

Sustaining Auckland City Centre through the Construction of the Central Rail Link



Setting the scene

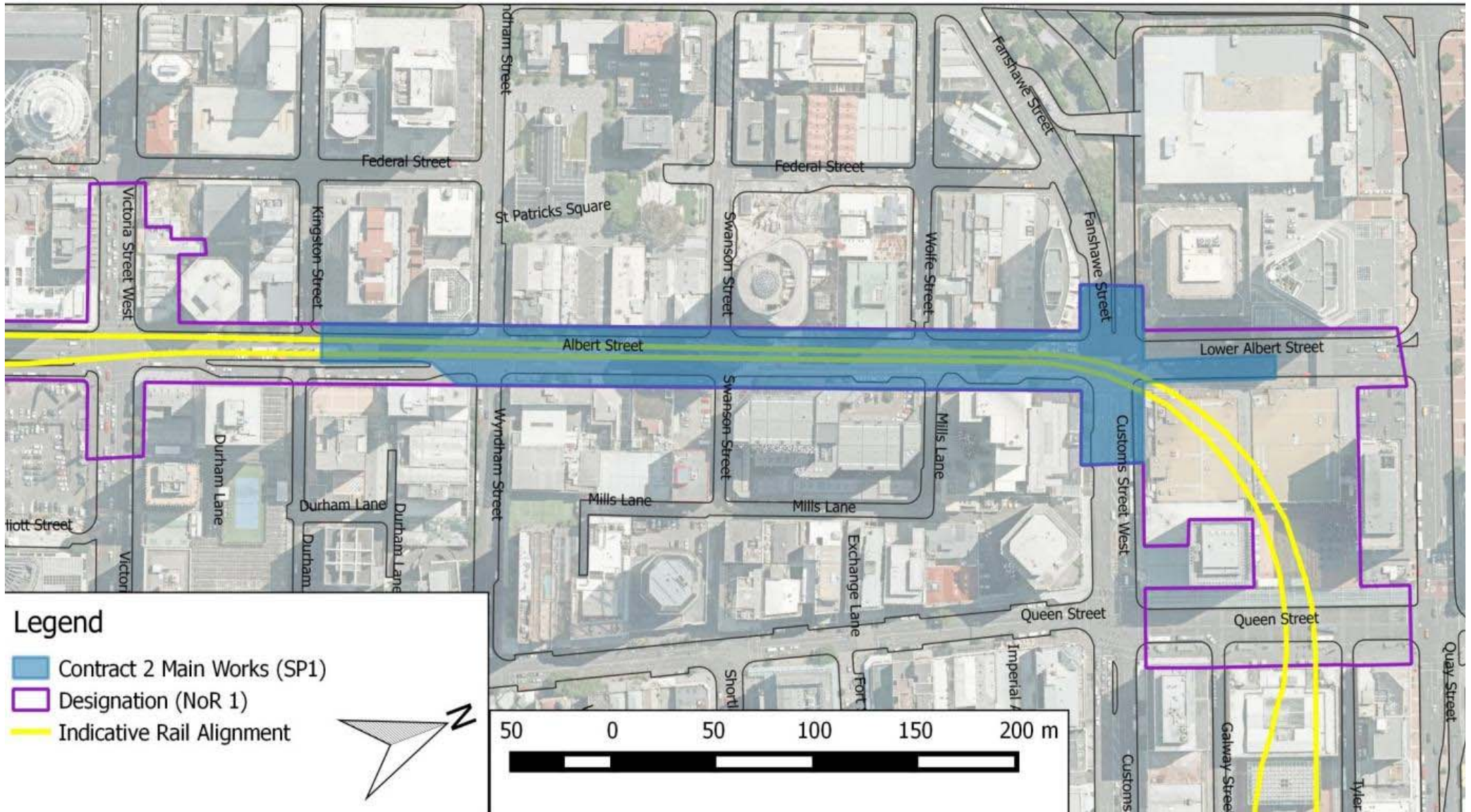
Reconfiguring the City Centre

Traffic modelling!

City Centre Network Operations team

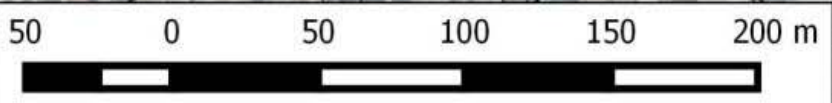
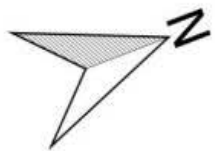
Auckland – 2016 to 2020





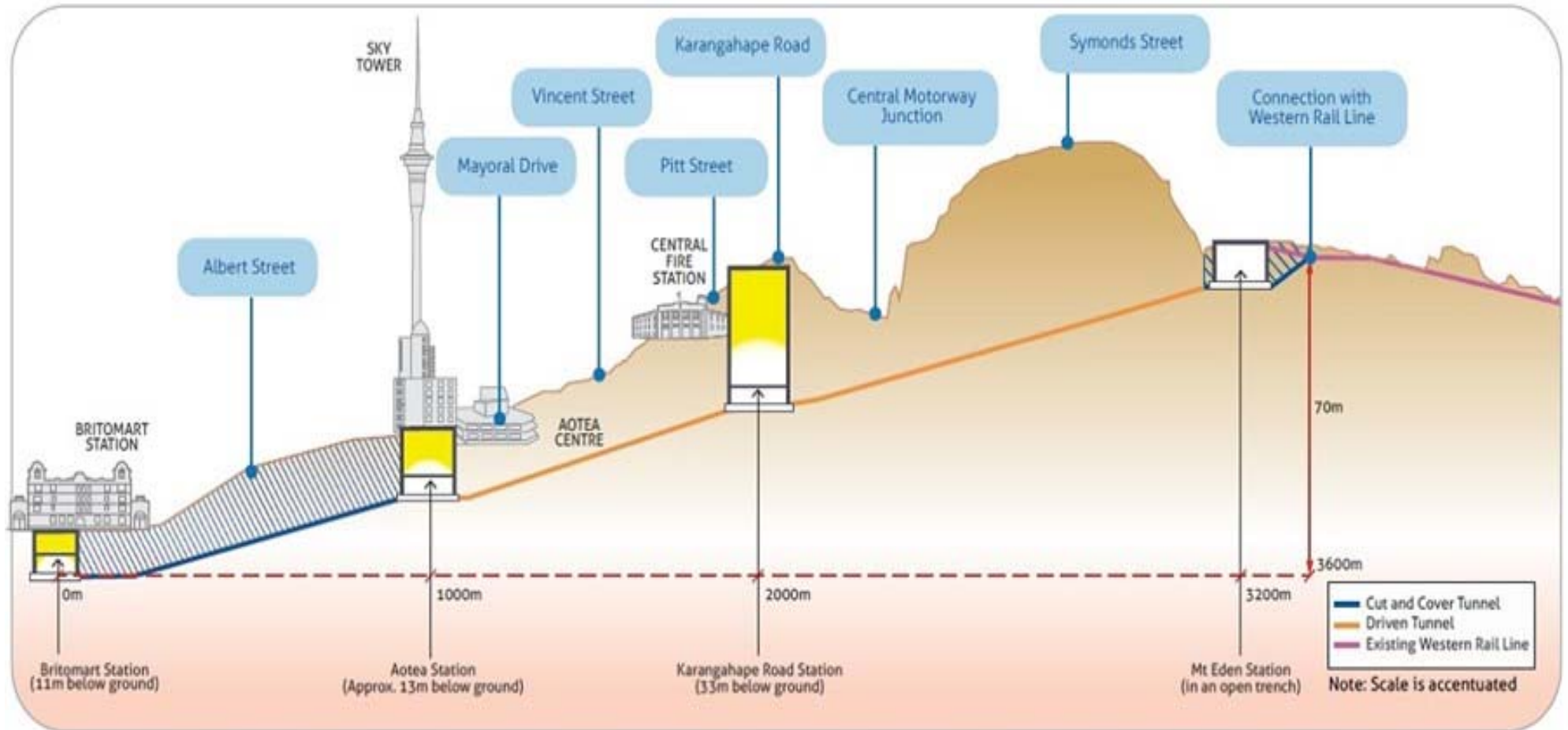
Legend

- Contract 2 Main Works (SP1)
- Designation (NoR 1)
- Indicative Rail Alignment



CRL

Tunnel location and direction

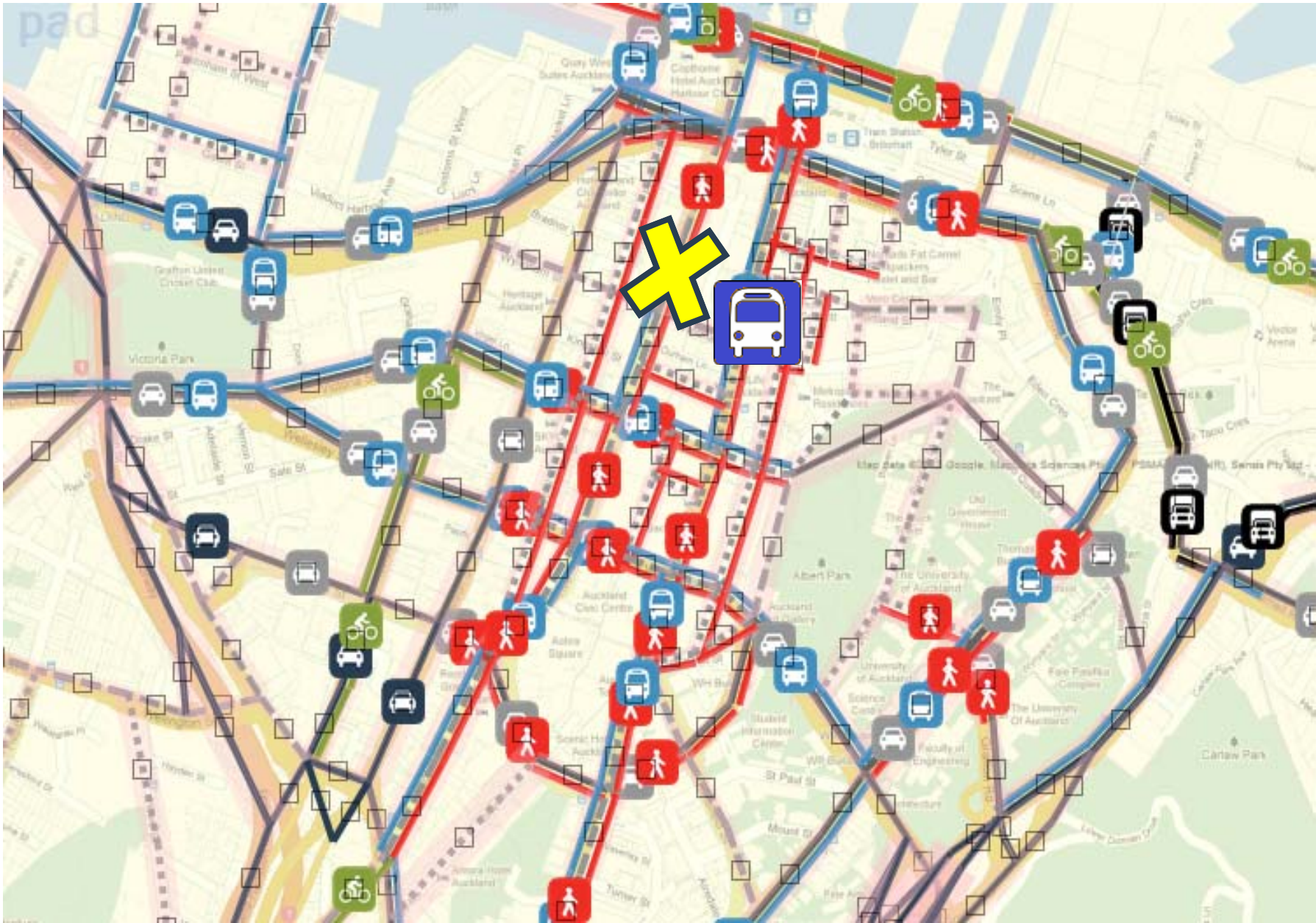


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*Establish
Interim
Network
Operating
Plan*



Key performance indicators



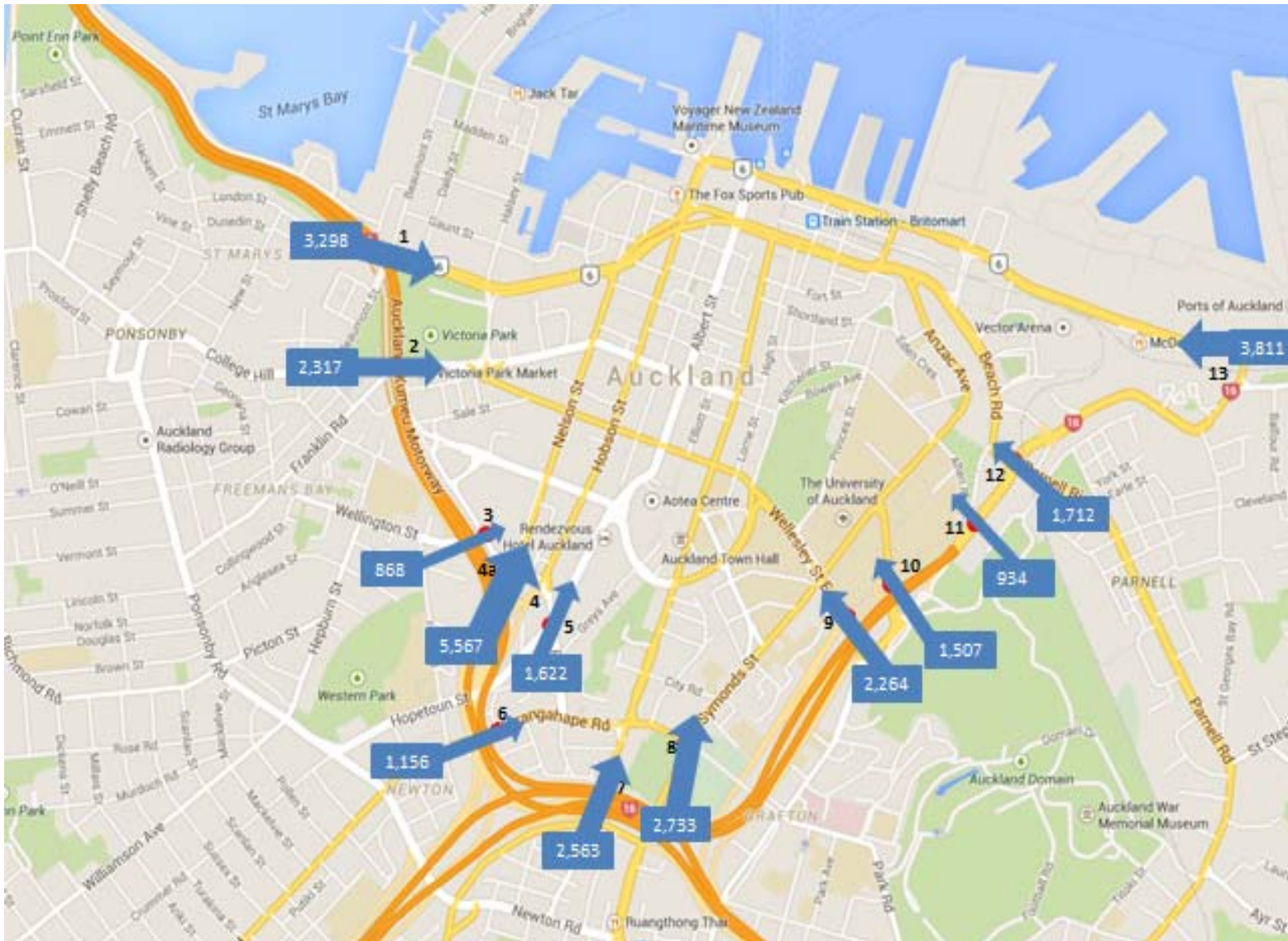
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Inbound vehicular movements



29,000 to 32,000
vehs / 2hr peak

Inbound people movements

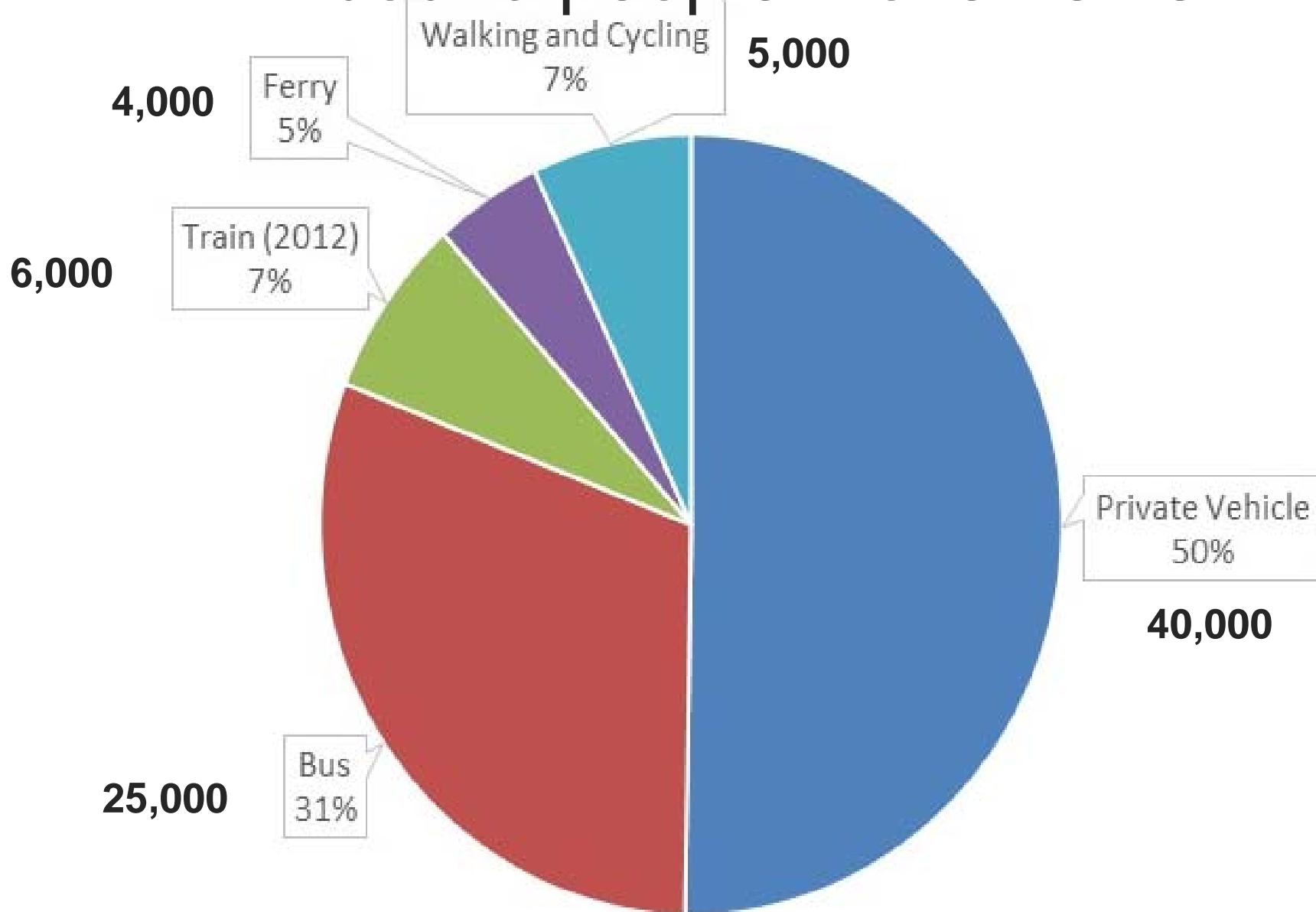
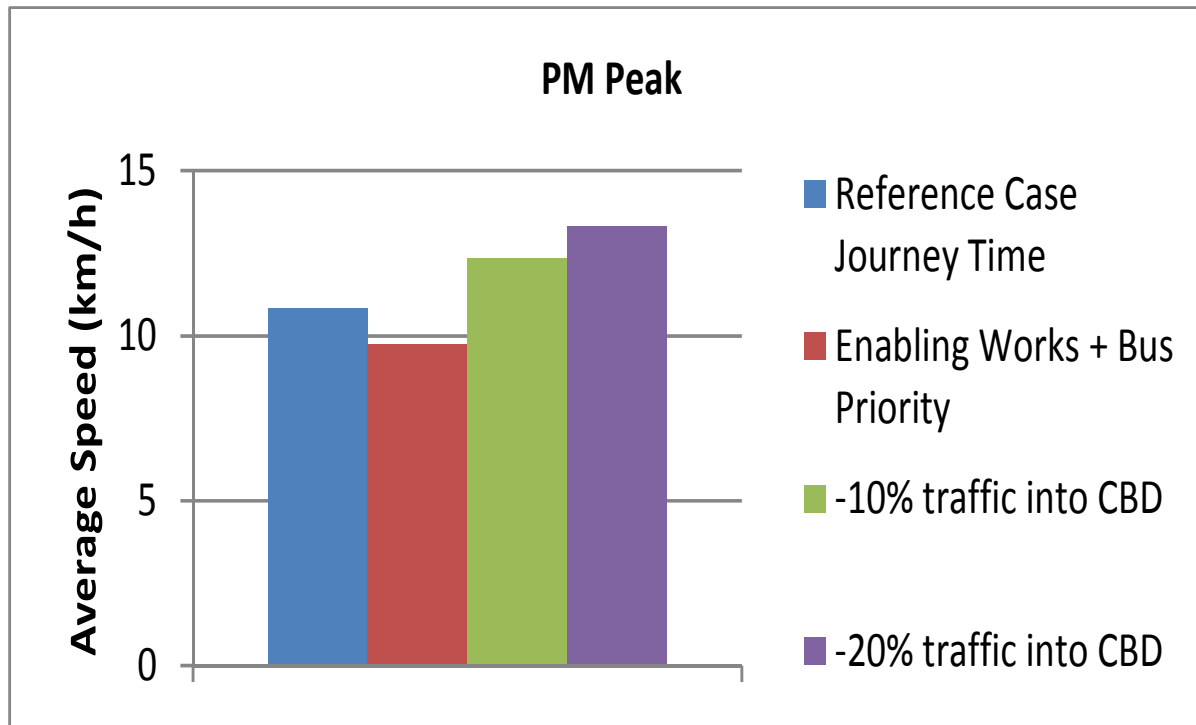


Table 1: Summary Statistics – Morning Peak

	General Traffic (Excluding Buses)			Bus Traffic ²		
	Reference Case	Enabling Works	Enabling Works + Bus Priority	Reference Case	Enabling Works	Enabling Works + Bus Priority
Travel Time (person-hr)	8,370	8,480 (+110)	8,520 (+150)	3,430	3,530 (+100)	3,280 (-150)

- With Enabling Works + Bus Priority = larger increase in general traffic travel times
- Bus Priority more than mitigates the effects of the Enabling Works



10%
less vehicles for general
traffic travel time to be
similar to the reference
case.

4,000 people mode
change

Zoom



Plan A

Existing

Establish NOP around key principles.

Target minimum overall disruption



scenario	1 AT strategy	2 AC vision	3 Network efficient	4 Practical	5 Disrupt	6 Conven ience	Merit or Not
Plan A Existing	2-3	2-3	2-3	3!	3	3	2-3
Plan B Alb/Queen	1-2	0-1	2	Directs into constr	2	2-3	✘
Plan C Well/Vic	2	1	3	3	2	2-3	1-3
Plan D Quay/Custom	2	1	3	2-3	2	1-2	1-3
Plan E C and D	2	1	3	2-3	2	1-2	1-3

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How are we going to cope?

- Dedicated team
- Visibility of all works
- Based at ATOC Central
- **Tactical & operational capability:**
 - Active monitoring 6am-7pm weekdays
 - Coordinate temporary traffic management
 - Access to a suite of technology....
- **Planning coordination and reporting**

Miguel Menezes
Alex Lee, Nicole Borland
Logan Christian

Planning

Traffic modelling

Resource consenting

Tactical response
ATOC central

Mitch Tse
ATOC staff



Temporary Traffic Management

Abhishek Shivkar
Brana Ravichelvan
Chris Bird
AC

Monitoring and Reporting

Anita Lin, Jack Yu,
Kelera Quaraniqio

ATOC Central





Albert Street













Customs Street













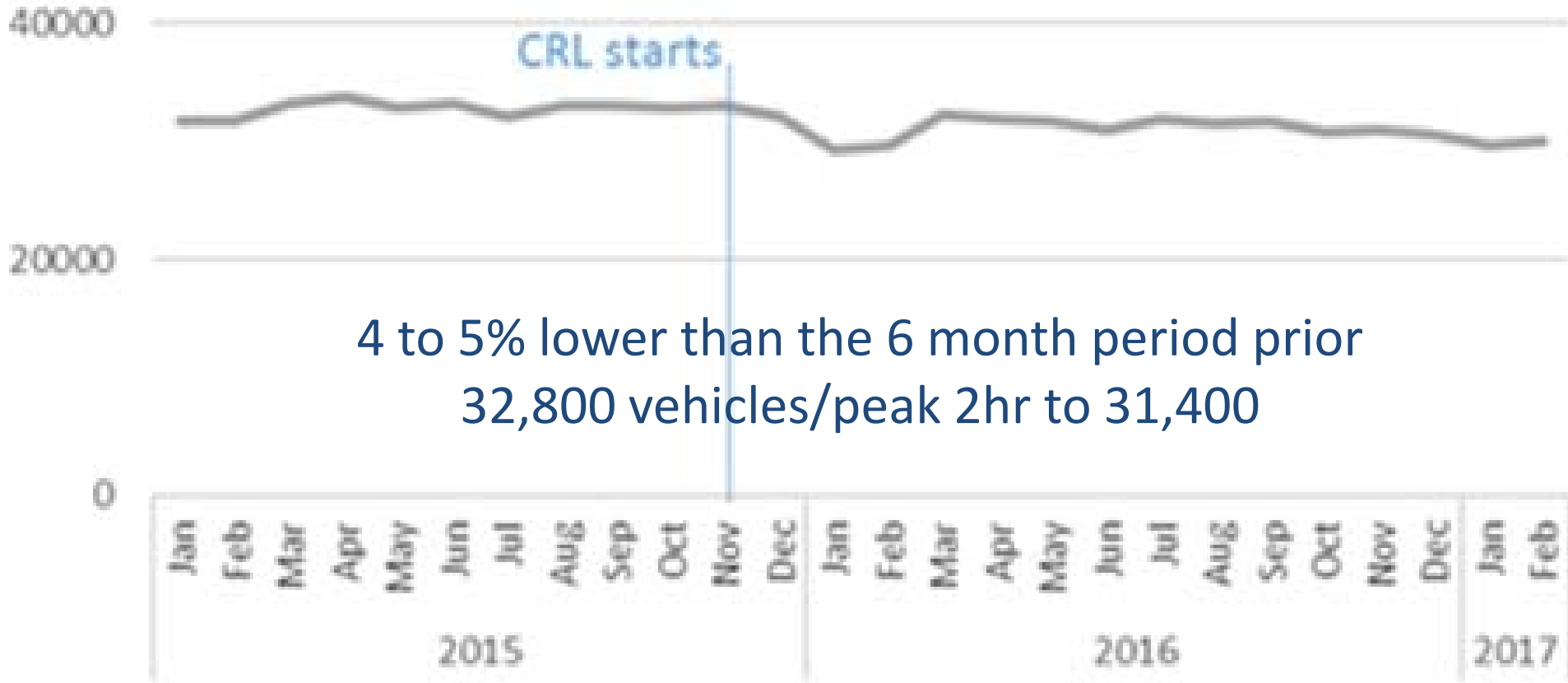
City Centre Network Operations Monthly Report



February 2017



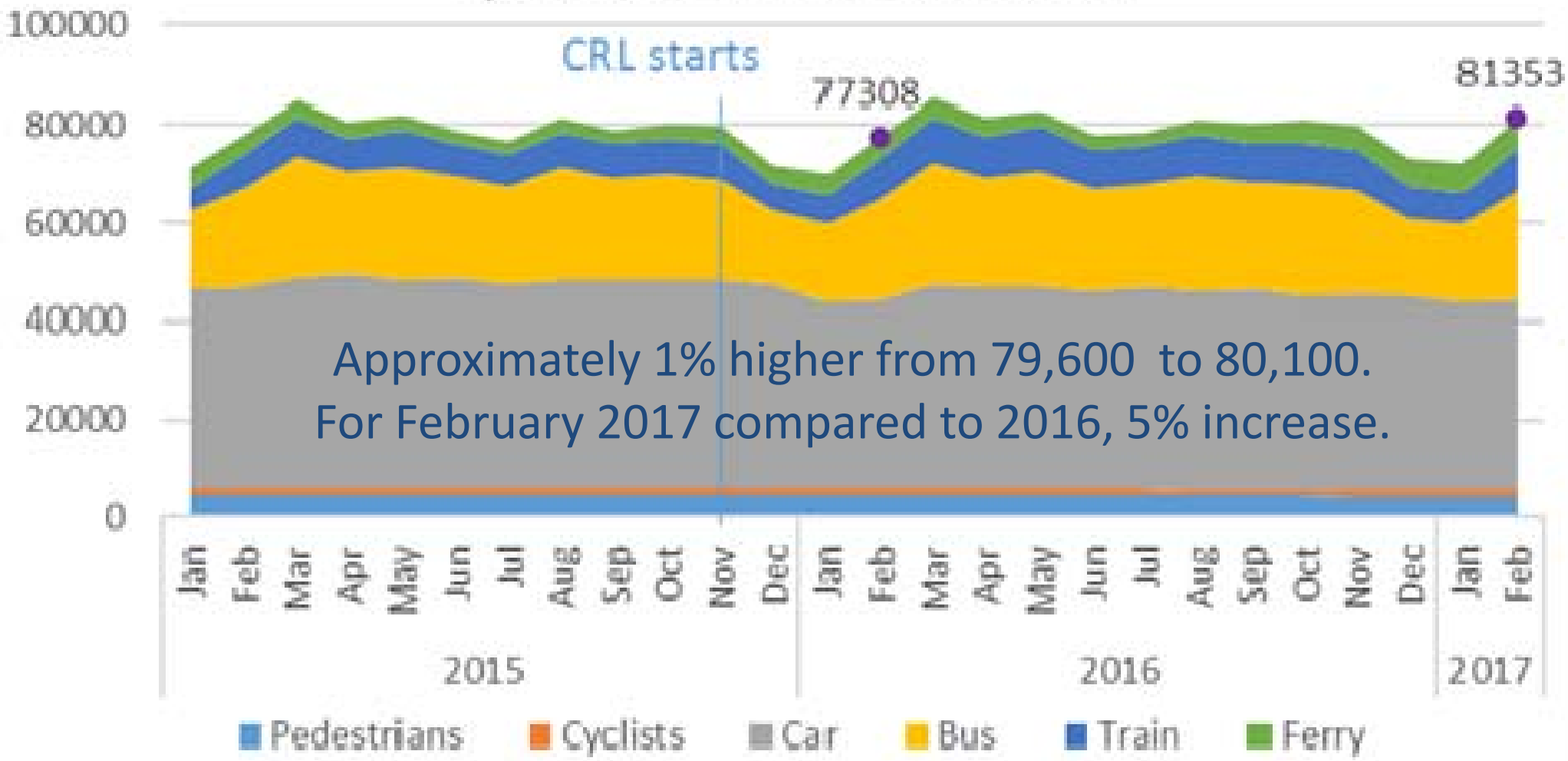
General Vehicles into CBD during morning peak by different modes 7-9 am



4 to 5% lower than the 6 month period prior
32,800 vehicles/peak 2hr to 31,400



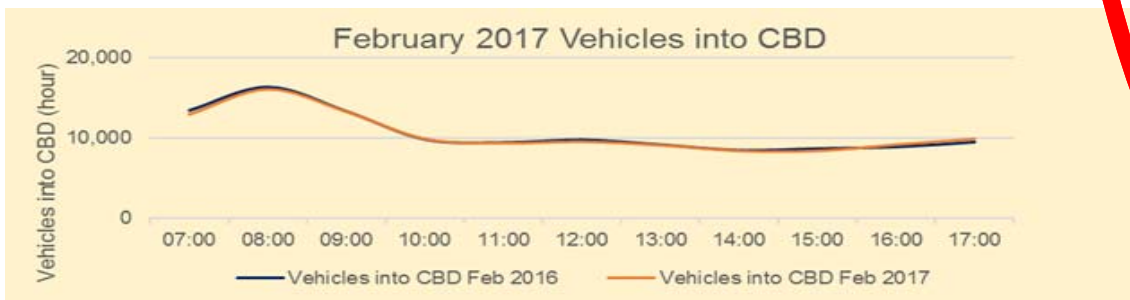
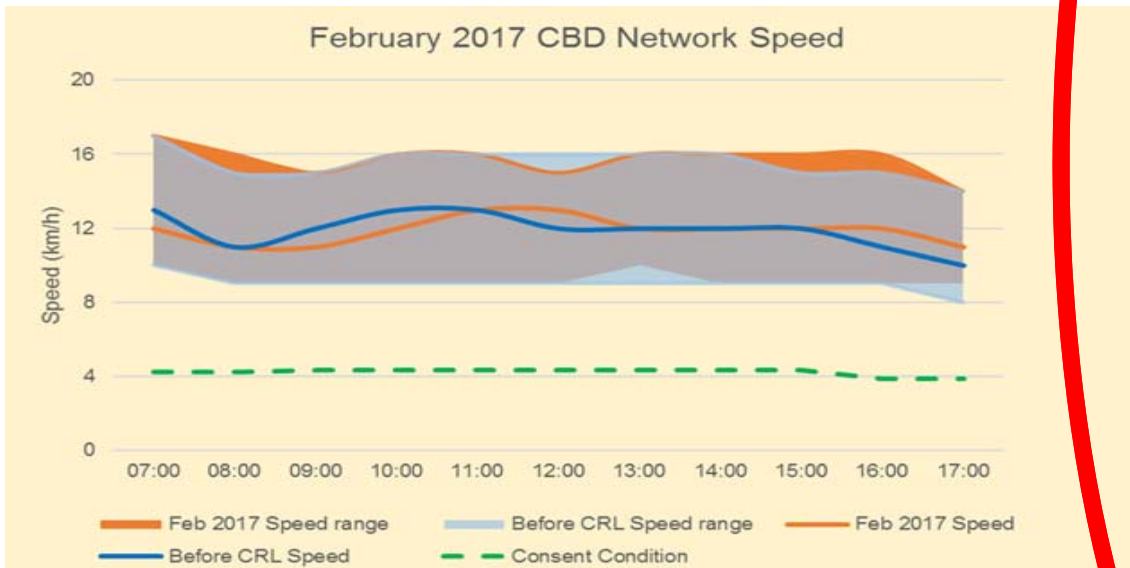
People Movement into CBD during morning peak by different modes 7-9 am



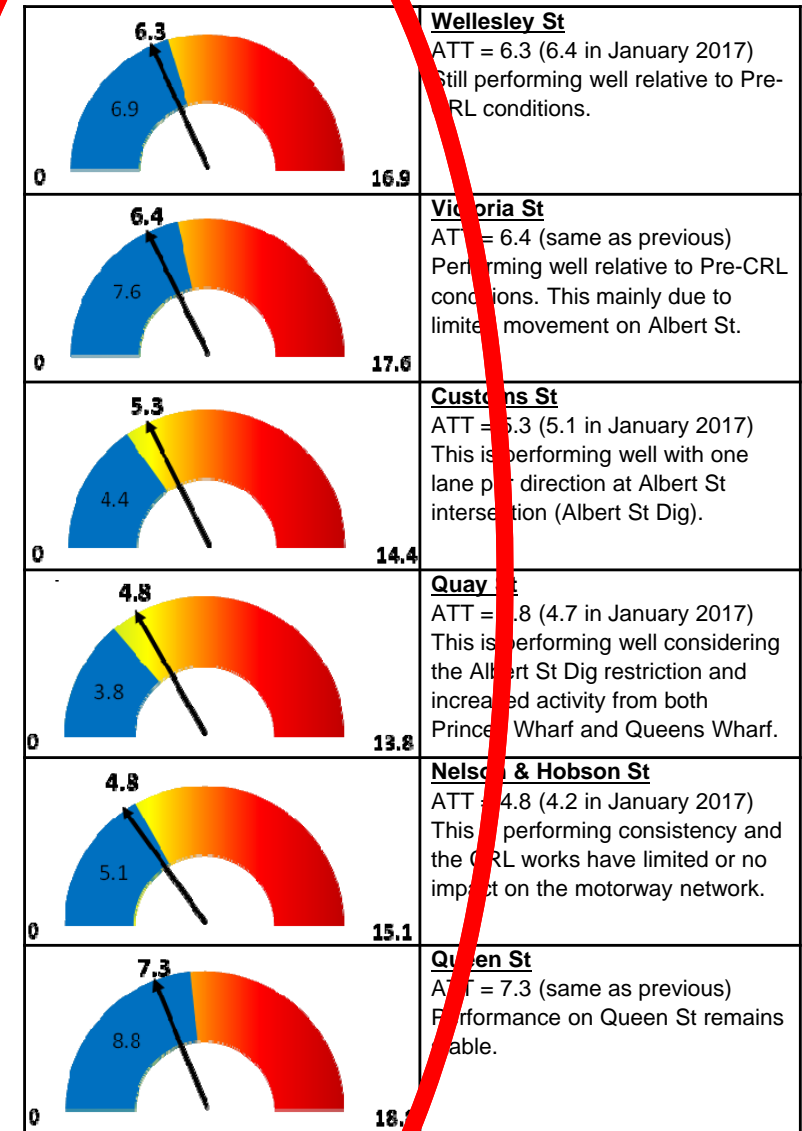
Measures of Success - Performance Dashboard

Overall CBD Network Speed

- The city centre network continues to absorb the construction activity despite the increased intensity in construction on Albert St and across Customs St.
- Average travel speed of key routes are within acceptable levels and are largely similar to Pre-CRL conditions (see graph below).
- Current speeds (orange line) remain similar to Pre-CRL average speeds (blue line), and continues to be well above the CRL consent conditions (green line).
- The average speed across the six routes ranges between 8 kmph and 18 kmph with only Customs Street and Quay Street operating at slightly lower speeds compared to Pre-CRL.
- Vehicle volumes leading into the City Centre has remained similar and followed similar trends to last year (see graph below)



ATT - Average Travel Time (minutes) relative to the Base Time Prior to CRL Works for February 2017



* Base Travel times have been calculated against the average travel time per route prior to the CRL works commencing. These are identified on the dials by the shaded blue sections. Conditions of the resource consent allow no more than a 10 minute delay against this original base time (dial maximum value). The dials represent visually how each route is performing within these parameters.

Measure of Success – Performance Dashboard

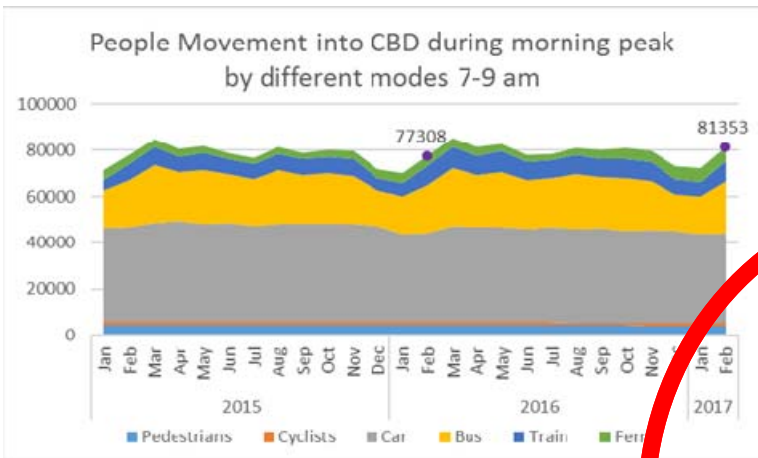
People Movement into the City Centre

It is estimated that on average 81,353 people travelled into the City Centre during the morning peak period (7-9am) in February 2017. This is over 4,000 more than in February 2016.

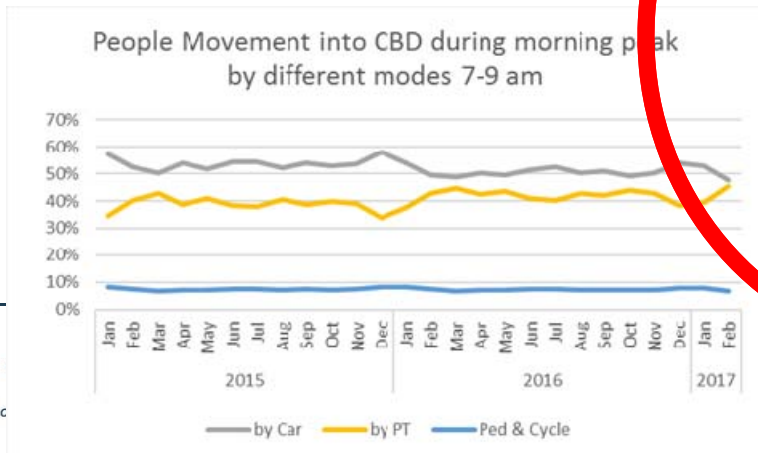
The % splits by mode for this month was:

- 48% by Car
- 45% by Public Transport (PT)
- 7% by Active modes.

The modal split has averaged 49%, 44% and 7% respectively for 2016. There has been a slight shift towards PT in February 2017.



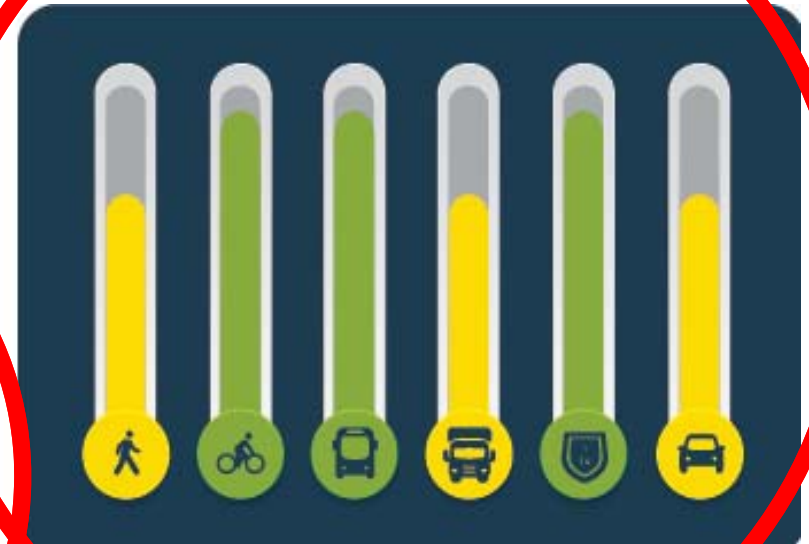
There continues to be an increase in people entering the CBD relative to last year.



Key Performance Indicators

Overall the network continues to perform at acceptable levels for all modes in the city centre.

- The **motorway** network, the **bus** network, **pedestrian, cycling, freight** and **general traffic** access have operated adequately for a city centre environment.
- Impact continues to be confined to the core of the city. Pedestrian and vehicular movement is particularly constrained along Albert Street.



Green = good/acceptable, yellow = acceptable/not good in places, red = not good





Thank you.

