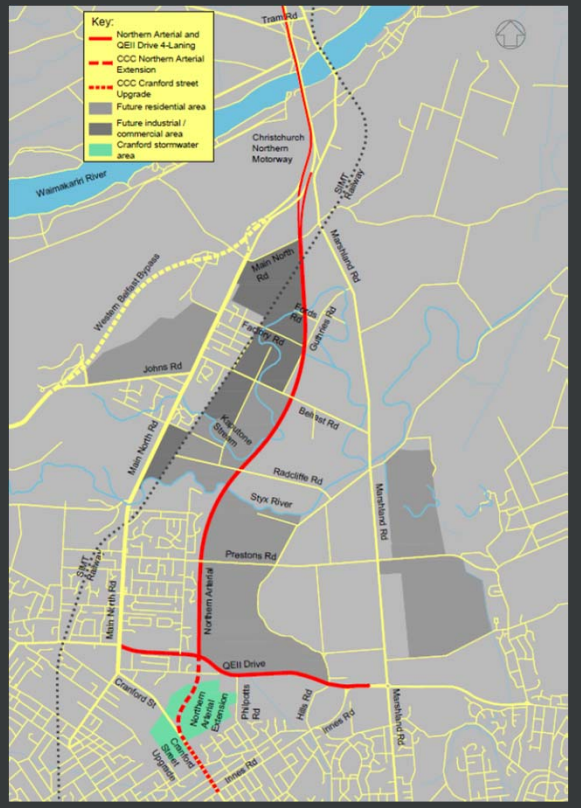
Managing Downstream Effects of the CNC (Northern Motorway)



Dr Shane Turner

TG Conference - March 2020

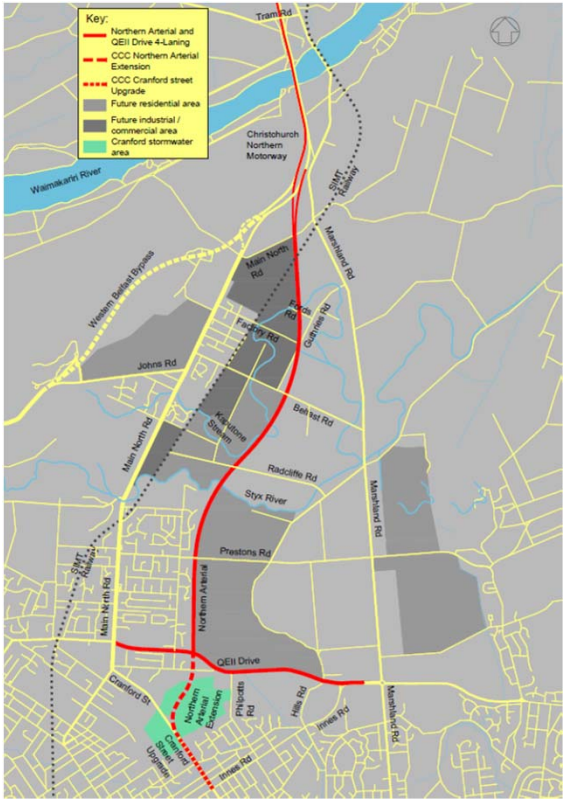
Project Scope

The objectives of the investigation, as stated in the Notice of Requirement (NoR), into the downstream effects are:

1. To identify preferred vehicle access routes, particularly for trucks, between the end of the Christchurch Northern Corridor and the Central City; and

2. To identify strategies to keep vehicles on preferred vehicle access routes; and

3. To discourage vehicles away from public transport routes and walking or cycling routes such as Main North Road / Papanui Road and Rutland Street corridors respectively.



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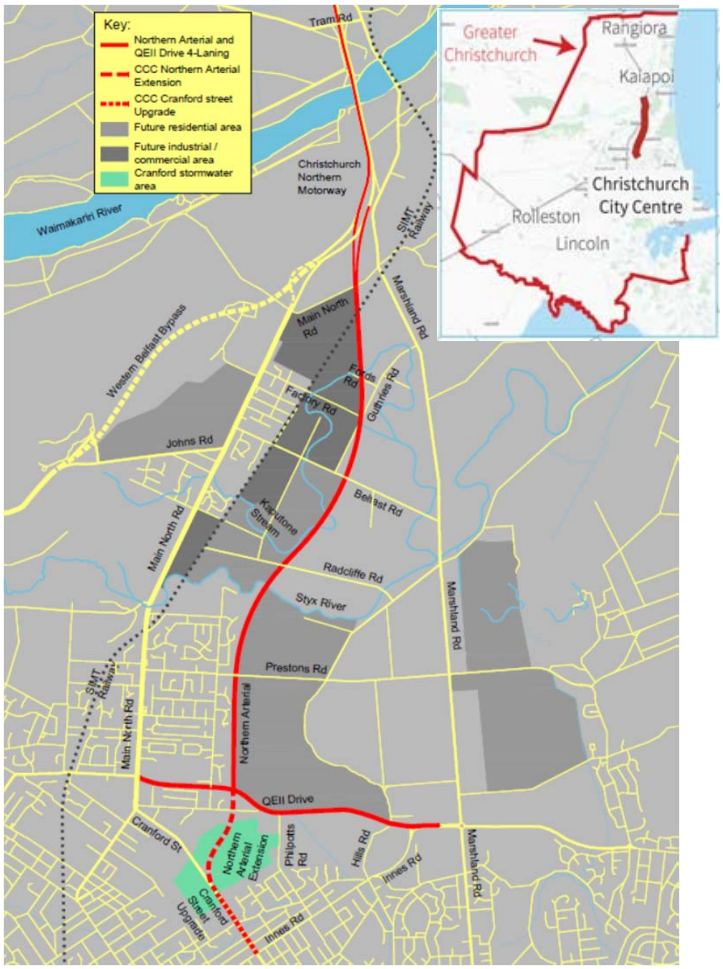
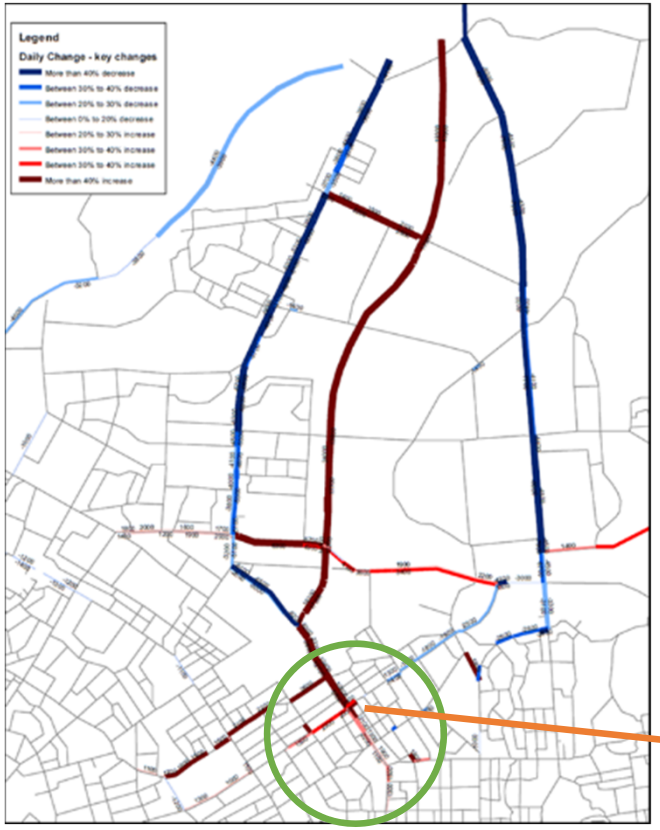
Traffic Effects

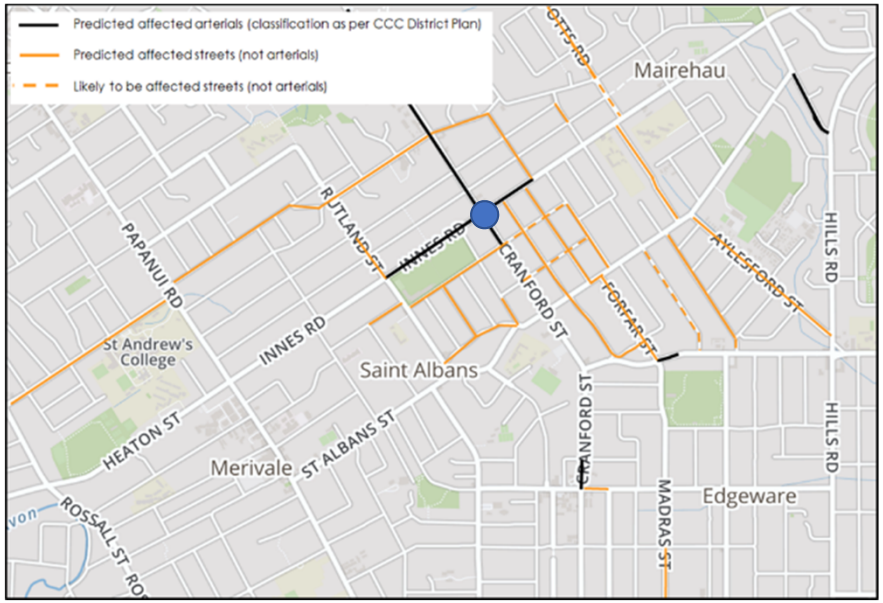




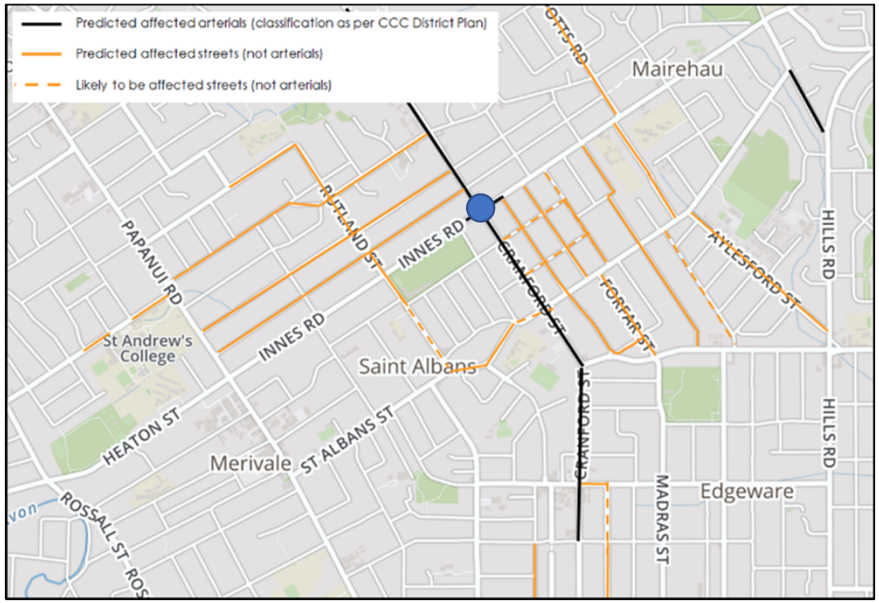
CRANFORD STREET

abley

Traffic Effects (>30% increase)



AM Peak Period Impacts of CNC (2031)



PM Peak Period Impacts of CNC (2031)

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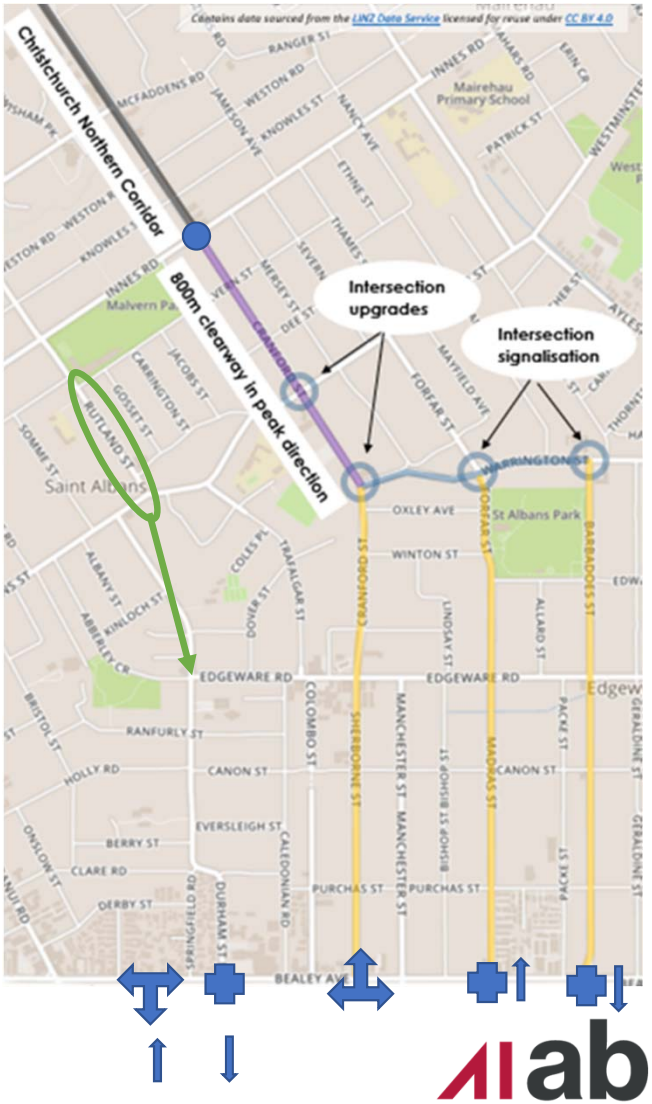
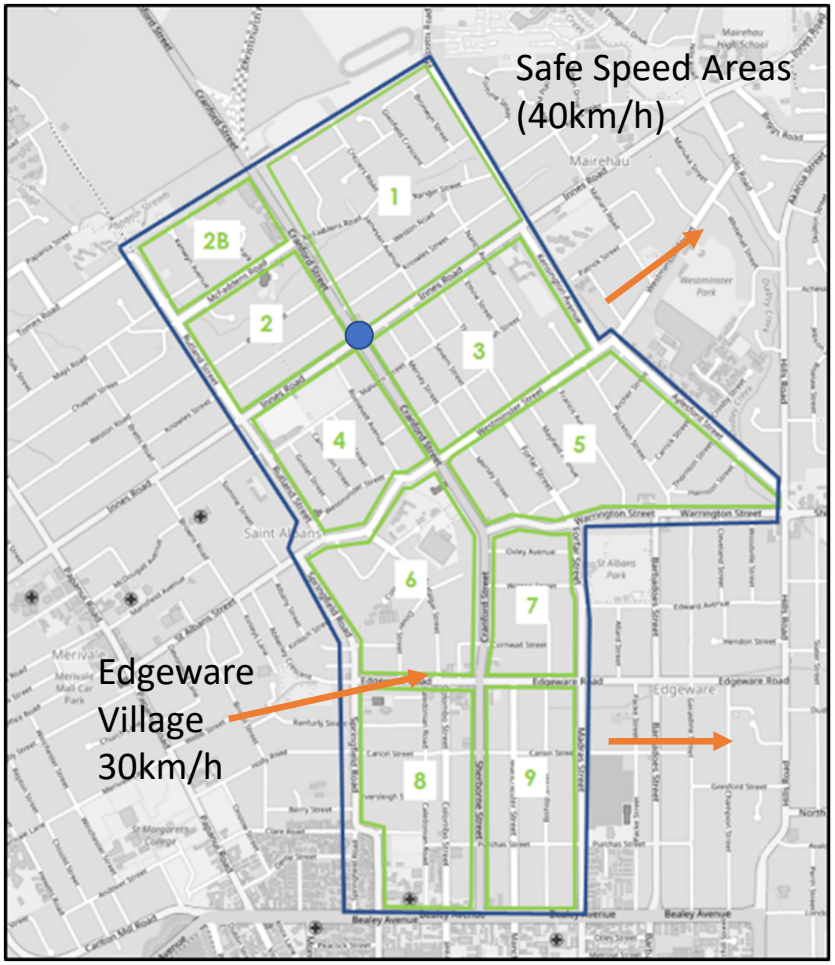
Arterial Upgrades

- 800m peak period clearway on Cranford Street
- Upgrading Cranford Signals
- New Signals on Berwick Street
- South Berwick Options
  - Cranford/Sherborne Clearways
  - Barbadoes/Madras Upgrades
  - Further Modelling Required



Traffic Calming



Tonkin + Taylor

Measures to address other Impacts

- Consultation Process identified a lot of issues
  - Less vehicles – travel demand management
  - Road Safety – especially for school children & cyclists
  - Impacts of congestion on access to parks, homes & businesses
  - Rat-running in local streets (covered above)
- Focus areas
  - Travel Demand Management (CCC, NZTA & ECan) – HOV lanes
  - Safe Access to Schools
  - Safe Cycling Routes
  - Access to Parks
  - Access to Commercial Areas

Safe Access to School

St Albans School:

- Lower speeds on local roads and collectors (30km/h/40km/h speed areas). Cranford Street School Zone (40km/h)
- Right-turn ban at Cranford/Westminister during morning peak (reduce traffic through school crossing on Westminster)
- English Park car-park LILO
- New Signalised mid-block Crossing to English Park
- Coloured surfacing at Cranford / Westminister Intersection
- Build on safe routes to school programme

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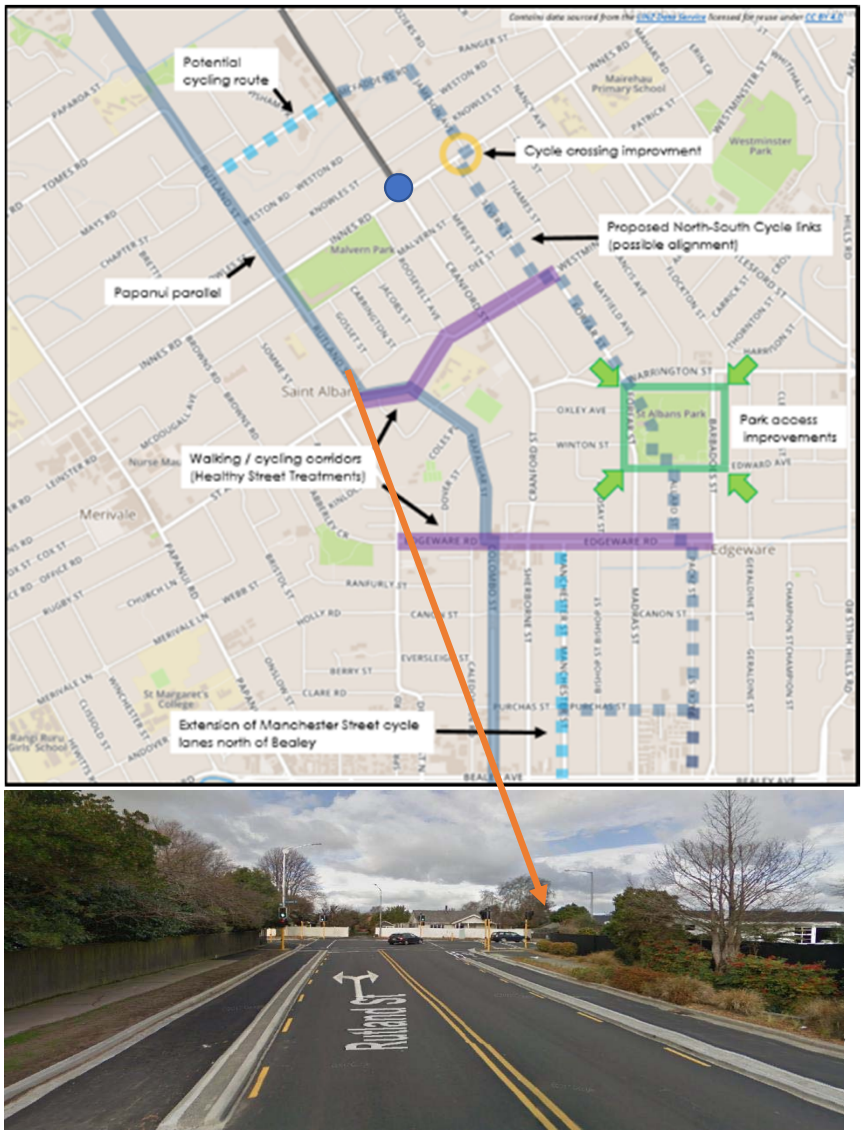
Safe Cycle Routes

Key concerns:

1. Lack of cycle facilities in future on Cranford Street and Berwick Street (and Sherborne)
2. Increased traffic volumes
3. Limited facilities in community linking to the Papanui Parallel primary cycle route

Treatments:

- Lower speed limits on local/collector streets
- Additional (secondary) facilities
  - Second North-South Link east of Cranford Street
  - East-west Cross Links on McFaddens, Courtney/Westminster and Edgeware Road
  - **Link between motorway and Papanui Parallel**
- Better wayfinding for cyclists
- **Widening of Cranford to achieve wider clearway lane**



Access to Parks

Malvern/Rugby Park

- An opportunity associated with Streets around the park, like Roosevelt Street and Malvern Street, to add traffic calming and implementation of safer speed areas

St Albans Park

- Warrington traffic signals (x2) improving access from the north
- Cycleway linkage to Forfar Street (north), and Allard (south)
- Improvements to Forfar Street and Barbadoes Street (road narrowing and crossing aids)

English Park (St Albans School)

- Mid Block Signals (on Cranford Street)

Access to activity (Business) Centres

Key Issues

- Safe access by walking, cycling, and public transport
- Parking requirements – on (and off) road
- Amenity and urban design
- Provision for visually and mobility impaired
- Desire ‘Healthy Streets’ for walking and cycling

Proposed:

- Development (& implementation) of a Local Activity Centre (Shops) Transport Plan
- Edgeware Village – review current master-plan

Local Commercial Centres

Westminister Street / Cranford Street Shops
Warrington Street / Barbadoes Street Shops
Edgeware Road / Barbadoes Street Shops
Rutland Street Shops
Edgeware Village (activity centre)

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Monitoring Regime

Monitoring Required through to 2030 (10 years)

<u>What is being Monitored:</u>

- Traffic flows (looking for 30% increase)
- Pedestrians and cycle flows at key locations
- Noise, Air Pollution and Vibration on arterial and some collector routes

<u>Three levels of monitoring:</u>

- Baseline (before)
- After CNC opens
- Ongoing monitoring
  - Key locations
  - Following any changes (e.g. traffic claming)

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