



22 March 2017

Bike Auckland Submission: Northern Corridor Improvements

Project Overview

In summary, the Northern Corridor Improvements (NCI) project:

- Provides the final motorway connection for the Western Ring Route
- Extends the Northern Busway from Constellation Drive to the Albany Bus Station
- Adds shared use paths (SUPs) for pedestrians and cyclists along the length of the proposal area, interfacing with the local roading network.

The NZTA has applied to the EPA and an associated Independent Board of Inquiry for consent to proceed with the project. As part of that process, submissions are accepted from interested parties.

This document is Bike Auckland's submission. It is primarily focused on cycling aspects, but includes commentary on other components as well. It provides recommendations for cycling infrastructure changes, and conditions that should apply during construction.

In summary, Bike Auckland supports the NCI project. While we have some concerns about the costs and the addition of new motor vehicle capacity, aspects such as the inclusion of the busway - and of course the cycling components - make us view the project more favourably than a number of other motorway projects.

However, our review of the proposal has identified some serious efficiency and safety issues, particularly for SUP users on the SH18 section which we seek to have changed.

Motorway Connection

Bike Auckland supports the completion of the Western Ring Route, primarily for resiliency. It is our hope that the provision of an alternate route can reduce the pressures on other motorway routes (especially SH1), and thus reduce the need for new costly projects and enable space reallocation to other modes.

Northern Busway Extension

Bike Auckland strongly supports the extension of the busway to Albany. Not only will this encourage motorists to leave the car at home in favour of PT, it also provides more encouragement for cyclists in the Albany Basin to cycle to a local bus station to catch a bus.

Introduction of SUPs

Bike Auckland endorses the provision of Shared Use Paths adjacent to the motorways. While shared paths are somewhat of a double-edged sword (potentially creating conflicts with pedestrians, as they are not proposed to be separated), we consider that for the majority of the proposed project, pedestrian volumes are likely to remain relatively low for the foreseeable future, making SUPs more acceptable than on some other projects.

Generally, the proposed SUPs will provide an attractive cycling environment with agreeable gradients over the project area, facilitating commuter, recreational and local pedestrian and cycling trips. Unfortunately there is no linkage proposed between Constellation Drive and Esmonde Rd (to connect with SeaPath), but we understand this is on NZTA's long term plan for the corridor. We request its route reservation and subsequent implementation to provide the sort of connectivity between the City and Albany as the popular NW cycleway currently provides between the City and West Harbour.

We also endorse the efforts that NZTA has gone to in addressing the severance effects of the current SH1/SH18 roading environment, and the introduction of a number of connections to the SUP. Our submission is based primarily on the careful design of these connections, and the interfaces into Auckland Transport's roading network.

SUP Width

Our primary concern with the SUPs themselves is that they are at a bare minimum width of 3.0m, reducing to 2.5m at Section A (CH12600), just

north of McClymonts Rd. We request detailed design should try to widen the path to a full 3.0m in this area again (i.e. not treat the 2.5m as a fixed given if opportunities exist in detailed design to widen it). Wider shared paths will minimise conflict between pedestrians and cyclists.

For the same reason, we also ask the design to maximise the SUP shoulders to 1m where possible, as this allows riding closer to the edge to avoid other users.

Connections to the Roding Network

Key to the success of the SUP will be integrating it into the roading network managed by AT. It is a little unclear from the General Arrangement sheets exactly where the demarcation lies, so the following comments will need to be interpreted accordingly, and relayed to AT if in their jurisdiction. They should, however, be included in project scope and completed at the same time as the SUP to maximise its benefits.

The following comments are ordered by the “General Arrangement” sheet numbers of the provided plan sets.

Sheet 1 - Oteha Valley

The SUP terminates on a narrow footpath on the southern side of Oteha Valley Rd (OVR). We propose the following enhancements:

- Facilities so confident eastbound on-road cyclists can enter the SUP from the northern side of OVR. This could include allowing cyclists a right turn from ASBs at the lights for the southbound on-ramp, but instead crossing to the current footpath and making their way to the SUP entry. This will mean widening and designating the footpath as a SUP as well
- Facilities so confident on-road cyclists can exit the SUP to travel east on the northern side of OVR. This could include widening and designating the footpath as a SUP to the Fairview Rd intersection where cyclists can cross and join the eastbound traffic stream
- Provide access (a short section of footpath widening to 3m) to the SUP from nearby Masons Rd to serve the large residential community to the east so they don't need to access the SUP via OVH, a hostile environment for non-confident cyclists.

Sheet 2 - McClymonts/Spencer

Offering SUP access from both the east and west, and its proximity to the Albany bus station, McClymonts Rd is a key crossing and needs to be designed well. We propose the following enhancements:

- The “pedestrian crossing” across McClymonts Rd at the SUP ramp entry needs to prioritise both pedestrians and cyclists. This could take the form of a zebra crossing for pedestrians, supplemented by a parallel priority crossing for cyclists
- The cycle lanes on McClymonts Rd need to be protected/raised to provide physical separation between cyclists and motorists. It is unclear whether that is already provided in the proposal
- Cycle lanes need to be added to the short length of Elliot Rose Ave to provide safe cycle connectivity between the Albany Bus station and McClymonts Rd. Cycle lanes on the overbridge and then to the Bus Station will make bike access to the Bus Station possible for the large residential catchment to the east. This has the potential to significantly increase PT use and reduce pressure on Bus Station parking.

Spencer Rd

- It’s disappointing the Spencer Rd connection is stairs-only and doesn’t include a cycle connection (as shown on promotional videos). A cycle connection here needs to be reconsidered
- Failing this, the stairs need cycle push channels on both sides so cyclists can comfortably push their bikes up and down.

Sheet 3 - Greville

No issues.

Sheet 4 - Rosedale

As a route on the Auckland Cycle Network and popular with cyclists, Rosedale Rd is another key feed to/from the SUP. There are two significant issues here:

- The existing Rosedale Rd underpass under the motorway is so narrow it forces cyclists onto a (severely sub-standard) “shared path” (footpath). Assuming the project cannot remedy the underpass width (only the motorway bridge width is being increased), it must work with AT to introduce traffic calming or other appropriate road design which makes cycling safer through the underpass section.
- In addition, it appears the narrow width is perpetuated underneath the new busway bridge. It is essential that proper cycle lanes resume immediately after the current constriction
- Cyclists need to cross safely from the SUP ramp to the southern side of Rosedale Rd (for westbound arriving and departing cyclists). A crossing is necessary at this point for both pedestrians and cyclists, which could be integrated into the traffic calming measures to address the constriction.

Sheet 5 - Arrenway

No issues.

Sheet 6 - Constellation

The SH18 SUP crossing the motorway to the bus station is very convoluted, squeezes through a narrow underpass, and is subject to four crossings, none of which are cycle-friendly. While three crossings are signal-controlled, the crossing across the slip lane on the southbound offramp turning left into SH18 isn't controlled. This is hazardous for pedestrians and cyclists as motorists will both be travelling fast and looking to the right, oblivious to a cyclist approaching on their left.

We propose the following to improve the design:

- Maximise the SUP width within 500m of the bus station to accommodate the higher density of pedestrians and cyclists on the SUPs. Aim for a design width of at least 4m before reverting to the standard 3m
- Specifically, maximise the width of the SUP in the underpass and in the ramp section to the bus station - for the former, by narrowing the traffic lanes and reducing the width of the raised central median
- Signalise the slip lane to synchronise with the adjacent right-turning lanes
- Ensure the signalised pedestrian/cycle crossings show a green aspect whenever possible ("automatic demand" in signals terminology), and don't default to red pending a button call.

Sheet 7 - Sunset

Continuing the SH1 SUP to the south to link up with SeaPath at Esmonde Rd is an essential "missing link". Just as the centreline of the proposed busway extension to the north is shown on Sheet 1, please show the centreline of the SUP to the south, and ensure the SUP corridor is designated and protected.

Sheet 8 - Constellation Drive to Paul Matthews

The plan appears to show a 3m SUP directly adjacent to the westbound traffic stream, with no separation. Unfortunately there is no cross-section detail to show the proposed layout.

If this is the case (no physical barrier or landscaping strip between the path and the road), we CANNOT support this design (as we have previously highlighted to NZTA). This is because it represents a serious

safety and amenity defect, nor would it comply with NZTA's safe systems approach.

Motorists will be travelling at high speed westbound (60-80kph plus), while eastbound cyclists on the SUP will be travelling at 20-30kph plus. With a closing speed of 100kph there is no margin for error for either motorists or cyclists (some cyclists will be novices/children). As well as the safety aspect, this is not a pleasant environment for cyclists to be in such close proximity to high speed motor vehicles, and will act as a disincentive for SUP use.

The design needs to change to make it safer and more pleasant:

- A crash barrier or at least a 1m wide landscape buffer must separate cyclists and motorists
- Given its proximity to the bus station, a wider path (3.5m-4m) width should be provided to provide extra separation, and to minimise pedestrian/cyclist conflict
- The increased separation must extend over the new bridge to Paul Matthews Rd - again we have specifically discussed this before with NZTA, yet it has not been incorporated. Like further east, the path on the bridge is located next to a high speed sweeping road.

The second issue on this sheet is the Caribbean Dr crossing. While the primary crossing is signalised, the left turn slip lane isn't, which represents a considerable hazard to pedestrians and cyclists due to high motor vehicle speeds. For SUP users to safely cross a number of design options should be considered:

- Removing the slip lane and adding a left turn arrow to the kerbside straight through lane
- Tightening the radius of the slip lane to reduce motorist speeds
- Introducing a formal (and possibly raised) zebra crossing with parallel cycle crossing.

Finally, Caribbean Dr from Sunset Rd to SH18 is a popular cycle route, but not cycle-friendly as there is no cycle infrastructure provisioned. To maximise connectivity to and functionality of the SUP it's essential that local connectors are of high quality, so residents in suburbs such as Unsworth Heights can access the SUP safely.

NZTA needs to provide cycle facilities within that part of Caribbean Drive that is in their designation, and that is being significantly widened. These could be either:

- Protected one-way cycle lanes, or

- At least a 3m wide shared path.

Failing such provision will lead to people having to ride on a five lane road or on a narrow single-sided footpath to get from Unsworth Heights to the new west-east SUP, which would be a severe safety and network connectivity failing cast in stone by the new design.

Working in conjunction with AT, we suggest the project scope needs to increase further south down Carribean Dr and also include at least facilities at the first roundabout.

Sheet 9 - Paul Matthews/Unsworth

The plan shows the SUP turning from Paul Matthews Rd to Saturn PI, but not continuing across it. As a no-exit cul-de-sac, Saturn PI attracts very little pedestrian and cycle traffic, however Paul Matthews itself is heavily used by cyclists as it connects to the Rosedale sports facilities and Bush Rd. The design need to change to provide this connectivity:

- A safe crossing across the Saturn PI intersection for northbound SUP users
- A safe entry to the SUP at the Saturn PI intersection for southbound SUP users. This could take the form of an entry from the right turn bay for confident on-road cyclists, and a refuge crossing for pedestrians and less confident cyclists.

The intersection of the SUP and the side path from Alexandra Creek needs to be redesigned at least slightly, as the current arrangement with no corner chamfers could create severe sightline issues between people coming onto the path from the north and riders approaching from the west. This currently does not match Austroads requirements, and there is no certainty that there will be (now or in the future) no buildings or landscaping in the private property at the corner blocking potential sightlines.

Sheet 10 - Albany Highway

While access to the SUP from the north is well designed, there is no access designed from the south. There will be considerable demand for this movement from both Glenfield and cyclists using the popular Upper Harbour Drive route. This can be best designed as follows:

- Confident on-road cyclists should be presented with a cycle lead-in lane to an Advanced Stop Box allowing a right turn towards the on-ramp, but filtering left to safely access the SUP
- Less confident cyclists and pedestrians can use the existing signalised crossings, but the unformed crossing across the slip lane needs

improvement to cater for SUP users both entering and exiting the path. A combined zebra/cycle crossing or possibly removal of the slip lane would provide improved safety for SUP users at this point.

Final Sheet - Constellation Station detail

This sheet shows detail missing from Sheet 6. For cyclists traversing between the SH1 and SH18 SUPs the path appears convoluted, but rideable as the turning radius at the Bus Station appears adequate.

Good signage will be required here so there is no confusion as to which path goes where.

Consent conditions

As per the Waterview consent, it is important that any already existing pedestrian and cycle paths remain open throughout construction. A condition for the NCI works should be to ensure such paths stay open as much as possible, and any closures required for construction should be minimised as much as possible, and relegated to non-peak hours.

Use of SUP chicanes

It is not clear from the reviewed design whether SUP chicanes are proposed.

We **strictly oppose** the Draft Urban Design Landscape Framework's call for "safety chicanes" at T-intersections and cross-intersections of the shared paths. Chicanes are called out in modern design literature (including ATCOP) as an often very problematic method of "safety" treatment, which in fact interrupt cycling convenience, create pinch points and constitute unnecessary crash hazards in themselves.

The appropriate safety treatment at such intersection locations is provision of good sightlines in the first place, and, where absolutely required, "raised table" treatments or other surface treatments to alert and slow down riders (as used on other paths such as at the train station cross path intersection of NZTA's Stage I section of the Glen Innes to Tamaki Drive Urban Cycleway).

Facilities at Bus Stations

The SUP's are going to make it much easier for people to access the bus stations by active modes, reinforcing the need for adequate cycle parking and cycle storage at the bus stations. A consent condition

should be for NZTA to work closely with AT to ensure there is adequate capacity, and to monitor/upgrade over time.

Summary

Bike Auckland endorses the NCI Project subject to the design changes referenced in this submission. We would like to be considered a key stakeholder for all cycling-related matters, with the ability to provide input to the NCI design team as the design progresses.

Thank you.

Steve Southall
Committee Member
Bike Auckland