

Local Transport Issues for Christchurch

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TRANSPORT PLANNING AND DESIGN

The Tuesday Club, Christchurch, Sep 2019

Session Outline

- About me
- Big Picture Stuff
 - Case Study
- Different Travel Modes
- Prioritising Spending

Time for Questions/Discussion

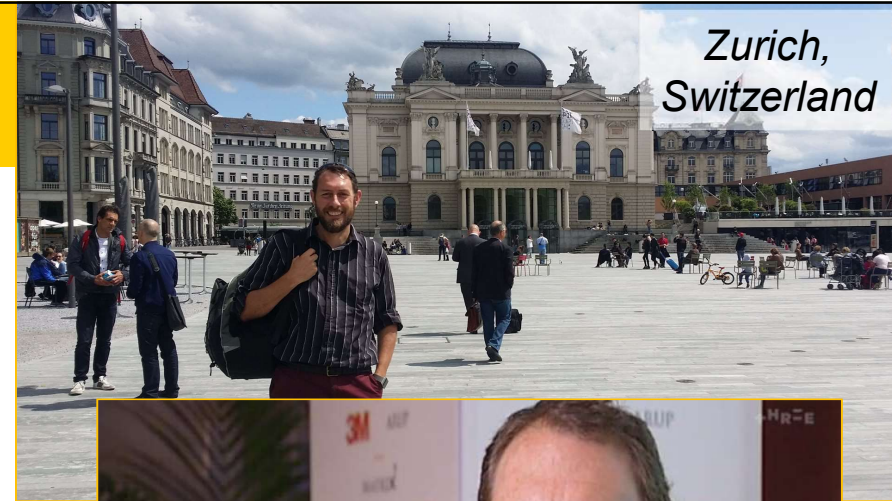


About me...

- ViaStrada Ltd (2016-)
- University of Canterbury (2004-16)
- Opus International (1996-2004)

I should declare some affiliations:

- *Living Streets Aotearoa*
- *CAN / Spokes Canterbury*
- *NZ Automobile Assn*
- *ECan PT Advisory Group*



The thing about Transport in NZ

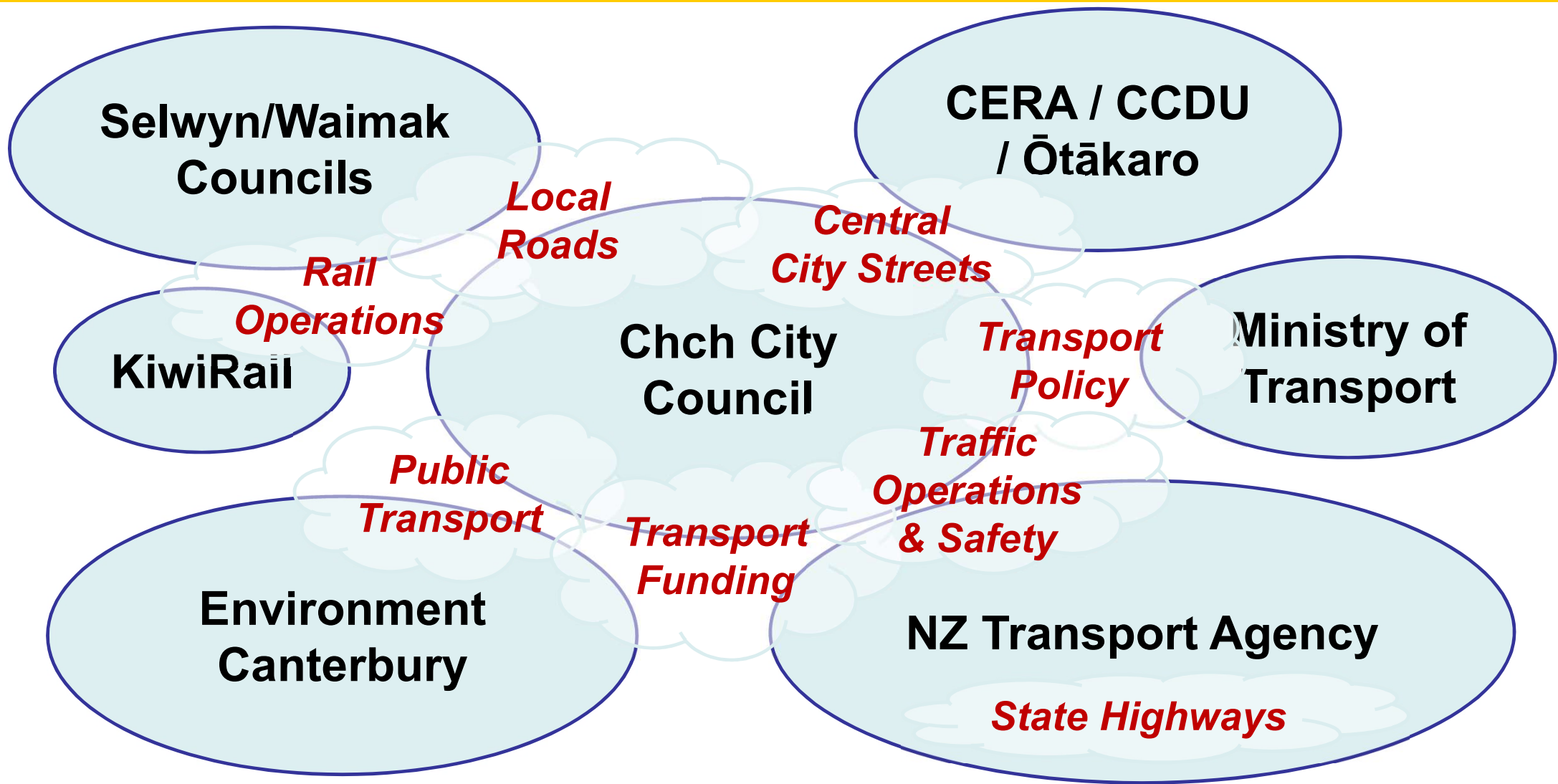
- Transport is a very topical issue in **local** govt politics

BUT...

- Most of the key transport decisions are made by **central** Govt

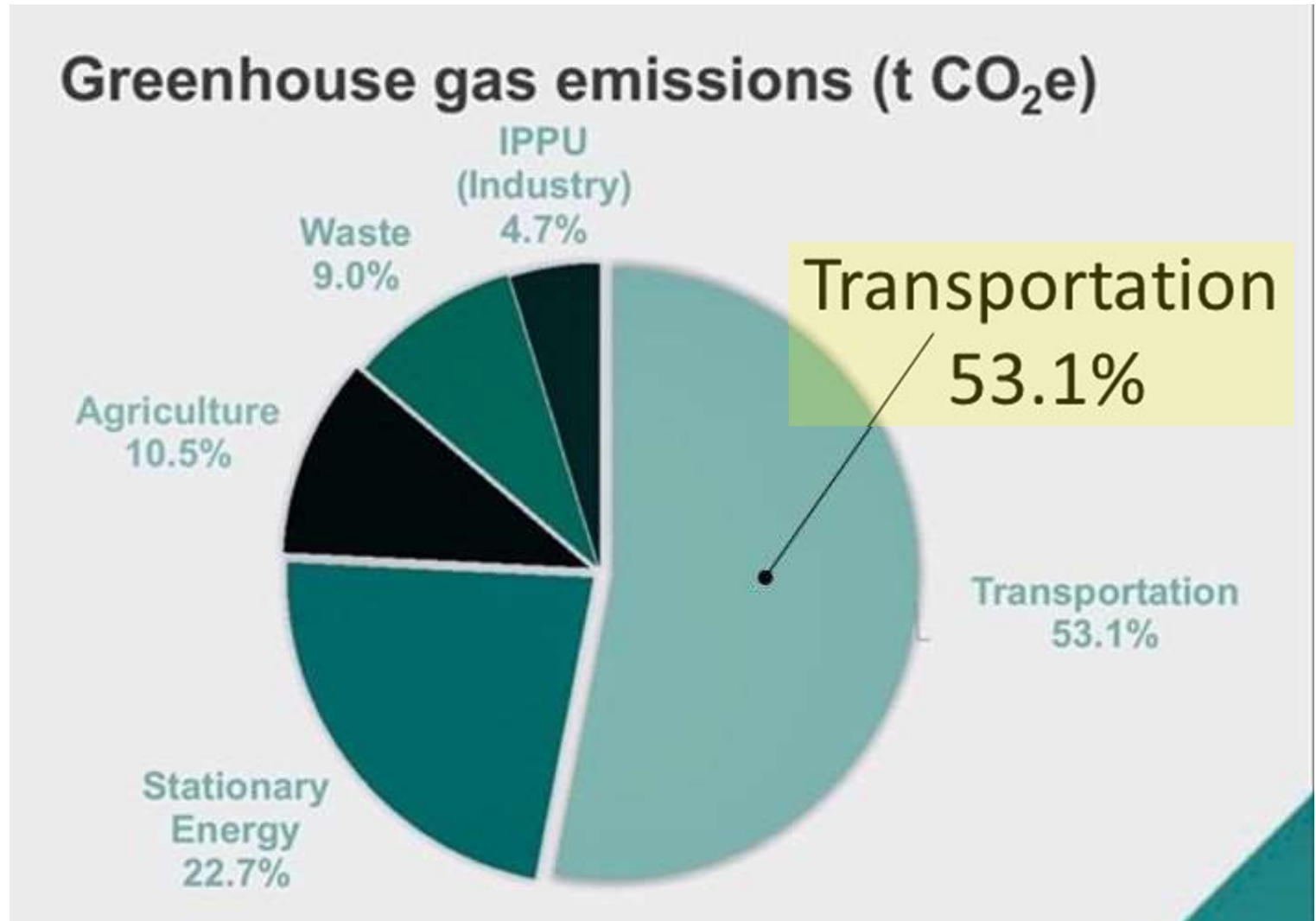
*(...but locally we can still do a lot to influence the
Ministers / Ministry / Transport Agency)*

Who is responsible for Transport in NZ?



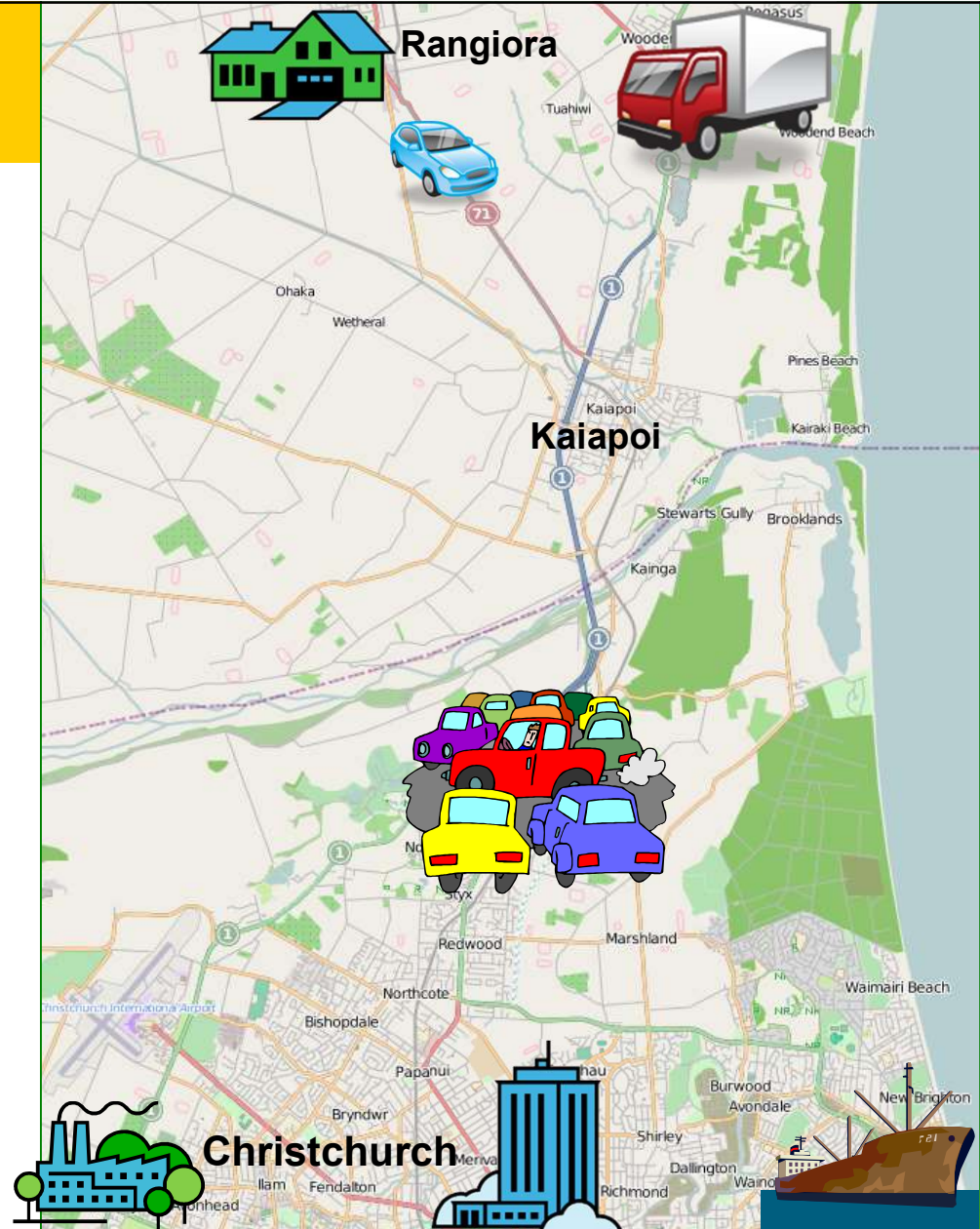
Thinking Global: Climate Change

- Chch GHG emissions by sector
 - IPCC target by 2030 = **-45%** (*>4% pa reduction*)



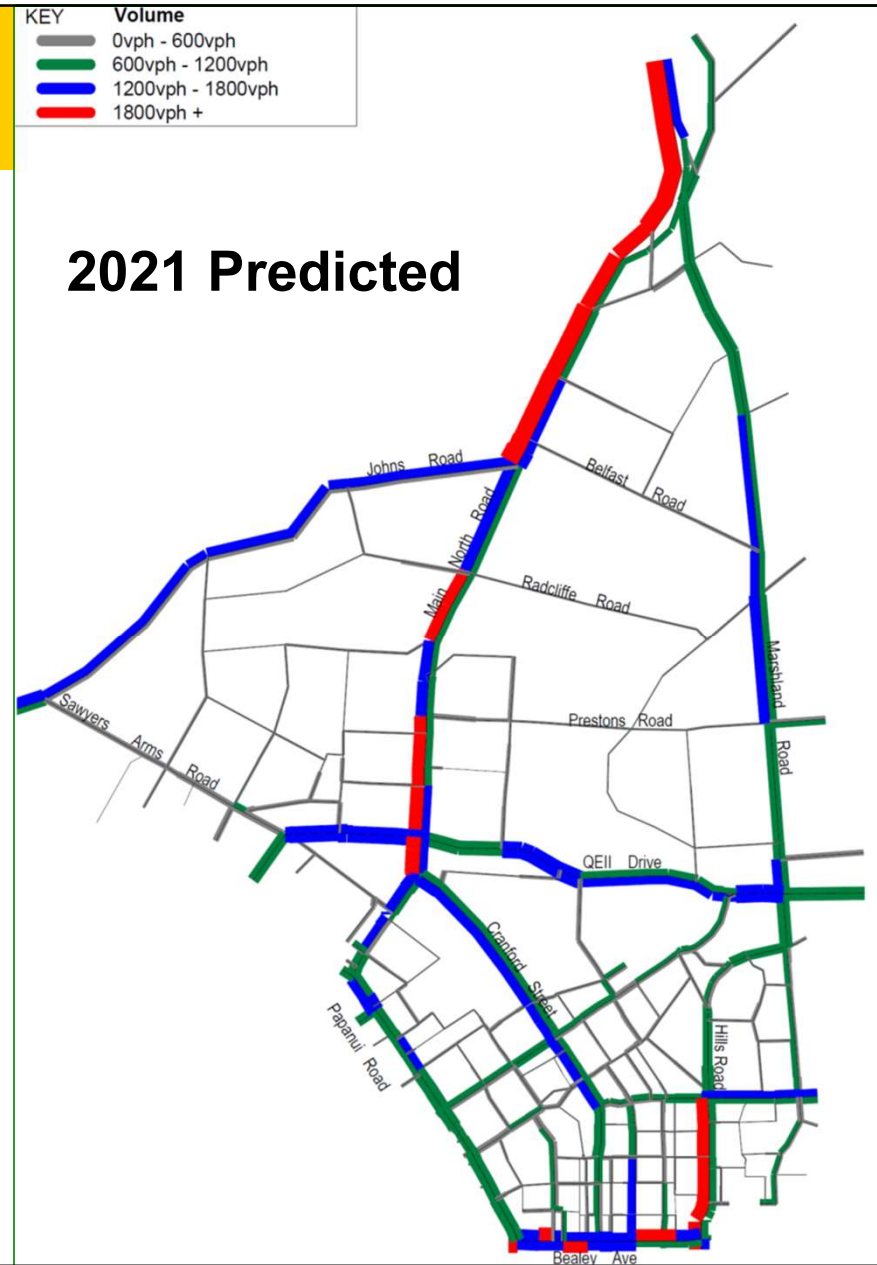
Case Study:

- Chch Northern Roading Access



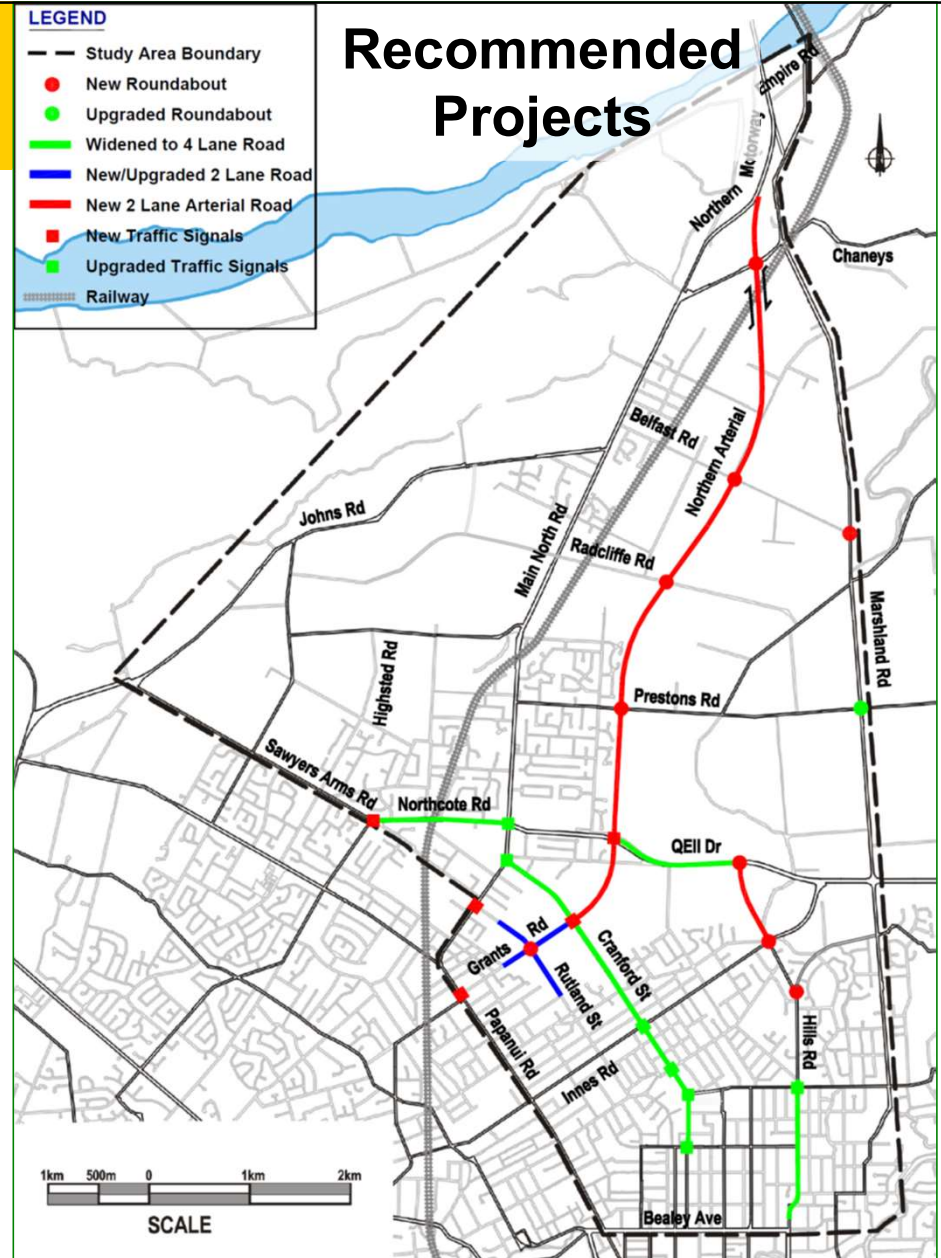
“Predict and Provide”

- Additional Road Capacity “Needed”



“Predict and Provide” cont’d

- Chch Northern Roding Options Study (2002)
“...to identify improvements to the **road network** ...required to meet the **transportation** needs over the next 20 years...”



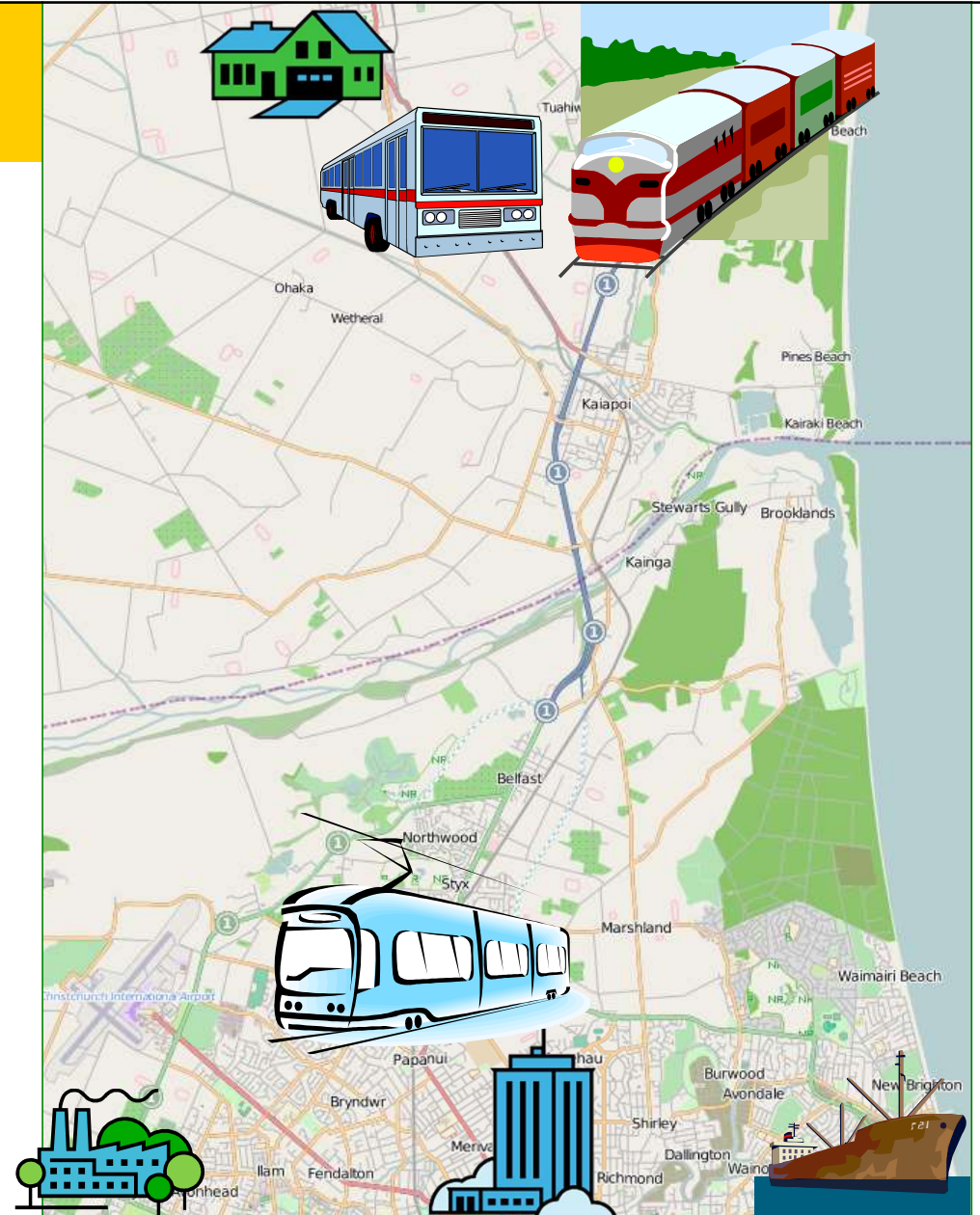
Can't We Just Build Our Way Out of Congestion?



*"Solving traffic congestion by building more roads is rather like **curing obesity by buying larger trousers**"*

Multi-Modal Approach

- Develop Public Transport Options
- Shift Freight onto Rail or Sea



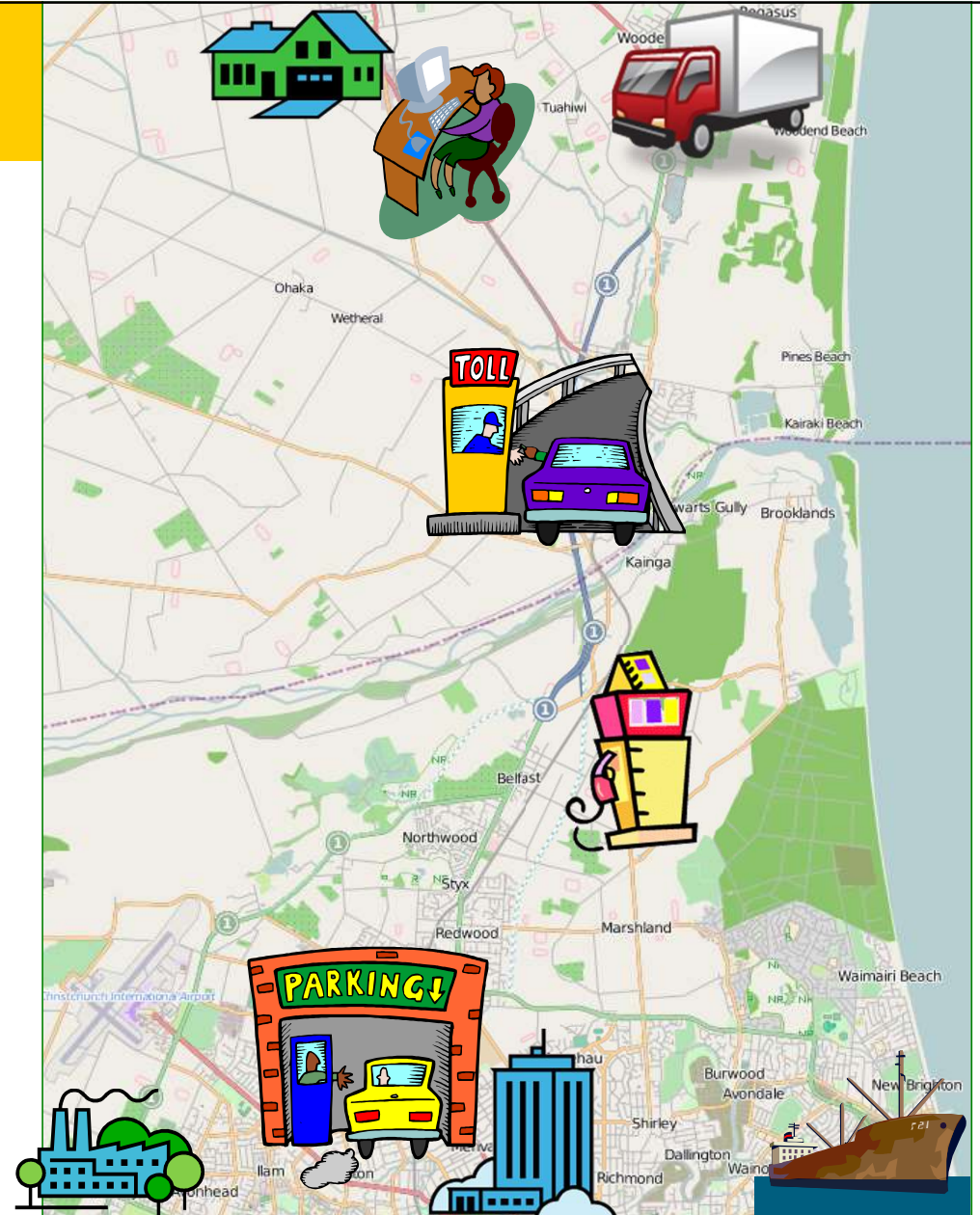
Multi-Modal Approach

- Encourage Walking / Cycling for Shorter Trips
- Bikes with Public Transport
- Encourage Car-Pooling



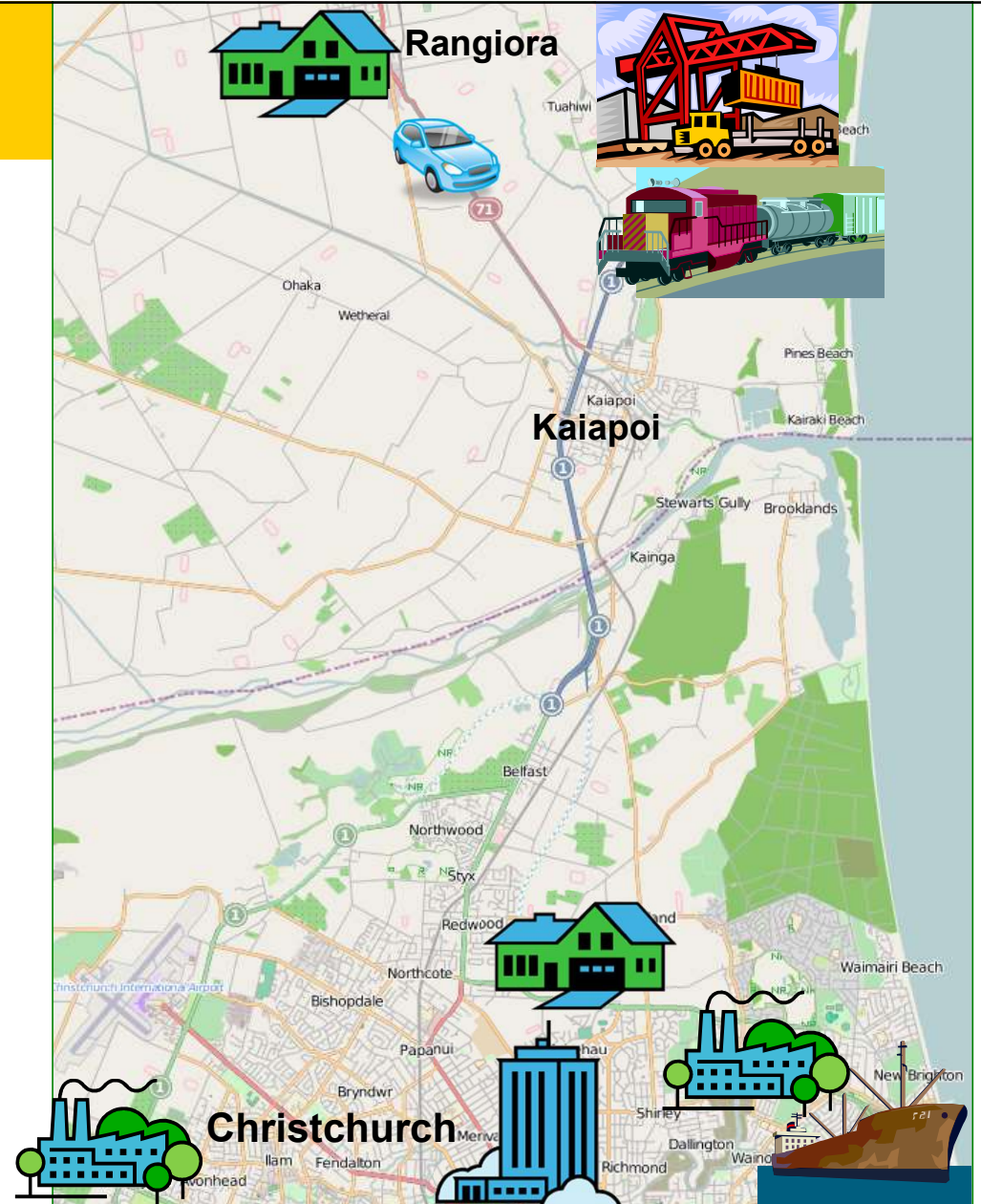
Demand Management

- Road Pricing Options
 - Road Tolls
 - Parking Charges
 - Fuel Taxes?
- Travel Behaviour Change
 - Telecommuting
 - Combine Trips
 - Peak Spreading



Activity Changes

- Homes, Shops, Workplaces, etc close to each other
 - Mixed Land-Use
 - Higher Density
- Industry near Transport Nodes
 - “Inland Ports”



Some Thoughts on Transport in Christchurch

Land Use is the Best Transport Solution

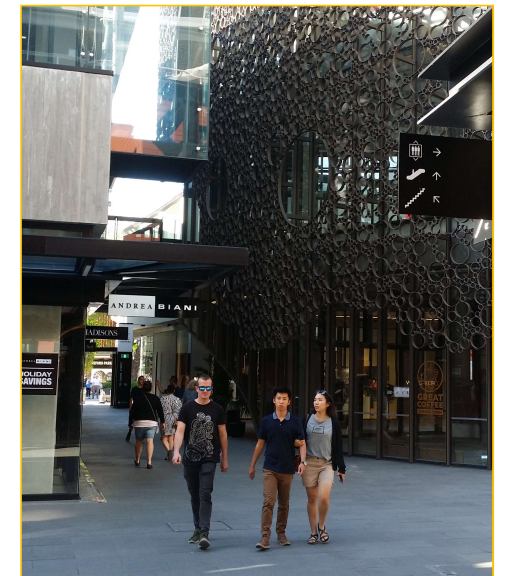
- LIVE
- WORK
- PLAY

Copenhagen, Denmark



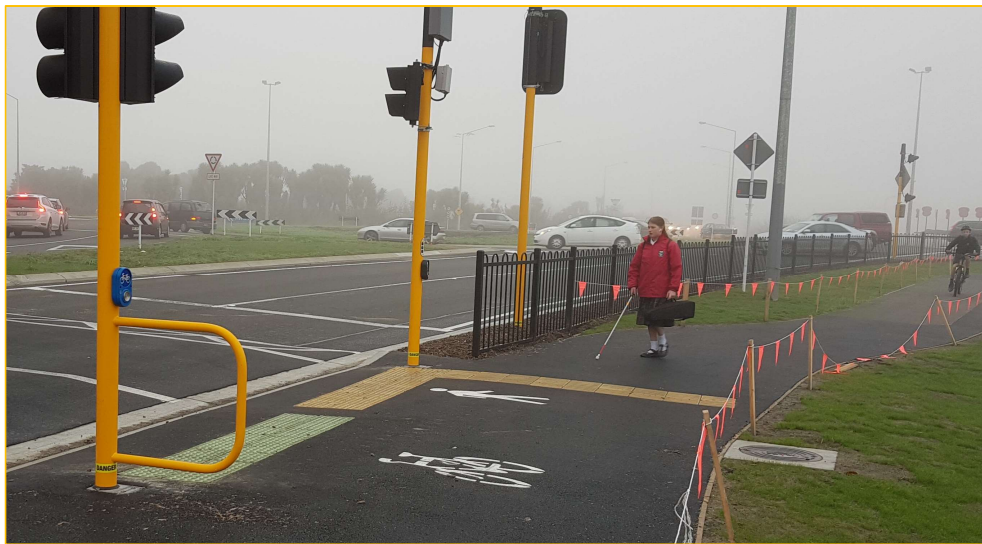
Walking

- Most people like traffic-free / calmed areas
- Killing/injuring pedestrians is a Chch problem



More Safe Walking Routes to Schools/Shops

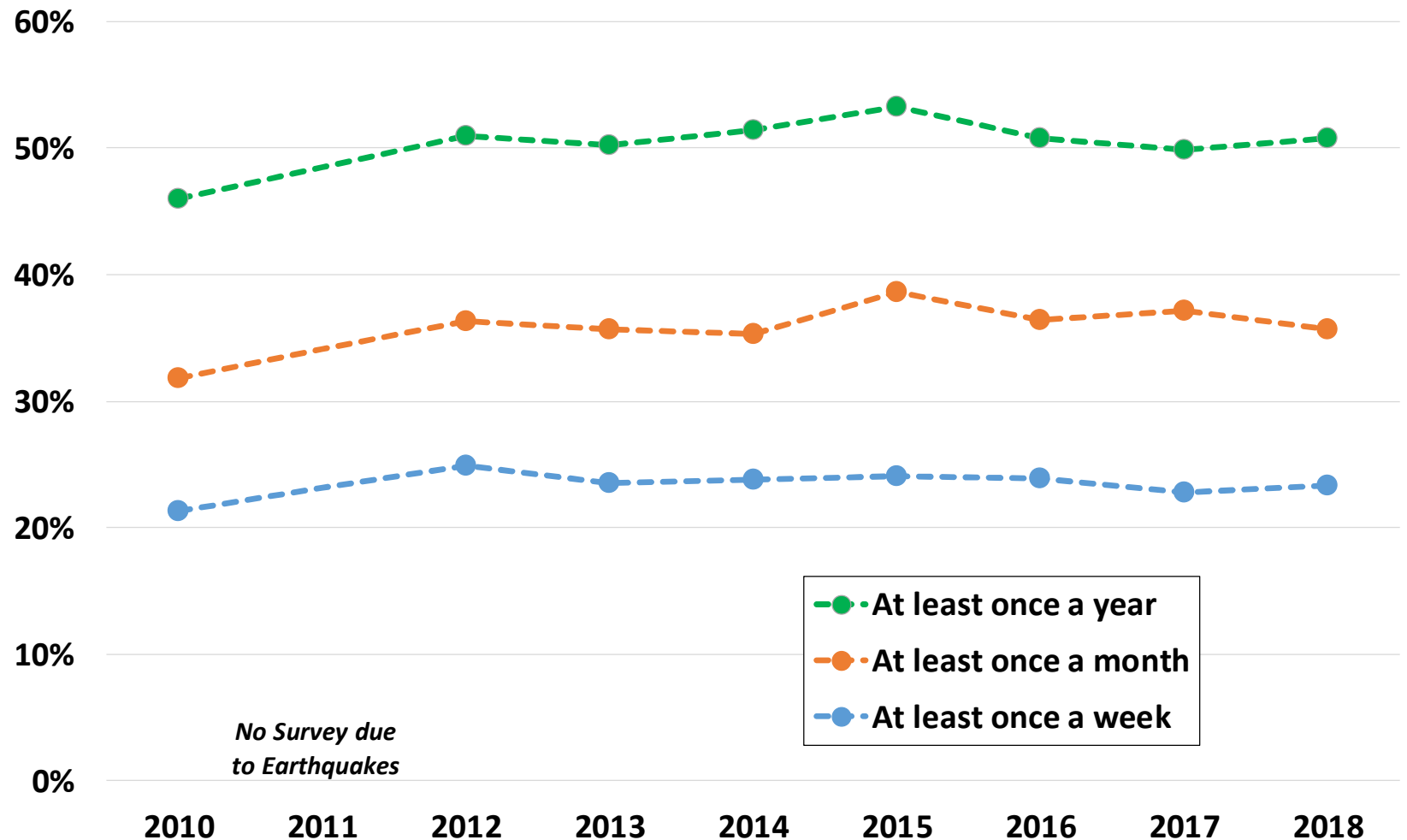
- Lower Speeds
- Crossing Opportunities
- Smooth/Wide Pathways
- Consider Impaired Users



Cycling: The “Small Minority”

How often have you cycled on a public road in Chch in the last 12 months?

● CCC Annual Residents' Survey (n=770)



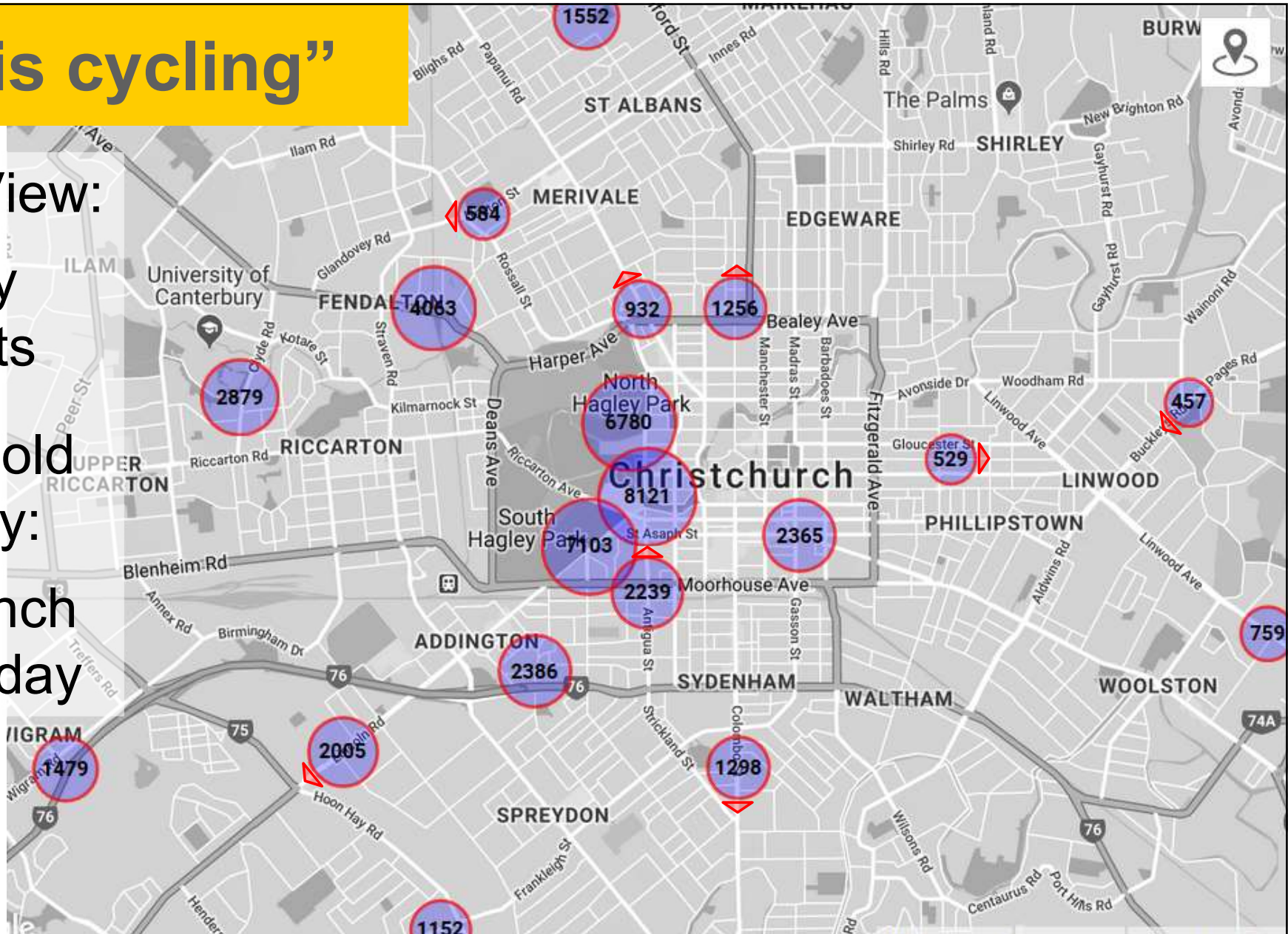
“No-one is cycling”

CCC SmartView:

- Live weekly cycle counts

MoT Household Travel Survey:

- ~50,000 Chch cycle trips/day



“Cycleways are controversial”

Cycleway	No. Submissions	Support	Opposed
South Express	642	72%	26%
Quarrymans Trail	466	91%	9%
Heathcote Express	170	85%	15%
Nor'West Arc	147	84%	7%
Uni-Cycle	136	79%	10%
Rapanui Shag-Rock	86	92%	8%
2018 LTP: Cycleways	424	67%	29%

*Typically people are more likely to submit **against** something...*

Side Note: Scooters

In the past year:

- Number of people killed by scooters in NZ: **0**
- Number of people killed by cars in NZ: **>350**
- Average cost of ACC scooter claim: <\$400
- Average cost of ACC motor vehicle claim: \$10,000

Focus on safe spaces for scootering



Will someone bring BikeShare back to Chch?



Public Transport

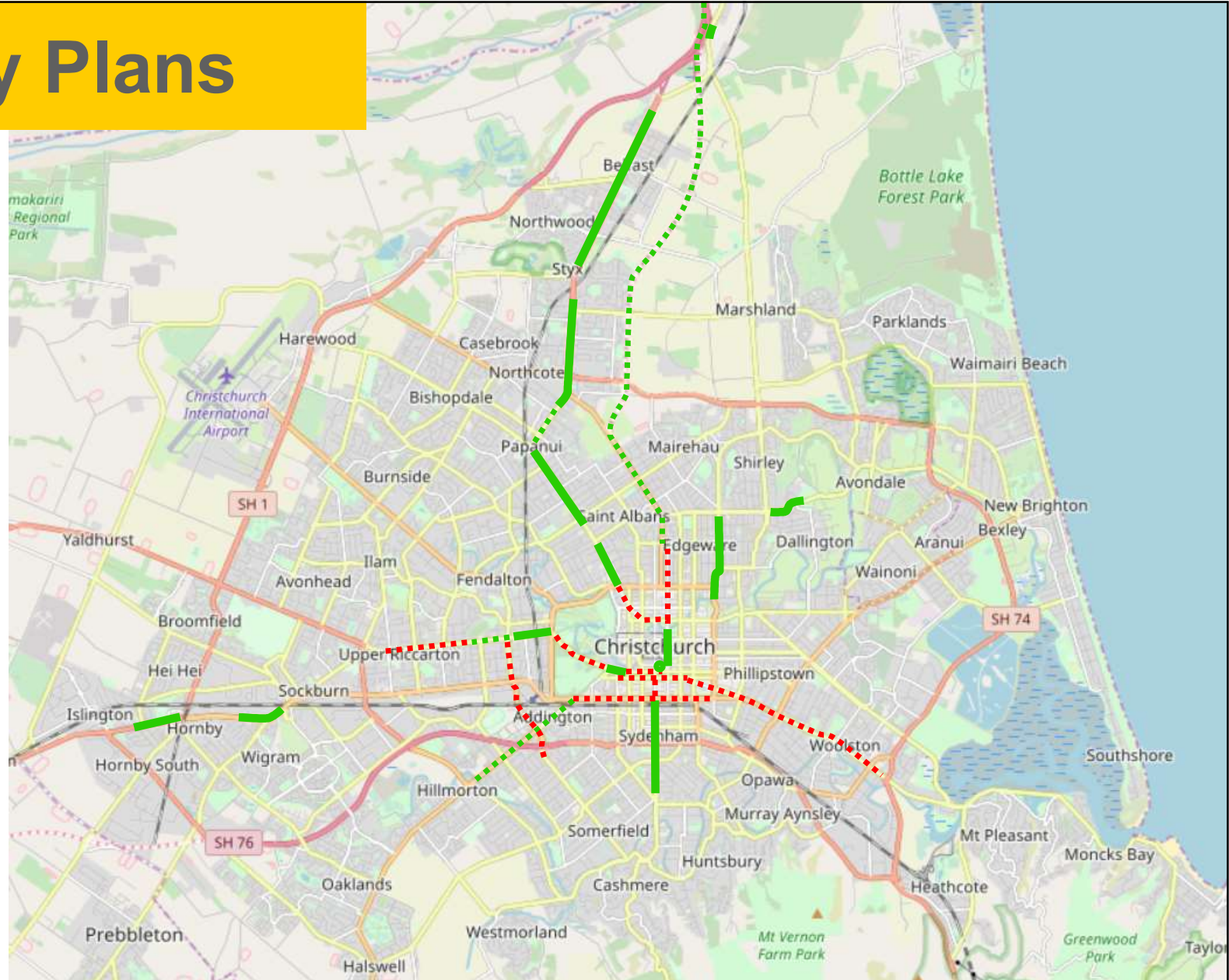
- Scorecard for PT in Chch:

Coverage	• Most of the city and surrounds • Reasonably responsive to trials and new areas
Cost	• Inexpensive (\$2.65/trip, \$5.30 max a day) • Could be improved? (e.g. free child fares)
Frequency	• Good on the main lines (15 mins → 10 mins) • Other services no so good, worse on weekends
Directness	• Not so many direct into town ('hub' model) • More need to transfer buses = time penalty
Reliability	• Get caught up in general traffic • Relatively limited bus priority

Bus Priority Plans

- Mostly S.Hwys
- Part-time
- Not connected

*CCC could
spend a lot more
on this...*



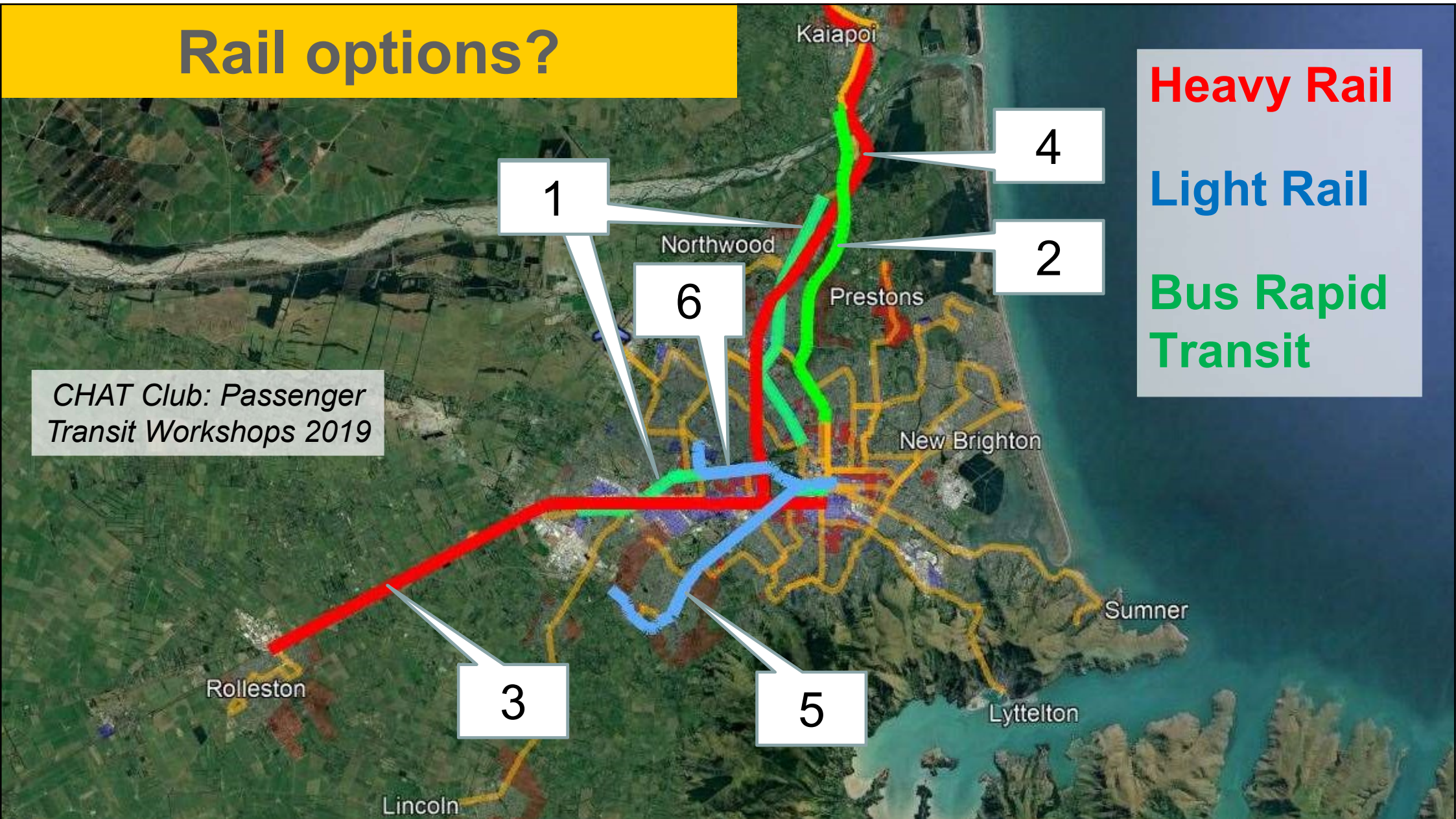
Rail options?

Heavy Rail

Light Rail

**Bus Rapid
Transit**

*CHAT Club: Passenger
Transit Workshops 2019*



Do we need Rail or just good Bus Rapid Transit?

- Eugene-Springfield, Oregon US (pop.250,000)



Motor Vehicles

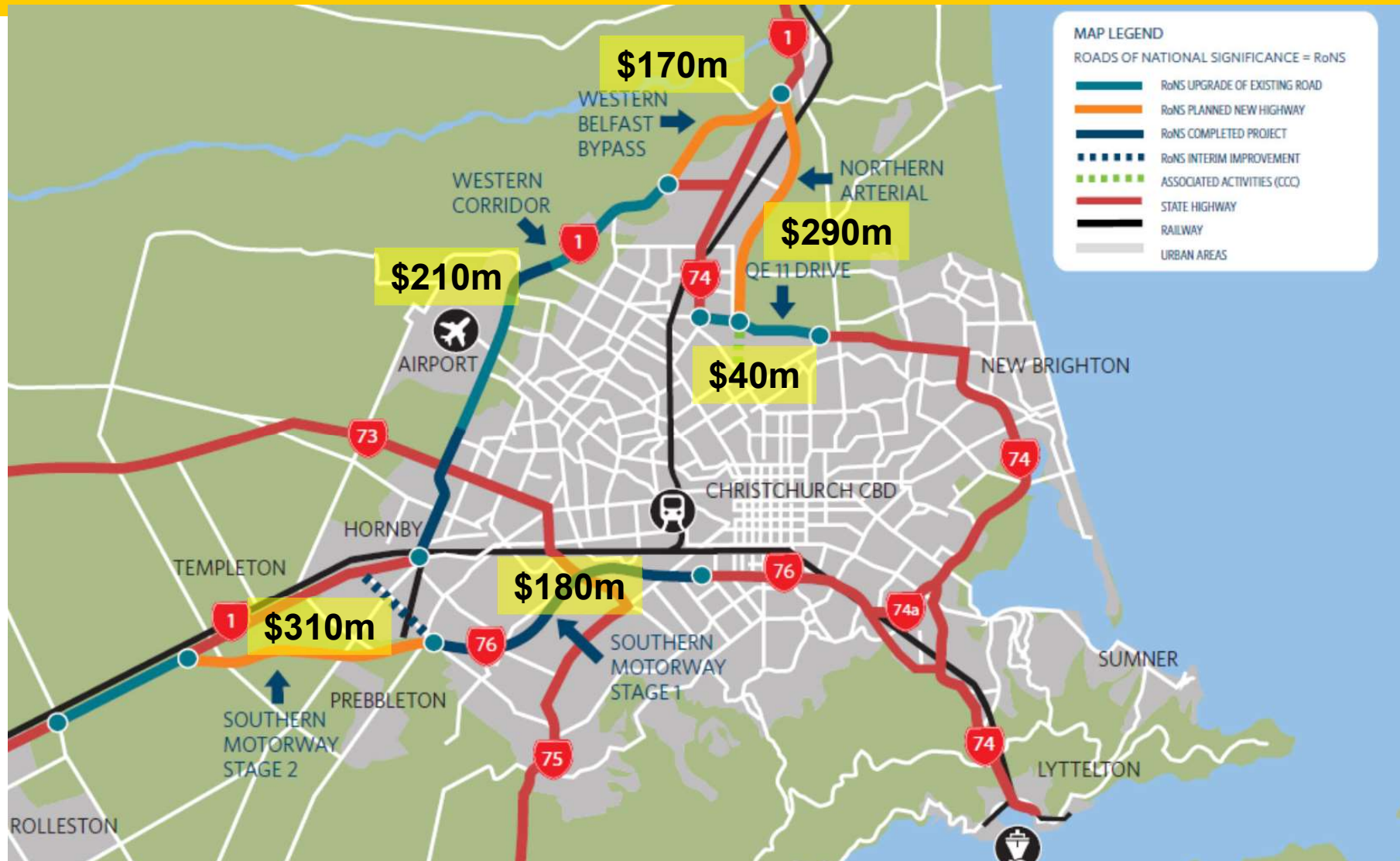
What's the biggest problem for motor vehicles in Chch?

- Too much congestion
- Not enough car parking
- CBD is too confusing
- Too much roadworks
- Car parking is expensive
- Slower speed limits



We keep killing and injuring people...

We've already spent a LOT on Roads...

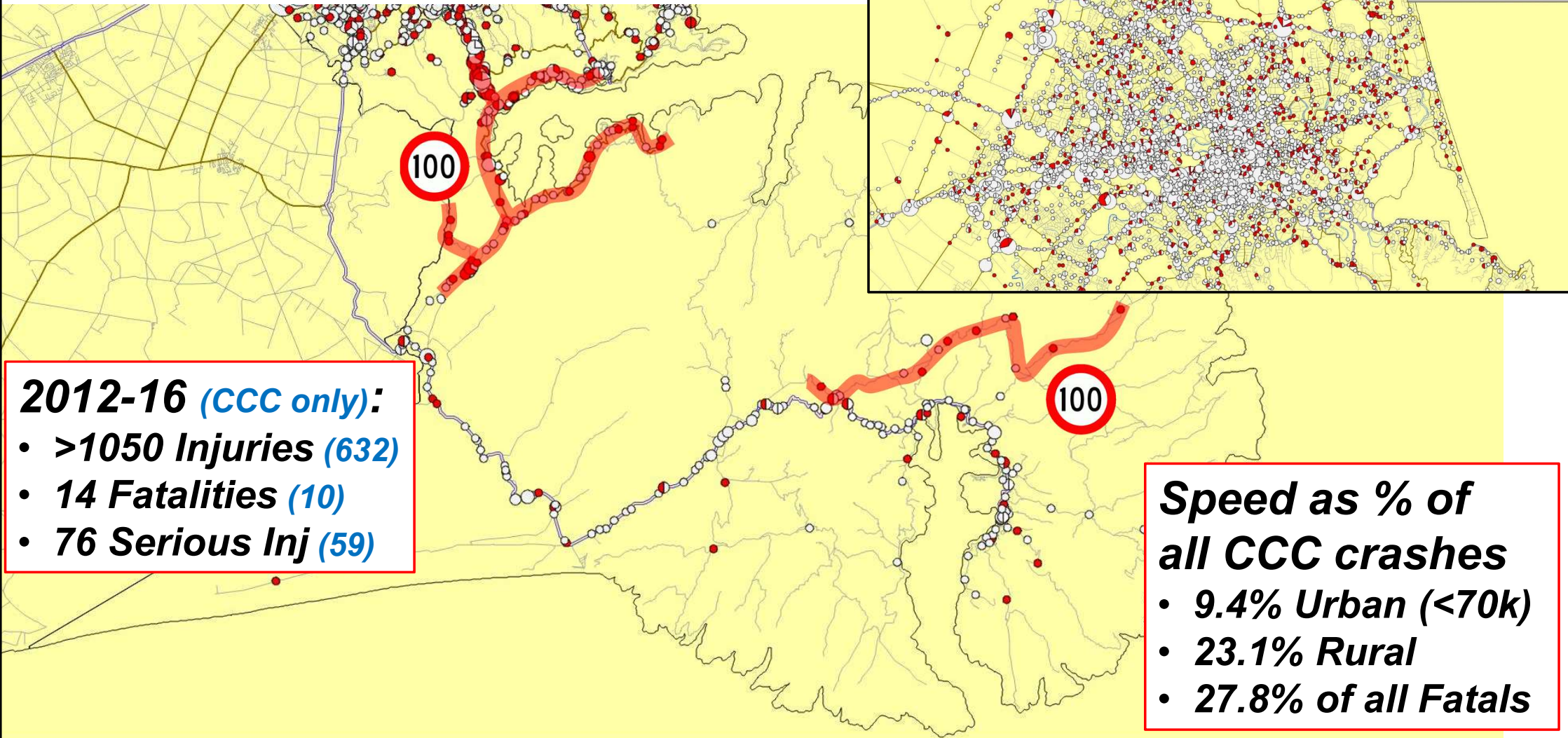


Road Safety Stats for Christchurch 2014-19

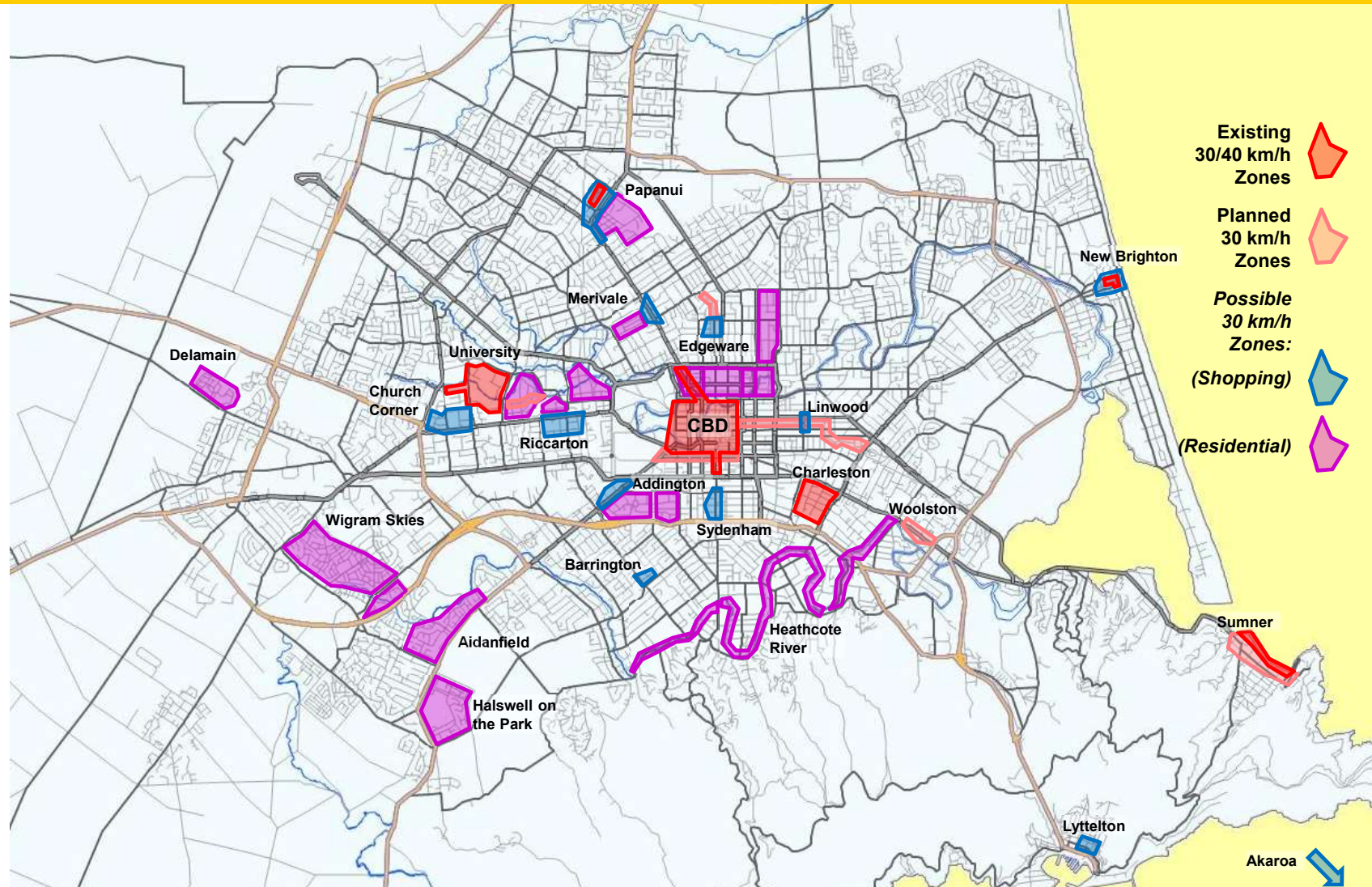
Road User	Deaths	Serious Injuries	Minor Injuries
Driver/Passenger	64	626	3480
Pedestrian & other wheeled path users	9	134	307
Cyclist	7	155	493
TOTAL	80	915	4280
<i>Approx. per year</i>	<i>14</i>	<i>165</i>	<i>775</i>

Speed-related crashes in Christchurch

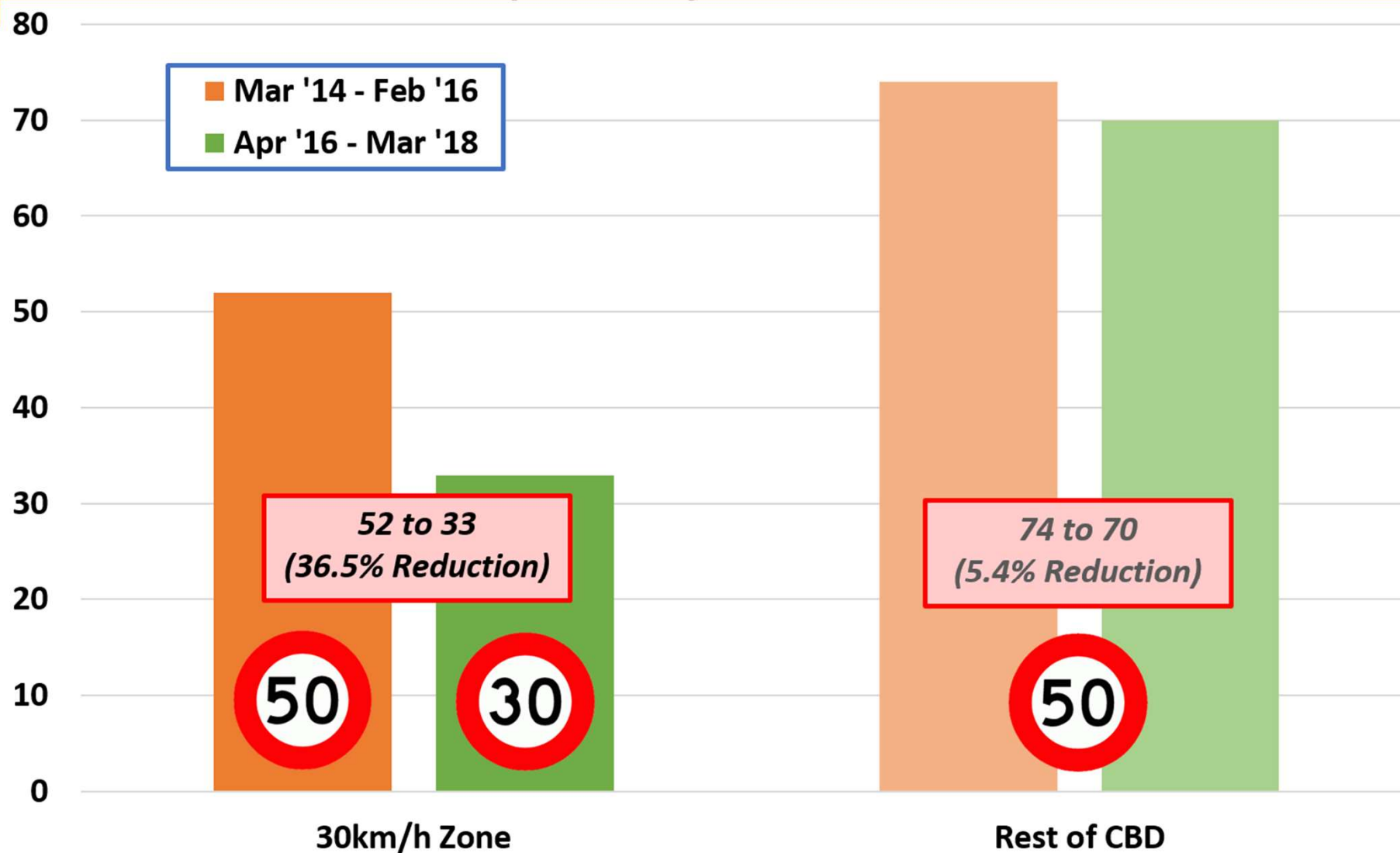
(shown in red)



Potential urban lower speed limits in Chch



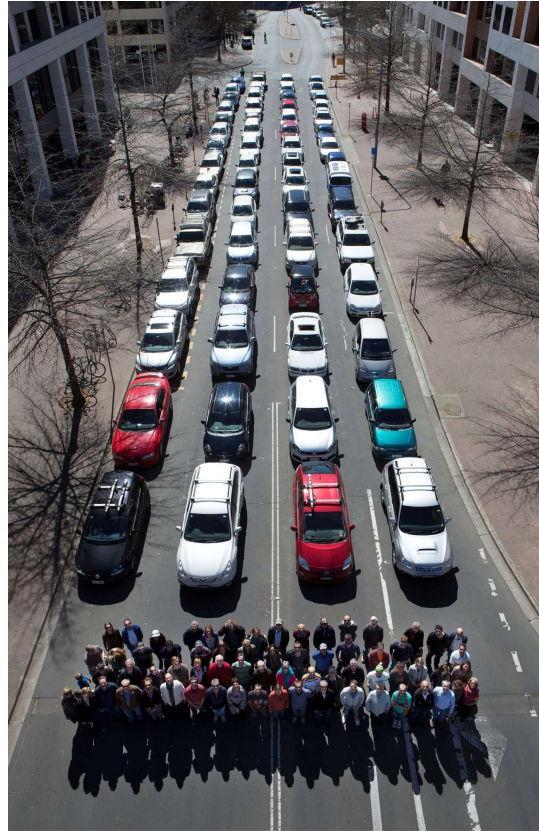
CBD: Total Reported Injuries – Before/After



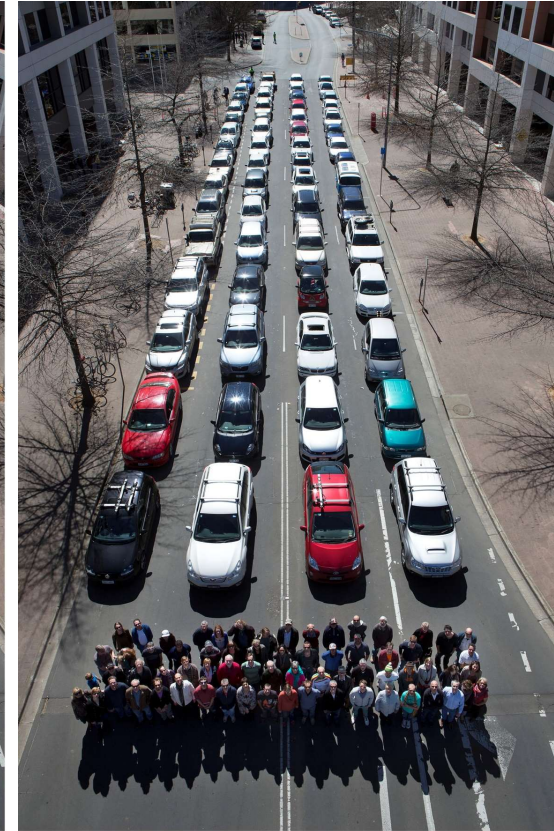
Space required to transport 50 people



Cars



**Self-driving
Cars**



**Self-driving
Electric Ubers**

Parking

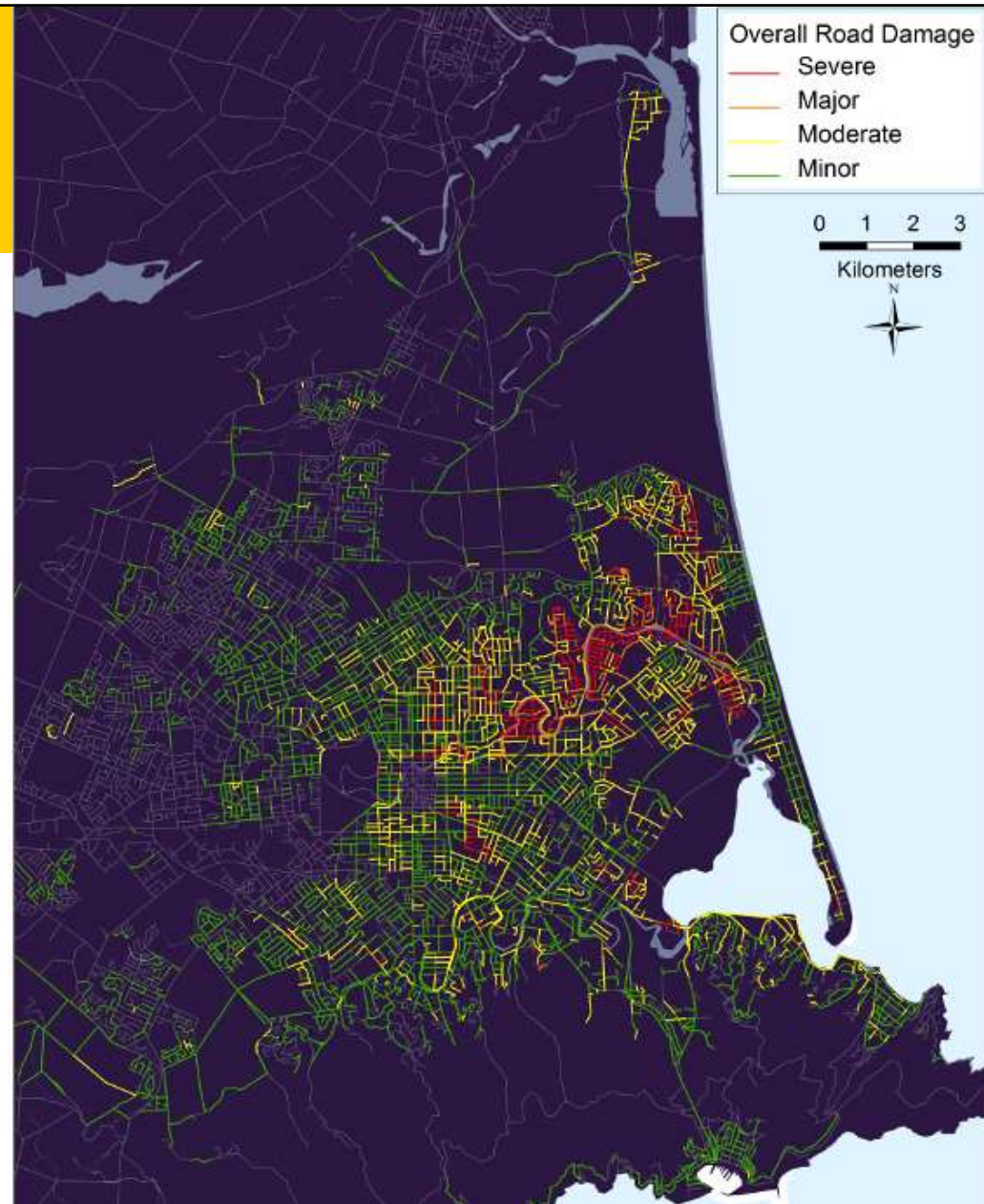
- Need **more** paid parking to reduce everyday car commuting
 - Central city (beyond existing)
 - Area around major malls
 - Other high-parking generators
- Residents' parking permits
- Park & ride?
 - Place strategically near bus routes and future railway stations
 - Charge for P&R



Post-Quake Road Damage

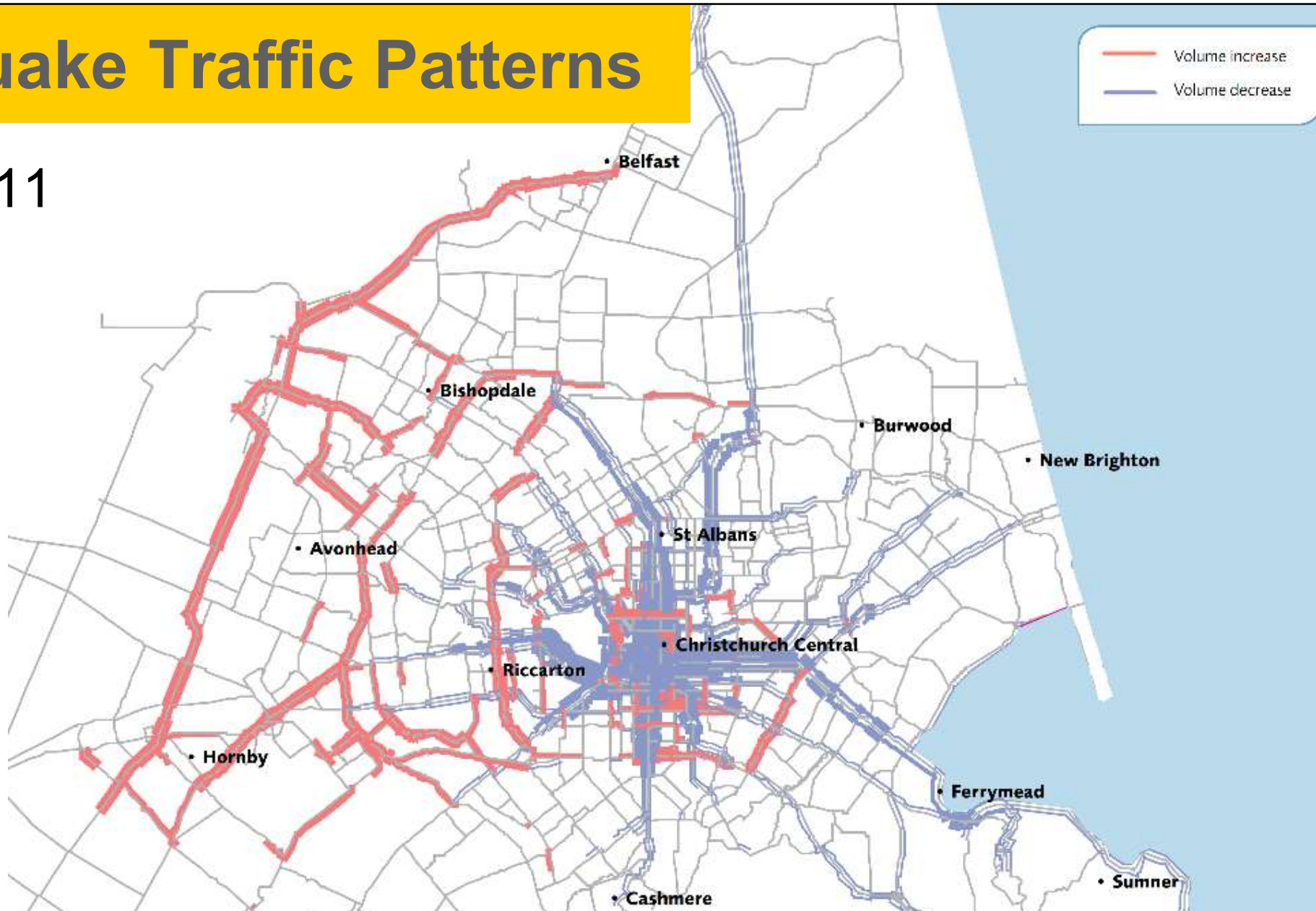


**Stronger
Christchurch**
Infrastructure Rebuild Team



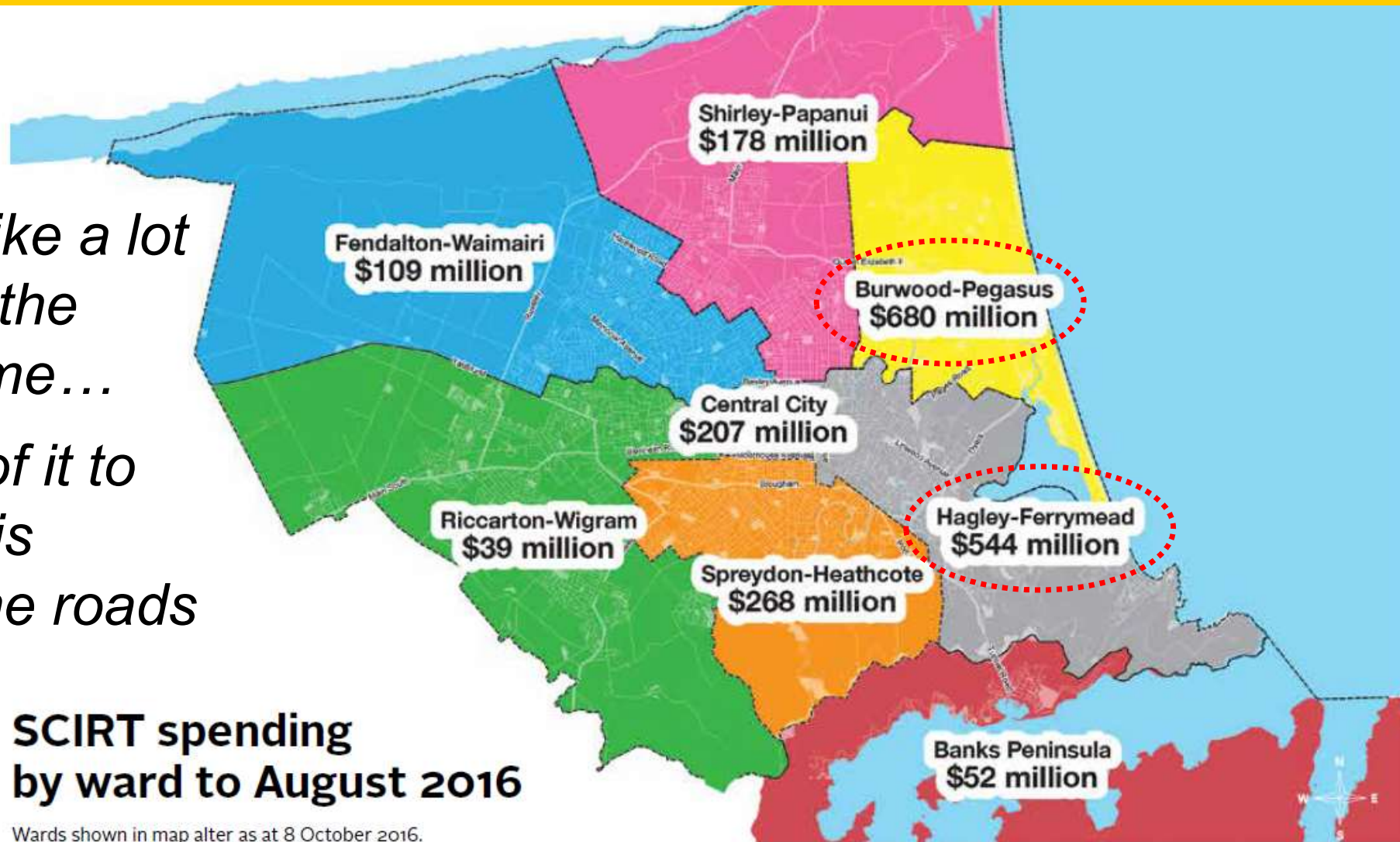
Post-Quake Traffic Patterns

- April 2011

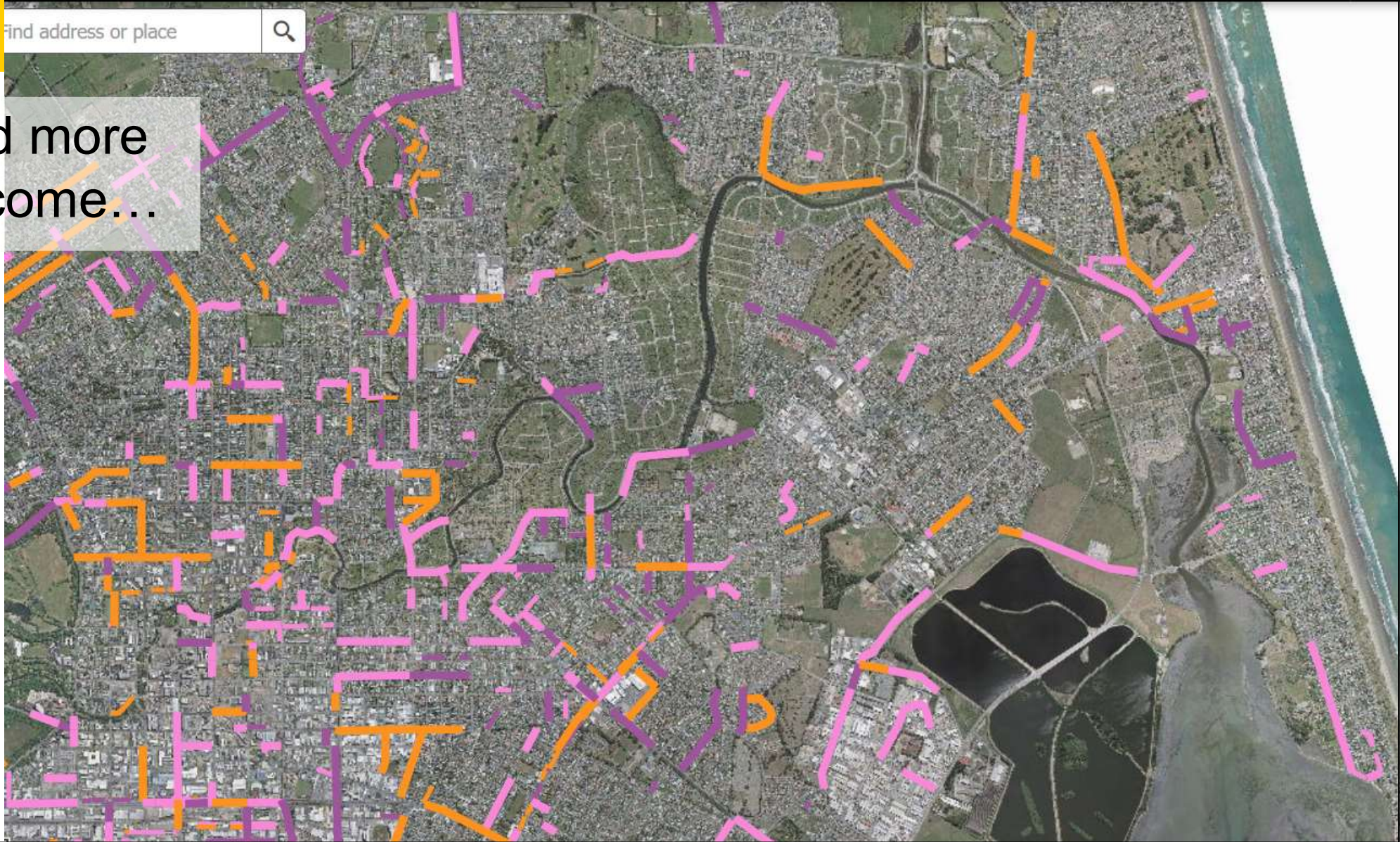


“Fix the Roads in the East!”

- *Seems like a lot spent in the East to me...*
- *...most of it to fix what is under the roads*

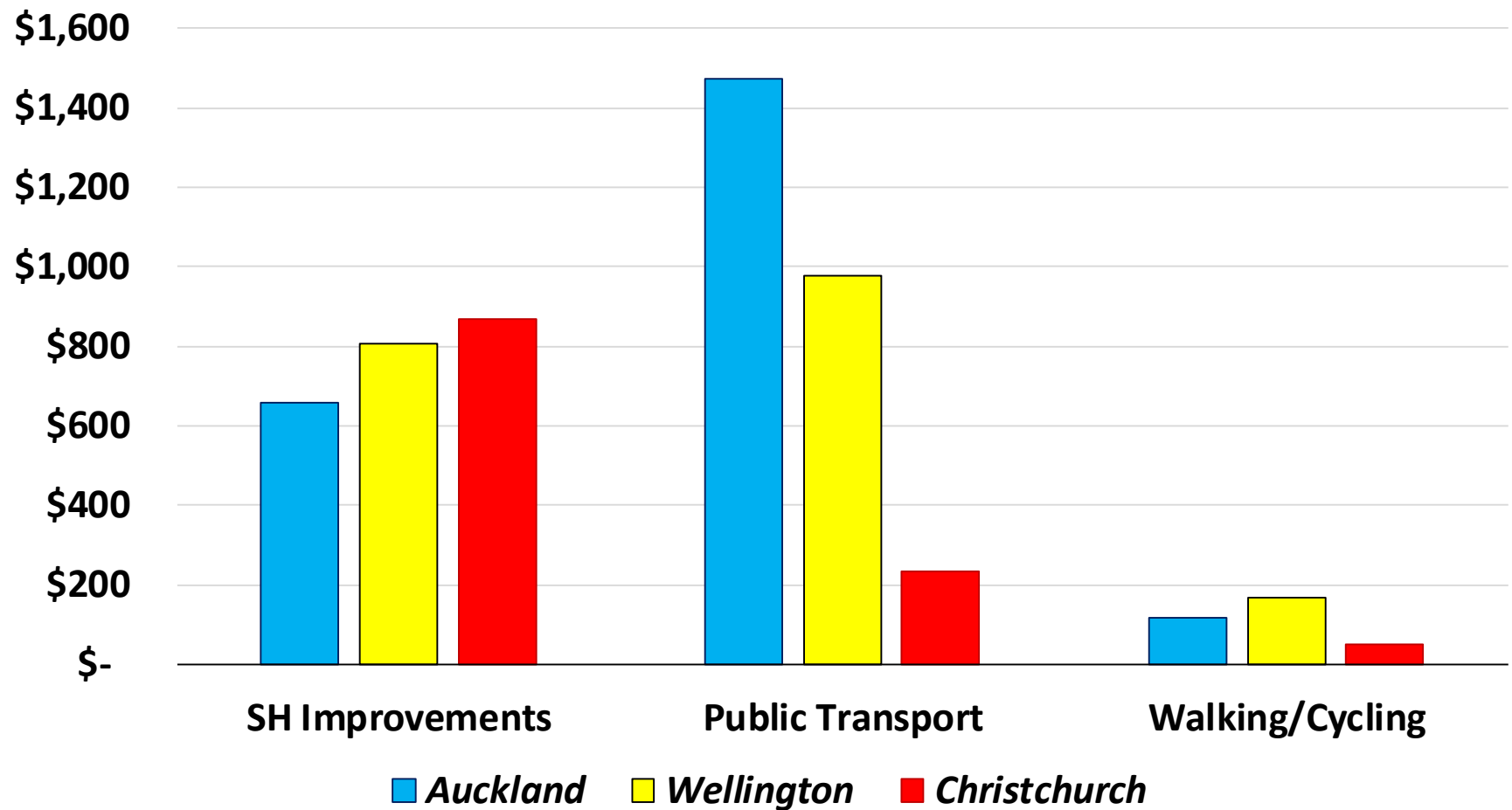


- And more to come...



Show me the Money...

National Land Transport Programme Spend per capita 2018-21



NLTP stats
(NZTA website)

Thank you!

- Questions?



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