**REPORT 1** 

# CYCLE IMPROVEMENTS FOR ISLAND BAY

# 1. Purpose of report

To seek the Committee's agreement to proceed with implementing improvements in Island Bay which will provide safer and more convenient facilities for people on bikes when using The Parade.

# 2. Executive summary

The existing provision for people on bikes along The Parade is relatively poor. A scheme to improve the situation greatly has been developed, consulted on and is well supported by the wider community but opposed by some affected residents. Officers recommend proceeding to the detailed design phase of the project with option 2 - kerb side cycle lanes, taking account of the feedback set out in the report.

The provision of improved and new cycle lanes on The Parade is the first stage of providing a high standard route for people on bikes between the south coast in Island Bay and the city.

# 3. Recommendations

Officers recommend that the Transport and Urban Development Committee:

- 1. Receive the information.
- 2. Agree that cycle lanes be established next to the footpath along The Parade and that parking be established outside the cycle lanes where it is safe to do so.
- 3. Note that subject to detailed design and a consequential traffic resolution process which is expected to come back to the Committee for approval in September, approximately 270 on-street car parks will remain in the treated section (some 45 being removed for safety reasons near intersections and bus stops).
- 4. Agree that cycle bypass facilities be provided at bus stops.
- 5. Agree that the main shopping area covered by a 30 km/h speed limit not have cycle lanes at this time, noting that people on bikes must share the road space with motorised traffic.

- 6. Agree that the Dee St roundabout be removed and replaced with a Give Way controlled intersection to allow for proper cycle lanes to be provided along the main route and to be consistent with nearby intersections.
- 7. Note that the cost of work to provide this 3.4 km of good quality cycle facilities is some \$1.3 million and this is provided for the 2014/15 Annual Plan.
- 8. Note that the proposal to reduce bus stops from four to two in the short section between Avon Street and Tamar Street is supported by Greater Wellington and their analysis shows no significant effect to bus access from this change. This proposal will be subject to a normal traffic resolution process.

# 4. Background

Council has recently committed significant funding to improving cycle facilities throughout the city. The Cycling Policy (2008) seeks to make cycling safer and more convenient, and identifies over 20 key routes to be improved over time of which Island Bay to city is one. In May 2013 we undertook a feasibility study which recommended developing a route between Island Bay and the city. This Committee report focuses on the first section of that route - Shorland Park to Wakefield Park. The other sections of the route are being addressed differently, as they are more complex and subject to the requirements and timing of other major transport projects. Island Bay's many amenities and will mean locals can enjoy the benefits of improved cycling facilities while the other sections of the route are still to be upgraded.

The 2013 Census shows 268 people from Island Bay rode a bike to work on Census day, up from 137 in 2006. Recent morning peak hour cycle counts show:

- northbound cycle numbers increasing from 25 near Humber Street to 95 near Dee Street
- southbound (the non peak direction) ranging from 5 to 9 at various locations.

The existing cycle level of service, which takes account of traffic volumes and speed, lane widths and cycle facilities shows The Parade to be providing a poor level of service<sup>1</sup>, rated F in many places.

# 5. Discussion

The Parade is the most direct route connecting local amenities and is therefore the best location to provide for people on bikes if space is available. It is some 1.7 km in length and runs from Derwent Street in the south to Dover Street in

<sup>&</sup>lt;sup>1</sup> Cycle level of service has been assessed using a best practice Danish methodology which takes account of traffic speed and volume, lane widths and cycle facilities. A 'Good' level of service is rated A-B and generally requires protected cycle lanes or very low traffic speeds and volumes. 'Average' level of service is C-D and is consistent with paint protected cycle lanes. 'Poor' level of servce is rated E-F and is found where there is no adequate provision for people on bikes.

the north. The southern half of the route currently has poor quality cycle lanes that:

- are relatively narrow presenting car door opening hazards
- don't continue through intersections (rather, they stop and start at each one)
- don't provide well for bus stops.

There is enough space along The Parade between Shorland Park and Wakefield Park to create better, continuous cycle lanes on both sides of the road. There are two ways to do this:

Option 1: Traffic-side Cycle Lanes (between parking and the moving traffic)



**Option 2: Kerbside Cycle Lanes (between parking and the footpath)** 



Both options would involve continuing the cycle lane through intersections, and include changes to allow people on bikes to bypass bus stops.

**Option 1: Traffic-side Cycle Lanes** are similar to the existing cycle lanes along each side of The Parade south of Medway Street, and are similar to the traditional on-road cycle lane arrangement used in other parts of the city. The lanes along The Parade would overall be 0.5 metre wider than existing lanes, with a marked strip next to the parking to highlight the dangerous car door zone. Space for wider cycle lanes would be gained by replacing the painted median in the centre of the road with a standard centre line, and slightly narrowing the through-traffic lanes.

Pros	Cons
Provides designated space for people on bikes so other road users	Does not meet international best practice standards
know where to expect to see cyclists Provides cycle lane continuity	Cyclists can still be squeezed between moving traffic and parked vehicles
across intersections Minimum impact on current	People on bikes are riding alongside fast-moving traffic
parking (approximately 31 spaces removed for safety reasons)	Bus stop bypasses are harder to access - there is more chance of cyclists
Shorter crossing distances for pedestrians	staying with other traffic to go past stopped buses
Meets international good practice standards for cycle safety	Some loss of parking on approaches to bus stop bypasses so bikes can turn in safely

Under option 1 cycle level of service is improved from F (poor) to C-D (average).

**Option 2: Kerbside cycle lanes** (between the footpath and parking) are new for Wellington, but they meet international best practice standards and provide much greater safety for people on bikes. They are being used in Christchurch at present.

The proposed new cycle lanes would be 1.8 metres wide to provide a safe space between parked cars and the footpath, marked with a physical separator between parking and the cycle lane. The parked vehicles physically separate people on bikes from the moving traffic, which is significantly safer and is much more appealing to ride along.

Space for wider cycle lanes would be gained by replacing the painted median in the centre of the road with a standard centre line and slightly narrowing the traffic lanes. Option 2 is the recommended option, as it gives significantly greater cycling safety and appeal for a small difference in cost.

Pros	Cons
Provides a much safer designated space for people on bikes, largely protected from traffic	Small loss of parking on approaches to intersections and around bus stops, so drivers and merging cyclists can see one another (approximately 45 spaces
Removes cyclists more completely from other road users' space for much	removed for safety reasons)
of the route	Some possible loss of parking at driveways so drivers' turning circle is
Provides continuity across intersections	appropriate, and drivers can see approaching cycle traffic
Meets international best practice for cycle traffic safety	When crossing the road, pedestrians need to expect bike traffic before regular traffic

Under option 2 cycle level of service is improved from F (poor) to B-C (good-average).

A number of ideas for the separator are being considered including plastic posts, horizontal plastic strips, or small concrete blocks. These would be carefully placed to avoid obstructing doors or tripping people. A suggestion from the public – planter boxes – is not feasible as the space is too narrow, and smaller pot-plants would require costly maintenance. Should the Committee to agree to proceed with the recommended improvements, a decision on the type(s) of separator will be made as part of the detailed design process in conjunction with the urban design unit and key stakeholders.

#### **Bus stops**

International good practice guidance states that where bus stops have more than four to six buses per hour (The Parade bus stops have up to 16 scheduled services plus school buses), a separated cycle lane of some kind is essential so people on bikes can pass safely. Separated cycle lanes at bus stops can be done in two ways:

- paint a separated cycle lane straight along the road past the bus stops, so people on bikes ride straight past buses that are pulled over
- take cyclists around the back of the bus stop (bypassing it).

Bypassing the bus stop is much safer than using a painted separated cycle lane (the first method above and what we currently have). Bus stop bypasses can be applied to either cycle lane option, and allow cyclists to safely pass behind buses stopped at bus stops without the risk of being squeezed between a stopped bus and passing traffic. Bus bypasses are new for Wellington, but have been used in Christchurch and are used overseas. Bus stop bypasses can be done in two ways, depending what suits the conditions of each site:

• with the bus shelter as an "island" or

• with the bus shelter on the footpath.

When there is no bus present, riders will have the choice of continuing on the carriageway through the bus stop space or using the bypass.

People on bikes ride up a ramp to footpath level and pass behind the bus shelter on a dedicated cycle lane on the footpath. The bus shelter sits on an "island" with the cycle lane running behind it. Where possible, the footpath would be widened to include a dedicated cycle lane on the footpath and an "island" for the bus shelter. Where the footpath can't be widened, there would be carefullymarked shared space where people cycling must give way to pedestrians.



The bus shelter island is the preferred arrangement for north bound bus stops and is supported by submissions from Greater Wellington and Living Streets Aotearoa.

Bus stop bypasses with the waiting area on the footpath will likely be used for south bound bus stops, where there are no shelters as there are fewer people waiting.

## **Coincidental bus stop changes**

It is sensible to make other changes to the road area at the same time as work upgrading the cycle route, as this minimises the overall period of disruption. Greater Wellington believes the 14 bus stops along The Parade can be reduced to 12 to provide a smoother journey for passengers while still maintaining a good level of accessibility. We plan to replace four very closely spaced stops between Avon and Tamar Streets with two, and this would be done while the cycle route work is underway (later in 2014).

Greater Wellington's analysis shows that these changes will make no significant difference to people's bus stop access: 14% of passengers walk up to 100m

further, 2% up to 200m further, 12% have a shorter walk and there is no change for 72% of the catchment population. The average distance to a bus stop in the catchment remains unchanged at 465m.

The proposed changes are set out below:

Northbound - combine bus stops 7130 outside 60 The Parade (north of Tamar St) and 7131 outside 108 The Parade (north of Avon St) and replace with a new bus stop outside 88 The Parade (Island Bay Presbyterian Church). The Church are not opposed to this proposal.

Southbound – combine bus stops 6130 outside 17 The Parade (south of Tamar St) and 6131 outside 109 The Parade (north of Avon St) and replace with new bus stop somewhere between the two (but not outside 75 The Parade on the Serbian Orthodox Church frontage as shown on the consultation plans). The church has no off-street parking and the frontage parking is reserved for special occasions from time to time. Officers will continue to investigate alternate locations.

This proposal is still subject to further consultation and approval through the normal traffic resolution process. The matter will be reported back to the Committee in September.

#### Intersections

The Parade's existing intersections don't provide well for people on bikes. Cyclists and other road users have complained that the cycle lanes stop in the areas where they are most needed, i.e. where there is turning traffic at intersections. To address this cycle lanes will be painted through the intersections of Trent, Humber, Mersey, Medway, Avon and Tamar streets to make sure the cycle lanes are continuous along the higher speed (50km/h) sections of The Parade. While we are doing this work, intersection corners at the cross roads of Humber, Mersey and Tamar streets will be built out to the side streets to shorten crossing distances for pedestrians and encourage greater care from left turning vehicles.

The key difference for intersections with kerbside cycle lanes is that cyclists approaching an intersection will need to move out from behind the parked cars to be near the traffic and ride through the intersections conflict points in a position where they can be easily seen. So they can be clearly seen, some onstreet parking will need to be removed on the approaches to intersections to minimise the risk of a sudden merge between a vulnerable road user and a vehicle. Existing right-turn bays would be retained at these intersections, as on balance they are a preferred facility to keep for safety reasons.



#### **Dee Street roundabout**

The Dee Street roundabout was installed in 2005 as a traffic calming device. It has been moderately effective in this role, but it has not delivered any safety improvement. In the nine years before the roundabout was installed there were no reported injury crashes at the junction, compared to three in the eight years after implementation.

Larger roundabouts are generally dangerous for cyclists, and small ones are only less dangerous if traffic speeds and volumes are very low and people on bikes 'take the lane' and traverse the roundabout like motorised traffic. Either way, this is inconsistent with the high level of service proposed along the rest of the route.

The recommended solution is to remove the roundabout and go back to the give way priority control for the Dee St approaches. This is consistent with requests from local residents, consistent with the treatment of all other intersections along The Parade route and will allow safer cycle lanes to be painted through the area. Cycle Aware Wellington support removing the roundabout.

## **Options considered and rejected**

## **Developing adjacent routes**

The option of providing cycle facilities on adjacent routes was discounted as it is feasible to provide suitable facilities on the main, most direct route. This also limits the need to cross the main road to access the cycle facility.

#### Providing a single, two-way cycle lane

The option of providing a two way cycle lane on one side of The Parade has been considered. However, expert advice is that for typical urban New Zealand streets the single, two way style cycle lane is not suitable. A 2009 NZTA research report undertaken by Dr Shane Turner of Beca International Consultants concluded that off road paths adjacent to the carriageway had between 1.8 and 2.5 times the likelihood of a crash involving cyclists than if cyclists were on road with no special facility. The greatest dangers arise from conflicts with vehicles, and to a lesser extent pedestrians, as cyclists can quickly approach a conflict point from the 'wrong' direction where the other road users do not normally expect them to come from. This is a significant problem on Wellington's existing Hutt Road facility.

If the cycle lane is placed back from the intersection into the side road (like a pedestrian facility) then New Zealand law requires people on bikes crossing the side road to give way to through traffic that turns into and out of the side road. In contrast, when in the proposed single-lane approach, bike traffic is considered part of the through traffic and have right of way over vehicles exiting or entering the side road.

For legal and safety reasons, the two way arrangement is not suitable for The Parade. Using two single-way cycle lanes on The Parade does not preclude using a two-way lane in Berhampore / Newtown if this is appropriate. Two-way lanes, along with many other road treatments, will be amongst the options the citizens' advisory panel will consider for section 2 (Wakefield Park to John Street).

#### **Replacing the Dee Street roundabout with traffic signals**

We considered the possibility of enabling cyclists to get priority at the intersection by removing the roundabout and installing traffic lights. This would also mean cycle lanes could be continued through the junction. However, this option was discounted as traffic lights would cost about \$250,000 and would increase delays slightly during peak periods. Higher operating speeds (when the lights are green) also increase the risk of more serious crashes at the junction. Traffic light at this intersection would also be inconsistent with the other intersections in this part of the route.

## Providing cycle lanes through the Island Bay shopping centre

We investigated providing protected cycle lanes through shopping centre but considered the associated removal of on-street car parking would outweigh the benefits to people on bikes using the traffic calmed, 30km/h shared space. Cycle Aware Wellington advocate for this to reconsidered. Officers recommend this matter be kept under review and be revisited in light of operational experience.

#### 5.1 Consultation and Engagement

There have been two phases of consultation for section 1 (Shorland Park to Wakefield Park):

- February 2014 initial discussions with property owners adjacent to the intersections of Humber, Mersey and Tamar Streets about possible localised effects of proposals on footpaths, car parking and bus stops
- April-May 2014 consultation with the general public about cycle lane options.

# **Initial consultation**

For the initial consultation Council wrote to the owners of 51 properties along The Parade on 7 February 2014. Each letter contained an explanation of initial options, plans and a feedback form. Responses were requested by 27 February. Overall feedback was received from 57% of owners. Three quarters of respondents indicated general support for cycling improvements. However, 76% also expressed some level of concern with the initial proposals.

Main themes coming through the initial feedback were:

- Humber St leave the existing north bound bus stop in its current position south of the intersection, as it is important for patronage of the dairy
- Significant concern about the potential loss of on-street parking and mature pohutukawa street trees
- Some concern about the expense and value of the changes.

The above feedback was taken into account and revised designs were prepared for general public consultation.

## **General public consultation**

The main consultation phase was launched on 8 April 2014, with extensive information on Council's website covering the options and making a submission. It involved a brochure delivery to all properties along the affected section of The Parade and a letter to non-resident property owners of The Parade. Residents disseminated Council's engagement emails through local email lists. Brochures were left at the Island Bay Library and supermarket, and the *Cook Strait News* ran a story about the consultation and advertised the open day, held on Saturday 12 April. This was attended by about 70 people and responses to frequently asked questions were posted on Council's website. Submissions closed on 6 May. 177 submissions were received.

Main themes from the submissions are:

- overall 81% support option 2: kerbside cycle lanes, 14% prefer option 1: traffic-side cycle lanes and 5% oppose both options or gave no preference
- 10% of comments expressed concern about intersection and roundabout safety
- 5% of comments expressed concern about various bus stop matters

- 4% of comments expressed concern with the preferred option about conflicts between people on bikes and people moving to and from parked vehicles
- 3% of comments opposed losing on-street parking spaces
- 3% of comments opposed removing any trees to accommodate changes
- 2% of comments suggested alternative routes.

Island Bay residents made 61 submissions, 64% supporting option 2, 26% supporting option 1 and 10% opposed to either option or stated no preference.

Residents of The Parade made 17 submissions, 5 (29%) supporting option 2, 8 (47%) supporting option 1 and 4 (24%) opposed to either option or stated no preference. Main comments from these submitters are:

- 4 comments expressed concern about various bus stop matters
- 3 comments opposed removing any trees to accommodate changes
- 3 comments suggested alternative routes
- 3 comments opposed losing on-street parking spaces.

Specific comments from the more substantive submissions are summarised below.

**Cycle Aware Wellington** (CAW) strongly support option 2 with bus stop bypasses. However, they strongly encourage Council to revisit the roundabout and other intersection designs and revisit the proposal to do nothing through the shopping area. Officers are recommending replacing the roundabout with an intersection consistent with the other designs. Other detailed suggestions will be taken into account during the detailed design phase of the project. Officers recommend proceeding with no intervention at this time in the shopping area but to keep this aspect under review.

**Greater Wellington** (GW) support the introduction of dedicated cycle lanes and regard option 2 as the safest option. GW regard bus stop bypasses as the safest way for cyclists and buses to share and operate on the road and request that the bus shelter island option be used on all five inward/northbound bus stops. GW require all stops to accommodate a standard 13.5m bus with 8m lead in and 5m lead out space and suggest other detailed design features which officers will incorporate in the detailed design where practicable.

**Living Streets Aotearoa** support in principle proposals to make cycling safer but not aspects that detract from the pedestrian domain. With regard to bus stop bypasses they oppose the footpath option, expressing concern that the shelter would obstruct the footpath at a point where it will be narrowed by the creation of a cycle path, and put people boarding or alighting from buses in conflict with cyclists at a time when they will be focused on the bus, not on cyclists. Officers recommend proceeding with the shelter on the island version which is also supported by Greater Wellington.

#### 5.2 Financial considerations

Subject to detailed design work being completed and service relocation costs being confirmed the recommended scheme is expected to cost some \$1.3 million to create 3.4km of good quality cycle facilities. A break down of costs is shown in the following table for the recommended scheme.

Cycle lanes along The Parade	\$145,000
Humber Street intersection work	\$172,000
Mersey Street intersection work	\$168,000
Tamar Street intersection work	\$156,000
Dee Street roundabout replacement	\$200,000
9 bus stop bypasses	\$487,000
Full cost	\$1,328,000

This expenditure is covered within the 2014/15 Annual Plan budget.

#### 5.3 Climate change impacts and considerations

Providing cycle friendly facilities is likely to encourage more people to use bikes to get around. This is widely considered a green transport choice.

#### 5.4 Long-term plan considerations

The approval of this scheme will have no significant implications for future long term plans.

#### 5.5 Next steps

Subject to the Committee agreeing to proceed, the project will continue as follows:

Undertake detailed design	May -July
Formalise traffic restrictions through the normal traffic resolution process	July - September
Finalise construction plans	October
Implement physical works	August - December

## 6. Conclusion

The existing provision for people on bikes along The Parade is relatively poor. A scheme to improve the situation greatly has been developed and is well supported by the wider community. Officers recommend proceeding to the detailed design phase of the project with option 2 - kerb side cycle lanes taking account of the feedback set out in the report.

Contact Officer: Paul Barker, Safe and Sustainable Transport Manager, Transport Planning, City Networks.

# SUPPORTING INFORMATION

# 1) Strategic fit / Strategic outcome

*The project implements an element of improvements envisaged by Council's Cycling Policy (2008).* 

# 2) LTP/Annual Plan reference and long term financial impact

The project is contained in the Council Plan # CX112.

## 3) Treaty of Waitangi considerations

The project has no Treaty of Waitangi considerations.

## 4) Decision-making

This is not a significant decision. The report sets out a number of options and reflects the views and preferences of those with an interest in this matter who have been consulted with.

## 5) Consultation

#### a) General consultation

All affected parties have been identified. The effects of this work are confined to the street and surrounding neighbourhood. Consultation has been undertaken with affected parties and the recommended scheme is consistent with the weight of submissions.

#### b) Consultation with Maori

No specific consultation with Maori has been undertaken.

## 6) Legal implications

There are no legal implications with the proposal to implement cycle lanes. Some associated traffic restrictions will be subject to the normal traffic resolution process and are expected to come back to the Committee in September.

## 7) Consistency with existing policy

*The project implements an element of improvements envisaged by Council's Cycling Policy (2008).* 

In 2007 Council approved in principle a bus priority plan which envisaged bus lanes along the full length of The Parade. The implementation of dedicated cycle lanes would use the space needed for future bus lanes. However, bus lanes are not considered necessary along The Parade as the route is not congested, so cycle lanes are a more appropriate use of the space for the foreseeable future.