick Reynolds Retweeted

AlexSteffen @AlexSteffen · 2h

The sooner we stop treating sustainability as virtue, the better. Sustainability is realism. Planetary forces trump personal preferences.

Non-motorist
@ByTheMotorway

1 Oops, we built sprawl. We're very sorry, we need a bigger road.
2 Yay, we built a big huge road, sprawl party!
3 →1

20/04/15 8:37 am

16 RETWEETS **12** FAVOURITES

weet

On traffic congestion

With only a third of the new housing completed at Long Bay and Orewa, what consideration has been given to the influx of cars travelling to Auckland at peak hour? In just under a year the increase in traffic is huge. Queues now stretch back 5km or 6km, adding 15 to 20 minutes to the commute. *Chris Bayes, Torbay.*

This problem is called congestion. When it happens, a city's options are to:

> (A) Stop growing — because congestion has become terrible and growth will make it worse.
>
> (B) Widen streets. This requires huge amounts of land, and land in cities is very expensive. What's more, if you tear down enough buildings to widen streets, you are effectively destroying your city in order to save it.
>
> (C) Focus on helping people get around using less space than cars require — through walking, cycling and mass transit.

Given the options, it's not surprising that urban leaders — regardless of political ideology — eventually decide that C is the only real answer.

-Jarrett Walker *Why Cars and Cities are a Bad Match* Washington Post 2016

What does it take to move 1000 people?

1 train (eight carriages)

15 buses

Anywhere from 250 to 1000 cars

This would then require 1.37 hectares of parking space in the Sydney Central Business District.

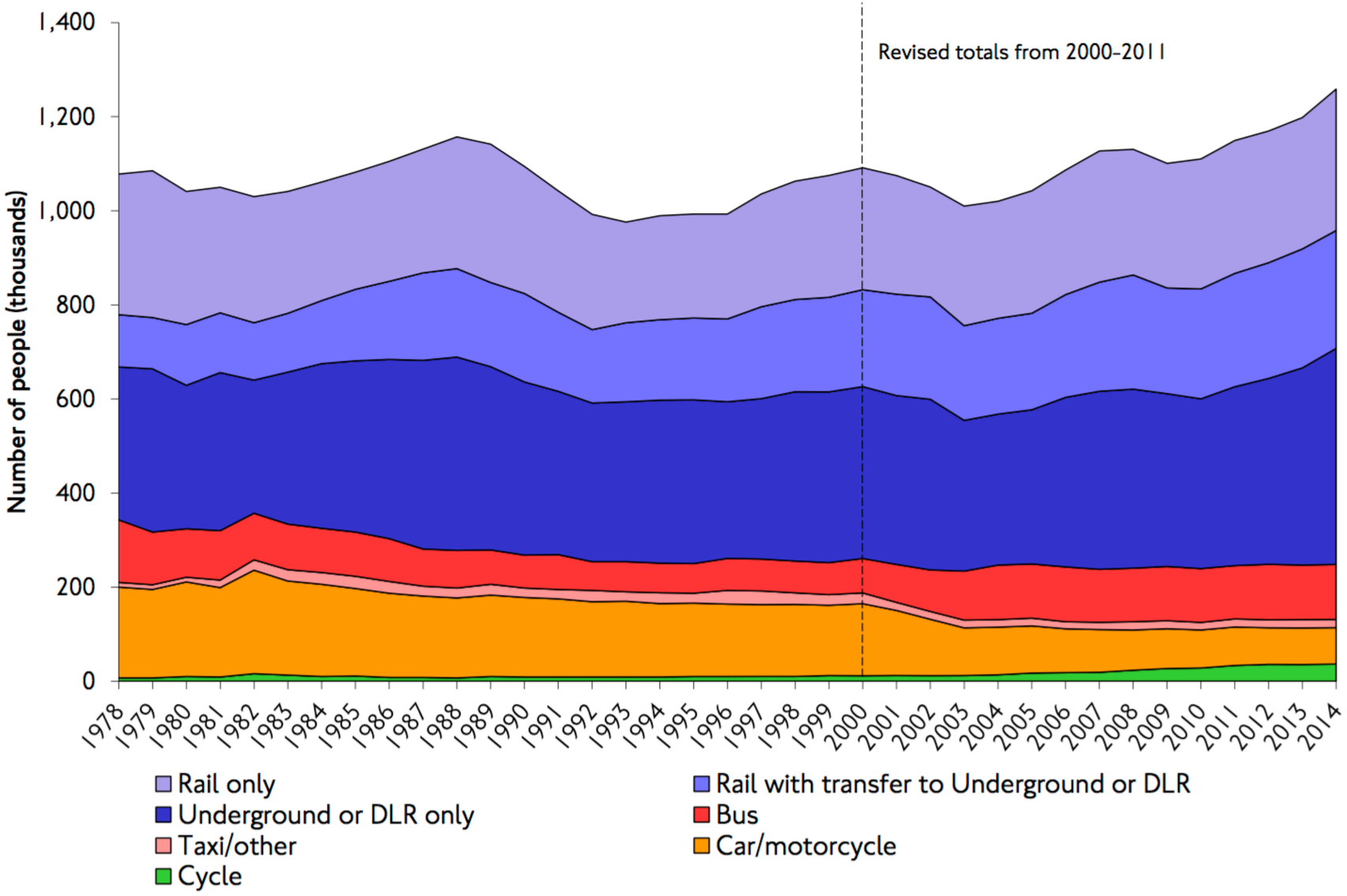
Cities
Cities in motion

End of the car age: how cities are outgrowing the automobile

Cities around the world are coming to the same conclusion: they'd be better off with far fewer cars. So what's behind this seismic shift in our urban lifestyles? Stephen Moss goes on an epic (car-free) journey to find out

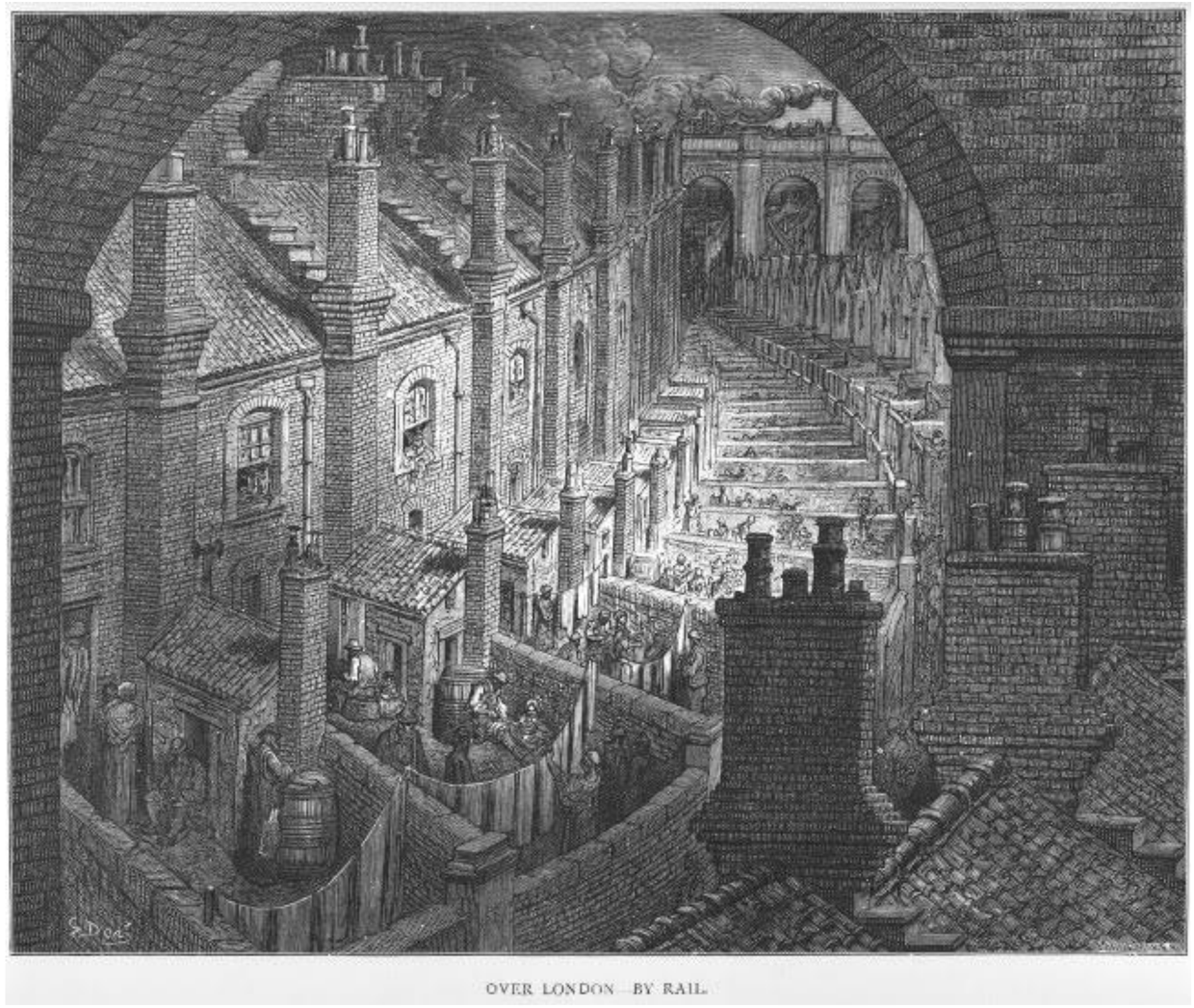
London's Oxford Street in 1965, when city planning was dominated by a desire to accommodate the car.
Photograph: Powell/Getty Images

Figure 2.5 People entering central London in the weekday morning peak, 1978 to 2014.

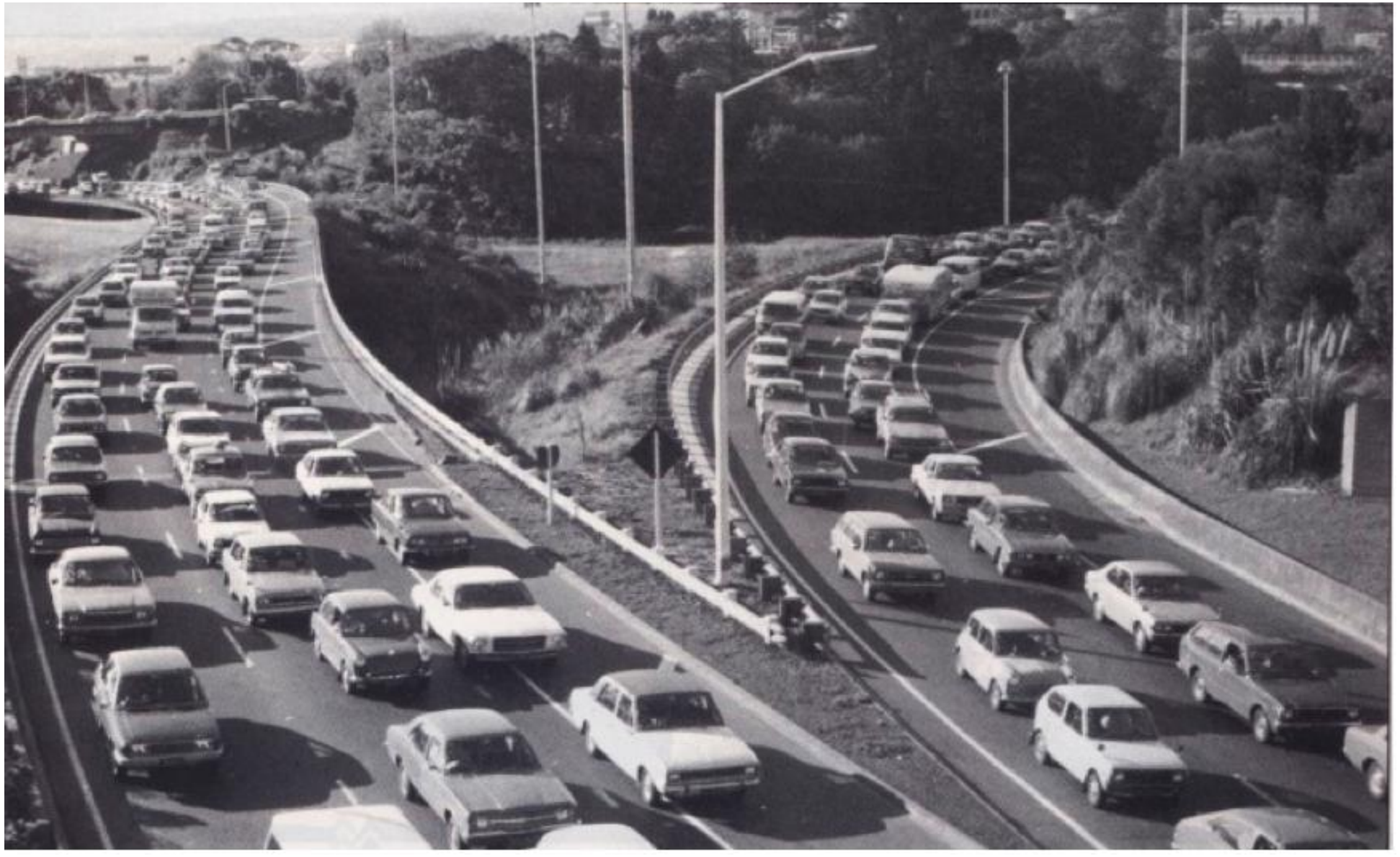


Source: TfL Planning, Strategic Analysis.

Cognitive Dissonance in AKL urban form debate

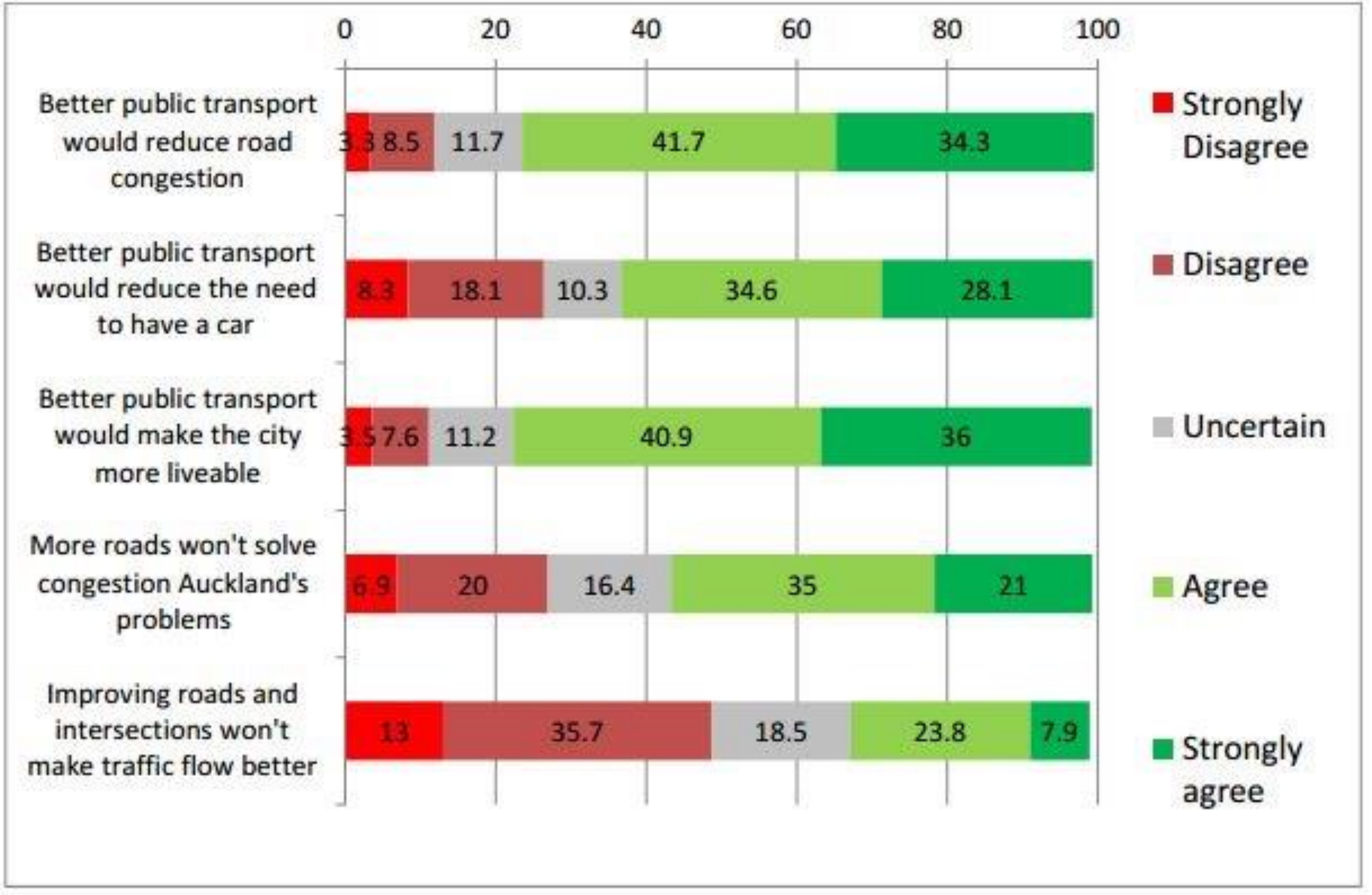


OVER LONDON—BY RAIL.




site
New Bus
Better
Why we love NZ
How we can show it
LOVE NZ
anvas .co.nz
FINDING MURDOCH
NIRVANA
STAR WARS
MARKET
CHANCE
HIGH
GO
BLUEBIRD
AHY619
EER531

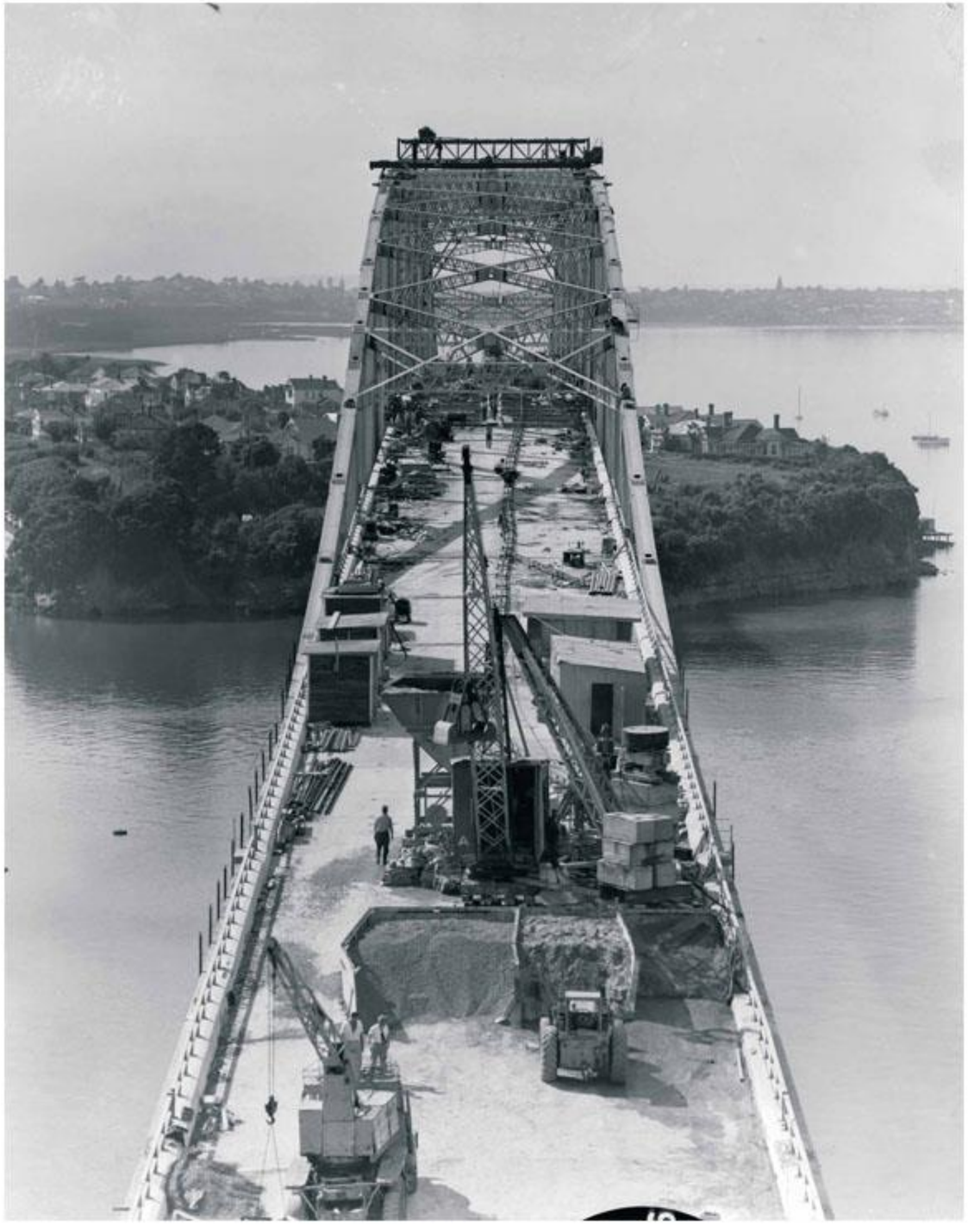
Questions 5a (i ... v) asked members to rate their reaction to commonly made claims about transport in Auckland. The questions were



‘Auckland adds an extreme case study to recent international scholarship that has examined the extent to which institutionalised processes and mind-sets can distort the articulation of public preferences in strategic transport plans.’

-Paul Mees and Jago Dobson 2007 *“Backtracking Auckland?”: Technical and communicative reason in Metropolitan transport planning*


Harbour Bridge 1958



ADDITIONAL WAITEMATĀ HARBOUR CROSSING

2MILLION AUCKLANDERS

—

Auckland's population is expected to grow to two million people by 2030.

30%

—

Without an additional crossing, daily trips across the harbour will grow by approximately 30% over the next 30 years.

65%

—

With an additional crossing in place, that growth in daily trips is forecast at around 65%.

Here's How Many Bridges NYC Would Need If Everyone Drove

KELSEY CAMPBELL-DOLLAGHAN *27 DECEMBER 2014 8:00 PM*

Manhattan has plenty of bridges — they're its most recognisable landmarks, really — but exactly how many more would it need if every last person drove a car? Matt Taylor, a transit engineer, has seen this bizarro-Manhattan, and it's not pretty.

Taylor took it upon himself to calculate exactly how many more bridges we'd need it everyone had a car. "2,060,000 people need to enter and exit Manhattan around the same times each day," he writes in a blog post, making allowances for the tourists, students, and even hospital patients that come in and out of the city every day. Right now, he continues, just 16 per cent of those people enter the island via car.

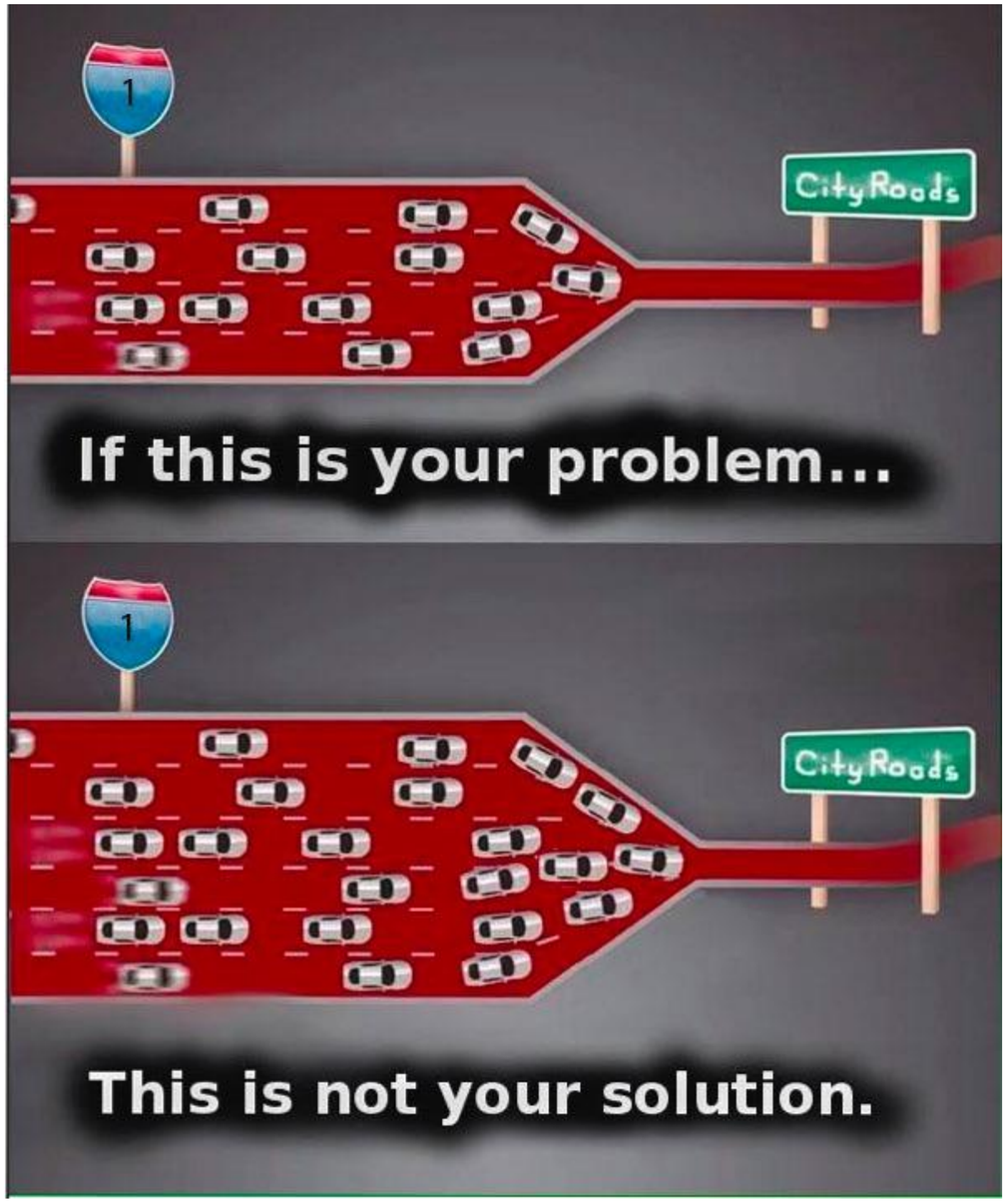
AWHC: Where Does all the New Traffic Go?

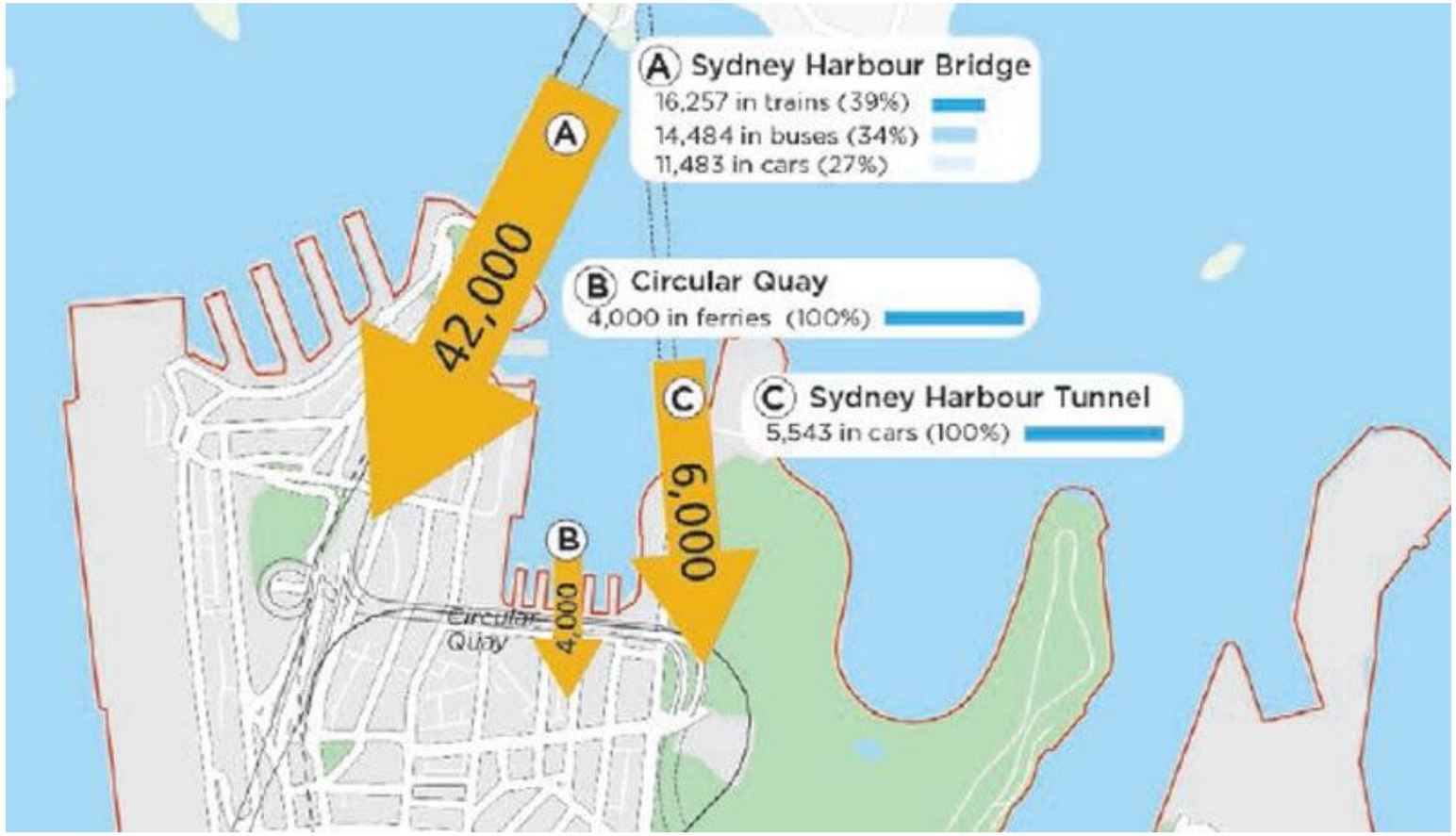
20,300 additional cars modelled for Fanshawe + Cook St with the AWHC option (assume that is all day on a weekday?). Even at the best sorts of turnover that would require around 10,000+ new carpark places. The downtown carpark has 1890 spaces. So where exactly do we put six new downtown carpark buildings? And what six streets get sacrificed to feed them?

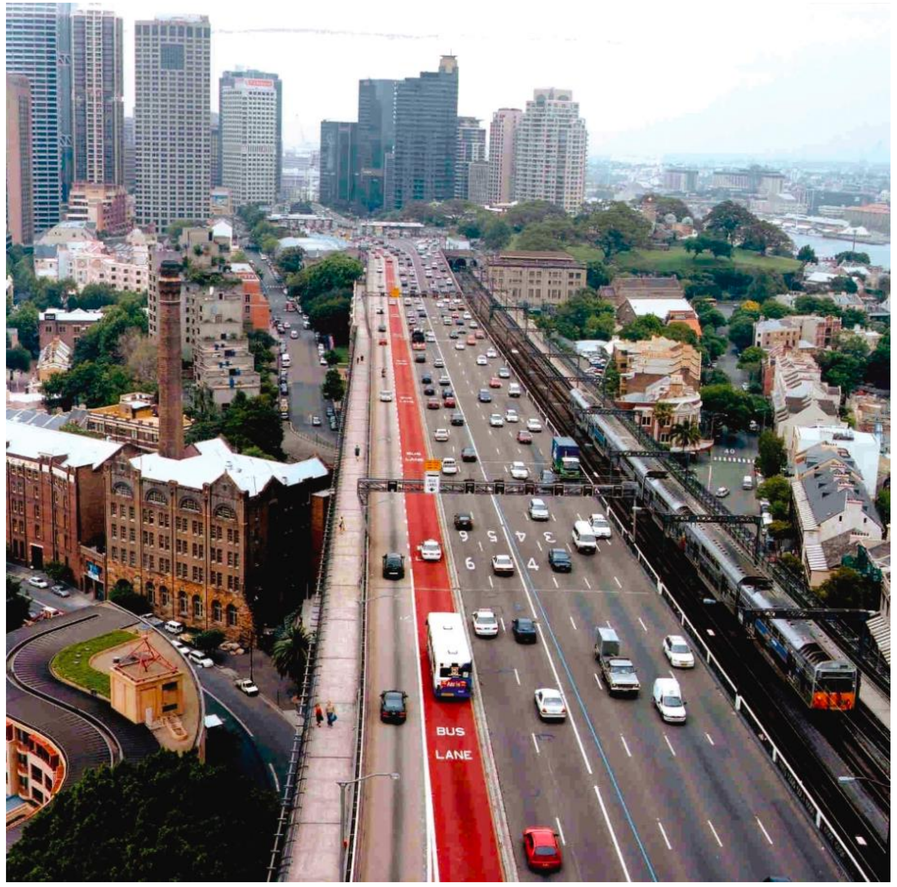
20,300 cars carry perhaps 25,000 people. The CRL at capacity will carry that entire amount in 40 minutes. As could a North Shore rail line of similar specification. If the net outcome of this project is to take 20,000 commuters to midtown, why not do it with rapid transit at a third the cost with none of the traffic congestion?

> *"The significant increase in traffic movements conflict with many of the aspirations outlined in current Council policies, strategies, frameworks and master plans."*
>
> —P 65 ***Additional Waitemata Harbour Crossing Network Plan***, NZTA, 2010.

Obviously these higher traffic volumes are not good for every pedestrian, resident, and general city user in these areas but there is one other group that this situation in particular is going to make miserable, **and that's the motorist**. There is a word for all this additional driving everywhere on city streets: congestion. Yup this increase in capacity across the harbour may speed that part of the journey but it's going to make arriving anywhere in the city in your car much more hellish than it is now. And don't even think about finding or affording somewhere to park.


1
CityRoads
If this is your problem...
1
CityRoads
This is not your solution.


A Sydney Harbour Bridge
16,257 in trains (39%)
14,484 in buses (34%)
11,483 in cars (27%)
B Circular Quay
4,000 in ferries (100%)
C Sydney Harbour Tunnel
5,543 in cars (100%)
A
42,000
B
4,000
C
6,000
Circular Quay

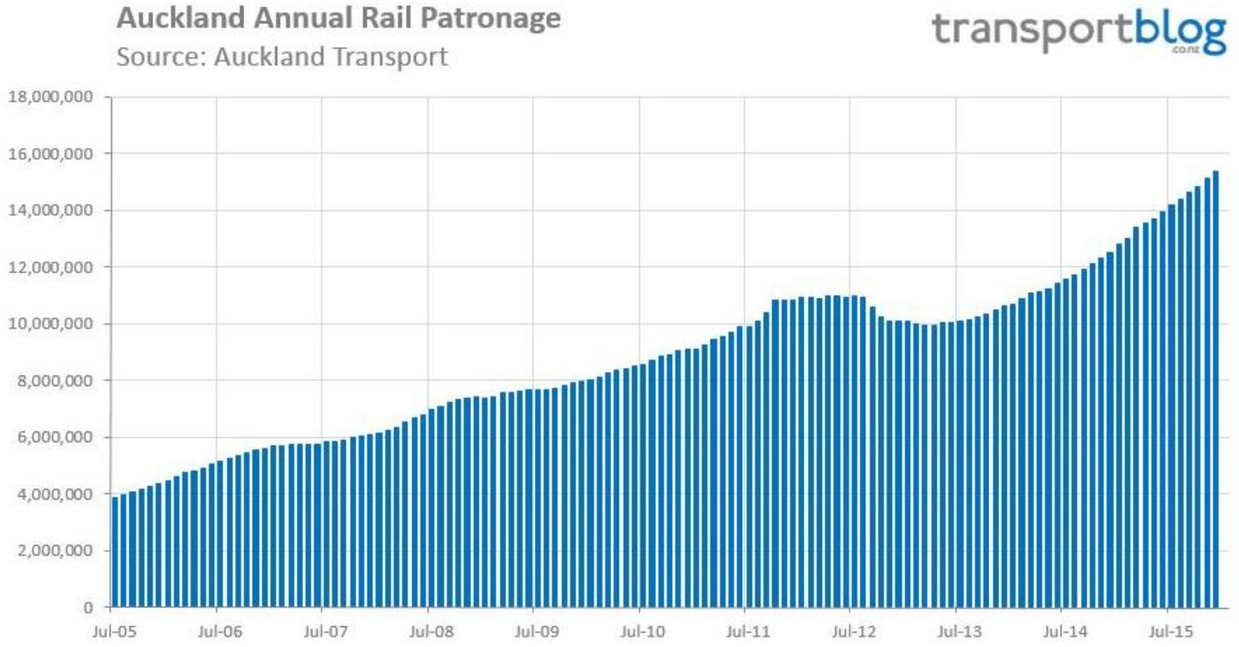

BUS LANE

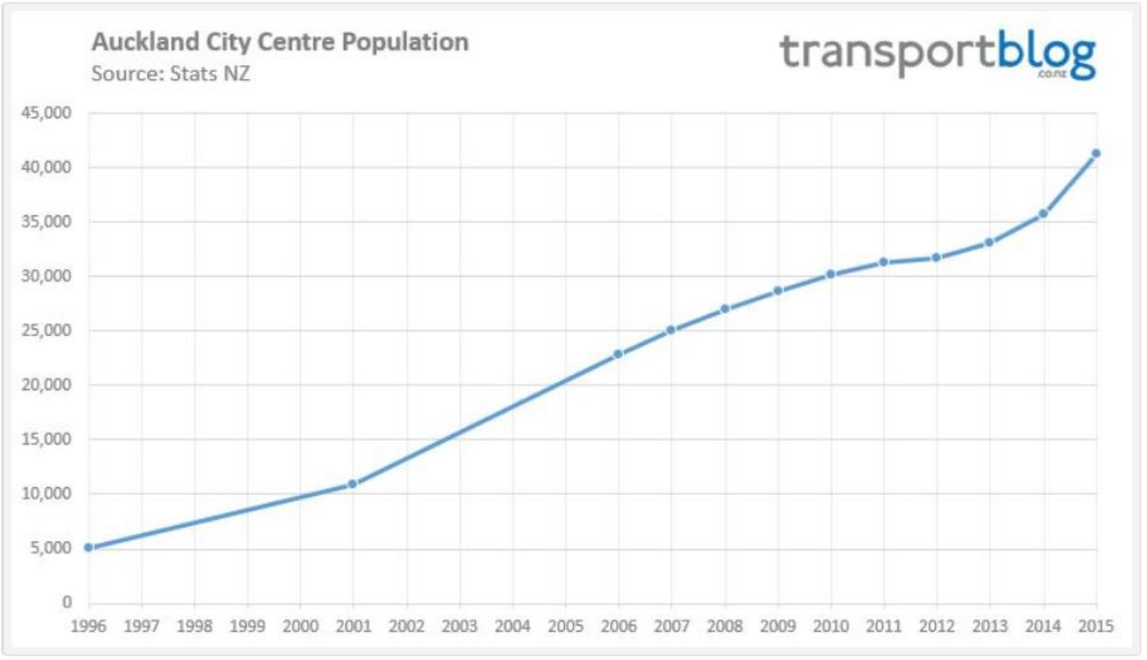

HYPE
MYER
ONE WAY
ONE WAY

'Seductive Congestion: that's what the best cities are about'

-John King


bivouac/outd
COMMITTED TO ADVEN
Jeanswest
Hannahs
INFO
COTTON

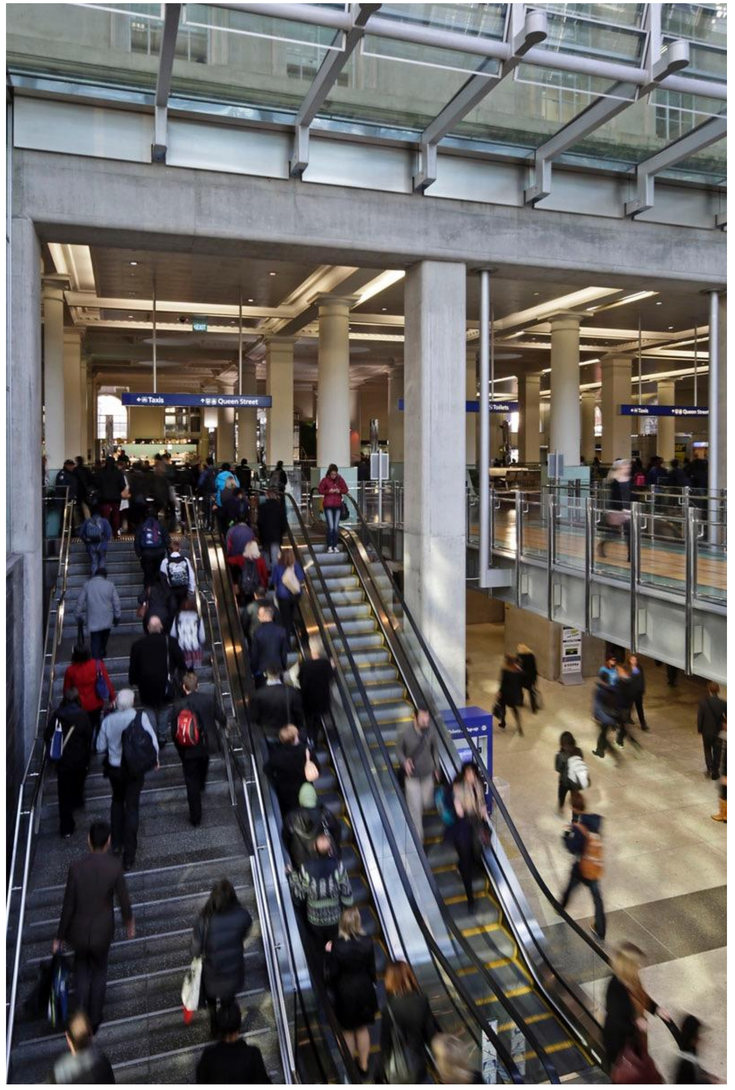

Auckland Annual Rail Patronage
Source: Auckland Transport
transportblog
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14
Jul-15

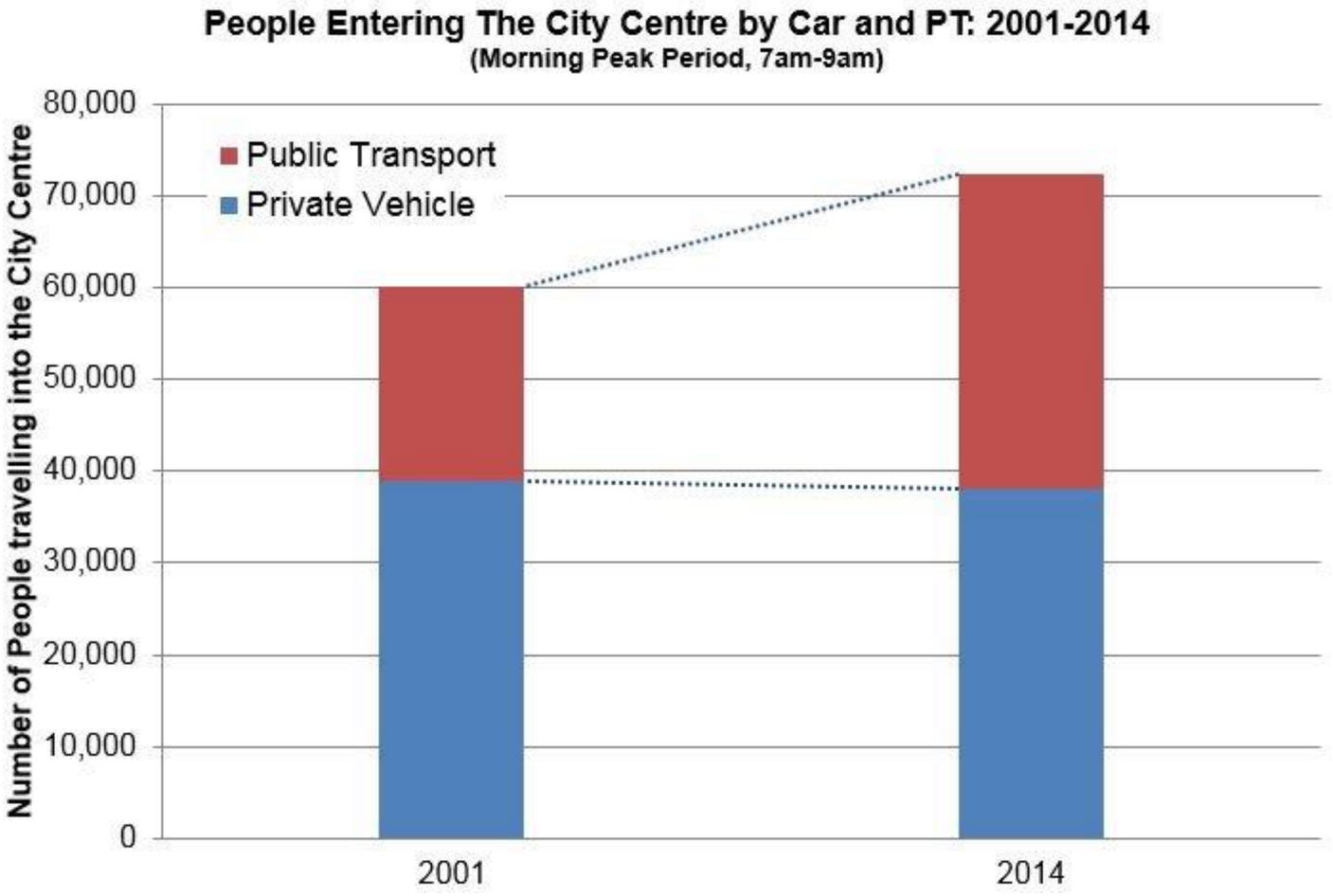

Auckland City Centre Population
Source: Stats NZ
transportblog
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015


pizza coffee
CAFE
MELBA
MOJO
WORKSHOP
PHYSIO SOLUTIONS
ACC Registered
CÉPAGE
SALE

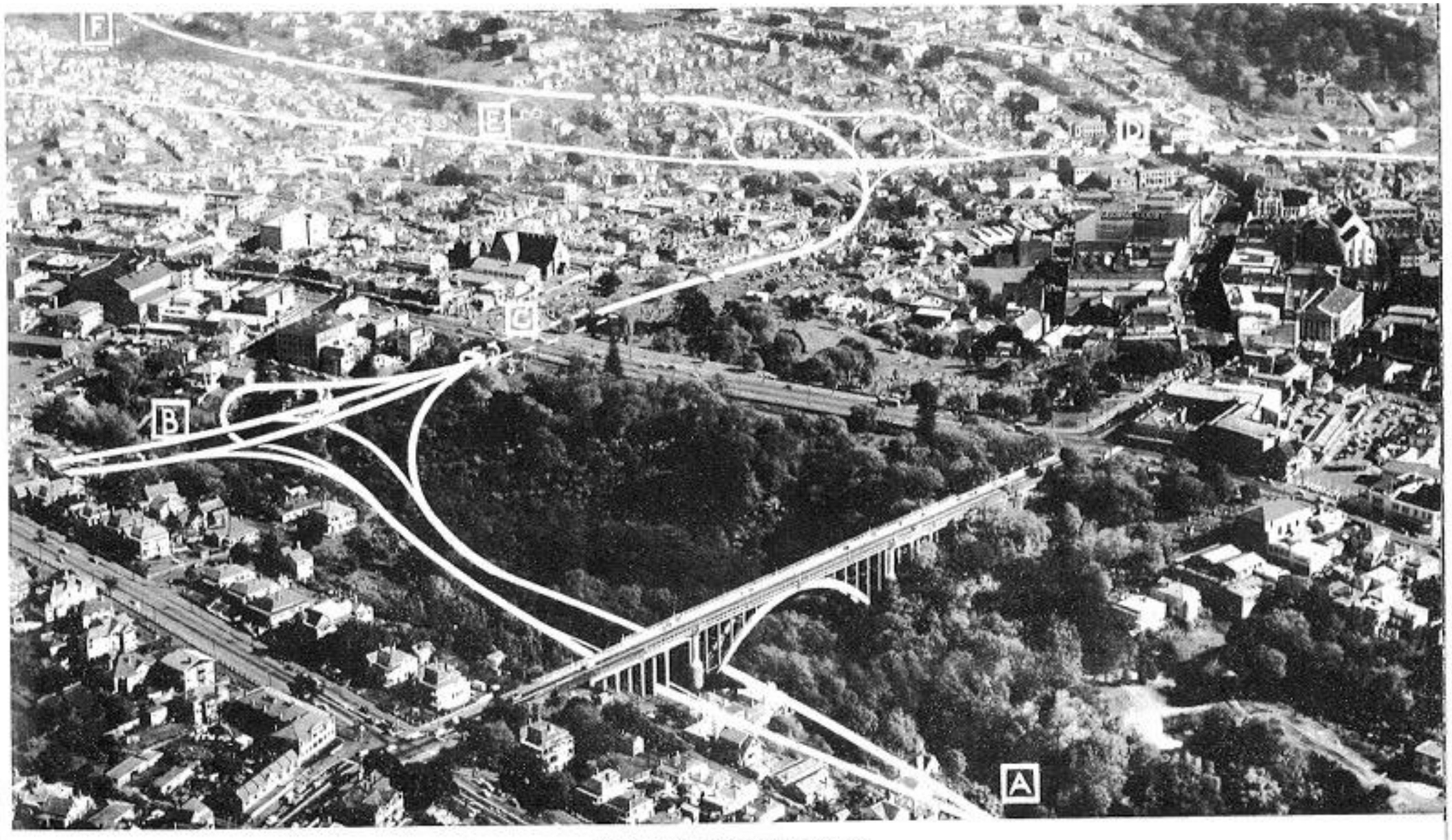

ARTHUR.H.NATHAN


3
4
Papakura


Queen Street


People Entering The City Centre by Car and PT: 2001-2014
(Morning Peak Period, 7am-9am)
Number of People travelling into the City Centre
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Public Transport
Private Vehicle
2001
2014

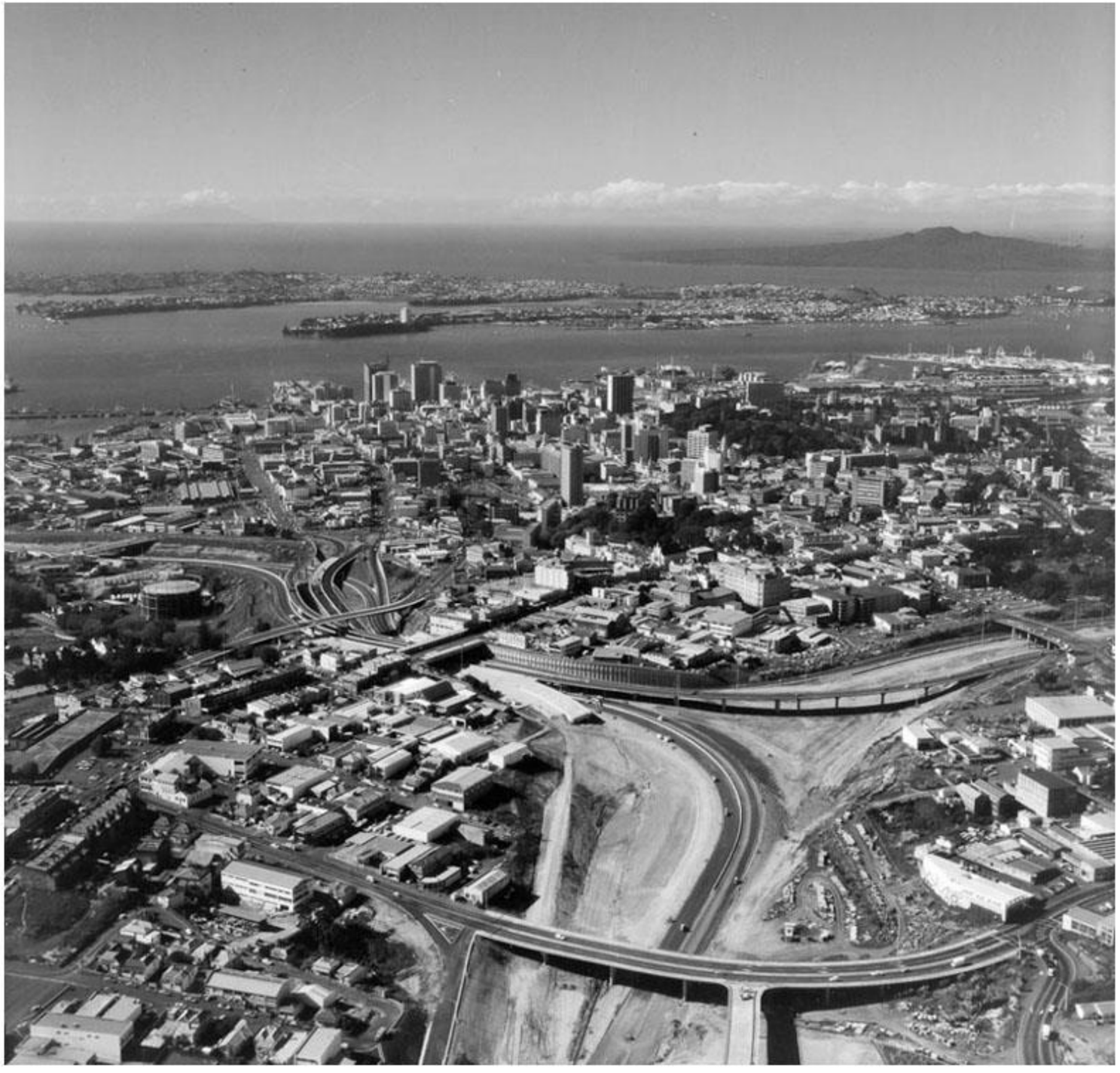

TAROCASH
CUSTOMS



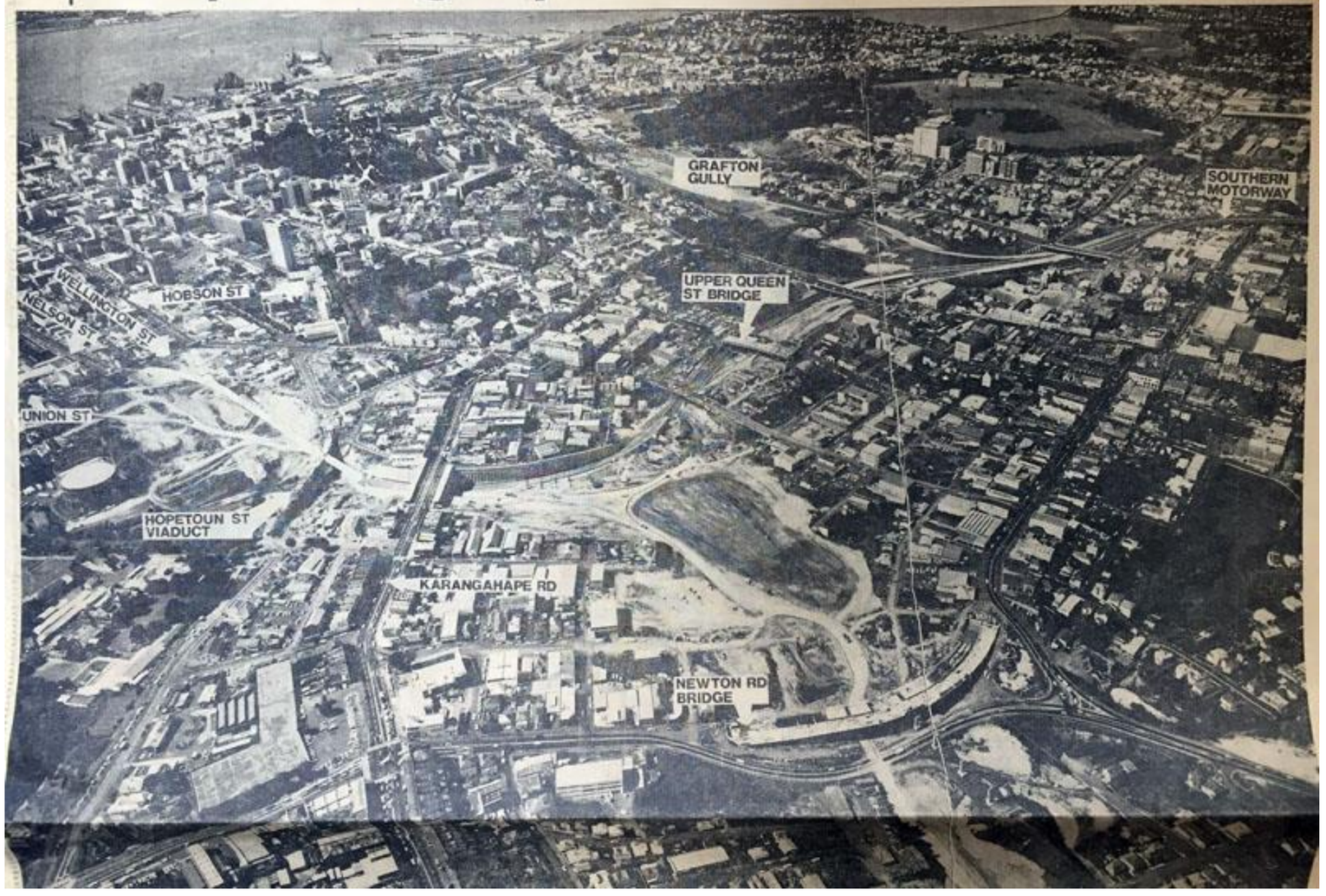
MASTER TRANSPORT FOCAL POINT.

The Grafton Gully and nearby areas will be the focal point of a network which will be among the most important in the Auckland Master Transport plan. The original Grafton Bridge was merely built to span a bush-clad gully. Among other things there will be a twin tunnel, nine chains long, with the rest "cut and cover" passes.

Main features of this view of the upper city are: A, Route to and from downtown city; B, To Newmarket and Penrose; C, Symonds Street; D, To Harbour Bridge under Karangahape Road; E, Motorway connecting south-western suburbs; F, Newton gully to northern motorway. The latter has been in use for some time.



Major surgery for Auckland City




Newton 1959
Newton 2010

'The highway is the triumphant devaluation of space'

-Milan Kundera

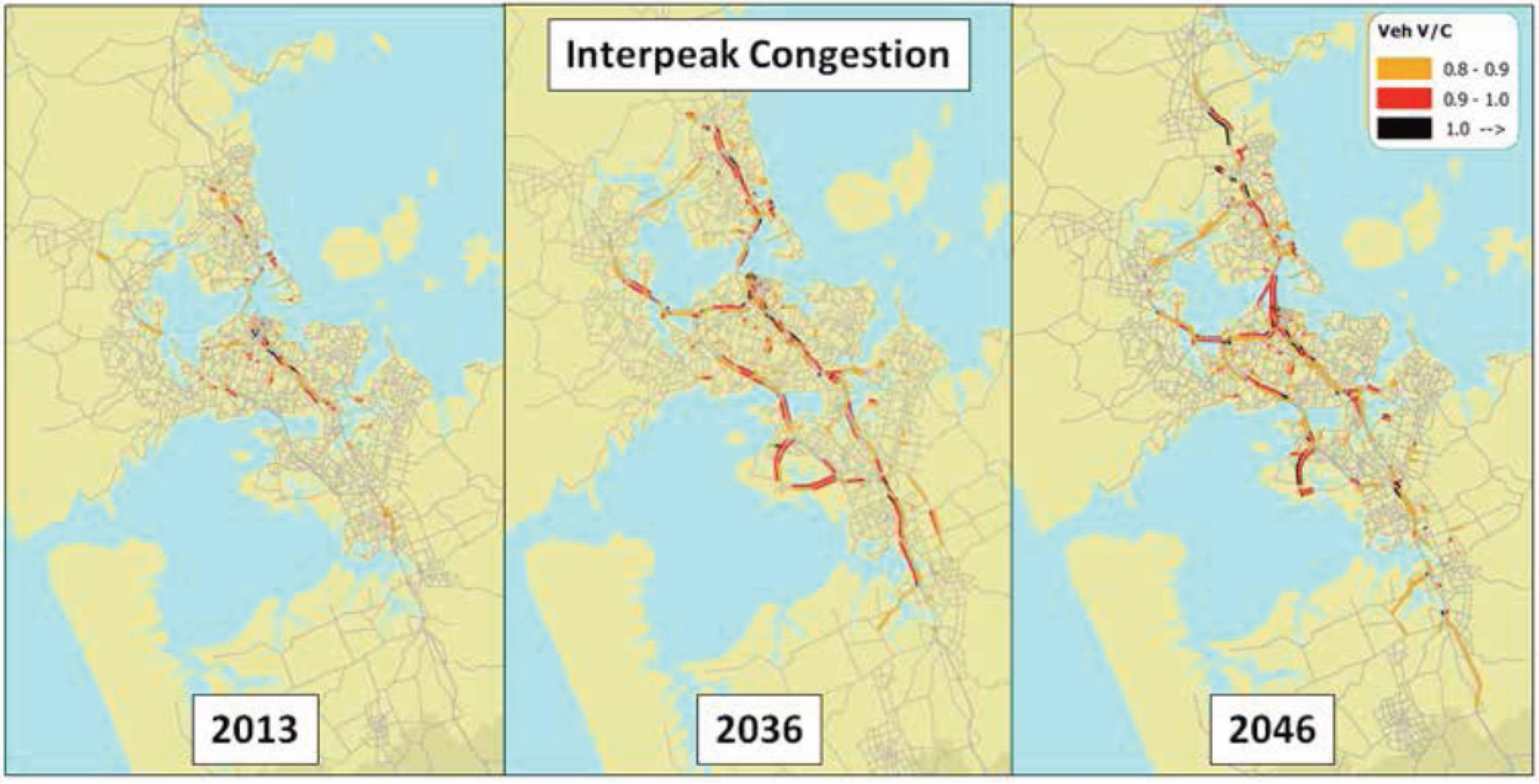
“Officials will provide advice on how this process can be managed and achieved,” Mr Bridges says.

In the interim, the NZ Transport Agency will later this year start early project works on widening State Highway 20 between Neilson St and Queenstown Rd.

“These works are integral to the wider East-West Connection project and will support traffic growth when the Waterview Tunnels open,” Mr Bridges says.

Over the next three years, $4.2 billion will be invested in transport in and around Auckland. This includes:

- Completing the Western Ring Route by 2019.
- Opening the $200 million Te Atatu and Lincoln interchanges in March.
- Opening the $1.4 billion Waterview Connection early next year.
- Ongoing construction of the $1.3 billion Auckland Manukau Eastern Transport Initiative.
- $268 million to upgrade parts of the Southern Motorway by late 2018.
- Starting construction of the Northern Motorway Upgrade in 2018, connecting it with the Western Ring Route.
- Completion of the Northern Busway Extension through to Albany.


Interpeak Congestion
Veh V/C
0.8 - 0.9
0.9 - 1.0
1.0 -->
2013
2036
2046

East West initial BCR table

TABLE 9.1: ECONOMIC ASSESSMENT OF OPTIONS (BASE CASE)

	Option A	Option B	Option C	Option D	Option E	Option F	FN32
Total Benefits ($M PV)[19]	850	1650	1500	1200	1600	1550	25
Net Costs ($M PV)[20]	200	500	700	750	850	800	20
NPV ($M)	650–700	1150–1200	775–825	475–525–	750–800	725–775	5
BCR (P50)	4.9	3.4	2.2	1.7	1.9	1.9	1.2
BCR (P95)	3.3	2.3	1.6	1.2	1.4	1.4	0.8

The Government today announced its intention to streamline the consent process for the East-West Connection roading project in Auckland in order to bring forward its construction.

The project, estimated to cost between $1.25 and $1.85 billion, will provide a seamless link between the South-Western Motorway (SH20) and the Southern Motorway (SH1). It will also tackle congestion and provide more reliable travel times in and out of the Onehunga-Penrose industrial area, and between the eastern suburbs and the airport.

* beehive.govt.nz

‘Auckland’s dependence on cars is the product of path-dependent pro-road polices extending back to the 1950s…This has not only created car-oriented norms, but also established formidable political and institutional barriers, as evidenced by inequitable funding allocation, biased technical rationality, shallow consultation processes…to justify road projects in preference to public transport.’

-Imran Muhammed *Metro Transport Planning and Governance in Auckland*
Melbourne University Press 2014

DE LEUW, CATHER & COMPANY
ENGINEERS
WESTERN OFFICE
1256 MARKET STREET
SAN FRANCISCO 2, CALIFORNIA
UNDERHILL 1-1302

October 25, 1965

The Chairman and Members
Auckland Regional Authority
Auckland, New Zealand

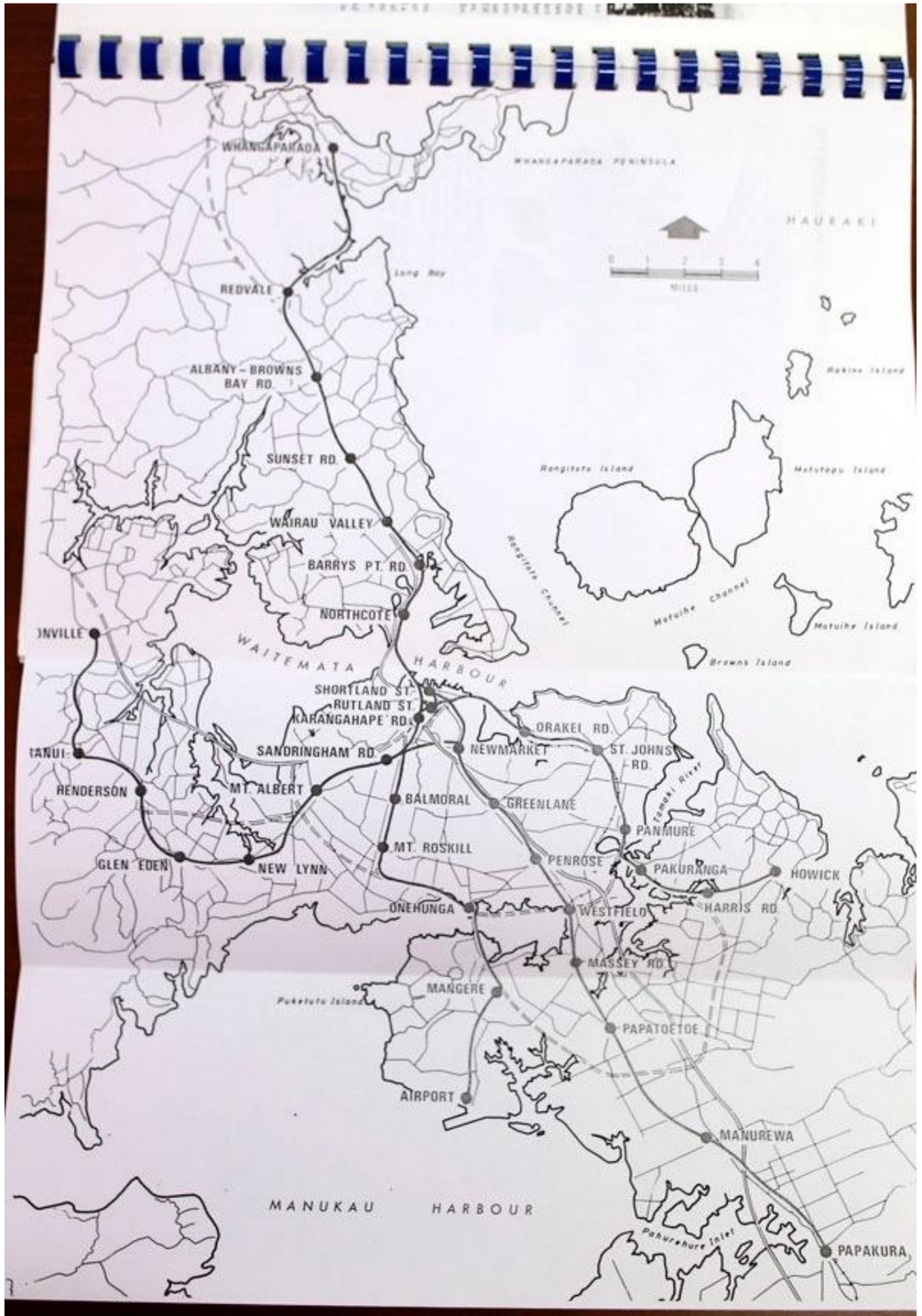
Gentlemen:

We are pleased to submit herewith a summary of the surveys, findings and recommendations completed pursuant to our assignment of May 14, 1963, to conduct a comprehensive study of highway transportation in the Auckland Metropolitan Region. This report presents a long-range plan for transportation development, including motorways, arterial thoroughfares and local streets, together with operational traffic improvements and automobile parking facilities.

Our report of July 15, 1965 on the Regional Transit Plan recommends a coordinated bus and rail rapid transit plan for public transportation service in the Auckland Metropolitan Region. The rail rapid transit facility would operate along trunk lines in the several principal corridors where railway facilities are now located, with an extension to downtown Auckland via an underground subway along Customs and Queen Streets to a terminus at the Civic Center. The bus lines tributary to the rail rapid transit corridors will provide feeder services to the outlying rail stations.

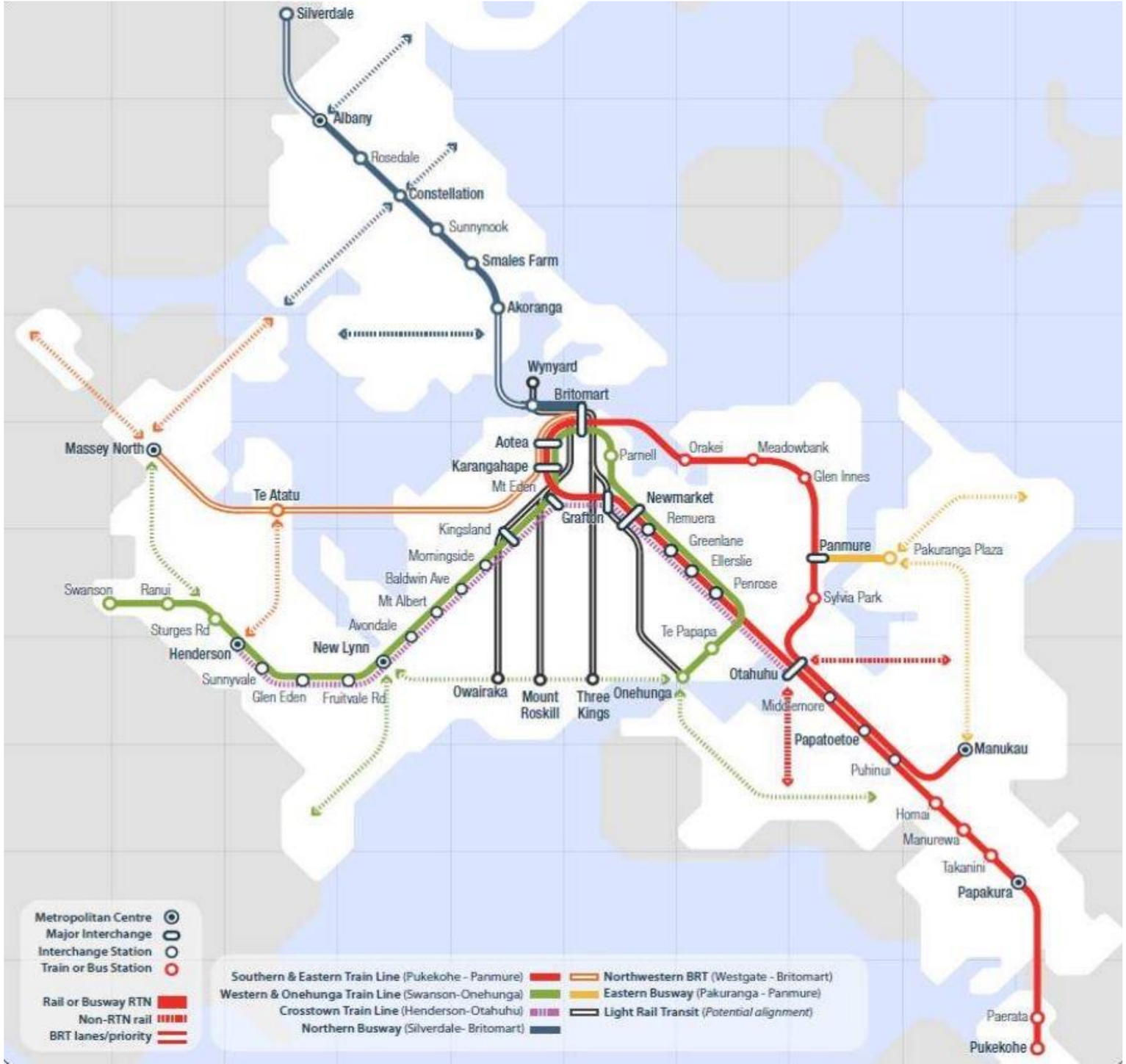
The two reports provide the basis for development of a balanced transportation system adequate to serve the entire Auckland Region to 1986 and beyond. The findings, conclusions and recommendations of this report are summarized as follows.

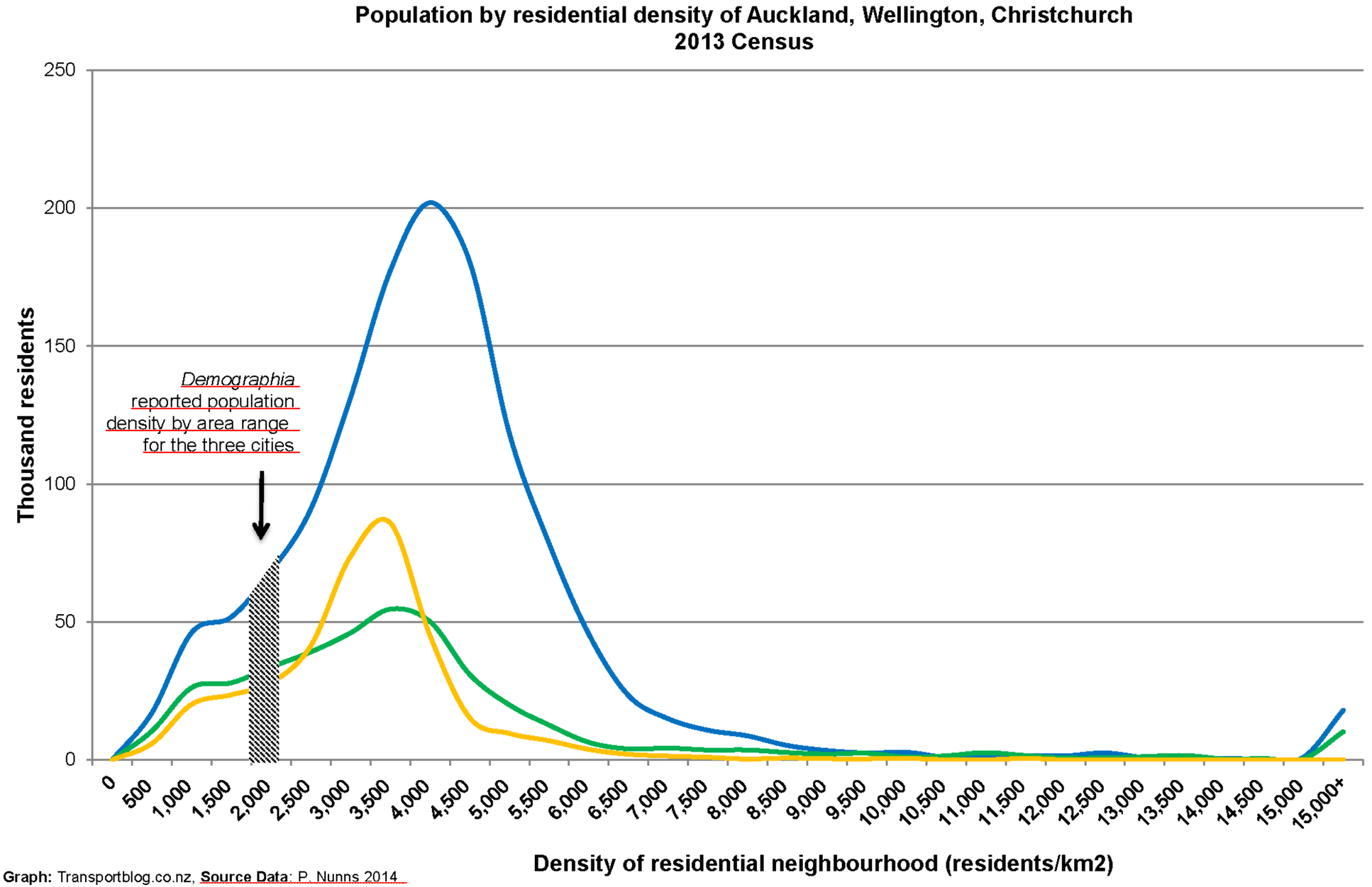
The transportation surveys, which provided an accurate and authoritative basis for estimating future traffic, included a comprehensive origin-destination survey, traffic volume counts, motorway and street inventories, screen line and cordon counts, travel time studies and parking studies in the central business district. Analyses of these


WHANGAPARAOA
WHANGAPARAOA PENINSULA
HAURAKI
REDVALE
Long Bay
ALBANY – BROWNS BAY RD
SUNSET RD
WAIRAU VALLEY
BARRYS PT. RD
NORTHCOTE
Rangitoto Island
Motutapu Island
Rakino Island
Motuihe Channel
Motuihe Island
Browns Island
WAITEMATA HARBOUR
SHORTLAND ST
RUTLAND ST
KHANGAHAPE RD
ORAKEI RD
SANDRINGHAM RD
NEWMARKET
ST JOHNS RD
Tamaki River
RENDERSON
MT. ALBERT
BALMORAL
GREENLANE
PANMURE
MT. ROSKILL
PENROSE
PAKURANGA
HOWICK
GLEN EDEN
NEW LYNN
ONEHUNGA
WESTFIELD
HARRIS RD
MASSEY RD
MANGERE
Puketutu Island
PAPATOETOE
AIRPORT
MANUREWA
MANUKAU HARBOUR
Pahurehure Inlet
PAPAKURA

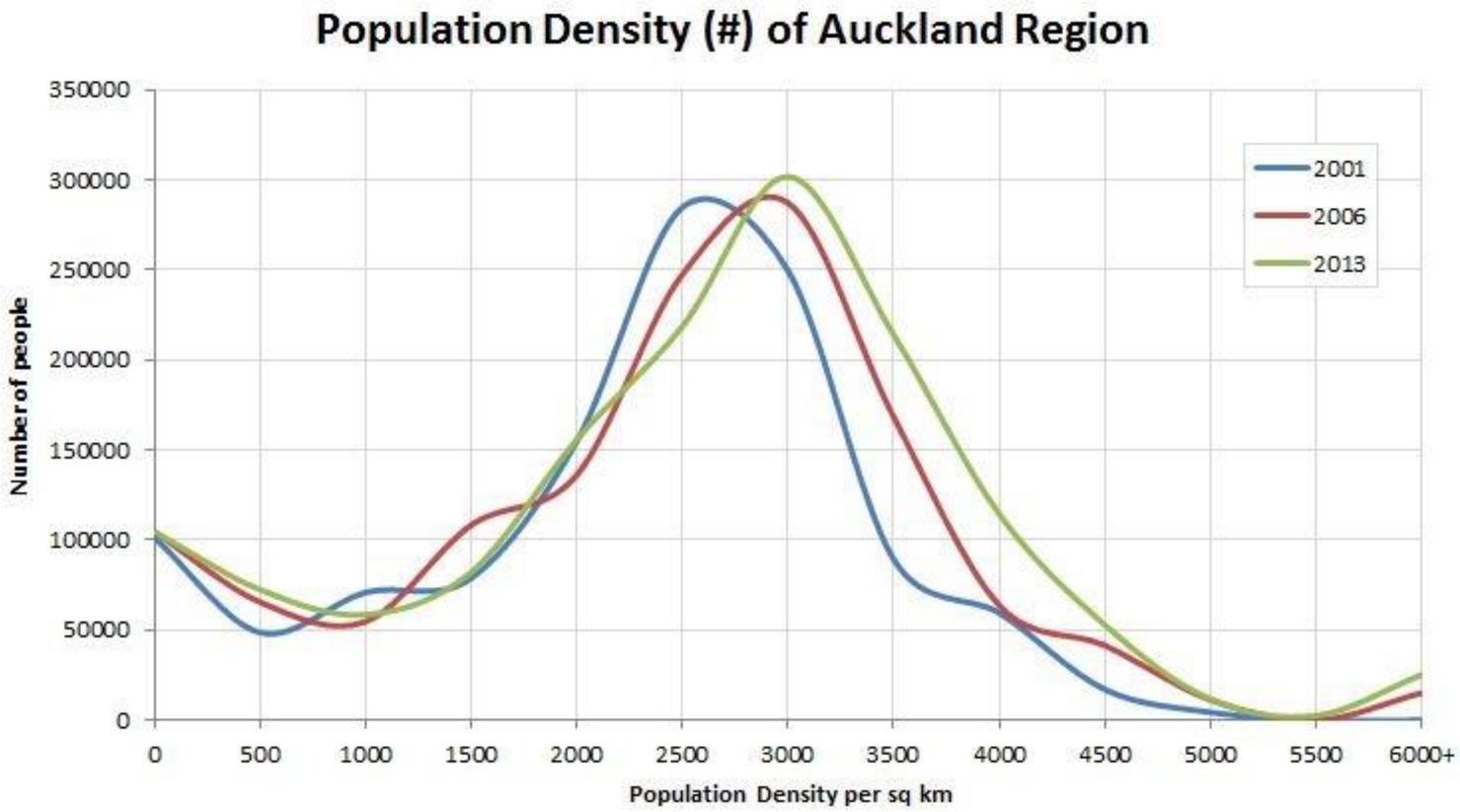

AUCKLAND
THE CONGESTION FREE NETWORK
2030
congestionfree.co.nz
Silverdale
Redvale
Albany
Greville Rd.
Rosedale
Constellation
Unsworth
Sunnynook
Schnapper Rock
Greenhithe
Kumeu
Hobsonville
Beachhaven
Smales Farm
Takapuna
Brighams Creek
Hauraki
Belmont
Westgate
Birkenhead
Akoranga
Royal
Northcote
Onewa
Devonport
Lincoln Road
Wynyard
Britomart
Lincoln Green
Te Atatu
Orakei
Meadowbank
Half Moon Bay
Waitakere Hospital
Aotea
Uni.
Parnell
Glen Innes
Swanson
Pt Chevalier
Karangahape
Hosp.
Howick
Ranui
Western Springs
Grey Lynn
Newton
Newmarket
Highland Park
Sturges Rd.
Grafton
Remuera
Kingsland
Greenlane
Sunny Hills
Henderson
Valley Road
Panmure
Ellerslie
Pakuranga Plaza
Baldwin Ave
Morningside
Penrose
Sunnyvale
Te Papapa
Sylvia Park
Glen Eden
New Lynn
Mount Albert
Balmoral
Onehunga
Botany
Fruitvale
Avondale
Otahuhu
East Tamaki
Owairaka
Mount Roskill
Middlemore
Mangere Bridge
Ormiston
Papatoetoe
Mangere
Clover Park
Ihumatao
Puhinui
Auckland Airport
Manukau City
Homai
Manurewa
Takanini
Papakura
Drury
Karaka South
Paerata
Pukekohe
Key to lines & symbols
Southern Line
East-West Line
Airport Line
Shore Line
Ferry Line
Interchange Station
International Airport
Northern Bus Line
Upper Harbour Bus Line
Northwestern Bus Line
Botany Bus Line
Howick Bus Line
Dominion Rd Light Rail
Devonport Bus Line
transportblog
generation zero
Campaign For Better Transport


AUCKLAND
THE CONGESTION FREE NETWORK
2015
Constellation
Sunnynook
Smales Farm
Akoranga
Devonport
Orakei
Meadowbank
Glen Innes
Britomart
Swanson
Ranui
Sturges Road
Henderson
Sunnyvale
Glen Eden
Fruitvale
New Lynn
Avondale
Mount Albert
Baldwin Ave
Morningside
Kingsland
Mt Eden
Grafton
Newmarket
Remuera
Greenlane
Ellerslie
Penrose
Te Papapa
Onehunga
Panmure
Sylvia Park
Otahuhu
Middlemore
Papatoetoe
Puhinui
Manukau City
Auckland Airport
Homai
Manurewa


Silverdale
Albany
Rosedale
Constellation
Sunnynook
Smales Farm
Akoranga
Wynyard
Britomart
Massey North
Aotea
Karangahape
Mt Eden
Parnell
Orakei
Meadowbank
Glen Innes
Te Atatu
Grafton
Newmarket
Remuera
Greenlane
Ellerslie
Penrose
Panmure
Pakuranga Plaza
Sylvia Park
Kingsland
Morningside
Baldwin Ave
Mt Albert
Swanson
Ranui
Sturges Rd
Henderson
Awondale
New Lynn
Sunnyvale
Glen Eden
Fruitvale Rd
Owairaka
Mount Roskill
Three Kings
Onehunga
Te Papapa
Otahuhu
Middlemore
Papatoetoe
Manukau
Puhinui
Homai
Manurewa
Takanini
Papakura
Paerata
Pukekohe
Metropolitan Centre
Major Interchange
Interchange Station
Train or Bus Station
Rail or Busway RTN
Non-RTN rail
BRT lanes/priority
Southern & Eastern Train Line (Pukekohe - Panmure)
Western & Onehunga Train Line (Swanson-Onehunga)
Crosstown Train Line (Henderson-Otahuhu)
Northern Busway (Silverdale- Britomart)
Northwestern BRT (Westgate - Britomart)
Eastern Busway (Pakuranga - Panmure)
Light Rail Transit (Potential alignment)



Graph: Transportblog.co.nz, **Source Data**: P. Nunns 2014


Population Density (#) of Auckland Region
Number of people
350000
300000
250000
200000
150000
100000
50000
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000+
Population Density per sq km
2001
2006
2013

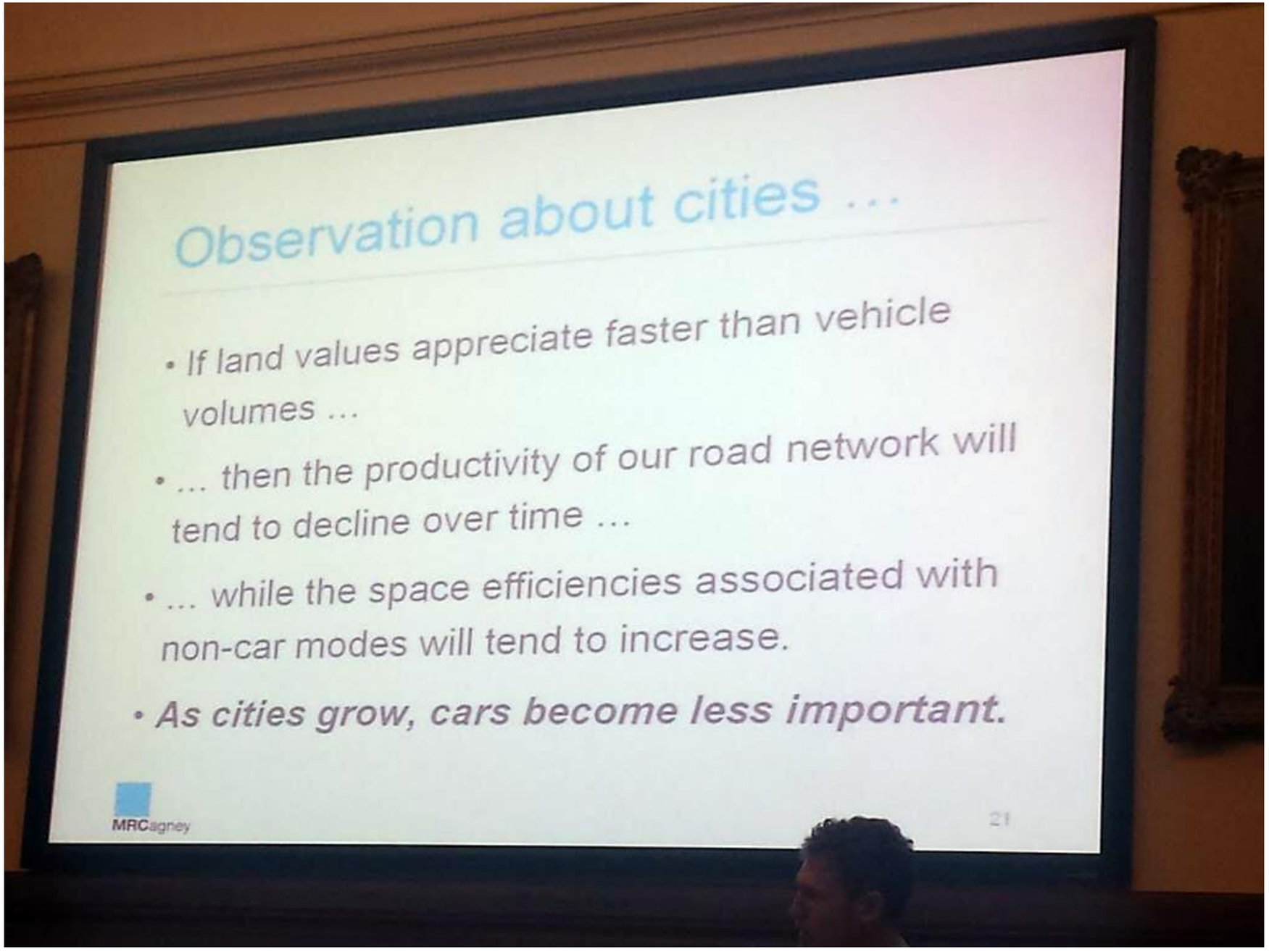
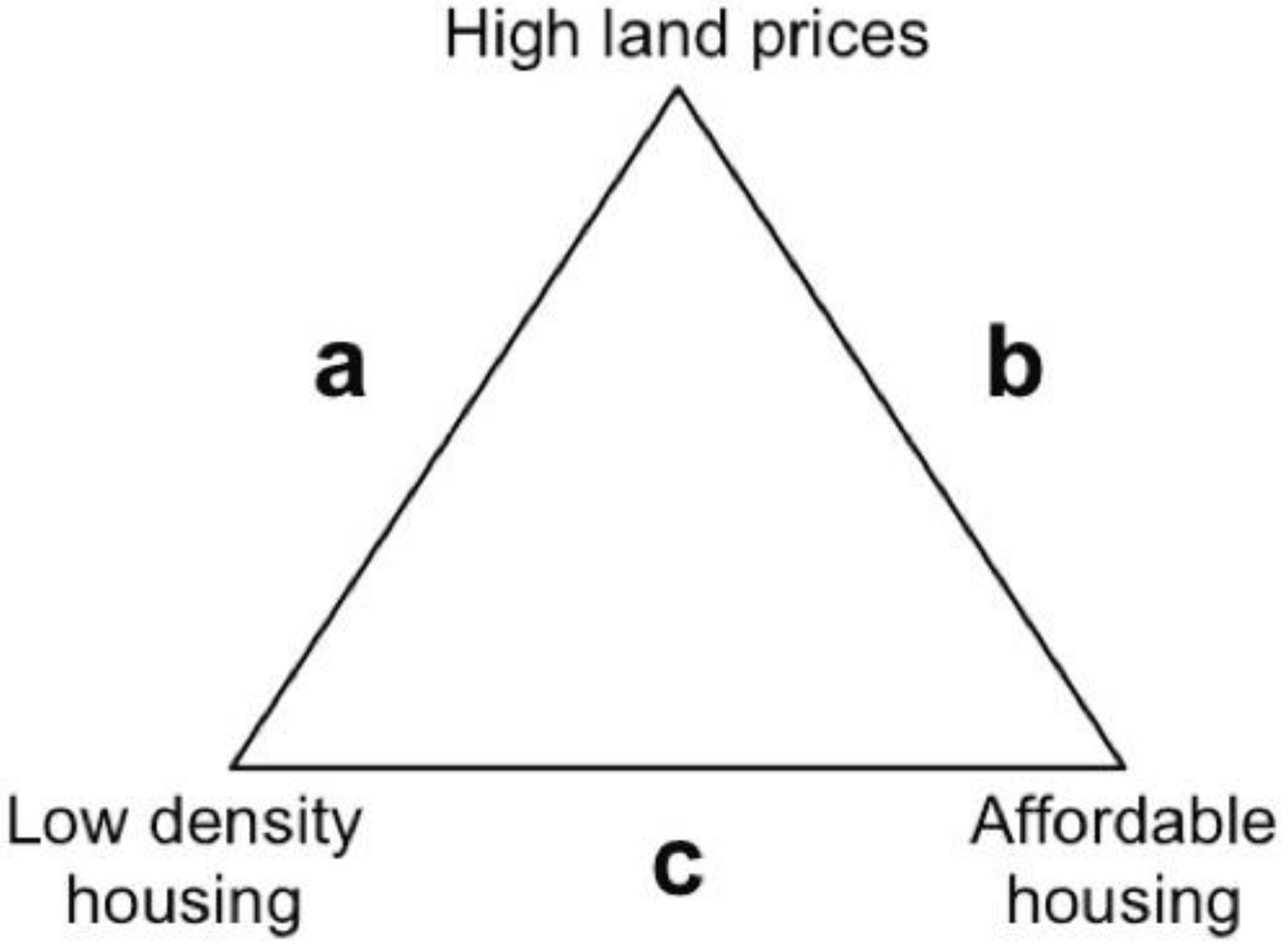
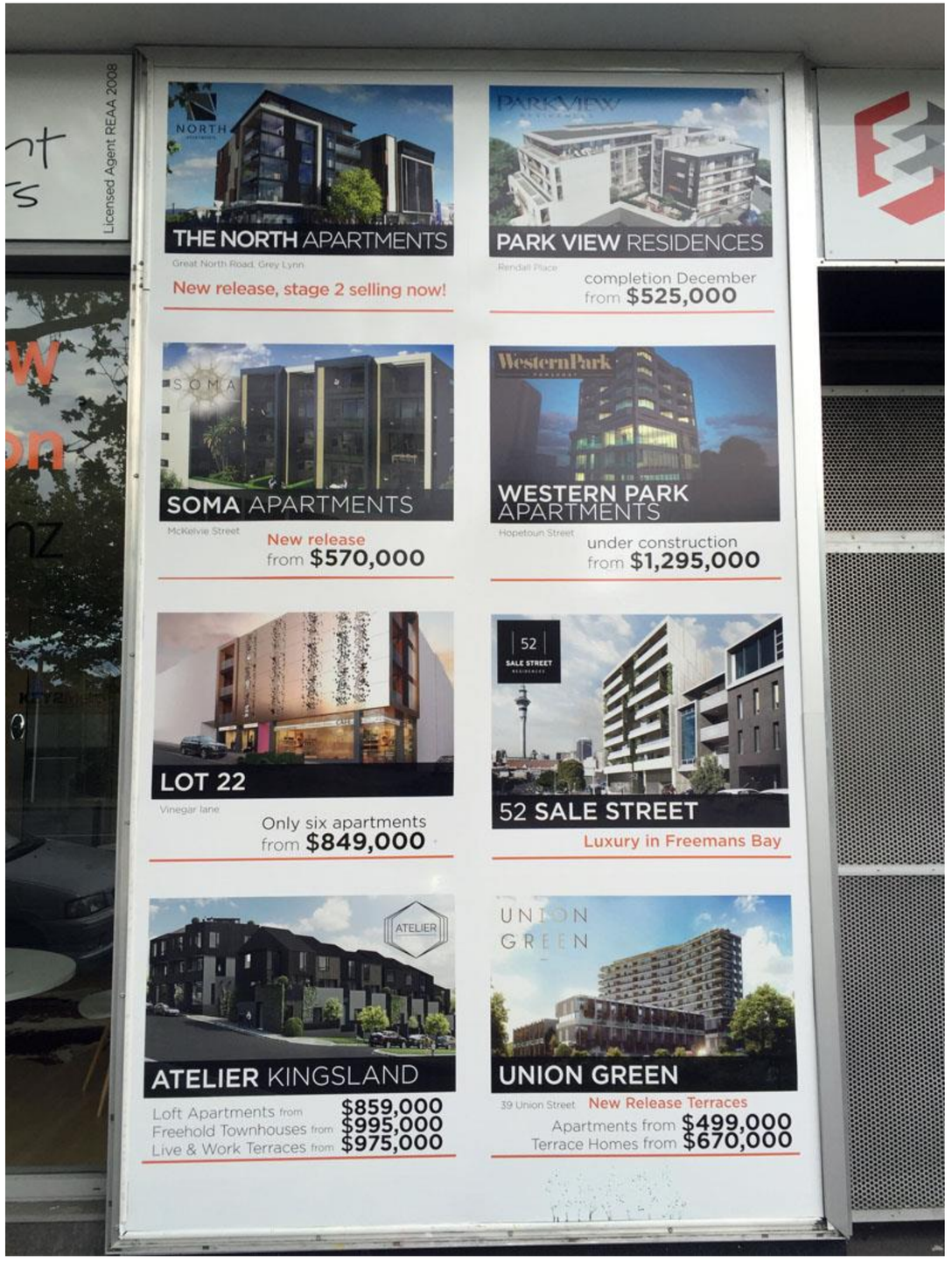

Observation about cities …
• If land values appreciate faster than vehicle volumes …
• … then the productivity of our road network will tend to decline over time …
• … while the space efficiencies associated with non-car modes will tend to increase.
• As cities grow, cars become less important.
MRCagney
21

Figure 5: The urban policy "trilemma": Choose two, and only two




Licensed Agent REAA 2008
THE NORTH APARTMENTS
Great North Road, Grey Lynn
New release, stage 2 selling now!
PARK VIEW RESIDENCES
Rendall Place
completion December
from $525,000
SOMA APARTMENTS
McKelvie Street
New release
from $570,000
WESTERN PARK APARTMENTS
Hopetoun Street
under construction
from $1,295,000
LOT 22
Vinegar lane
Only six apartments
from $849,000
52 SALE STREET
Luxury in Freemans Bay
ATELIER KINGSLAND
Loft Apartments from $859,000
Freehold Townhouses from $995,000
Live & Work Terraces from $975,000
UNION GREEN
39 Union Street
New Release Terraces
Apartments from $499,000
Terrace Homes from $670,000


Queens Residences
90m, Under Construction
St James Suites
134m, Late 2015
NDG Tower
209m, 2016(?)
Masons Tower
190m, 2016
Park Residences
120m, Under Construction
Precinct Downtown
179m, 2016
Show


North Harbour Stadium
Don McKinnon Dr
Northern Motorway
Auckland Waiwera Motorway
Massey University
Albany Expy


Ti Rakau Drive
Ti Rakau Drive
Ti Rakau Drive
Ti Rakau Drive
Ti Rakau Drive
Ti Rakau Drive
Te Hurangi Drive
Te Hurangi Drive
Te Hurangi Drive
Te Hurangi Drive


Norfolk St
Douglas St
Brown St
Richmond Rd
Ponsonby Rd
Chapel Bar & Bistro
Paget St
Picton St
Ponsonby Central
Golden Dawn
Ponsonby Rd
Colin Shaw Ln
Barrie St
Hepburn St
The Longroom
Freeman & Grey
MooChowChow
Mackelvie St
Pollen St
Rose Rd


clothesline
KATE SYLVESTER

I know, you want to read about the restaurant. But I need to get something off my chest first. It's this: if I read another piece about Ponsonby — a restaurant review or anything else — that complains about the lack of parking, I will start throwing my food.

This is why. The worst thing about Ponsonby is the traffic. Who doesn't agree with that? But if they provide more parks, it will get *even worse than it is now*. That's because more parks will bring more cars. I'm not making it up; this phenomenon has been measured all over the world.

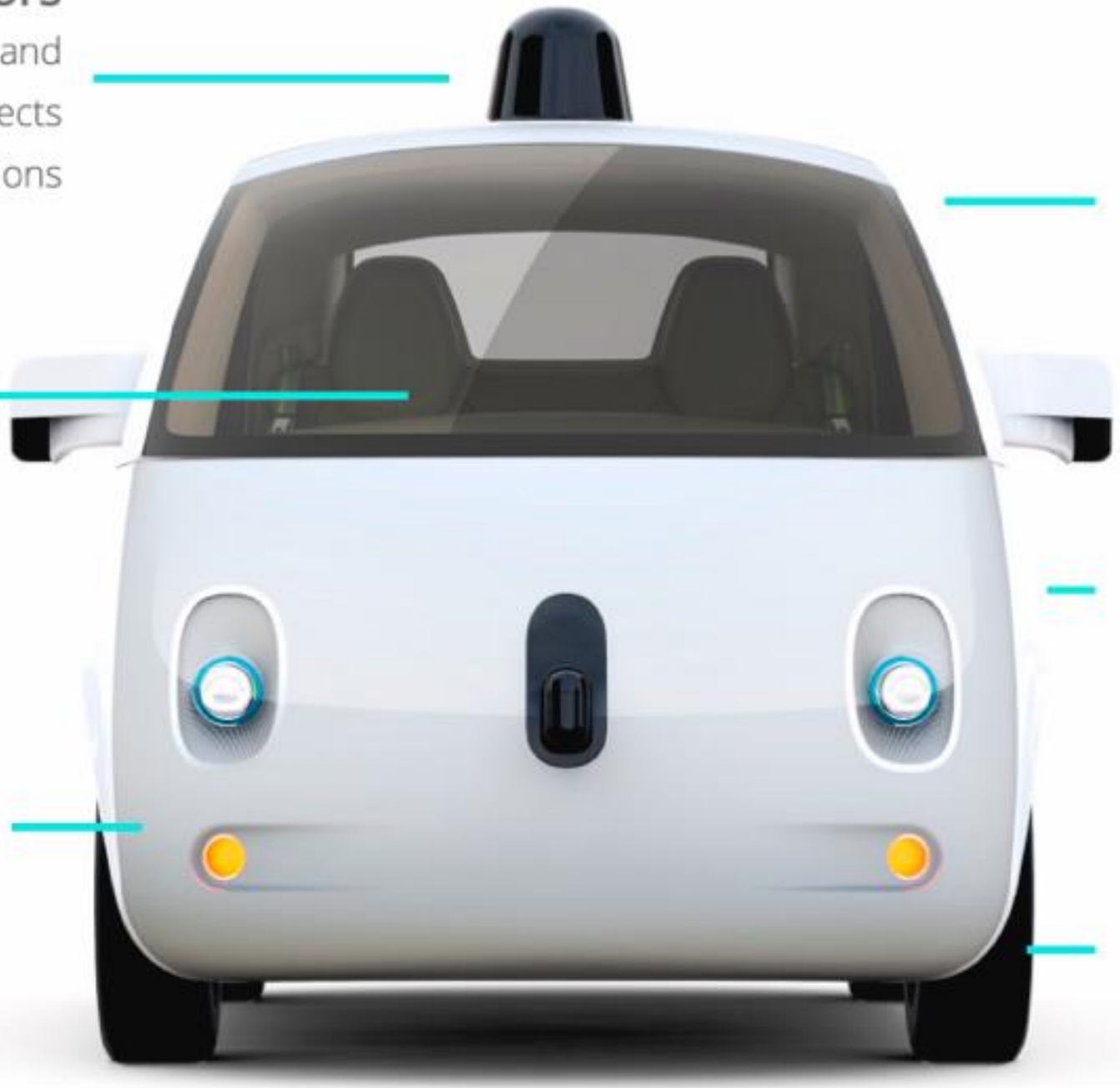
Ponsonby Rd will never be a vehicle-free zone, if only because it has a motorway onramp at both ends. But it could be a lot more pleasant than it is now, as a place to shop, eat and drink, ride a bike or walk the dog. And who doesn't want that?

The key to making it happen is this:


Spark


ONLY


FUTURA



Sensors

Lasers, radars and cameras detect objects in all directions

Interior

Designed for riding, not for driving

Electric batteries

To power the vehicle

Rounded shape

Maximizes sensor field of view

Computer

Designed specifically for self-driving

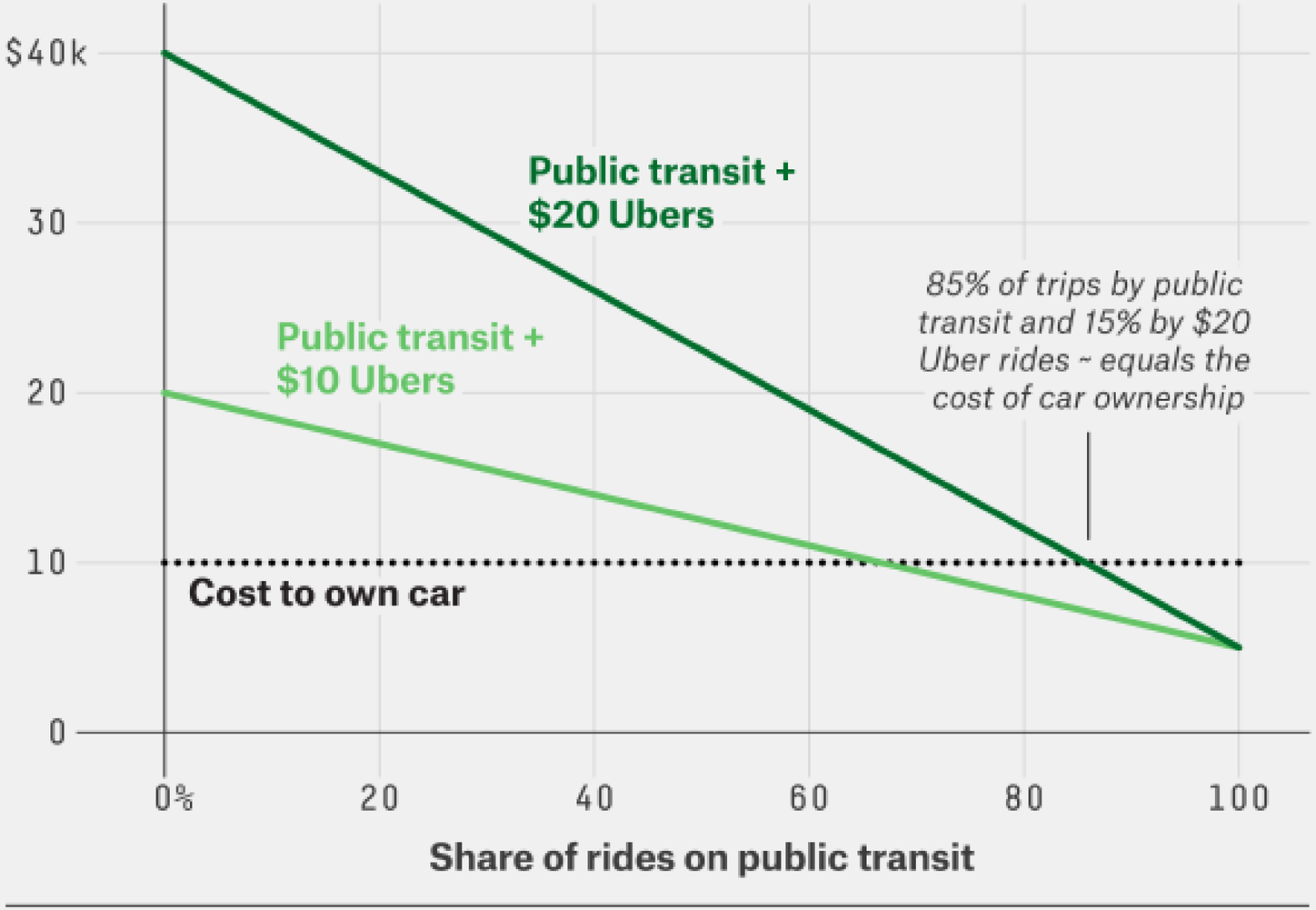
Back-up systems

For steering, braking, computing and more


BARBERS
BESPOKE
No Appointment Necessary
Strangely Normal
OPEN
Tailors

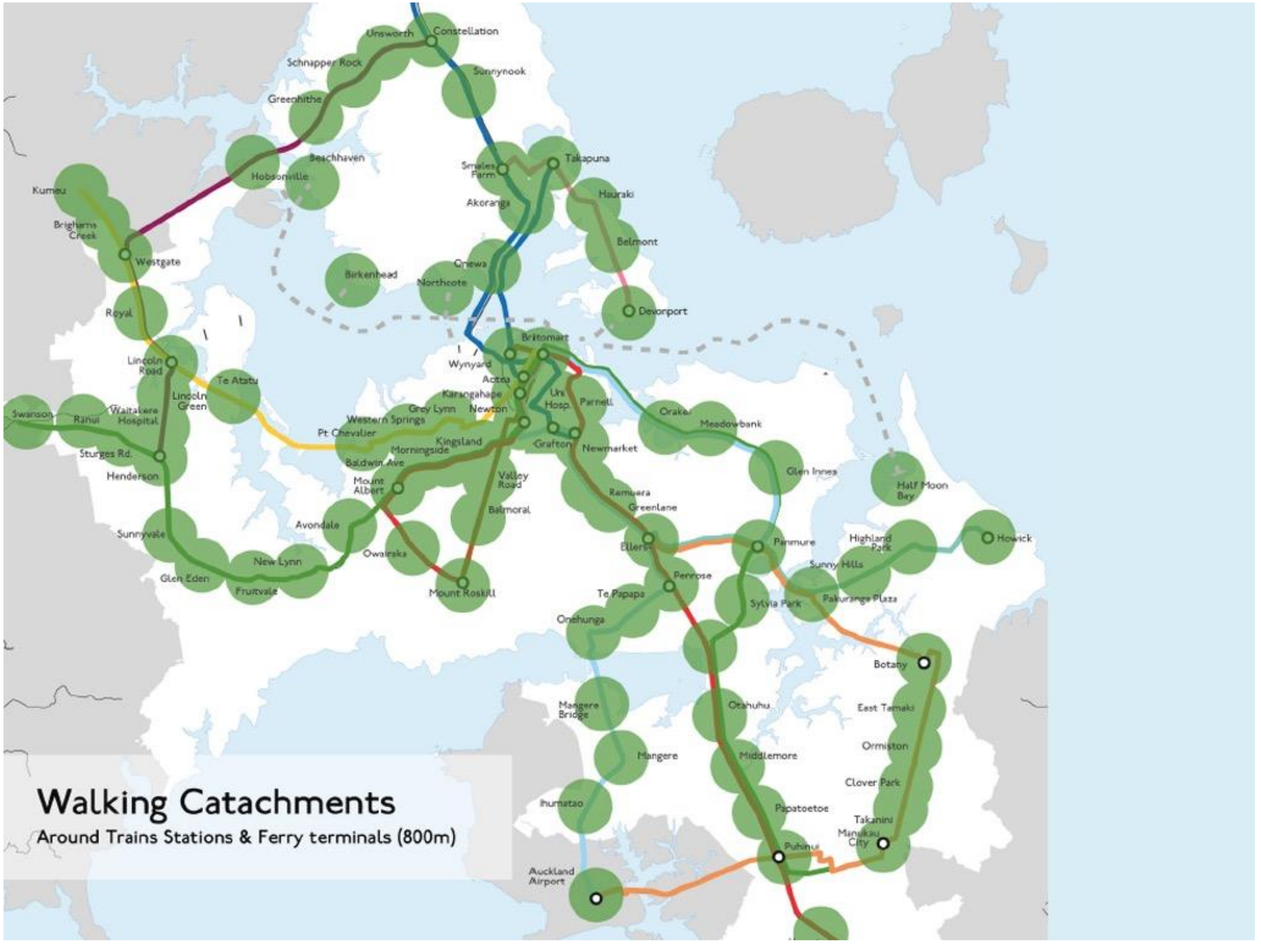
Uber Can Be Cheaper Than Car Ownership — If You Mostly Use Public Transit

Estimated annual cost of transportation by household, given share of trips that are taken on public transit



FIVETHIRTYEIGHT


中野の母が
地下

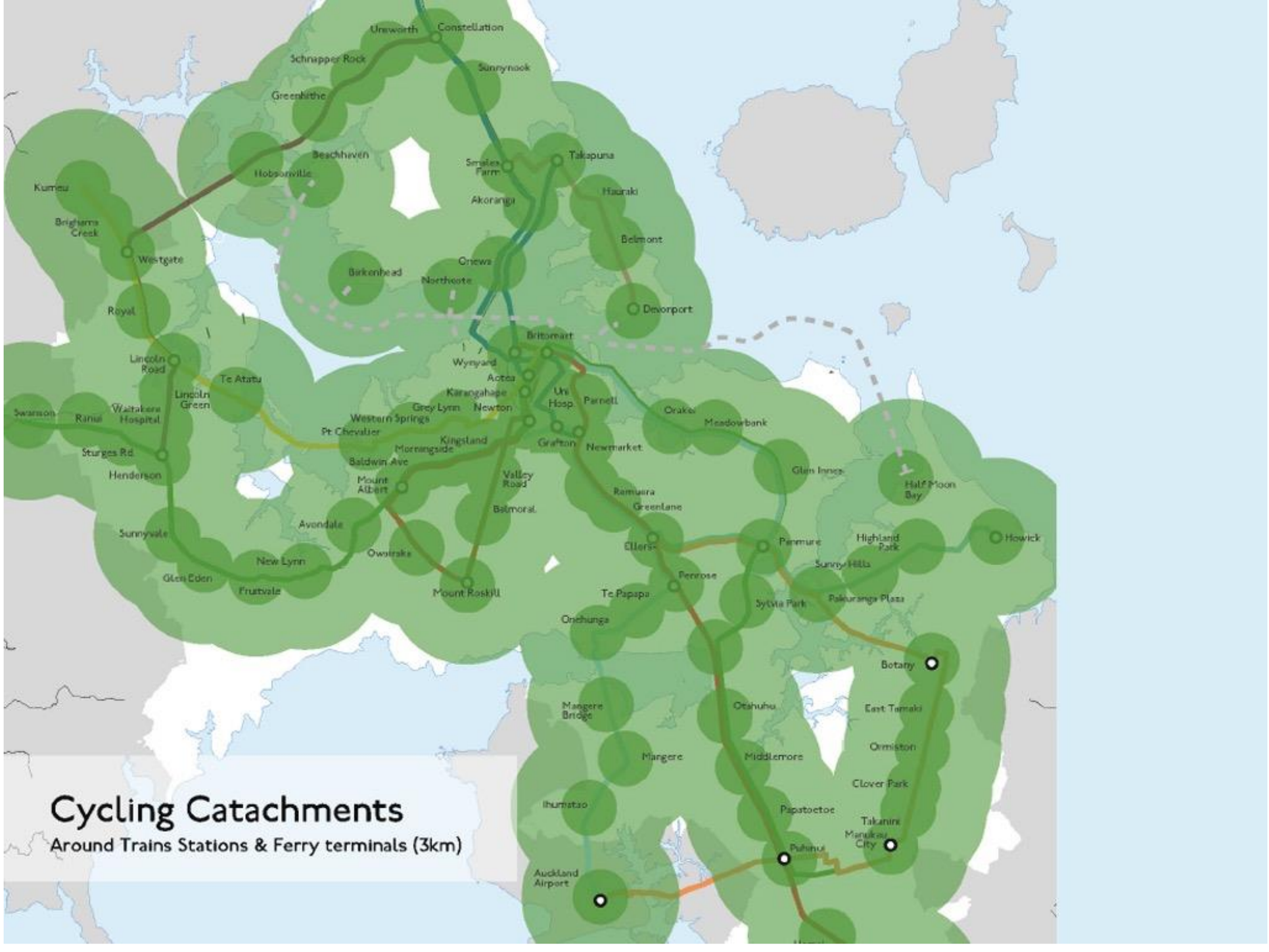

Unsworth
Constellation
Schnapper Rock
Sunnynook
Greenhithe
Beachhaven
Hobsonville
Smales Farm
Takapuna
Akoranga
Kumeu
Brigham Creek
Westgate
Birkenhead
Onewa
Northcote
Belmont
Devonport
Royal
Britomart
Wynyard
Lincoln Road
Te Atatu
Lincoln Green
Swanson
Ranui
Waitakere Hospital
Sturges Rd.
Henderson
Acton
Karangahape
Uni Hosp.
Parnell
Grey Lynn
Newton
Western Springs
Pt Chevalier
Kingsland
Morningside
Grafton
Newmarket
Orakei
Meadowbank
Baldwin Ave
Mount Albert
Valley Road
Ballmoral
Remuera
Greenlane
Glen Innes
Half Moon Bay
Avondale
Owairaka
Ellerslie
Panmure
Highland Park
Howick
Sunnyvale
New Lynn
Glen Eden
Fruitvale
Mount Roskill
Sunny Hills
Penrose
Te Papapa
Pakuranga Plaza
Sylvia Park
Onehunga
Botany
Mangere Bridge
Otahuhu
East Tamaki
Ormiston
Mangere
Middlemore
Clover Park
Ihumatao
Papatoetoe
Takanini
Manukau City
Puhinui
Auckland Airport
Walking Catachments
Around Trains Stations & Ferry terminals (800m)

OUTER LONDON IS ABOUT TO ACTIVATE THE 'SECRET WEAPON' OF THE SUBURBS: THE BICYCLE

February 25, 2015

Michael Andersen, Green Lane Project staff writer

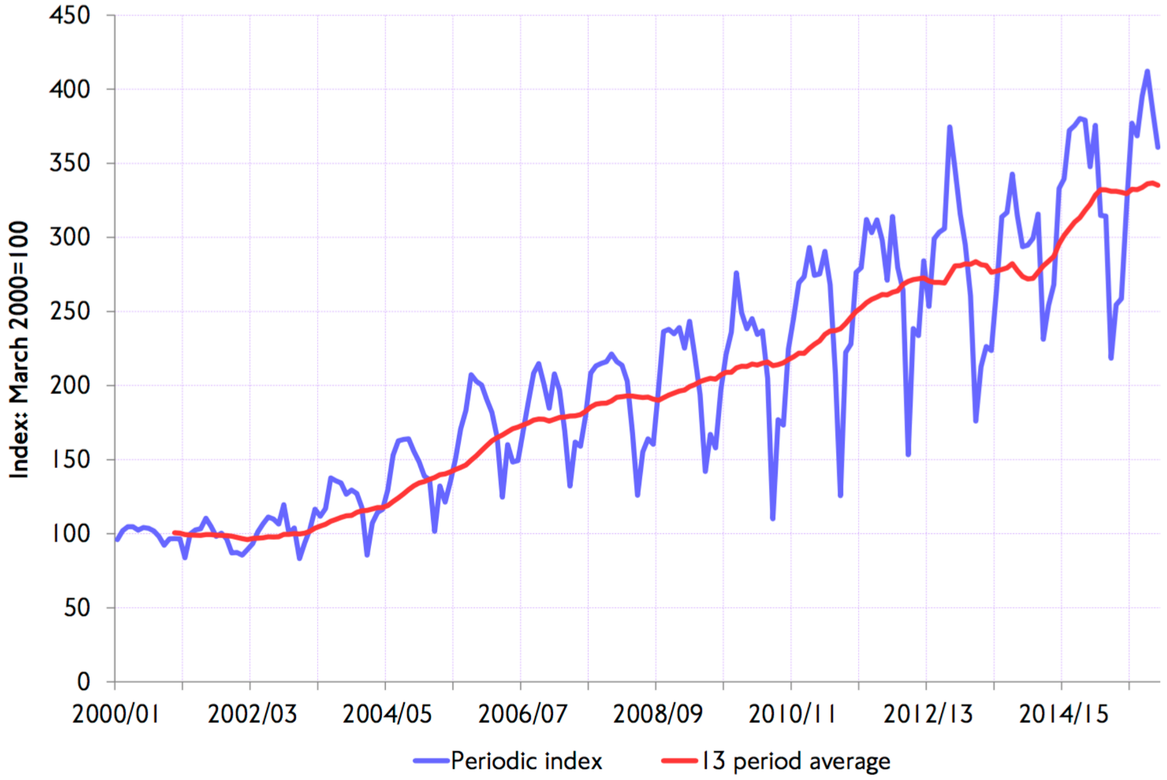
Kingston's rail station would become a "major cycle hub" under London's plan to pour tens of millions of dollars into biking improvements in three of its suburbs.


Cycling Catachments
Around Trains Stations & Ferry terminals (3km)
Unewerth
Constellation
Schnapper Rock
Sunnynook
Greenhithe
Beachhaven
Hobsonville
Smales Farm
Takapuna
Akoranga
Hauraki
Belmont
Kumeu
Brigham's Creek
Westgate
Birkenhead
Onewa
Northcote
Royal
Devonport
Britomart
Wynyard
Aotea
Lincoln Road
Te Atatu
Karangahape
Uni Hosp
Parnell
Lincoln Green
Swanson
Rānui
Waitakere Hospital
Grey Lynn
Newton
Orakei
Meadowbank
Western Springs
Pt Chevalier
Kingsland
Grafton
Newmarket
Sturges Rd
Morningside
Baldwin Ave
Glen Innes
Half Moon Bay
Henderson
Mount Albert
Valley Road
Ramuera
Greenlane
Balmoral
Sunnyvale
Avondale
Ellers-
Panmure
Highland Park
Howick
New Lynn
Owairaka
Sunny Hills
Glen Eden
Penrose
Frustvale
Mount Roskill
Te Papapa
Sylvia Park
Pakuranga Plaza
Onehunga
Botany
Mangere Bridge
Otahuhu
East Tamaki
Ormiston
Mangere
Middlemore
Clover Park
Ihumatao
Papatoetoe
Takanini
Manukau City
Puhinui
Auckland Airport

London May Soon Have More Bikes Than Cars at Rush Hour

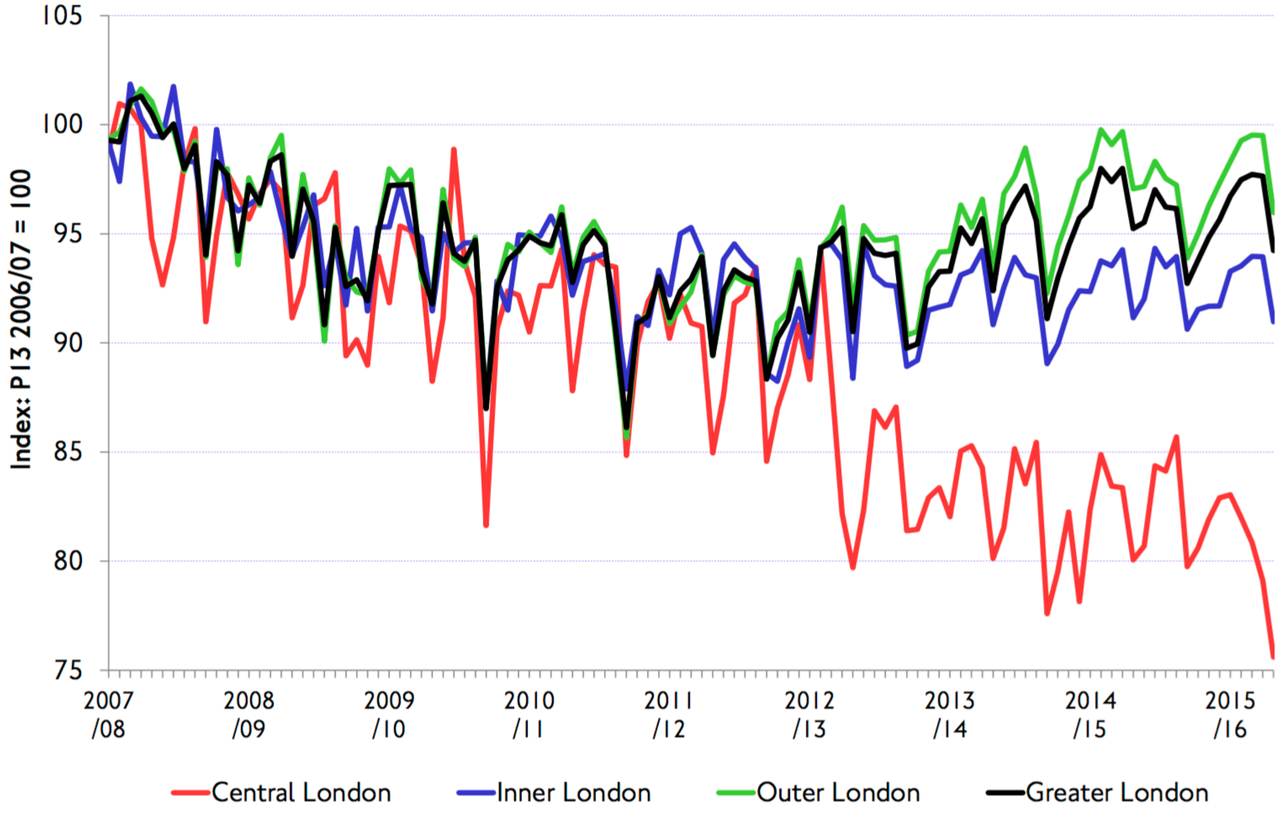
But cycling in the city still faces an uphill ride.

Figure 3.10 Trends in cycle flows on the TLRN.

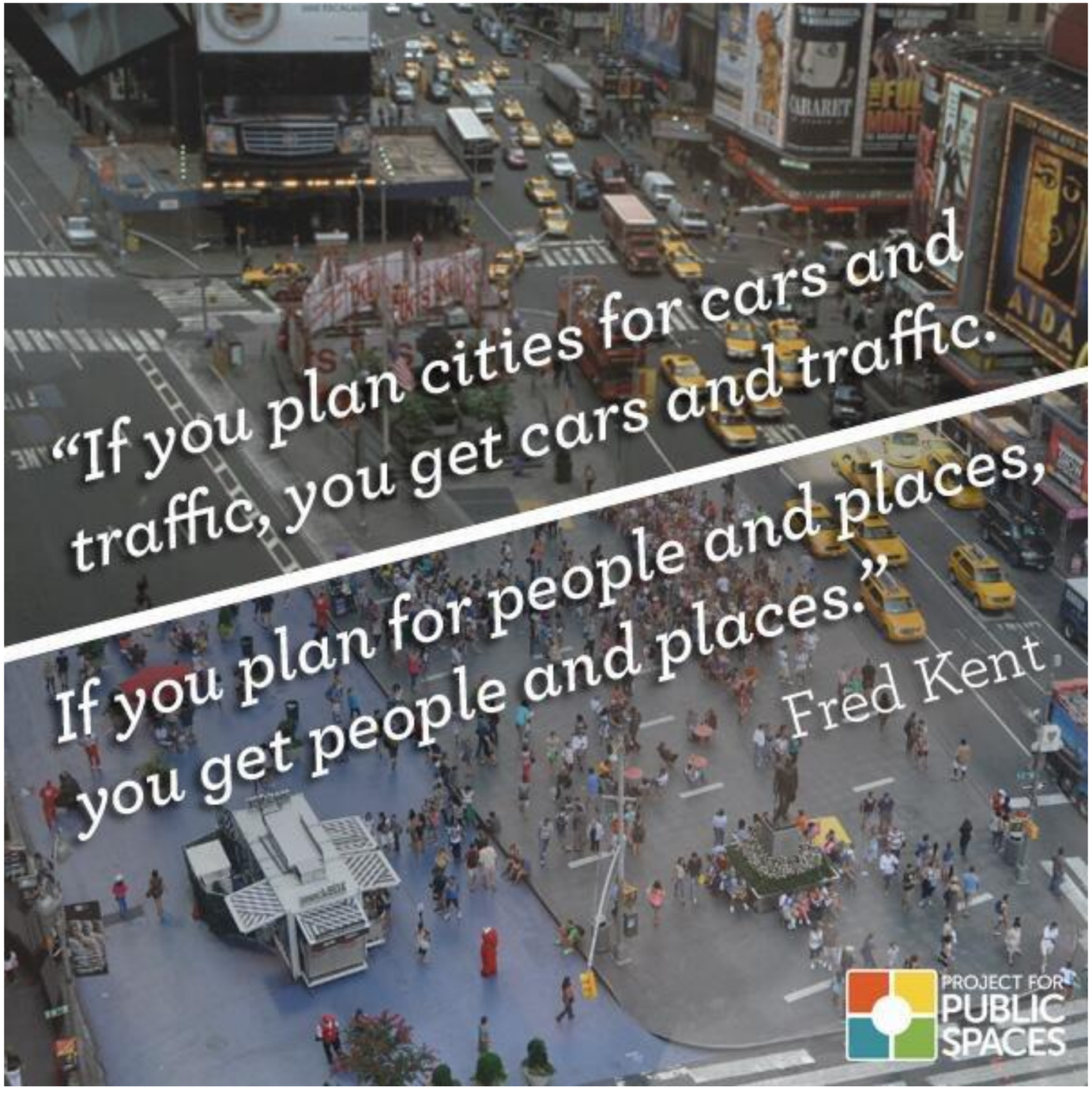


Source: TfL Surface Transport - Outcomes, Insight & Analysis.

Figure 3.8 Trends in road traffic (traffic flows), all motor vehicles in central, inner and outer London. Index: P13 2006/07=100.



Source: TfL Surface Transport - Outcomes, Insight & Analysis.


"If you plan cities for cars and traffic, you get cars and traffic.
If you plan for people and places, you get people and places."
Fred Kent
PROJECT FOR PUBLIC SPACES


PREPARE
TO
STOP
80
80

'Seductive Congestion: that's what the best cities are about'

-John King