Totara Street: Route to Mt Maunganui past NZ's busiest Port

OPUS



Totara Street Transport Committee

Project Goals

- Provision of a seamless, protected and high quality cycle connection
- Enhanced safety for people on bikes
- People on bikes of all confidence levels are catered for
- Improved operation and safety of the corridor, in particular for heavy vehicles
- Improved road crossing points for pedestrians

Tauranga City Council: A Client Perspective



Totara Street Transport Committee

Key Facts

- High priority Port and Industrial operations
- Nationally Strategic corridor
- More than 19,000 daily traffic,10 to 20% HCV's
- 25 trains per crossing per day
- 2338 people on bikes a week
- Current facilities for cyclists and road users are inadequate





Totara Street Feedback

Feedback

- 80% of respondents agree or agree with suggestions
- 80% of business and Ports of Tauranga disagreed with proposal on western alignment

Suggestions

- Support for physically separated facilities.
- Improvements to Hull Road/Totara Street roundabout.
- Considerations of landscaping planting and to not remove trees.
- Completing the connection to Mount Maunganui.
- Safety matters relating to Totara Street/Hewletts Road



Photo of Christchurch example

Totara Street Feedback

Those opposing the cycle proposal

- Two-way cycle lanes and conflict between people on bikes.
- Drivers looking for people on bikes coming from the opposite direction to normal traffic flow.
- Conflict and visibility issues between vehicles at multiple commercial driveways.



Photo of truck on entry to Totara Street



Photo of Christchurch cycleway example

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Safety by Design

Route Selection Options



Port and Rail

- Ports working with NZTA and TCC on longer term solutions
- Totara Street is not planned as main Port Route
- Speed limit change
- Alternatives are being sought including linking through Te Maire Street





Where and Why

Safety audit at scheme level strongly disagrees with cycleway on the Port Side (left/west)

Why

- Numerous commercial entrances used by heavy vehicles 26 vs 6
- Dangerous goods, chemical and bitumen storage
- Lack of sight distance on exit
- Cyclists at risk from left turning trucks on entry
- Trucks require 20m stacking length



Initial concept plan

Where and Why

Design team and Client Workshop resolution for vulnerable users

Cycleway and footpath East side (right)

- Reduced heavy vehicle entrances
- Clearer passage
- Rail crossing switching gear
- Avoids truck stop
- Removed from Port traffic
- Require bi-directional



Design treatments required to make this as safe as possible



Workshop Design Process



Urban design by Isthmus

Signalised Mid-Block Crossings

- 2 signalised crossings
- Located back from intersection
- Urban design approach treatment



Industrial Crossings

- WSP Opus Research recommendation
- Concrete judder bar built in
- Green cycleway pedestrian bars
- Advanced thermal detection
- Activated warning signs at entrance





Safety Design Decision

Retail Crossings

- Set back 5m
- WSP-Opus Research recommendation
- Bolt on judder bar
- Green cycleway pedestrian bars
- Signage for vehicles at dual entrances
- Cyclist warning signs on approach





Photo of Christchurch example

Railway Crossings

- 2 x automated gates
- VeloStrail
- ALCAM & LCSIA







Christchurch examples

Signalised Intersections x 3

- Port entrance of Hull Road
 - Existing roundabout
 - No 'U' turn facility
 - logs
- <u>Tee intersection of Triton Ave</u>
 - Storage to Port
 - Pedestrian phase across Totara
- Rail Crossing
- Modify signal layout at Waimarie
 - Remove left slip
 - Avoids truck stop
- Hewlett's Road (Existing signals)

Video of intersections

Bus stops

- Buses stop in live lane
- Raised platform within cycleway







Detail of Christchurch example

Signalised crossing & Gateway to Bay Oval

- Opportunity for urban design
 Why Cross
- Avoids side roads and retail
- Makes use of available berm
- Road cross section can be modified



Urban Design by Isthmus

Design Decision



Rata St Link

- Connects to the Mt
- Connects to cruise ships

Design considerations

- Make use of left turn lane
- Reallocate road space
- Visibility at intersection





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Questions?