



Appendix E

Summary of Evaluation of Corridor Treatment Long List Options

Location	Option	Benefits	Disbenefits	Comment	Shortlist
Special Vehicle Lanes (SVLs) and Bus Lanes (including Busways)					
All	No priority (Existing)	Straightforward, less disruption, does not affect car parking.	Highly unlikely to address the Investment Objectives.	Poor performance against the investment objectives.	No
All	Southbound or northbound - Kerbside SVL - all day	Long term social benefits by improving public transport. Safety- easier to understand than part-time reducing complexity. High alignment with IO1 – Bus attractiveness.	Multiple traffic lanes can create safety issues for motorcyclists, cyclists and pedestrians. Full time lanes remove car parking. Also, likely to have a significant effect at Kaiwharawhara intersection on queuing in the morning peak hour. Limits opportunities to provide additional lane capacity for general traffic off peak.	Should be progressed as part of a corridor package, where it can be implemented without adverse impact on throughput and cyclists.	Yes
All	Southbound or Northbound - Kerbside SVL – peak hours	Long term social benefits by improving public transport. Good alignment with IO1 Bus attractiveness. Part time lanes allow parking to be available during off peak periods.	Safety – part time operation has safety implications due to variability of traffic. Multiple lanes create safety issues for vulnerable road users. Limits opportunities to allow for increased bus frequencies and priority off peak.	Should be progressed as part of corridor package, where it can be implemented without adverse impact on throughput and cyclists.	Yes
All	Northbound or Southbound - Central Running SVL - All day	Long term social benefits by improving public transport. Safety- easier to understand than part-time reducing complexity. Moderate to low alignment with IO1.	Difficult pedestrian access from footpaths and crossing over carriage way. Regular stops create flow disruptions.	Unlikely to significantly improve bus attractiveness and has adverse effects on amenity values for pedestrians.	No
All	Central Running Busway	Long term social benefits by improving public transport. Moderate to low alignment with IO1.	Difficult pedestrian access from footpaths and crossing over carriage way. Regular stops create flow disruptions.	Unlikely to significantly improve bus attractiveness and has adverse effects on amenity values for pedestrians.	No
All	Peak direction - Central Running Contraflow SVL	Long term social benefits by improving public transport. Moderate to low alignment with IO1	Difficult pedestrian access from footpaths and crossing over carriage way. Regular stops create flow disruptions.	Unlikely to significantly improve bus attractiveness and has adverse effects on amenity values for pedestrians.	No

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All	Peak direction - SVL enabled by Tidal Flow	Long term social benefits by improving public transport. Using when needed approach provides a shared laneway design meaning more flexibility and serves north and southbound. Provides capacity for general traffic on the opposing direction. Moderate alignment to IO1.	Moderate negative score against the safety IO due to part time operation safety implications due to variability of traffic.	Should be progressed as part of corridor package, where it can be implemented as does not adversely impact on throughput, need to accommodate cyclists and address safety issues.	Yes

Cycling Facilities

All	3.0 - 3.5m wide shared path	Safety benefits are separation from traffic and also a positive effect on improving Level of Service. Long term social benefits from improving cycling infrastructure with positive effects on public health, economic activity (retail spend) and sustainability.	Safety disbenefits, risk of conflict – cyclists/cyclists and peds, contra-flow cyclists at intersections/accesses. Connectivity not as good as uni-directional path on both sides of road leading to risks joining/leaving facility.	Scores lower than other options which provide a better LOS and safety outcomes	No
All	3.5 - 4.0m wide shared path	Safety and LOS as above. Long term social benefits from improving cycling infrastructure with positive effects on public health, economic activity (retail spend) and sustainability.	Safety and connectivity as above.	Scores lower than other options which provide a better LOS and safety outcomes.	No
All	3.0m bi-directional cycleway + 1.0m buffer (Width = 4.0m from edge of road to edge of footpath)	Separation from traffic removes high risk conflicts. Has a positive effect on improving Level of Service. Long term social benefits from improving cycling infrastructure with positive effects on public health, economic activity (retail spend) and sustainability.	Connectivity not as good as uni-directional path on both sides of road leading to risks joining/leaving facility. Contra-flow cyclists unexpected at intersections/accesses increasing conflict risk. Remove conflict with pedestrians.	Strong support for the cycling and safety IO's.	Yes
All	2.0m one-direction cycleway on both sides + 1m buffer (Total width = 3.0m) - available all day	Separation from traffic removes high risk conflicts. Facility on both sides of road gives better level of access than bi-directional paths avoiding need to cross to access facility. More intuitive	Due to restricted total width of street compromises will likely be needed on width for footpaths, landscaping, and bus lanes.	Strong support for the cycling and safety IO's.	Yes

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		at intersections as cyclists moving with traffic. Has a high positive score against improving LOS and safety. Long term social benefits from improving cycling infrastructure with positive effects on public health, economic activity (retail spend) and sustainability.			
All	2.0m on-road cycle lane on both sides + 0.5 buffer (Total width = 2.5m) - available all day	Separation from traffic removes high risk conflicts. Facility on both sides of road gives better level of access than bi-directional paths avoiding need to cross to access facility. More intuitive at intersections as cyclists moving with traffic. Has a high positive score against improving LOS and safety. Long term social benefits from improving cycling infrastructure with positive effects on public health, economic activity (retail spend) and sustainability.	Cycleway safety will be focus with reduced buffer width.	Strong support for the cycling and safety IO's.	Yes
All	Kerbside SVL <4.2m wide (shared with buses and/or HOVs) - all day	Less exposure to general traffic than current. All day operation decreases safety risk over part-time as more readily understood.	Narrow lane increasing safety risk over a wider lane. Cycling LOS not improved and residual risk of conflict with passing traffic.	Scores lower than other options which provide a better LOS and safety outcomes.	No
All	Kerbside SVL >=4.2m wide (shared with buses and/or HOVs) - all day	Less exposure to general traffic than current. All day operation decreases safety risk over part-time as more readily understood.	Cycling LOS not improved and residual risk of conflict with passing traffic.	Scores lower than other options which provide a better LOS and safety outcomes.	No
All	Kerbside SVL <4.2m wide (shared with buses and/or HOVs) - peak time(s) only	Less exposure to general traffic than current. but narrow lane increasing safety risk over option with a wider lane. Part-time use can lead to confusion over current state of operation leading to confusion/risk.	Narrow lane increasing safety risk over option with a wider lane. Part-time use can lead to confusion over current state of operation leading to confusion/risk. Residual risk of conflict with passing traffic.	Scores lower than other options which provide a better LOS and safety outcomes.	No

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All	Kerbside SVL >=4.2m wide (shared with buses and/or HOVs) - peak time(s) only.	Less exposure to general traffic than current. All day operation decreases safety risk over part-time as more readily understood.	Cycling LOS not improved and residual risk of conflict with passing traffic.	Scores lower than other options which provide a better LOS and safety outcomes.	No

Footpaths and Amenities

All	No additional space available for wider footpaths and amenities	With general footpath width of 3m along both sides of Thorndon Quay is adequate for pedestrian movement.	Does not enable softening treatments such as street furniture, sheltered bus stops and landscape buffers appropriate to enhance nodal points and amenity. Does not improve Los for pedestrians.	Poor performance against the investment objectives. However, this is a benchmark for footpaths on Thorndon Quay and options will be assessed against reducing the footpath width below 3m.	No
All	0 - 1m (or up to 2m on one side) available for wider footpaths and amenities	Long term social benefits from improving footpaths. Slightly improved visual amenity with potential for landscaping to one side of the street.	Due to limited width of the street there will be compromises to cycling lanes and public transport so this needs to be considered.	Will support bus and cycling improvements by allowing space whilst improving or at least maintaining the pedestrian LOS on Thorndon Quay in terms of footpath width.	Yes
All	1 - 1.5m (or 2 - 3m on one side) available for wider footpaths and amenities	Long term social benefits from improving footpaths. Improves visual amenity with potential for landscaping to both sides of the street.	Due to limited width of the street there will be compromises to cycling lanes and public transport so this needs to be considered.	Will support bus and cycling improvements by allowing space whilst improving or at least maintaining the pedestrian LOS on Thorndon Quay in terms of footpath width.	Yes
All	1.5 - 2m (or 3 - 4m on one side) available for wider footpaths and amenities	Long term social benefits from improving footpaths. Improves visual amenity with potential for landscaping to both sides of the street.	Due to limited width of the street there will be compromises to cycling lanes and public transport so this needs to be considered.	Not to be progressed given the limited space available to be accommodated wider footpaths in Thorndon Quay, which would be at the expense of other key objectives such as cycling and bus improvements.	No
All	2 - 2.5m (or 4 - 5m on one side) available for	Long term social benefits from improving footpaths. Enables the	Due to limited width of the street there will be compromises to cycling lanes	Not to be progressed given the limited space available to be	No

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	wider footpaths and amenities	footpath to include better interaction with the shop front e.g. enabling cafe tables to be on the footpath. Landscape treatment, shelter, and street furniture.	and public transport so this needs to be considered.	accommodated wider footpaths in Thorndon Quay, which would be at the expense of other key objectives such as cycling and bus improvements.	
All	>2.5m (or >5m on one side) available for wider footpaths and amenities	Long term social benefits from improving footpaths. Enables the footpath to include better interaction with the shop front e.g. enabling cafe tables to be on the footpath. Landscape treatment, shelter, and street furniture.	Due to limited width of the street there will be compromises to cycling lanes and public transport so this needs to be considered.	Not to be progressed given the limited space available to be accommodated wider footpaths in Thorndon Quay, which would be at the expense of other key objectives such as cycling and bus improvements.	No

Parking Provision

All	Southbound - Retain existing (angled) parking layout with current morning Peak restrictions)	Enables parking to be retained in off-peak traffic. Does not remove any parking and thereby minimises the social impact.	Maintains the existing current poor safety situation off peak, offers little to no amenity benefits.	Scores lower than other options which provide a better safety and amenity outcomes.	No
All	Southbound - Retain existing (angled) parking layout but with morning and evening Peak restrictions)	Slight improvement to safety due to addition of evening peak restrictions. Enables parking to be retained in off-peak traffic.	Offers little to no amenity benefits.	Scores lower than other options which provide a better safety and amenity outcomes.	No
All	Southbound - Retain existing (angled) parking layout with parking available all-day (no peak time restrictions)	Does not remove any parking and thereby minimises the social impact.	Detrimental to current situation as removal of morning peak clearway increases cycle risk. Offers little to no amenity benefits.	Scores lower than other options which provide a better safety and amenity outcomes.	No
All	Southbound - convert angled parking to parallel with current	Less parking reduces exposure to cyclists and general traffic. Driver sightlines improved exiting spaces	Removes some parking and thereby has a negative social impact.	Good alignment with safety investment objective and allows space for cycling improvements.	Yes

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	morning peak restrictions)	reducing likelihood of a conflict. Enables more space to be dedicated to other modes of transport and reduces carpark dominance and improves visual sightlines safety. Peak morning movement so other modes of transport can use this space.			
All	Southbound - convert angled parking to parallel but with morning and evening Peak restrictions)	Less parking reduces exposure to cyclists and general traffic. Driver sightlines improved exiting spaces reducing likelihood of a conflict. Enables more space to be dedicated to other modes of transport and reduces carpark dominance and improves visual sightlines safety. Peak morning movement so other modes of transport can use this space. Limited benefit for pm restrictions.	Removes some parking and thereby has a negative social impact.	Good alignment with safety investment objective and allows space for cycling improvements.	Yes
All	Southbound - convert angled parking to parallel with parking available all-day (no peak time restrictions)	Less parking reduces exposure to cyclists and general traffic. Driver sightlines improved exiting spaces reducing likelihood of a conflict. Enables more space to be dedicated to other modes of transport. carpark dominance remains as not restricted times. No opportunity to use space for other transport at peak times.	No parking restrictions at morning/evening peak slightly scores lower in term of safety than other options. Car park dominance remains as not restricted times. No opportunity to use space for other transport at peak times.	Scores lower than other options which provide a better safety and amenity outcomes.	No
All	Southbound - Remove on-street parking	Removes parking exposure to cyclists and general traffic. Overall safety will depend on how the road space is used. Generally improves amenity. however, some on street parking important to serve nodal points and mechanism to slow traffic to acknowledge pedestrian orientated destination reached.	Some on street parking important to serve nodal points and mechanism to slow traffic to acknowledge pedestrian orientated destination reached. Removes parking and thereby has a negative social impact.	Scores lower than other options which provide a better safety and amenity outcomes.	No

Location	Option	Benefits	Disbenefits	Comment	Shortlist
All	Northbound - Retain existing (angled) parking layout with evening Peak restrictions)	Slight improvement due to addition of evening peak restrictions. Risk of conflict between parking and general traffic/ cyclists reduced. Enables parking to be retained in off peak traffic.	Maintains the existing current poor safety situation off peak, offers little to no amenity benefits.	Scores lower than other options which provide a better safety and amenity outcomes.	No
All	Northbound - Retain existing (angled) parking layout but with morning and evening Peak restrictions)	Slight improvement due to addition of morning/evening peak restrictions. Risk of conflict between parking and general traffic/ cyclists reduced. Enables parking to be retained in off peak traffic.	Maintains the existing current poor safety situation off peak, offers little to no amenity benefits.	Scores lower than other options which provide a better safety and amenity outcomes.	No
All	Northbound - Retain existing (angled) parking layout with no peak time restrictions	Enables parking to be retained in off-peak traffic. Does not remove any parking and thereby minimises the social impact.	Maintains the existing current poor safety situation off peak, offers little to no amenity benefits.	Scores lower than other options which provide a better safety and amenity outcomes.	No
All	Northbound - convert angled parking to parallel with current evening Peak restrictions)	Driver sightlines improved for drivers exiting spaces reducing likelihood of a conflict. Enables more space to be dedicated to other modes of transport and reduces carpark dominance and improves visual sightlines safety. Peak pm movement so other modes of transport can use this space.	Removes some parking and thereby has a negative social impact.	Good alignment with safety investment objective and allows space for cycling improvements.	Yes
All	Northbound - convert angled parking to parallel but with morning and evening Peak restrictions)	Driver sightlines improved for drivers exiting spaces reducing likelihood of a conflict. Enables more space to be dedicated to other modes of transport and reduces carpark dominance and improves visual sightlines safety. Peak am and pm movement so other modes of transport can use this space.	Removes some parking and thereby has a negative social impact.	Good alignment with safety investment objective and allows space for cycling improvements.	Yes

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All	Northbound - Remove on-street parking.	Removes parking exposure to cyclists and general traffic. Overall safety will depend on how the road space is used. Generally improves amenity. however, some on street parking important to serve nodal points and mechanism to slow traffic to acknowledge pedestrian orientated destination reached.	Some on street parking important to serve nodal points and mechanism to slow traffic to acknowledge pedestrian orientated destination reached. Removes parking and thereby has a negative social impact.	Scores lower than other options which provide a better safety and amenity outcomes.	No
Hutt Road - Aotea to Ngauranga	Northbound - Remove on-street parking.	Removes parking exposure to cyclists and general traffic. Overall safety will depend on how the road space is used. Generally improves amenity. however, some on street parking important to serve nodal points and mechanism to slow traffic to acknowledge pedestrian orientated destination reached.	Some on street parking important to serve nodal points and mechanism to slow traffic to acknowledge pedestrian orientated destination reached. Removes parking and thereby has a negative social impact.	Scores lower than other options which provide a better safety and amenity outcomes.	No
Hutt Road - Aotea to Ngauranga	Northbound - Remove on-street parking.	Removes parking exposure to cyclists and general traffic. Overall safety will depend on how the road space is used. Generally improves amenity. however, some on street parking important to serve nodal points and mechanism to slow traffic to acknowledge pedestrian orientated destination reached.	Some on street parking important to serve nodal points and mechanism to slow traffic to acknowledge pedestrian orientated destination reached. Removes parking and thereby has a negative social impact.	Scories lower than other options which provide a better safety and amenity outcomes.	No

Property Access/Turning Facilities

Hutt Road - Kaiwharawhara	Median/turning bays provided (or retained) along the corridor for direct property access	Reduces rear end risk although noted that this is generally low severity at urban speeds.	Does not improve overall amenity as vehicular driven.	Provides safe space for turning traffic without restricting property access.	Yes
Hutt Road - Kaiwharawhara	Median/turning bays provided at intersections only -	Reduces rear end risk although noted that this is generally low severity at urban speeds. However, with less	Restricting access to property will have negative social impacts.	Negative social impacts on property access restrictions.	No

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Location	Option	Benefits	Disbenefits	Comment	Shortlist
	direct property access still available	turning bays means corridor can be dedicated to other uses.			
Hutt Road - Kaiwharawhara	Raised median/restrictions on direct property access - alternative access provided	Removes right angle crash risk that can be more severe. Removes risk of vehicles turning across (more vulnerable and less visible) motorcyclists and cycleway users.	Restricting access to property will have negative social impacts. May increase delay and travel distance for property access users.	Negative social impacts on property access restrictions.	No
Hutt Road - Kaiwharawhara	Raised median/restrictions on direct property access - no alternative access provided	Removes right angle crash risk that can be more severe. Removes risk of vehicles turning across (more vulnerable and less visible) motorcyclists and cycleway users. May result in unsafe/unexpected u-turning at intersections.	Restricting access to property will have negative social impacts. May increase delay and travel distance for property access users.	Negative social impacts on property access restrictions.	No

Other Physical Works

All	No widening or build-outs	No change or improvements for cycling, pedestrians, or public transport unless carparking is altered.	Provides no improvement to pedestrian safety.	Poor performance against the investment objectives.	No
All	0 - 1m (or up to 2m on one side) widening beyond existing kerb	Widening beyond kerb will limit traffic management to lower levels.	Reduction in footpath width will have a negative impact on amenity and pedestrian LOS.	Poor performance against the investment objectives.	No
All	1 - 1.5m (or 2 - 3m on one side) widening beyond existing kerb	Widening beyond kerb will limit traffic management to lower levels.	Reduction in footpath width will have a negative impact on amenity and pedestrian LOS.	Poor performance against the investment objectives.	No
All	1.5 - 2m (or 3 - 4m on one side) widening beyond existing kerb	Widening beyond kerb will limit traffic management to lower levels.	Reduction in footpath width will have a negative impact on amenity and pedestrian LOS.	Poor performance against the investment objectives.	No
All	2 - 2.5m (or 4 - 5m on one side) widening beyond existing kerb	Widening beyond kerb will limit traffic management to lower levels.	Reduction in footpath width will have a negative impact on amenity and pedestrian LOS.	Poor performance against the investment objectives.	No

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All	>2.5m (or >5m on one side) widening beyond existing kerb	Widening beyond kerb will limit traffic management to lower levels.	Reduction in footpath width will have a negative impact on amenity and pedestrian LOS.	Poor performance against the investment objectives.	No
All	0 - 1m (or up to 2m on one side) build out from existing kerb	Increase in footpath width will have a positive impact on amenity and pedestrian LOS.	Could impact one lane of traffic should be manageable at lower levels of traffic management.	Good alignment with Pedestrian LOS and amenity investment objective.	Yes
All	1 - 1.5m (or 2 - 3m on one side) build out from existing kerb	Increase in footpath width will have a positive impact on amenity and pedestrian LOS.	Potentially impacting up to two lanes of traffic. Stop go traffic management may therefore be required during construction.	Good alignment with Pedestrian LOS and amenity investment objective.	Yes
All	1.5 - 2m (or 3 - 4m on one side) build out from existing kerb	Increase in footpath width will have a positive impact on amenity and pedestrian LOS.	Potentially impacting up to two lanes of traffic. Stop go traffic management may therefore be required during construction.	Good alignment with Pedestrian LOS and amenity investment objective.	Yes
All	2 - 2.5m (or 4 - 5m on one side) build out from existing kerb	Increase in footpath width will have a positive impact on amenity and pedestrian LOS.	Will impact two lanes or more of traffic. Stop go traffic management may therefore be required during construction or night works.	Not to be progressed given the level of difficulty to physically implement this option and have sufficient space to accommodate bus and cycling in the corridor.	No
All	>2.5m (or >5m on one side) build out from existing kerb	Increase in footpath width will have a positive impact on amenity and pedestrian LOS.	Will impact two lanes or more of traffic. Stop go traffic management may therefore be required during construction or night works.	Not to be progressed given the level of difficulty to physically implement this option and have sufficient space to accommodate bus and cycling in the corridor.	No