

Appendix P

Summary of Evaluation of Node and Intersection Treatment Long List Options

Location	Option	Comments	Progress to Short List?
Intersection Trea	atment Options		
Thorndon Quay - Mulgrave Street	Signalise right turn from Thorndon Quay into Lambton Bus Interchange and incorporate improved pedestrian/cyclist safety - phasing, advance stop boxes.	Good alignment with bus attractiveness and safety.	Yes
Thorndon Quay - Mulgrave Street	Close slip lane and direct all Mulgrave traffic to existing signals, allowing left turn there. Signalise bus entry/exit.	Scores lower than other options which provide a better bus reliability and cycling, pedestrian outcomes.	No
Thorndon Quay - Mulgrave Street	Swap over Mulgrave and Lambton Quay Bus Interchange entry/exit to remove Mulgrave/Bus Lane crossover.	Scores lower than other options which provide a better bus reliability and cycling, pedestrian outcomes.	No
Thorndon Quay - Davis Street	Signalise intersection.	Scores lower than other options which provide a better bus reliability and pedestrian outcomes.	No
Thorndon Quay - Davis Street	Raised platform intersection.	Good safety outcomes for pedestrians and cyclists.	Yes
Thorndon Quay - Moore Street	Raised platform intersection.	Good safety outcomes for bedestrians and cyclists.	Yes
Thorndon Quay - Moore Street	Signalise intersection.	Scores lower than other options which provide better bus reliability and pedestrian outcomes.	No
Thorndon Quay - Tinakori Road	Signalise Tinakori Road intersection and provide Toucar Crossing and bus priority.	Good alignment with bus attractiveness, safety and LOS outcomes for pedestrians and cyclists.	Yes
Hutt Road - Aotea Quay	Provide additional road signage at diverge to ramp to ferry terminal.	Scores lower than other options which provide better safety outcomes.	No
Aotea Quay	Turn-around facility at Aotea Quay/Mainfreight to allow trucks/people to use motorway to get to the Kaiwharahara Ferry Terminal.	Would help remove Kaiwharawhara ferry traffic from Hutt Road. Supports the freight objective.	Yes
Hutt Road - Kaiwharawhara	Improve pedestrian crossing facilities or provide new crossings at Kaiwharawhara intersection.	Good alignment with bus attractiveness, safety, and LOS outcomes for pedestrians.	Yes
Hutt Road - Kaiwharawhara	Provide bus lane and signal pre- emption southbound and northbound. Suggest extending bus lane beyond southbound bus stop to facilitate buses pulling out.	Does not maintain access by freight as is likely to cause large southbound queues in the morning peak period at Kaiwharawhara if just a bus only lane.	No

Location	Option	Comments	Progress to Short List?
Hutt Road - Kaiwharawhara	Bus queue jump at Kaiwharawhara Road/Hutt Road Intersection (northbound).	Good alignment with bus attractiveness outcomes.	Yes
Hutt Road - Kaiwharawhara	Connect School Road to Kaiwharawhara Road ban right turn in from Hutt Road.	Does not align well with environmental effects on the Kaiwharawhara Stream. Also scoring lower than other options which provide better bus attractiveness outcomes.	No
Hutt Road - Kaiwharawhara	Convert to seagull intersection.	Scores lower than other options which provide better bus attractiveness outcomes.	No
Hutt Road - Kaiwharawhara to Ngauranga	In combination with bus priority at Jarden Mile and Kaiwharawhara intersections, provide a bus lane south bound on Hutt Road - use one of existing traffic lanes.	May create issues at intersections as this is a bus only option. Could lead to reduced capacity for other general traffic	No
Hutt Road - Jarden Mile/Centennial Highway	Centennial Highway intersection, considering signal pre-emption for buses and pedestrian crossings facilities.	Good alignment with bus attractiveness, pedestrian LOS, and safety outcomes.	Yes
Hutt Road - Jarden Mile/Centennial Highway	Centennial Highway southbound stop extend no stopping lines to facilitate bus pull-out and consider providing 5- minute parking for drop-off, so vehicles don't block bus stop.	Good alignment with bus attractiveness, and safety outcomes.	Yes

Pedestrian and Cycling Options

Thorndon Quay - Bordeaux Crossing	Signalise existing zebra crossing (one stage or two stage crossing).	Scores lower than other options which provide better pedestrian safety outcomes.	No
Thorndon Quay - Bordeaux Crossing	Raised platform crossings (whether uncontrolled, zebra or signalised).	Good safety outcomes for pedestrians.	Yes
Thorndon Quay - Davis Street	Provide grade separated (bridge) to connect Davis Street to Stadium Concourse.	Good alignment with bus reliability and safety outcomes for pedestrians. However, has a poor travel time and accessibility outcomes for mobility impaired pedestrians.	Yes
Thorndon Quay - Davis Street	Provide grade separated (underpass) to connect Davis Street to Stadium Concourse.	Scores lower than other options which provide better pedestrian safety/LOS outcomes.	No
Thorndon Quay - Davis Street	Signalise existing zebra crossing (one or two stage crossing).	Scores lower than other options which provide better bus reliability and pedestrian outcomes.	No

Location	Option	Comments	Progress to Short List?
Thorndon Quay - Davis Street	Raised platform crossings (whether uncontrolled, zebra or signalised).	Good safety outcomes for pedestrians.	Yes
Thorndon Quay - Davis Street	Provide crossing over Davis Street to prioritise or raise awareness of pedestrians (raised platform or zebra).	Good safety outcomes for pedestrians.	Yes
Thorndon Quay - Davis Street	Reconfigure zebra and bus stop.	Scores lower than other options which provide better bus reliability and pedestrian outcomes.	No
Thorndon Quay - Moore Street	Provide crossing over Moore Street to prioritise or raise awareness of pedestrians (raised platform or zebra).	Good safety outcomes for pedestrians.	Yes
Thorndon Quay - Moore Street	Signalise existing zebra crossing (one stage or two stage crossing) - Toucan crossings.	Good safety and LOS outcomes for bedestrians and cyclists.	Yes
Thorndon Quay - Moore Street	Raised platform crossings (whether uncontrolled, zebra or signalised)	Good safety outcomes for pedestrians	Yes
Thorndon Quay - Moore Street	Reconfigure zebra and bus stop.	Good alignment with bus reliability and safety outcomes for pedestrians.	Yes
Thorndon Quay - Motorway Overpass	Adding active mode crossing to connect to bus stops, at grade.	Good alignment with bus attractiveness and safety outcomes for pedestrians.	Yes
Thorndon Quay - Motorway Overpass	Adding active mode crossing to connect to bus stops - overpass or underpass.	Scores lower than other options which provide better pedestrian safety/LOS outcomes.	No
Thorndon Quay - Tinakori Road	New mid-block Signals to aid cyclists crossing Thorndon Quay. Will involve some parking temoval and bus stop relocations (Toucan crossings).	Good safety and LOS outcomes for pedestrians and cyclists.	Yes
Hutt Road - Aotea Quay	Provide dropped crossing point north of bus stop and pedestrian refuge.	Scores lower than other options which provide better pedestrian safety/LOS outcomes.	No
Hutt Road - Aotea Quay	Provide "controlled" crossing (Zebra or signals, one stage or two stage).	Good safety outcomes for pedestrians.	Yes
Thorndon Quay - Mulgrave Street to Tinakori Road	Install additional wayfinding signage for cyclists and pedestrians.	Good alignment with alternative modes outcomes.	Yes
Hutt Road - Aotea Quay to Kaiwharawhara	Install additional wayfinding signage for cyclists.	Good alignment with amenity and cycling LOS outcomes.	Yes
Hutt Road - Rangiora Avenue	Place existing zebra crossing on platforms.	Good alignment with bus attractiveness, pedestrian LOS, and safety outcomes.	Yes

Location	Option	Comments	Progress to Short List?
Hutt Road - Rangiora Avenue	Signalise existing zebra crossing (one stage or two stage crossing) (Toucan or standard).	Good alignment with bus attractiveness, pedestrian LOS, and safety outcomes.	Yes
Hutt Road - Jarden Mile/Centennial Highway	Install additional wayfinding signage for cyclists and pedestrians	Good alignment with active modes outcomes.	Yes
Hutt Road - Jarden Mile/Centennial Highway	Provide pedestrian crossings at Jarden Mile/Hutt Road.	Good alignment with bus attractiveness, pedestrian LOS, and safety outcomes.	Yes
Amenity Options	3		
Thorndon Quay - Mulgrave Street to Tinakori Road	Addition of more bike facilities for parking throughout the route.	Good amenity and cycling LOS outcomes.	Yes
Thorndon Quay - Mulgrave Street	Provide amenity improvements (seating, landscaping etc).	Good amenity and active modes outcomes.	Yes
Thorndon Quay/Hutt Road - Aotea Quay to Mulgrave Street	Shade and shelter.	Good alignment with amenity outcomes.	Yes
Thorndon Quay/Hutt Road - Aotea Quay to Mulgrave Street	Streetscaping.	Good alignment with amenity outcomes.	Yes
Thorndon Quay - Motorway Overpass	Argenity improvements by adding lighting to the overpass to create a gateway effect, this improves the overall equiconment of the area, making it more appealing and safer. Also helps with road safety in alerting drivers to a change of environment.	Scores lower than other options which provide better pedestrian safety/LOS outcomes.	No
Thorndon Quay - Mulgrave Street to Moore Street	Provide shelter and shade structures between Subway exit from Railway Station on the east side of Thorndon Quay to Moore Street, provide shelter also on opposite side of Moore Street near pedestrian crossing.	Scores lower than other options which provide better pedestrian LOS and amenity outcomes.	No
Thorndon Quay - Motorway overpass to Tinakori Road	Provide amenity improvements (seating, landscaping etc) in space under pohutukawa trees between Motorway overbridge and Tinakori Road.	Scores lower than other options which provide better pedestrian and amenity outcomes.	No
Thorndon Quay - Motorway Overpass to Tinakori Road	Surface improvements, and adding cycle wheel ramps beside the stairs	Scores lower than other options which provide better pedestrian/cyclist safety/LOS outcomes.	No

Location	Option	Comments	Progress to Short List?
Hutt Road - Kaiwharawhara	Shade and shelter.	Good alignment with amenity outcomes.	Yes
Hutt Road - Kaiwharawhara	Streetscaping.	Limited value or opportunity to carry this out along the corridor. Other options score better for amenity outcomes.	No

Bus Operational Options

Thorndon Quay - Pipitea Marae	Replace the car parking out front of the Marae with bus parking.	Overall negative score due to neutral scores against the IO's and negative scores against social and Tangata Whenua effects.	No
Thorndon Quay - Motorway Overpass	Use car park as bus layover area to reduce pressure on the Bus Interchange, Land is understood to be owned by NZTA.	Good alignment with bus attractiveness outcomes.	Yes
Thorndon Quay and Hutt Road - Aotea Quay to Mulgrave Street	Bus stop rationalisation.	Good alignment with bus attractiveness outcomes.	Yes
Thorndon Quay/Hutt Road - Aotea Quay to Mulgrave Street	Remove all layby stops and replace with in lane bus stops to reduce bus delay.	Good alignment with bus attractiveness outcomes.	Yes
Hutt Road - Aotea Quay to Ngauranga	Remove all lay by stops and replace with in lane bus stops to reduce bus delay.	Good alignment with bus attractiveness and safety outcomes.	Yes
Safety Improver	nents		
Thorndon Quay/Hutt Road - Aotea Quay to Mulgrave Street	Determine safe and appropriate speed from speed review and implement the speed changes and appropriate engineering measures.	Good alignment with safety outcomes.	Yes
Thorndon Quay/Hutt Road - Aotea Quay to Mulgrave Street	Reduce speed limit to 30km/h.	Good alignment with safety outcomes.	Yes
Thorndon Quay/Hutt Road - Aotea Quay to Mulgrave Street	Reduce speed limit to 40km/h.	Good alignment with safety outcomes.	Yes
Thorndon Quay/Hutt Road - Aotea Quay to Mulgrave Street	School Zone (40kph).	Good alignment with safety outcomes.	Yes

Option	Comments	Progress to Short List?
Determine safe and appropriate speed from speed review and implement the speed changes and appropriate engineering measures.	Good alignment with safety outcomes.	Yes
Engineer up - median and side barriers.	Good alignment with safety outcomes.	Yes
Install W section barriers on the roadside edge of the shared path in the 80km/h section of Hutt Road. May required some cycleway widening to maintain clear route.	Good alignment with safety outcomes.	Yes
Remove off road cycle path obstructions (power poles, streetlights, and other street furniture/utility cabinets etc).	Good alignment with safety outcomes.	Yes
Reduce speed limit to 60km/h (Onslow to Jarden Mile).	Good alignment with safety outcomes.	Yes
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Re-open Kaiwharawhara Station with active mode connection to Hutt Road.	Although this option scored highly against active mode share, but is discounted due the station being outside of the scope of this project.	No
Re-open Kaiwharawhara Station with integrated bus/rail interchange.	This option scored highly against bus attractiveness, but is discounted due to the station being outside of the scope of this project.	No
	Determine safe and appropriate speed from speed review and implement the speed changes and appropriate engineering measures. Engineer up - median and side barriers. Install W section barriers on the roadside edge of the shared path in the 80km/h section of Hutt Road. May required some cycleway widening to maintain clear route. Remove off road cycle path obstructions (power poles, streetlights, and other street furniture/utility cabinets etc). Reduce speed limit to 60km/h (Onslow to Jarden Mile). Re-open Kaiwharawhara Station with active mode connection to rutt Road. Re-open Kaiwharawhara Station with	Determine safe and appropriate speed from speed review and implement the speed changes and appropriate engineering measures.Good alignment with safety outcomes.Engineer up - median and side barriers.Good alignment with safety outcomes.Install W section barriers on the roadside edge of the shared path in the 80km/h section of Hutt Road. May required some cycleway widening to maintain clear route.Good alignment with safety outcomes.Remove off road cycle path obstructions (power poles, streetlights, and other street furniture/utility cabinets etc).Good alignment with safety outcomes.Reduce speed limit to 60km/h (Onslow to Jarden Mile).Good alignment with safety outcomes.Re-open Kaiwharawhara Station with active mode connection to that Road.Although this option scored hare, but is discounted due the station being outside of the scope of this project.Revoen Kaiwharawhara Station with integraved bus/rail interchange.This option scored highly against bus attractiveness, but is discounted due to the station being outside of the scope of being outside of the scope of being outside of the scope of tis project.