

The Parade Upgrade

Short-term safety improvements
and long-term upgrades

25 May 2021



Cycleways update 20/21

STRATEGY AND POLICY COMMITTEE
8 OCTOBER 2020

Absolutely Positively
Wellington City Council
Me Heke Ki Pōneke

2.3 Cycleways Programme Update 20/21

Moved Deputy Mayor Free, seconded Mayor Foster, the following motion

Recommendation/s

That the Strategy and Policy Committee:

1. Receive the information.
2. Agree that funding to cover the budget shortfall for Cobham Drive is reprioritised from elsewhere within the cycleways budget.
3. Agree to additional funding to cover the overspend on Evans Bay (stage 1) and for budget uplift for the Miramar cutting bike and walking improvements to complete 80% of these projects as per agreed with Waka Kotahi in our Memorandum of Understanding for the Urban Cycleways funding.
4. Note that officers will be progressing planning for the Island Bay project this financial year, after being advised that the project was not successful as a shovel ready project.
5. Note that officers are progressing the four innovating streets projects approved by Waka Kotahi.

Moved Councillor Foon, seconded Councillor Fitzsimons, the following amendment

Resolved

6. Ask officers to update the Newtown connections website with indicative process and timeline as soon as we have direction from LGWM on a Southern connections plan from the central city to Island Bay.
7. Ask officers to contact Waka Kotahi seeking funding for the Island Bay **Parade upgrade cycle-way** as soon as possible.

Carried

Annual Plan 20/21

ANNUAL PLAN/LONG-TERM PLAN COMMITTEE 18 FEBRUARY 2021

Absolutely Positively
Wellington City Council
Me Heke Ki Pōneke

2. General Business

2.1 Long-Term Plan - Proposed Plan and Budget for Consultation

Page 7 in minutes

Moved Mayor Foster, seconded Deputy Mayor Free, the following motion

Recommendation/s

That the Annual Plan/Long-Term Plan Committee:

1. Receive the information.

...

12. Instruct officers to bring forward the resealing of the Island Bay Parade and simultaneously remove ghost markings, complete minor safety improvements and install buffers between the cycleway and parking lanes.
13. Note that the minor safety improvement is expected to require removal of some parking and therefore a traffic resolution.

Page 8 in minutes

...

Moved Councillor Foon, seconded Councillor Rush, the following amendment

Page 12 in minutes

Resolved

That the Annual Plan/Long-Term Plan Committee:

17. Increase spending for cycleways by \$45 million over years 4-10 which will keep us under the debt to revenue ratio.
18. Request officers to advise us how the Island Bay project can be included within that programme.

Carried

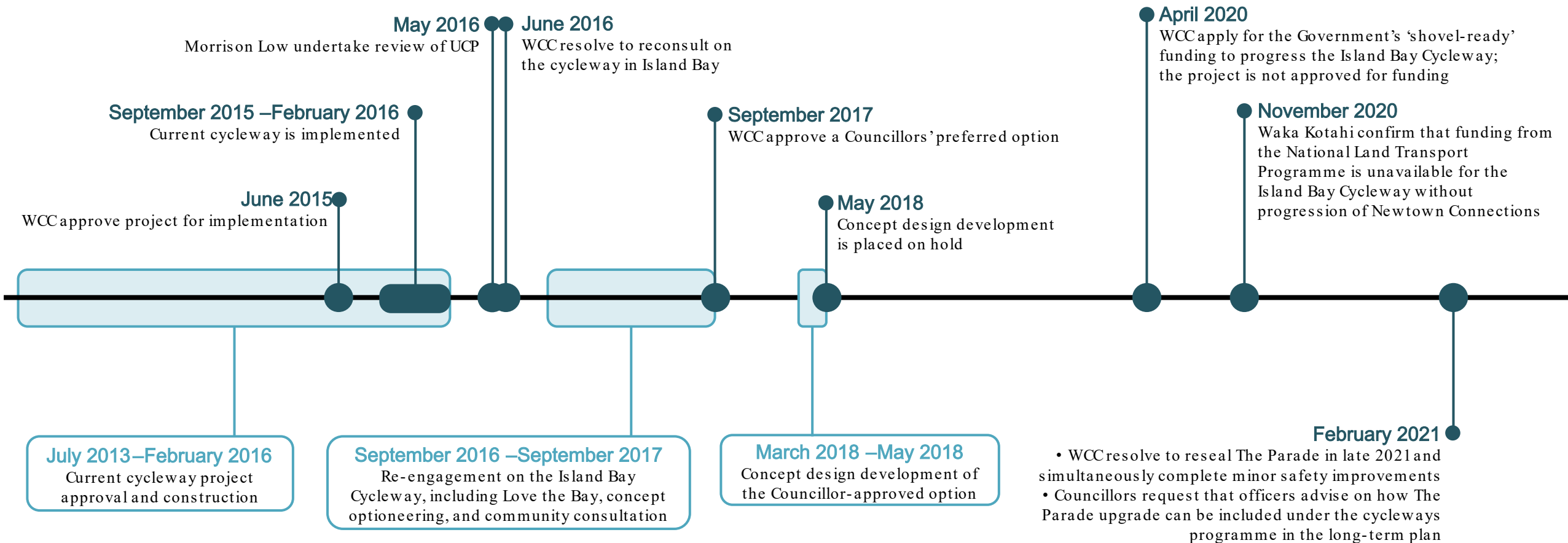
TODAY'S PURPOSE

- To outline what can be achieved on The Parade within three funding brackets:
 1. \$0
 2. Up to \$6.1 million (the previously approved budget)
 3. Greater than \$6.1 million (to implement the option previously approved by Councillors)
- To inform decision making around Long-Term Plan budget, **not** to select a preferred outcome

AGENDA

- Background
 - Historic timeline
 - Current issues on The Parade
- Short-term safety improvements
 - Options considered
 - Recommended improvements
 - Implementation
- Long-term upgrades
 - Assessment process
 - Short-listed options
 - MCA results for the short list options
 - Key features of the short list options
 - Recommendation

HISTORIC TIMELINE



CURRENT ISSUES

Road Safety Audit findings:

- Inconsistency in road markings (cycle markings and ghost markings)
- Intervisibility at:
 - Bus shelters
 - Driveways
 - Intersections
- Parking in the buffer zone
- Narrow lanes at the bend (south of Medway St)
- Transition for cyclists from the cycle lane to the main road



CURRENT ISSUES

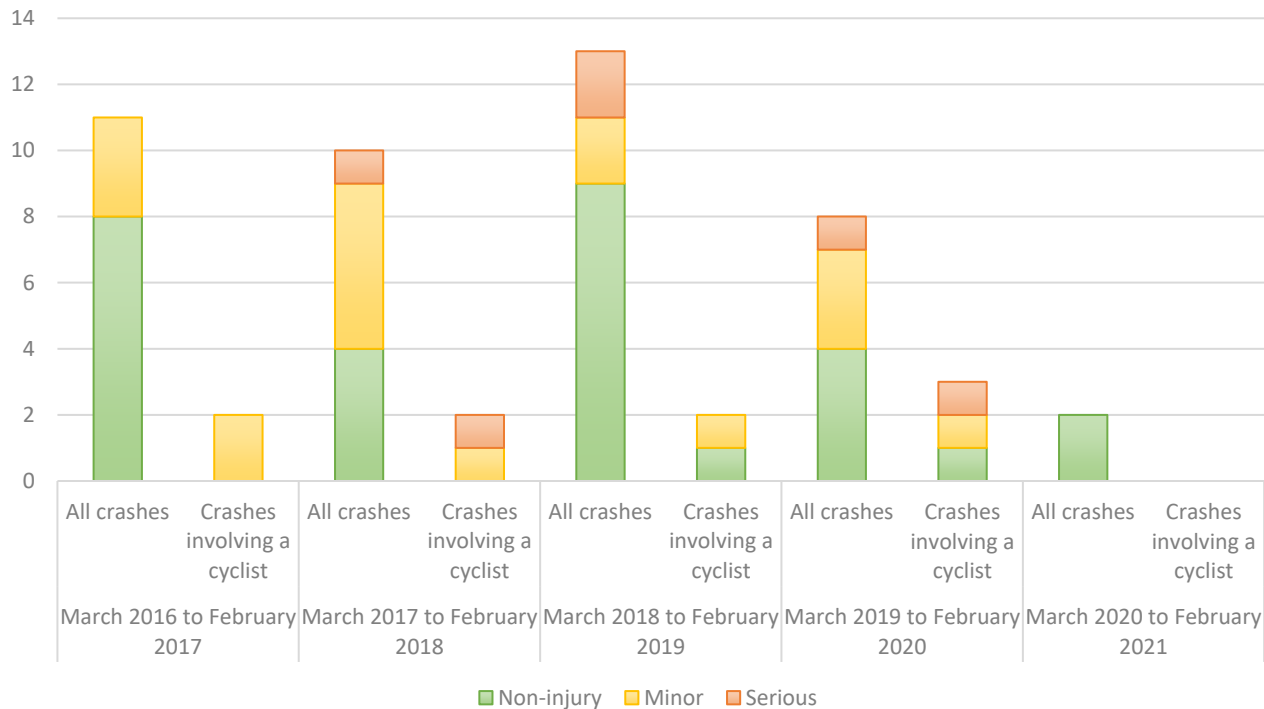
Community feedback:

- Inconsistent and confusing layout
- Lack of visibility of cyclists at:
 - Driveways
 - Intersections
- Confusing parking layout
- Difficult for passengers to unload from parked vehicles and cross the cycle lane
- Narrow traffic lanes; cars exiting driveways need to cross the centreline
- Bus stops and traffic islands block traffic, causing delays

CURRENT ISSUES

Crash history (post construction, Mar 2016 - Feb 2021):

Reported crashes on The Parade after construction of the cycleway



- 44 crashes total
- 9 crashes involving cyclists:
 - 2 in the town centre
 - 3 between motor vehicles and cyclists at driveways
 - 3 between motor vehicles and cyclists at intersections
 - 1 between a cyclist and a pedestrian in the midblock

Short-term safety improvements



Short-term safety improvements: options considered

Improvement		Issue(s) addressed
Separators	Vertical posts	<ul style="list-style-type: none"> Vehicles parked in the buffer zone
	Low mountable separators	<ul style="list-style-type: none"> Vehicles parked in the buffer zone Conflict between cyclists and vehicles turning into/out of driveways
	Kerb separators	<ul style="list-style-type: none"> Vehicles parked in the buffer zone Narrow car door buffer zone Confusing layout Difficulty unloading from parked cars
	Planter boxes	<ul style="list-style-type: none"> Vehicles parked in the buffer zone Narrow car door buffer zone Confusing layout
Parking	1m setback at driveways	<ul style="list-style-type: none"> Lack of visibility of cyclists at driveways
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	30m setback on intersection approaches	<ul style="list-style-type: none"> Lack of visibility of cyclists at intersections
	No individual car parks	<ul style="list-style-type: none"> Individual car park markings
Road markings	Consistent cycle markings	<ul style="list-style-type: none"> Lack of consistency along The Parade Lack of visibility of the cycle lanes at intersections
	Wider buffer space	<ul style="list-style-type: none"> The existing buffers are narrower than the minimum recommended width Difficulty unloading from parked cars
	Wider traffic lanes	<ul style="list-style-type: none"> Difficulty entering and exiting driveways Difficult for buses and heavy vehicles to pass each other
Bus stop improvements		<ul style="list-style-type: none"> Lack of intervisibility between cyclists and pedestrians at bus stops Lack of consistency Delay at bus stops
Raised tables		<ul style="list-style-type: none"> Conflict at intersections Lack of visibility of cyclists
Remove ghost markings		<ul style="list-style-type: none"> Lack of consistency along The Parade Confusing layout
Business zone	Cycle lanes	<ul style="list-style-type: none"> Shared traffic lanes through the town centre
	Bus and bike-friendly road humps	<ul style="list-style-type: none"> Non-cycle-friendly traffic calming measures for the shared traffic lanes in the town centre
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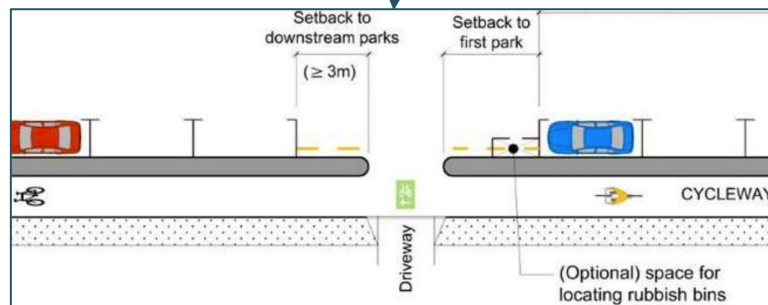
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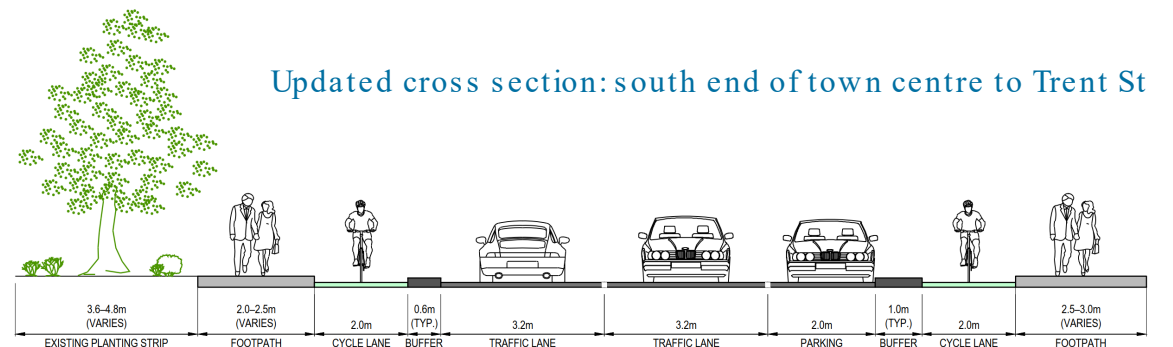
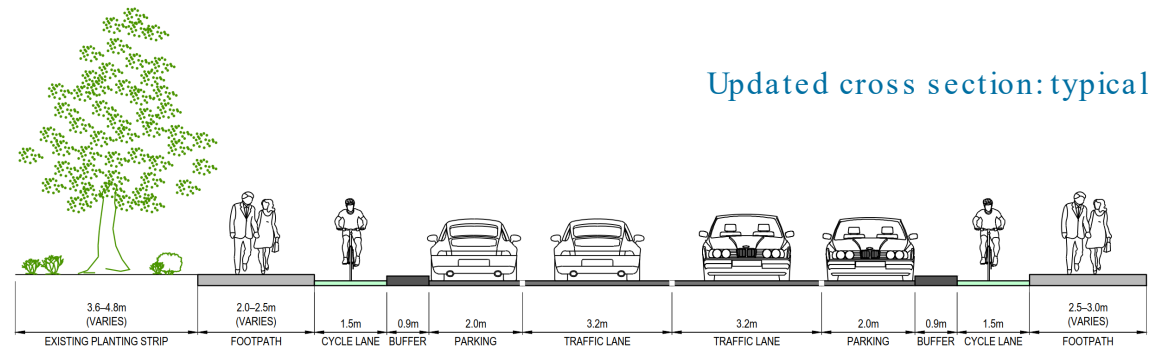
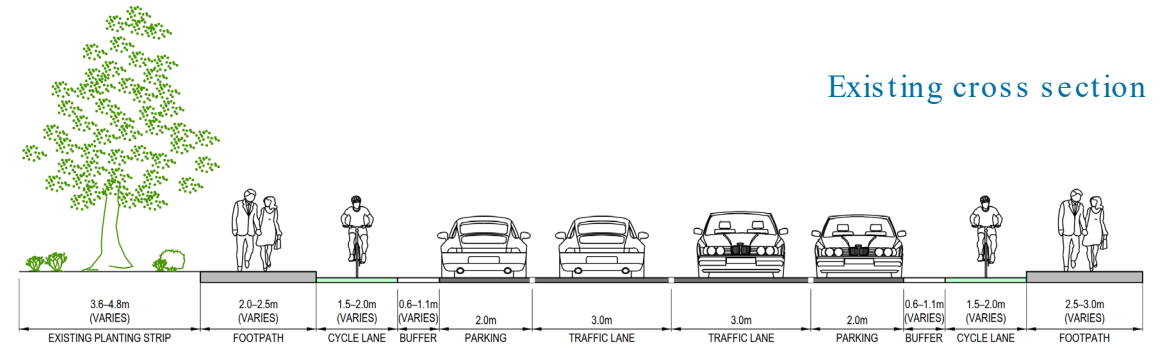
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Short-term safety improvements: recommendation

1. Physical separators in the buffer:
 - a. Precast concrete kerb separators
 - b. Low mountable separators across driveways
2. Parking (residential area):
 - a. 3m setbacks at driveways
 - b. 30m setbacks on approaches to intersections
 - c. No individual car parks
3. Road markings:
 - a. Cycle facilities marked consistently across intersections
 - b. 0.9m buffer
 - c. 3.2m traffic lanes
4. Resurfacing
5. Town centre:
 - a. Replace the existing road cushions with road humps
 - b. Remark the road markings south of Medway Street

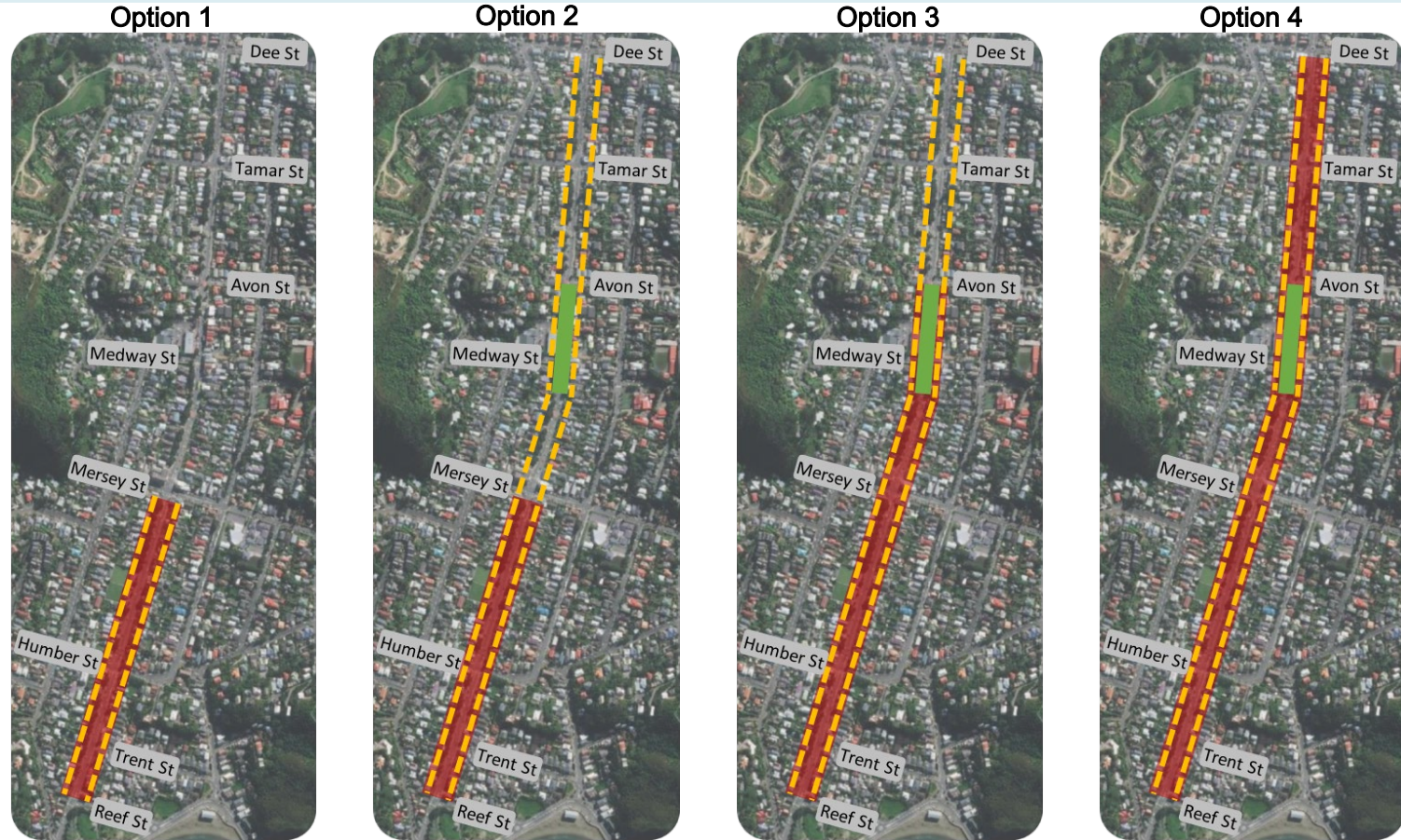


Short-term safety improvements: implementation

Legend

- Resurfacing
- Residential safety improvements:
 - Parking changes
 - Cycle lanes marked through intersections
 - Widened buffer space and traffic lanes
- Town centre safety improvements:
 - New road humps
 - Remarkd transitions to/from the cycle lanes

Base construction cost estimate for resurfacing between Mersey St and Reef St = \$120,000



	Resurfacing to remove ghost markings	Mersey St to Reef St only			✓
	Parking changes	Mersey St to Reef St only	✓	✓	✓
	Cycle lanes marked through intersections	Humber St intersection only	✓	✓	✓
	Widened buffer space and traffic lanes	Mersey St to Reef St only	✓	✓	✓
	Physical separators installed	Mersey St to Reef St only	✓	✓	✓
	Town centre improvements	✗	✓	✓	✓
Indicative cost estimate	Additional cost (safety improvements, uncertainty, design, MSQA, WCC)	\$0.5 - \$0.8 m	\$1.0 - \$1.6 m	\$1.3 - \$2.0 m	\$1.6 - \$2.4 m
	Total	\$0.6 - \$0.9 m	\$1.1 - \$1.7 m	\$1.4 - \$2.1 m	\$1.7 - \$2.5 m

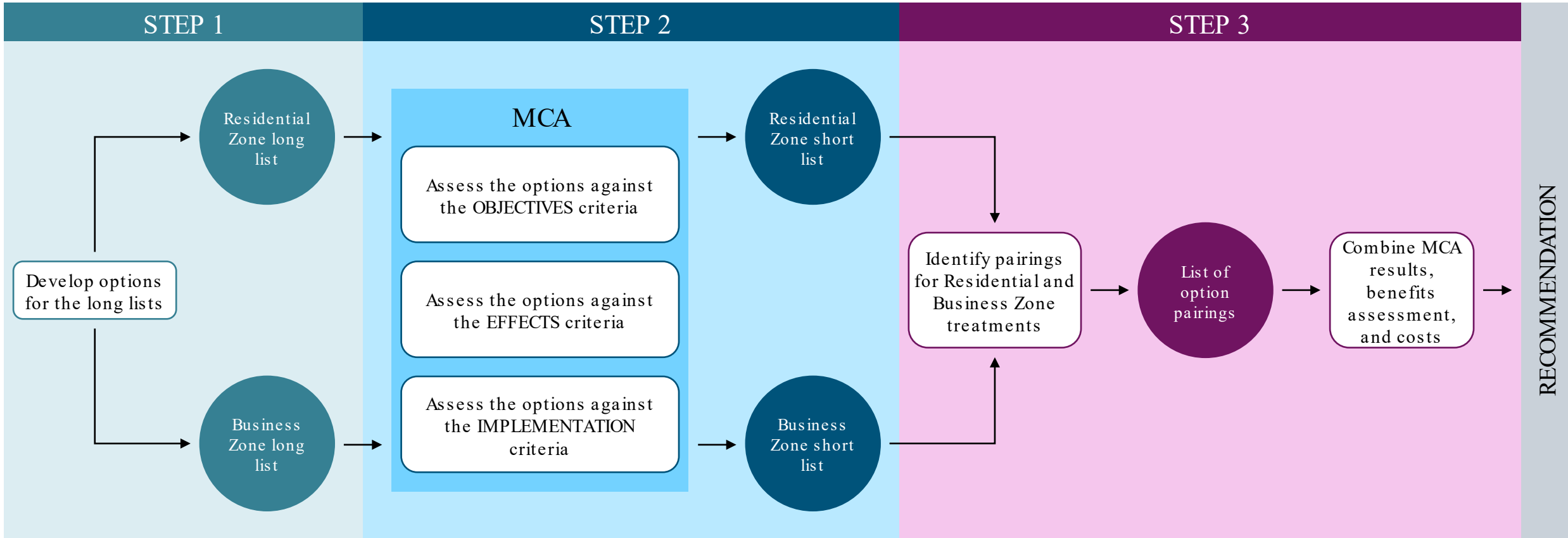
Existing (residential zone)	Marked spaces	151
	Legal spaces (1m setback)	135 - 140

Parking removal (compared to legal spaces)	Option 1	Options 2 to 4
3m setbacks at driveways and 30m setbacks at intersection approaches	15 -25	40 -50
Cross-section changes	10 -15	20 -25
<i>Total removed</i>	<i>25 -40</i>	<i>60 -75</i>
Total remaining	95 -115	60 -80

Long-term upgrades

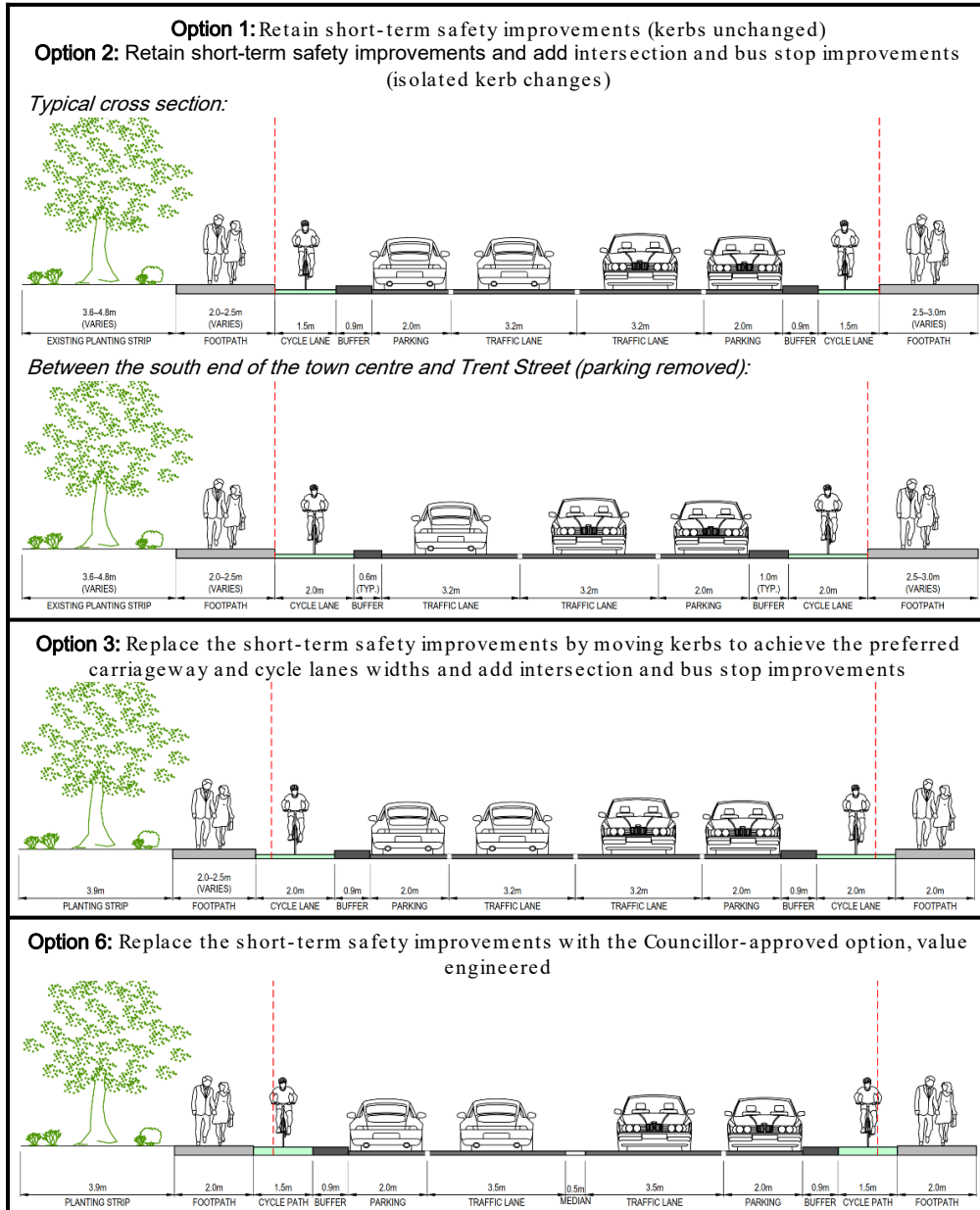


Long-term upgrades: assessment process

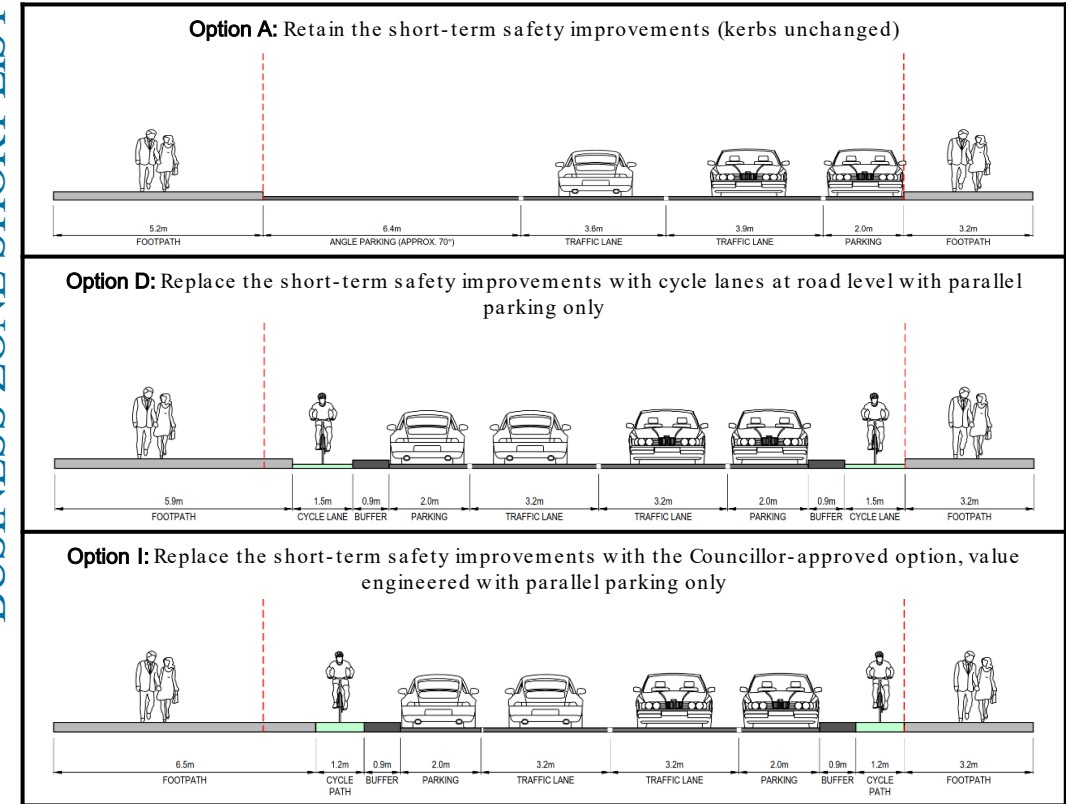


Long-term upgrades: short-listed options

RESIDENTIAL ZONE SHORT LIST



BUSINESS ZONE SHORT LIST



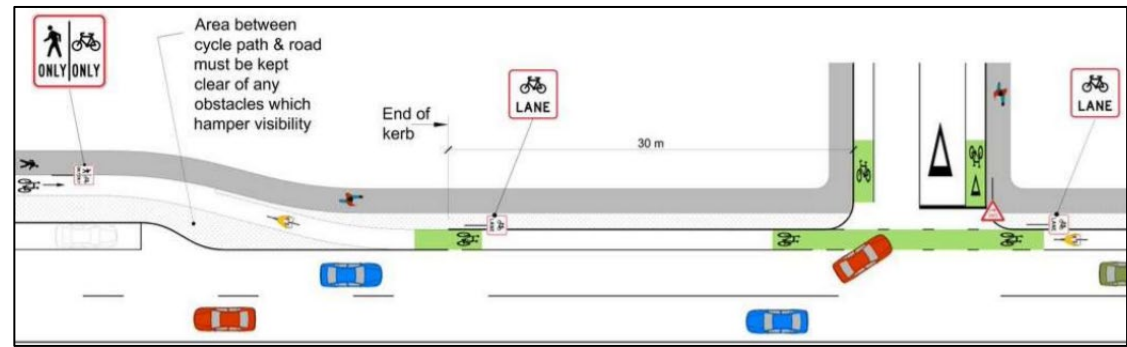
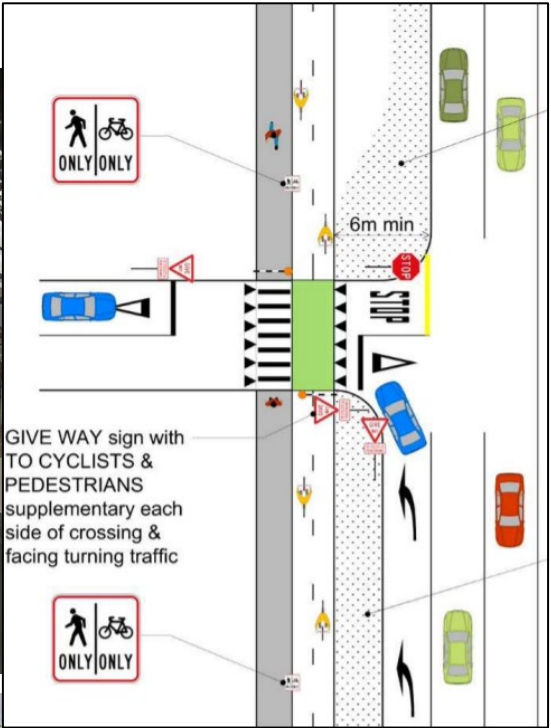
SHORT-LISTED COMBINATIONS

Combination	Residential Zone Option	Business Zone Option
1-A	1	A
1-D	1	D
2-A	2	A
2-D	2	D
3-D	3	D
6-I	6	I

*the red dashed lines represent the indicative location of the existing kerbs

Long-term upgrades: intersections and bus stops

Raised table



Textured surfacing

Long-term upgrades: key features of short list

Item		\$0	up to \$6.1 million			\$6.1 million +	
		Combo 1-A	Combo 1-D	Combo 2-A	Combo 2-D	Combo 3-D	Combo 6-I
		Retain short-term safety improvements	Retain short-term safety improvements + cycle lanes through the town centre	Retain short-term safety improvements + intersection/bus stop improvements	Retain short-term safety improvements + intersection/bus stop improvements + cycle lanes through the town centre	Move kerbs (to achieve preferred carriageway and cycle lane widths) + intersection/bus stop improvements + cycle lanes through the town centre	Councillor-approved option (cycle paths), value engineered with parallel parking in the town centre
Effectiveness meeting Love the Bay objectives		<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections in the residential zone only Cycle lanes realigned to make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades
Footpath widths	Residential	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –2.5m	2.0m
	Business	3.2m / 5.2m	3.2m / 5.9m	3.2m / 5.2m	3.2m / 5.9m	3.2 / 5.9m	3.2 / 6.5m
Cycle facility widths	Residential	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	2.0m	1.5m
	Business	No cycle facilities	1.5m	No cycle facilities	1.5m	1.5m	1.2m
Traffic lane widths	Residential	3.2m	3.2m	3.2m	3.2m	3.2m	3.5m with 0.5m median
	Business	3.6m / 3.9m	3.2m	3.6m / 3.9m	3.2m	3.2m	3.2m
Remaining # of car parks	Residential	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	85-100 (29-37% reduction)	85-100 (29-37% reduction)
	Business	55 (no change)	40-45 (18-27% reduction)	55 (no change)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	40-45 (18-27% reduction)
Indicative cost estimate	Base cost*	\$0	\$2.4 to \$3.2 m	\$2.6 to \$3.4 m	\$5.1 to \$6.6 m	\$6.6 to \$8.5 m	\$9.4 to \$12.2 m
	Uncertainty allowance	\$0	\$0 to \$1.2 m	\$0 to \$1.3 m	-\$0.1 to \$2.5 m	-\$0.1 to \$3.3 m	-\$0.1 to \$4.7 m
	Total cost	\$0	\$2.4 to \$4.4 m	\$2.6 to \$4.7 m	\$5.0 to \$9.1 m	\$6.5 to \$11.8 m	\$9.3 to \$16.9 m

*Base costs assume that the short-term safety improvements have already been implemented. The estimates include: construction, design fees, MSQA, and 20% WCC management costs.

Long-term upgrades: key features of short list

Item		\$0	up to \$6.1 million				\$6.1 million +	
		Combo 1-A	Combo 1-D	Combo 2-A	Combo 2-D	Combo 3-D	Combo 6-I	
		Retain short-term safety improvements	Retain short-term safety improvements + cycle lanes through the town centre	Retain short-term safety improvements + intersection/bus stop improvements	Retain short-term safety improvements + intersection/bus stop improvements + cycle lanes through the town centre	Move kerbs (to achieve preferred carriageway and cycle lane widths) + intersection/bus stop improvements + cycle lanes through the town centre	Councillor-approved option (cycle paths), value engineered with parallel parking in the town centre	
Effectiveness meeting Love the Bay objectives		<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections in the residential zone only Cycle lanes realigned to make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	
Footpath widths	Residential	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –2.5m	2.0m	
	Business	3.2m / 5.2m	3.2m / 5.9m	3.2m / 5.2m	3.2m / 5.9m	3.2 / 5.9m	3.2 / 6.5m	
Cycle facility widths	Residential	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	2.0m	1.5m	
	Business	No cycle facilities	1.5m	No cycle facilities	1.5m	1.5m	1.2m	
Traffic lane widths	Residential	3.2m	3.2m	3.2m	3.2m	3.2m	3.5m with 0.5m median	
	Business	3.6m / 3.9m	3.2m	3.6m / 3.9m	3.2m	3.2m	3.2m	
Remaining # of car parks	Residential	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	85-100 (29-37% reduction)	85-100 (29-37% reduction)	
	Business	55 (no change)	40-45 (18-27% reduction)	55 (no change)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	
Indicative cost estimate	Base cost*	\$0	\$2.4 to \$3.2 m	\$2.6 to \$3.4 m	\$5.1 to \$6.6 m	\$6.6 to \$8.5 m	\$9.4 to \$12.2 m	
	Uncertainty allowance	\$0	\$0 to \$1.2 m	\$0 to \$1.3 m	-\$0.1 to \$2.5 m	-\$0.1 to \$3.3 m	-\$0.1 to \$4.7 m	
	Total cost	\$0	\$2.4 to \$4.4 m	\$2.6 to \$4.7 m	\$5.0 to \$9.1 m	\$6.5 to \$11.8 m	\$9.3 to \$16.9 m	

*Base costs assume that the short-term safety improvements have already been implemented. The estimates include: construction, design fees, MSQA, and 20% WCC management costs.

Long-term upgrades: key features of short list

Item		\$0	up to \$6.1 million				\$6.1 million +	
		Combo 1-A	Combo 1-D	Combo 2-A	Combo 2-D	Combo 3-D	Combo 6-I	
		Retain short-term safety improvements	Retain short-term safety improvements + cycle lanes through the town centre	Retain short-term safety improvements + intersection/bus stop improvements	Retain short-term safety improvements + intersection/bus stop improvements + cycle lanes through the town centre	Move kerbs (to achieve preferred carriageway and cycle lane widths) + intersection/bus stop improvements + cycle lanes through the town centre	Councillor-approved option (cycle paths), value engineered with parallel parking in the town centre	
Effectiveness meeting Love the Bay objectives		<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections in the residential zone only Cycle lanes realigned to make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	
Footpath widths	Residential	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –2.5m	2.0m	
	Business	3.2m / 5.2m	3.2m / 5.9m	3.2m / 5.2m	3.2m / 5.9m	3.2 / 5.9m	3.2 / 6.5m	
Cycle facility widths	Residential	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	2.0m	1.5m	
	Business	No cycle facilities	1.5m	No cycle facilities	1.5m	1.5m	1.2m	
Traffic lane widths	Residential	3.2m	3.2m	3.2m	3.2m	3.2m	3.5m with 0.5m median	
	Business	3.6m / 3.9m	3.2m	3.6m / 3.9m	3.2m	3.2m	3.2m	
Remaining # of car parks	Residential	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	85- 100 (29-37% reduction)	85- 100 (29-37% reduction)	
	Business	55 (no change)	40-45 (18-27% reduction)	55 (no change)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	
Indicative cost estimate	Base cost*	\$0	\$2.4 to \$3.2 m	\$2.6 to \$3.4 m	\$5.1 to \$6.6 m	\$6.6 to \$8.5 m	\$9.4 to \$12.2 m	
	Uncertainty allowance	\$0	\$0 to \$1.2 m	\$0 to \$1.3 m	-\$0.1 to \$2.5 m	-\$0.1 to \$3.3 m	-\$0.1 to \$4.7 m	
	Total cost	\$0	\$2.4 to \$4.4 m	\$2.6 to \$4.7 m	\$5.0 to \$9.1 m	\$6.5 to \$11.8 m	\$9.3 to \$16.9 m	

*Base costs assume that the short-term safety improvements have already been implemented. The estimates include: construction, design fees, MSQA, and 20% WCC management costs.

Long-term upgrades: key features of short list

Item		\$0	up to \$6.1 million				\$6.1 million +	
		Combo 1-A	Combo 1-D	Combo 2-A	Combo 2-D	Combo 3-D	Combo 6-I	
		Retain short-term safety improvements	Retain short-term safety improvements + cycle lanes through the town centre	Retain short-term safety improvements + intersection/bus stop improvements	Retain short-term safety improvements + intersection/bus stop improvements + cycle lanes through the town centre	Move kerbs (to achieve preferred carriageway and cycle lane widths) + intersection/bus stop improvements + cycle lanes through the town centre	Councillor-approved option (cycle paths), value engineered with parallel parking in the town centre	
Effectiveness meeting Love the Bay objectives		<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections in the residential zone only Cycle lanes realigned to make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	
Footpath widths	Residential	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –2.5m	2.0m	
	Business	3.2m / 5.2m	3.2m / 5.9m	3.2m / 5.2m	3.2m / 5.9m	3.2 / 5.9m	3.2 / 6.5m	
Cycle facility widths	Residential	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	2.0m	1.5m	
	Business	No cycle facilities	1.5m	No cycle facilities	1.5m	1.5m	1.2m	
Traffic lane widths	Residential	3.2m	3.2m	3.2m	3.2m	3.2m	3.5m with 0.5m median	
	Business	3.6m / 3.9m	3.2m	3.6m / 3.9m	3.2m	3.2m	3.2m	
Remaining # of car parks	Residential	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	85- 100 (29-37% reduction)	85- 100 (29-37% reduction)	
	Business	55 (no change)	40-45 (18-27% reduction)	55 (no change)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	
Indicative cost estimate	Base cost*	\$0	\$2.4 to \$3.2 m	\$2.6 to \$3.4 m	\$5.1 to \$6.6 m	\$6.6 to \$8.5 m	\$9.4 to \$12.2 m	
	Uncertainty allowance	\$0	\$0 to \$1.2 m	\$0 to \$1.3 m	-\$0.1 to \$2.5 m	-\$0.1 to \$3.3 m	-\$0.1 to \$4.7 m	
	Total cost	\$0	\$2.4 to \$4.4 m	\$2.6 to \$4.7 m	\$5.0 to \$9.1 m	\$6.5 to \$11.8 m	\$9.3 to \$16.9 m	

*Base costs assume that the short-term safety improvements have already been implemented. The estimates include: construction, design fees, MSQA, and 20% WCC management costs.

Long-term upgrades: key features of short list

Item		\$0	up to \$6.1 million				\$6.1 million +	
		Combo 1-A	Combo 1-D	Combo 2-A	Combo 2-D	Combo 3-D	Combo 6-I	
		Retain short-term safety improvements	Retain short-term safety improvements + cycle lanes through the town centre	Retain short-term safety improvements + intersection/bus stop improvements	Retain short-term safety improvements + intersection/bus stop improvements + cycle lanes through the town centre	Move kerbs (to achieve preferred carriageway and cycle lane widths) + intersection/bus stop improvements + cycle lanes through the town centre	Councillor-approved option (cycle paths), value engineered with parallel parking in the town centre	
Effectiveness meeting Love the Bay objectives		<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections in the residential zone only Cycle lanes realigned to make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	
Footpath widths	Residential	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –2.5m	2.0m	
	Business	3.2m / 5.2m	3.2m / 5.9m	3.2m / 5.2m	3.2m / 5.9m	3.2 / 5.9m	3.2 / 6.5m	
Cycle facility widths	Residential	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	2.0m	1.5m	
	Business	No cycle facilities	1.5m	No cycle facilities	1.5m	1.5m	1.2m	
Traffic lane widths	Residential	3.2m	3.2m	3.2m	3.2m	3.2m	3.5m with 0.5m median	
	Business	3.6m / 3.9m	3.2m	3.6m / 3.9m	3.2m	3.2m	3.2m	
Remaining # of car parks	Residential	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	85- 100 (29-37% reduction)	85- 100 (29-37% reduction)	
	Business	55 (no change)	40-45 (18-27% reduction)	55 (no change)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	
Indicative cost estimate	Base cost*	\$0	\$2.4 to \$3.2 m	\$2.6 to \$3.4 m	\$5.1 to \$6.6 m	\$6.6 to \$8.5 m	\$9.4 to \$12.2 m	
	Uncertainty allowance	\$0	\$0 to \$1.2 m	\$0 to \$1.3 m	-\$0.1 to \$2.5 m	-\$0.1 to \$3.3 m	-\$0.1 to \$4.7 m	
	Total cost	\$0	\$2.4 to \$4.4 m	\$2.6 to \$4.7 m	\$5.0 to \$9.1 m	\$6.5 to \$11.8 m	\$9.3 to \$16.9 m	

*Base costs assume that the short-term safety improvements have already been implemented. The estimates include: construction, design fees, MSQA, and 20% WCC management costs.

Long-term upgrades: key features of short list

Item		\$0	up to \$6.1 million				\$6.1 million +	
		Combo 1-A	Combo 1-D	Combo 2-A	Combo 2-D	Combo 3-D	Combo 6-I	
		Retain short-term safety improvements	Retain short-term safety improvements + cycle lanes through the town centre	Retain short-term safety improvements + intersection/bus stop improvements	Retain short-term safety improvements + intersection/bus stop improvements + cycle lanes through the town centre	Move kerbs (to achieve preferred carriageway and cycle lane widths) + intersection/bus stop improvements + cycle lanes through the town centre	Councillor-approved option (cycle paths), value engineered with parallel parking in the town centre	
Effectiveness meeting Love the Bay objectives		<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Minor safety improvements at intersections No opportunity to realign the cycle lanes and make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections in the residential zone only Cycle lanes realigned to make the layout more intuitive No opportunity to improve cohesiveness No upgrades to the town centre layout 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	<ul style="list-style-type: none"> Substantial safety improvements at intersections Cycle lanes realigned to make the layout more intuitive Improved cohesiveness between residential and business zones Town centre upgrades 	
Footpath widths	Residential	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –3.0m	2.0 –2.5m	2.0m	
	Business	3.2m / 5.2m	3.2m / 5.9m	3.2m / 5.2m	3.2m / 5.9m	3.2 / 5.9m	3.2 / 6.5m	
Cycle facility widths	Residential	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	1.5 –2.0m	2.0m	1.5m	
	Business	No cycle facilities	1.5m	No cycle facilities	1.5m	1.5m	1.2m	
Traffic lane widths	Residential	3.2m	3.2m	3.2m	3.2m	3.2m	3.5m with 0.5m median	
	Business	3.6m / 3.9m	3.2m	3.6m / 3.9m	3.2m	3.2m	3.2m	
Remaining # of car parks	Residential	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	60-80 (43-56% reduction)	85- 100 (29-37% reduction)	85- 100 (29-37% reduction)	
	Business	55 (no change)	40-45 (18-27% reduction)	55 (no change)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	40-45 (18-27% reduction)	
Indicative cost estimate	Base cost*	\$0	\$2.4 to \$3.2 m	\$2.6 to \$3.4 m	\$5.1 to \$6.6 m	\$6.6 to \$8.5 m	\$9.4 to \$12.2 m	
	Uncertainty allowance	\$0	\$0 to \$1.2 m	\$0 to \$1.3 m	-\$0.1 to \$2.5 m	-\$0.1 to \$3.3 m	-\$0.1 to \$4.7 m	
	Total cost	\$0	\$2.4 to \$4.4 m	\$2.6 to \$4.7 m	\$5.0 to \$9.1 m	\$6.5 to \$11.8 m	\$9.3 to \$16.9 m	

*Base costs assume that the short-term safety improvements have already been implemented. The estimates include: construction, design fees, MSQA, and 20% WCC management costs.

