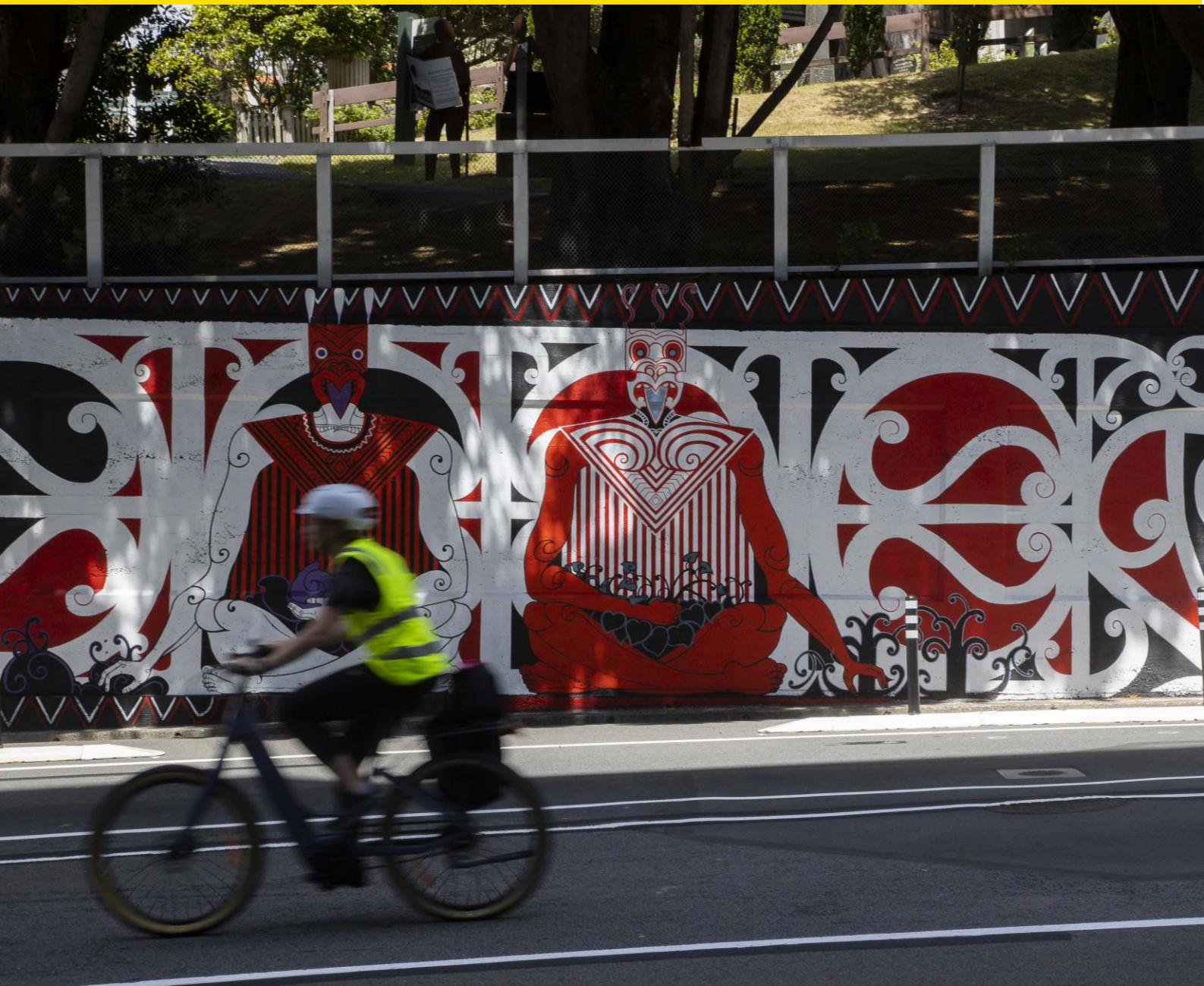


Botanic Garden ki Paekākā to city street changes

Monitoring and evaluation report

15 April 2024



Absolutely Positively Wellington City Council

Me Heke Ki Pōneke

Version	Date	Author	Approver
1	15/04/2024	L.I	CP

Contents

Executive summary	3
Introduction: The route and the network	4
Report scope and limitations	5
Monitoring vs evaluation	5
More low-carbon transport trips	7
People on bikes	7
Bus travel times and trips	9
E-scooter and E-bike share scheme counts and behaviour	10
User diversity	12
Improved safety	14
Perceived safety	14
Actual safety	16
Public participation in the process	18
Engagement	18
Adjustments based on feedback	19
Place-making – sites of significance	21
Retail impacts	23
Vehicle travel time	23
Speed of delivery	26
Ongoing data collection	26

Executive summary

Paneke Pōneke, Wellington's bike network plan, aims to improve safety and convenience for people on bikes, pedestrians, and using public transport. The Botanic Garden ki Paekākā to city route is the first completed section of the transitional programme delivering improvements through an accelerated delivery approach.

The four goals of the transitional programme are to:

- increase low carbon journeys,
- improve real and perceived user safety,
- increase the diversity of people biking and using other forms of micromobility,
- deliver improvements faster.

To date, these goals have been achieved. However, we will continue to monitor some data and trends as more data becomes available and connections with other routes and suburbs are installed.

The Botanic Garden ki Paekākā to City project took 18 months to deliver from initiation to the end of construction. Construction on this project started in October 2022, and the full route was in use by March 2023. This is significantly faster than comparable projects being delivered using traditional processes although not as fast as originally planned. Comparable projects usually take between 3 and 6 years.

Sensor data from the Bowen/Terrace intersection shows a 27.5 percent increase in people on bikes following the changes.

Even though there has been a decrease in e-scooter and e-bike share numbers in Wellington overall, numbers have increased on Bowen Street and Tinakori Road.

There has been a 41 percent increase in female e-bike, manual bike and e-scooter riders compared with the increase in male users of 24 percent, narrowing the gender gap in ridership and improving the diversity of people using micromobility.

The general growth in bike and e-scooter use on the route is likely related to the improved perception of safety that active transport users reported once the new route was in place. Following the street changes, 75 percent of people on bikes surveyed felt their experience had improved, as did 50 percent of people using scooters. There have been no serious crashes reported through the Waka Kotahi Crash Analysis System since 2022.

For the pedestrian experience, 25 percent of pedestrians surveyed felt their experience had improved, while 35 percent felt it was worse. Some of these people were concerned about the new shared path at the corner of Bowen Street and Tinakori Road, but most appeared to be opposed to the changes in general, with few specific details provided. Forty percent of pedestrians felt the changes had not affected their journey.

At this stage, the impacts of the project on bus services and patronage is inconclusive as bus journey time data was impacted by unrelated roadworks over the analysed period and an increase in passengers along the route was likely influenced by increasing capacity in bus services after the bus driver shortage.

This report was prepared 12 months after physical changes being made to the route. Some of the data noted in the report will continue to be monitored to better understand how bike, bus and pedestrian changes have delivered on the four goals of more low-carbon journeys, safety, diversity, and speed of delivery, particularly as the network extends into more suburbs.

Introduction: The route and the network

The Botanic Garden ki Paekākā to city route is a 1.4-kilometre section of a key transport route, which is part of both Paneke Pōneke (Wellington’s bike network plan) and the city’s Bus Priority Action Plan. It connects to the major recreational destination of the Botanic Garden ki Paekākā in the west, passes through a short section of the Tinakori Road/Thorndon residential area and the major employment areas around Parliament, the Terrace and Lambton Quay and then connects over to Wellington waterfront (Figure 1).

The project scope included improved bike, bus, and pedestrian infrastructure for safer travel and more low-carbon transport options from Thorndon, Northland and Kelburn to the city centre. Key upgrades included separated bike lanes, downhill shared bus/bike lanes and enhanced intersections for pedestrians. The project scope also included highlighting cultural sites of significance along the route.

We used adaptable materials to make street changes so we could take a transitional approach, allowing for a quick roll out of sections of the network over months rather than years. Transitional bike lanes are formed with minimal physical works and can be refined after installation.

Immediately prior to the transitional route being installed, Let’s Get Wellington Moving made permanent changes to the intersection of The Terrace and Bowen Street as part of their Central City Pedestrian Improvements programme.



Figure 1 Botanic Garden ki Paekākā to city route.

The route makes up 1.4km of the planned 166km of bike network in Wellington and expands access by bike to nearly 3600 buildings, including a high density of office and apartment blocks (Figure 2), within 500m of the improved walking, bus and biking facilities.

The route is also part of the number 2 bus service. This service is currently preparing for a significant increase in capacity. Four other public bus services also share this route, alongside 11 school bus services transporting students to schools east of the city.

By 2025, this section will fully connect to the western suburbs via the Karori connections, Wadestown connections, and Thorndon connections routes currently being installed.

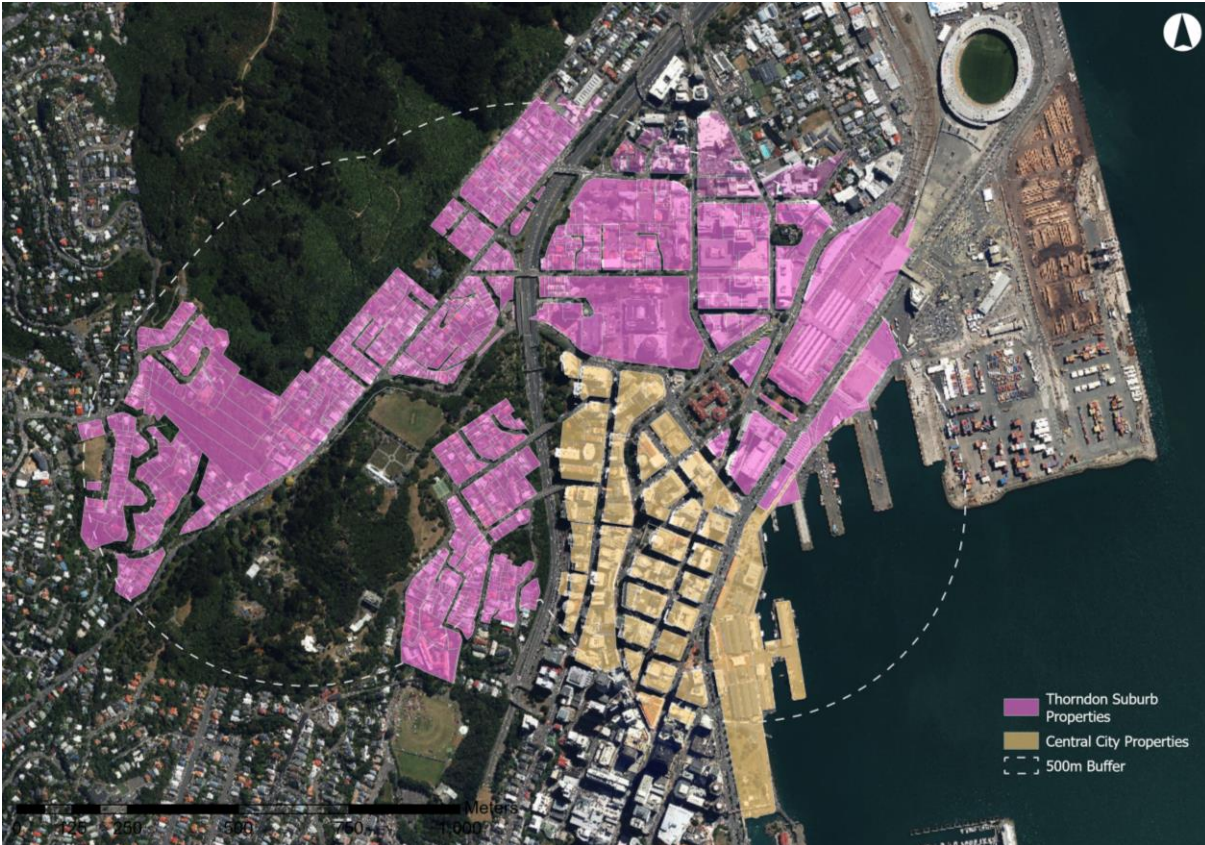


Figure 2 Buildings within 500 metres of the completed route.

Report scope and limitations

The purpose of this report is to present trends emerging from the street changes and their effectiveness twelve months on from the official opening in March 2023.

Transitional projects such as this have four main objectives – increased uptake of low-carbon transport trips (mode shift), increased diversity of people using the new infrastructure, improved safety and perceptions of safety by the users of the new facilities, and faster delivery. These objectives have shaped this monitoring and evaluation report.

For some data sets, twelve months is not enough time to meaningfully or accurately gauge trends. Where this is the case, we have used other methods in the short term, and/or identified opportunities for longer-term monitoring and evaluation towards the broader programme objectives.

Because of the limited time the section has been open, this report presents emerging data and trends, rather than conclusive outcomes.

Monitoring vs evaluation

Monitoring and evaluation are put in place to understand the impacts and benefits of the project. Monitoring data is used to track impacts and see whether any corrective action is needed. Evaluation data helps us understand whether the project has met its objectives.



Before and after street changes - Lambton Quay and Whitmore Street intersection: WCC

More low-carbon transport trips

People on bikes

We've collected data about people riding bikes through multiple sources to capture different aspects of the movements along the route. Our collection methods include manual observational surveys and digital monitoring provided by FOLKL Vision Cameras and BeCounted Eco-Counters (third-party providers) (tables 1 and 2 respectively).

Table 1 FOLKL Vision cyclist counts table. Data sourced from FOLKL after analysis.

People on bikes counts (comparing 6 days of data gathered in July 2022 and July 2023)				
Source	Location	1/07/22	1/07/23	% Change
FOLKL Vision	The Terrace/Bowen Street	3210	4094	27.5%

Table 2 BeCounted Eco-Counters counts table, Data sourced from BeCounted.

People on bikes counts (comparing May, June and July 2022 versus 2023)										
Source	Location	May 22	May 23	% Change	Jun 22	Jun 23	% Change	Jul 22	Jul 23	% Change
BeCounted Eco-Counters	Glenmore Street	5600	6200	11%	4600	5500	20%	4100	4900	20%
	Bowen Street	6100	6600	8%	4700	6000	28%	4400	5500	25%

Based on the continuous recording methodologies through FOLKL Vision and the BeCounted Eco-Counters, we can confidently say more people have been travelling by bike post installation compared with before installation.

November counts of people on bikes

In addition to the May to July counts, the manual observation counts during November also display a significant increase of people on bikes during commuter hours and out of peak times (Table 3).

The BeCounted Eco-Counter over the spring/summer period (Oct–Jan) also recorded an increase of average weekly riders. The percentage change between November 2022 and 2023 is a 35% difference (shown by yellow line in Figure 3 below).

Table 3 Manual observations counts table

Source	Location	Time recorded	November 2021	November 2023	% Change
Manual observations	Glenmore - Botanic entrance	3:30pm - 5:30pm	107	144	35%
	Bowen -Terrace intersection	7:30am - 9:30am	127	215	69%
	Whitmore - Stout intersection	10am – 12 noon	13	41	215%

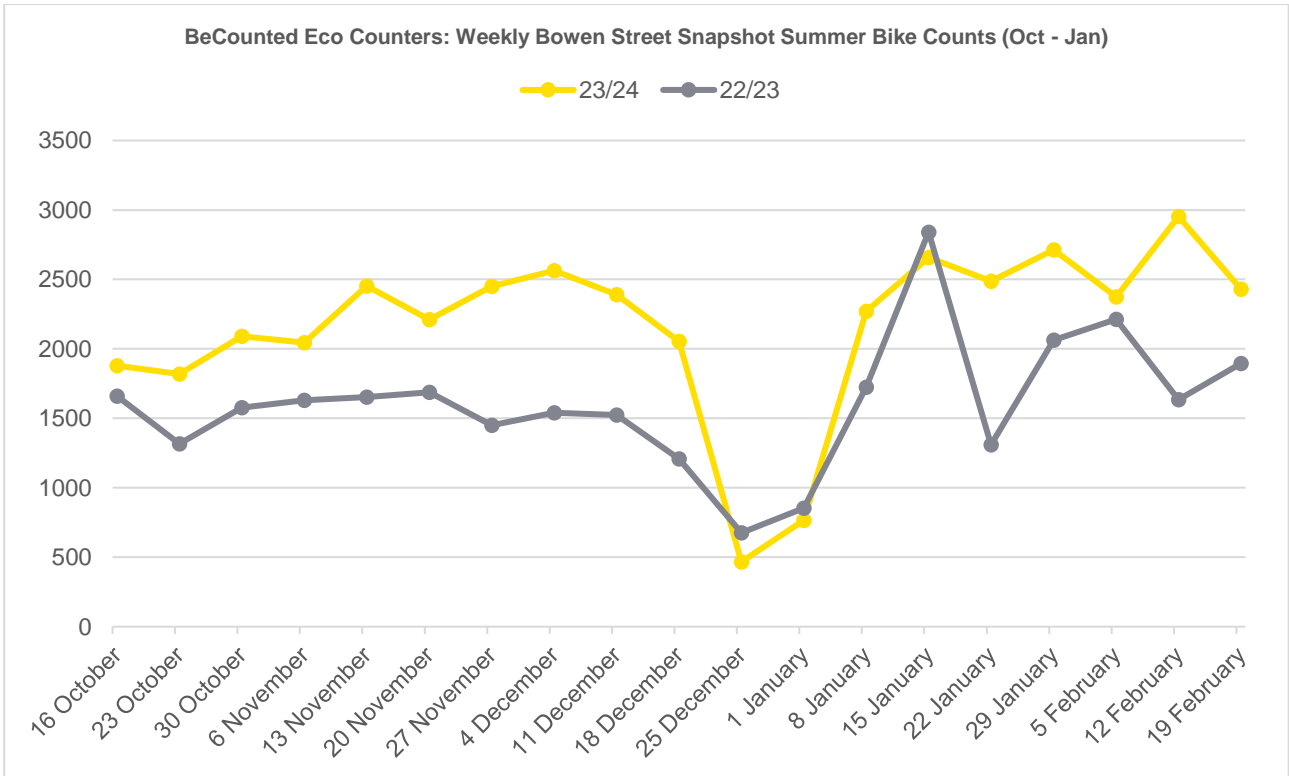


Figure 3 BeCounted Eco Counters weekly Bowen Street spring/summer counts graph, Data sourced from BeCounted.



Figure 4 Whitmore Street 2023, WCC

Bus travel times and trips

Bus travel times

The data gathered on bus travel times is inconclusive at the time of writing this report. This is due to external factors including continuous road works until December 2023 that were unrelated to the project. This means it is very difficult to say with any accuracy what effect the street changes associated with this project may have had on bus trips and travel times.

Longer-term monitoring will be required to be able to report more conclusively on the bus travel time impacts of this project.

Bus trips

Under the Bus Priority Action Plan 2019, the Botanic Garden ki Paekākā to city corridor was identified as a key public transport route that required roading changes to improve bus services and cater for increased demand.

In total, the average inbound/outbound monthly passenger ticket boarding counts* from bus stops within the project corridor increased 38 percent between 2022, before the changes had been made, and 2023, following their installation (Figure 5). This most likely relates to a citywide increase in bus drivers and a return to pre-COVID-19 capacity for the number 2 bus services, which included capacity for an additional 800 commuters out of Karori every morning peak, starting in January 2024.

Future street changes that connect this route to larger catchments, including Karori, are expected to further support an increase in bus patronage.

*Ticket boarding counts: Derived from the Snapper ticketing system, includes passengers using paper tickets or smartcards. Multiple passengers travelling on the same smartcard are also recorded individually e.g., 15 passengers on one smartcard is counted as 15 ticket boarding passengers (NetBi, Greater Wellington Regional Council).

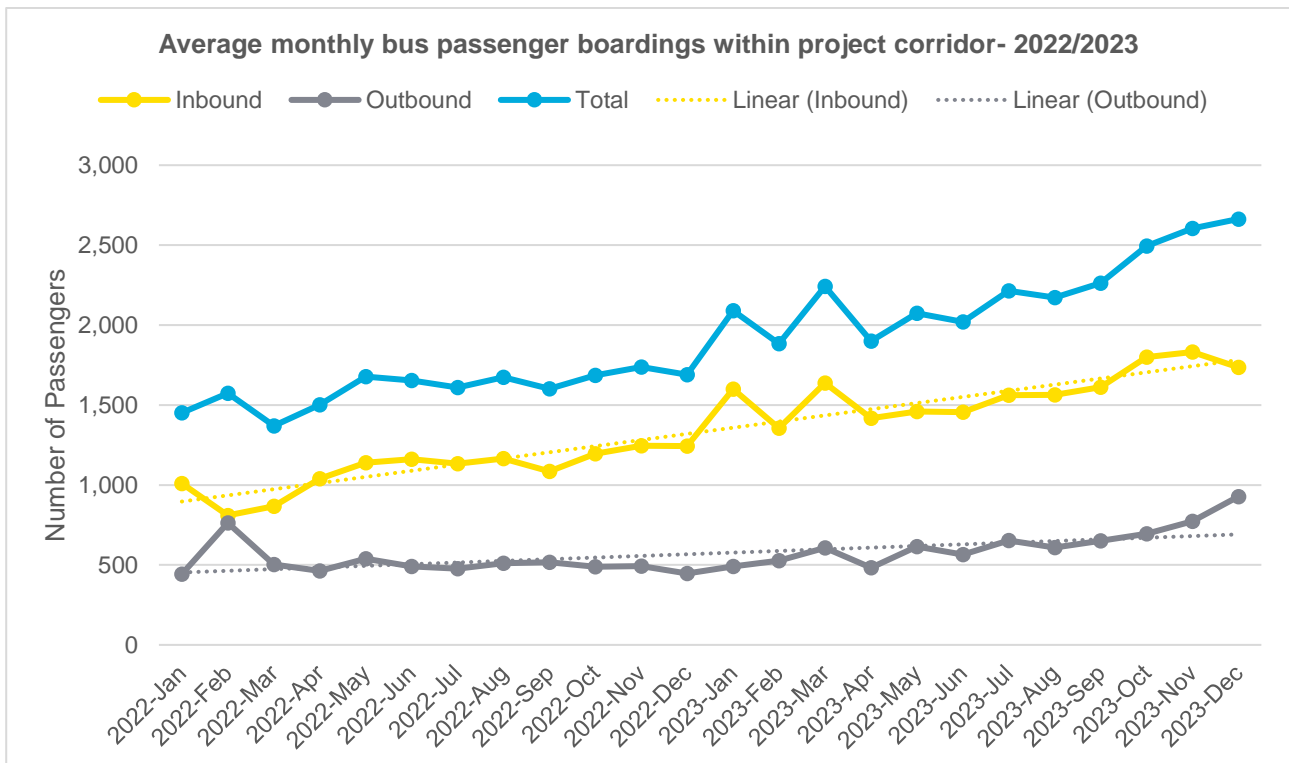


Figure 5 Average monthly bus passengers within the project corridor - 2022/2023. Data sourced from Greater Wellington Regional Council.

E-scooter and E-bike share scheme counts and behaviour

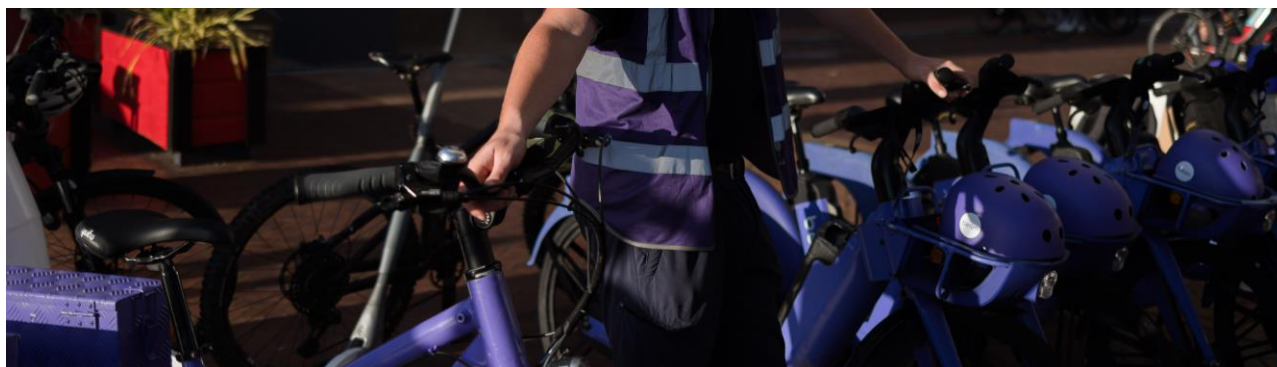


Figure 6 Beam at Go by bike day 2022, WCC

RideReport data (external source of e-scooter and e-bike share ride data) provides an indication of how e-scooter and e-bike rider behaviour has changed in the area (Table 4). This data shows that there has been an overall decrease in e-scooter and e-bike share use of 17 percent city-wide, possibly related to pricing changes.

Despite this, for Bowen Street and Tinakori Road where bike and bus lanes have been installed, e-scooter and e-bike share numbers have increased. In nearby streets and paths without bike lanes, numbers have decreased significantly more than the city average. This pattern appears to show that share scheme riders are attracted to the new bike and bus lanes away from streets and paths they were previously using. Interestingly Whitmore Street, which also has new separated bike lanes, has seen a decrease in share scheme riders in line with the city-wide trend.

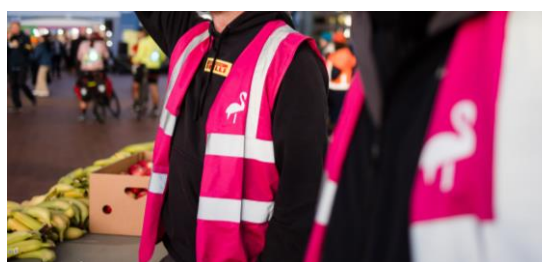


Figure 7 Flamingo at Go by bike day 2022, WCC

Table 4 Beam and Flamingo micro-mobility usage table, Data sourced from RideReport

Section	Total trips		Total change	% change
	Q1 2022	Q1 2024		
Tinakori Road (project route)	2300	2800	500	22
Bowen Street (project route)	2700	3700	1000	37
Whitmore Street (project route)	6900	5600	-1300	-19
Ballantrae Place	200	<100	>100	>-51
Sydney Street	900	600	-300	-33
City to Sea Walkway	200	<100	>100	>-51
Ramp Path	500	400	-100	-20
Museum Street	1700	600	-1100	-65
Old Government Building Car Park	1100	300	-800	-73
Lady Elizabeth Lane	6800	4800	-2000	-29
City wide share scheme ridership	279100	231100	-48000	-17



Before and after street changes Bowen Street: WCC

User diversity

The gender diversity of people riding bikes or using other micro-mobility devices like scooters is manually collected through observational surveys.

While the number of people on bikes and scooters has increased significantly based on observational counts, the proportion of female adult users has increased at a higher rate, up 41 percent compared with male adults at 24 percent (Table 5).

We acknowledge this gender data will have some potential for inaccuracy as it is based on observations, rather than self-identification. Observations only allow categorisation based on appearance so are limited to male and female. We recognise this limitation, and that gender identity and expression is broader than these binary categories.

It is also not possible to assess ethnicity through observational surveys. We recognise the limitations of this survey method and are working towards more suitable methods of collecting demographic data, such as through a city-wide transport survey. This may mean that, in future, we report at a network level, rather than a route level.

Table 5 Micro-mobility diversity counts (comparing November 2022 with November 2023)

Gender	E-bike		Change	Manual bike/mountain bike		Change	E-scooter		Change	Total		Change
	Nov-2021	Nov-2023	%	Nov-2021	Nov-2023	%	Nov-2021	Nov-2023	%	Nov-2021	Nov-2023	%
Female adult	63	93	48%	41	49	20%	9	17	89%	113	159	41%
Male adult	58	93	60%	150	160	7%	26	37	42%	234	290	24%



Figure 8 Whitmore Street - Waterloo Quay intersection, WCC



Before and after street changes Whitmore Street: WCC

Improved safety

Perceived safety

A feedback survey was distributed to assess experiences of the changes once they were installed. The survey asked 'How would you rate your experience compared to before the changes were made?' returning the following results:

People on bikes

Over 74 percent (320) of people riding bikes thought the changes improved their experience. Around a quarter of these people expressed a desire for extending the connection:

"I wish it kept going! Where the bike lane stops at the gate I often nip onto the footpath until all the way to the next bus lane heading to Karori because Tinakori Road is so narrow, and I just don't feel safe."

Around a quarter of the people who thought their experience was worse thought the bike lane is either too narrow/short, needs to be on both sides of the road or that they get slowed down behind new riders.

"The bike lanes are only wide enough for one bike, so you get stuck behind the slowest bike all the way up Bowen St or you have to nip out into the traffic lane."

Pedestrians

About 40 percent (192) of pedestrians felt there was no change in experience:

"I only walk that way when I'm running late, otherwise I go down through the cemetery - so, I guess quieter and more beautiful would prompt me to walk there more but it isn't really an issue for me."

About 35 percent of pedestrians felt their experience was worse. Some of these people were concerned with the shared path at the corner of Bowen and Tinakori, although many expressed dissatisfaction with the changes in general.

"The crossing over of bike and pedestrian traffic at the Glenmore Bowen street intersection is dangerous and disrupts the flow of both forms of traffic."

People on e-scooters and skateboards

Nearly 50 percent (19) of people using e-scooters or skateboards thought the changes improved their experience. About 25 percent (10) felt there was no improvement in their experience.

People with mobility aides

Eight out of nine survey respondents with mobility aides felt their experience was worse.

"The bus platform makes it hard to navigate the area on crutches. The platform has a strange texture and feels unstable."

Wellington City Council Residents' Satisfaction Survey 2023

The Residents' Satisfaction Survey is an annual survey conducted by Wellington City Council to gather a statistically representative sample of Wellington City's residents' engagement and satisfaction with Council's delivery services, facilities, Council Controlled Organisations and perceptions of the city. For the 2023 survey, approximately 2,000 residents responded.

Wellington City Council's April 2023 residents' satisfaction survey showed an increase in residents' satisfaction with their ability to get around the city by bike (Figure 9).

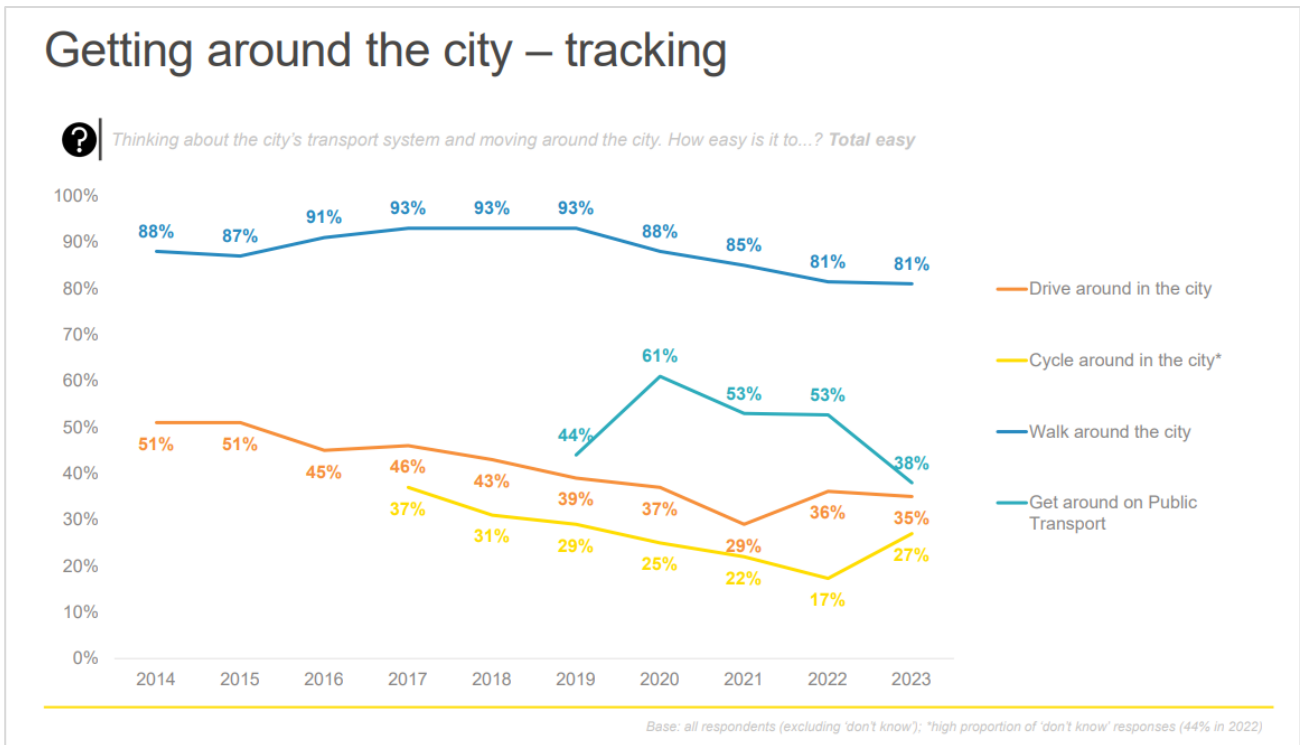


Figure 9 Wellington City Council Residents' satisfaction survey - April 2023

This finding indicates a possible emerging trend that corresponds to the addition of this route to Wellington's bike network and work underway and planned on other routes.

The drop in public transport satisfaction is likely correlated to the bus driver shortages occurring in the first half of 2023, which overlaps with the timing of the survey responses. Shortages were so severe that Metlink reported over 10 percent of services were cancelled across the network.

Actual safety

The national Crash Analysis System (CAS) only reports on crashes reported to the police and is updated up to nine months after an incident has occurred.

Early results show there has been a general decrease in crashes of all types along the project corridor since 2021, including no fatalities (Figure 10).

CAS will provide a future data source for tracking longer-term safety trends.

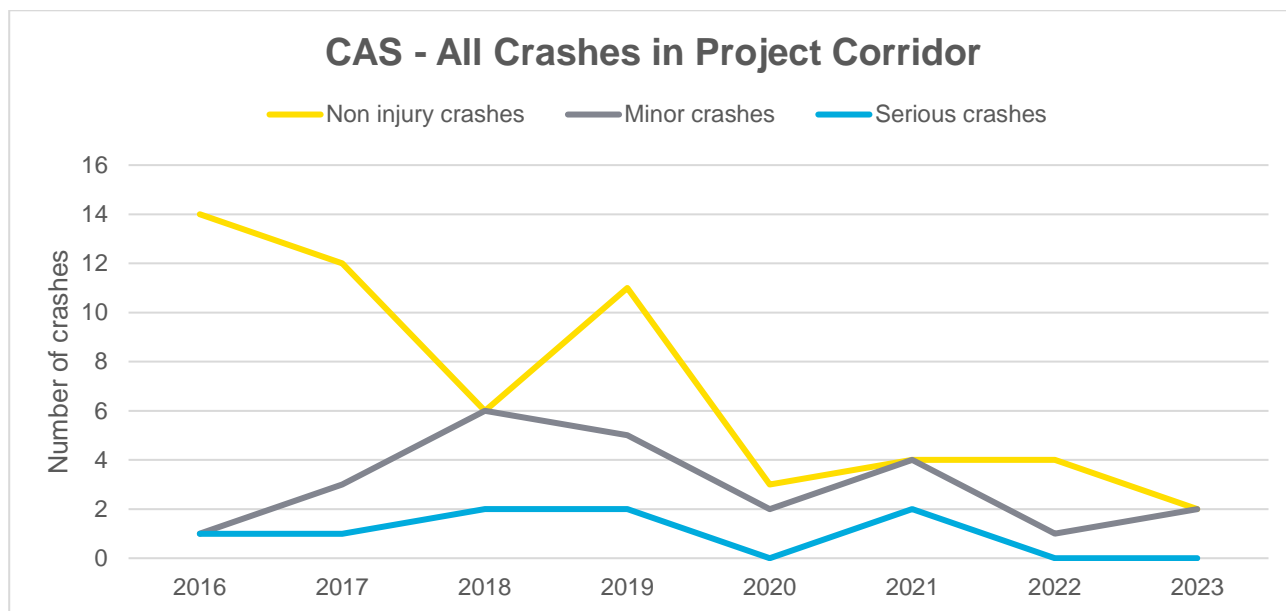
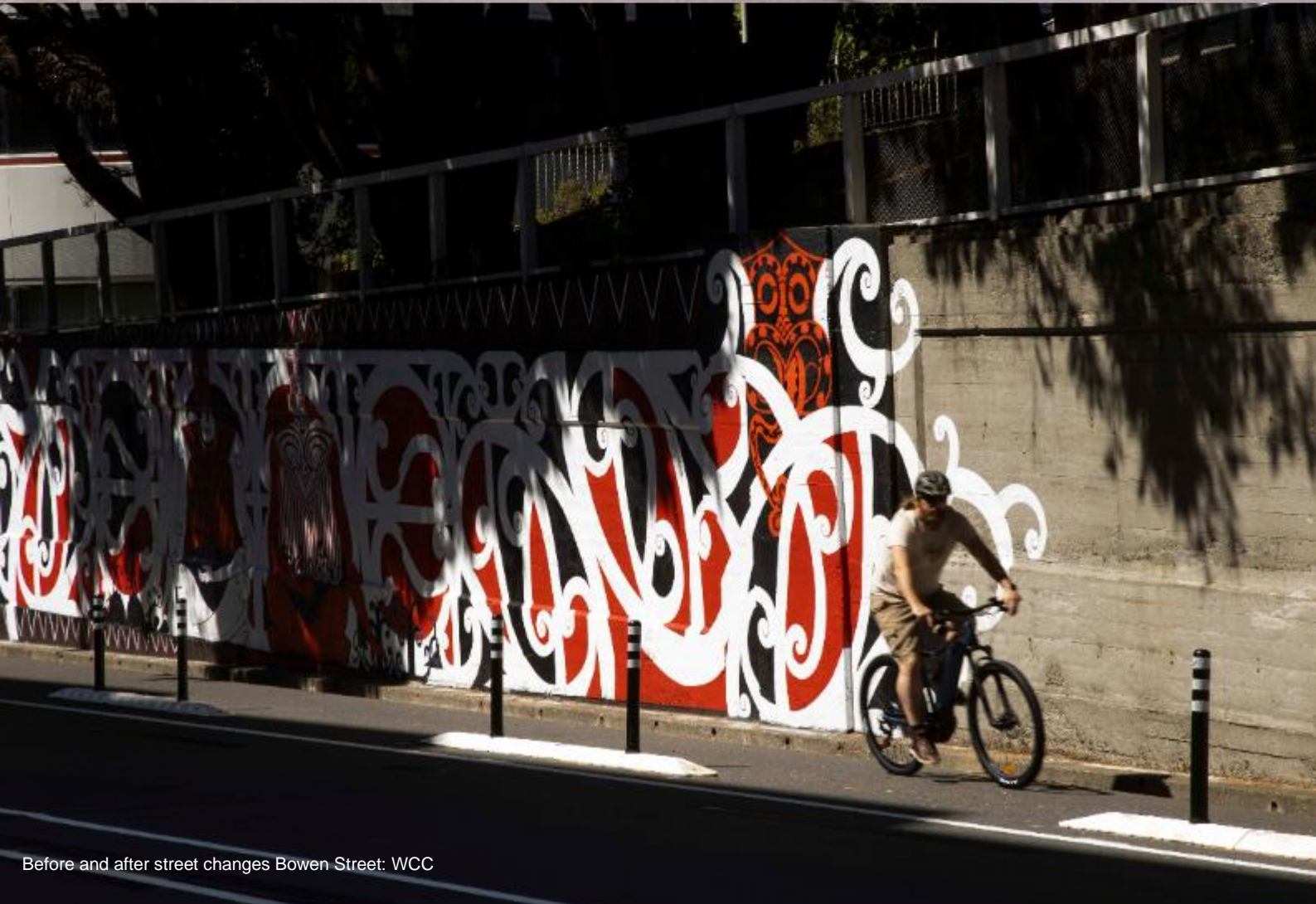


Figure 10 Early results of 2022-2023 CAS reports, Data sourced from Waka Kotahi (NZTA) National Crash Analysis System.



Before and after street changes Bowen Street: WCC

Public participation in the process

Engagement

We have received over 2000 pieces of feedback about the project from the community. Over 300 people gave us feedback on how things were working pre-installation, and over 1000 people gave feedback on the changes once installed. Nearly 640 people made a submission through community consultation on the proposed designs. This included 621 individuals and 17 organisations including businesses, residents' associations, cycling and accessibility advocates, sports groups, and beautification/historic preservation groups.

The community had opportunities to talk with Council staff about the project at workshops and meetings. During community consultation from 5 to 26 July 2022, we held a number of webinars and drop-in sessions that an estimated 250 people attended.

Post installation, we hosted guided rides along the route with several large organisations, including NZ Police, women's focused community group Frocks on Bikes, and the Ministry of Business, Innovation and Employment (MBIE). A number of themed, guided bike tours included this route, including an arts tour, secret parks of Wellington tour, and a Rainbow tour.



Figure 11 Active artists creative spaces (e-bike) tour 2023, WCC

Adjustments based on feedback

By using lower-cost materials that can be adjusted once in place, transitional improvements like these ones can be installed and in use more quickly. Early feedback from people using the route helps with minor adjustments and future permanent changes.

Below is a list of changes that have or will be made based on feedback from the community and stakeholders:

Adaptations made to designs from community consultation, before installation:

- Including off-peak short-term parking on Bowen Street to service the Tinakori village,
- Changes to the parking restrictions on St Mary Street and Patanga Crescent,
- Including red conflict markings where pedestrian paths meet Bowen Street.

Adaptations made from observations after installation:

- Adjustment to signal light phasing at the Whitmore Street/Waterloo Quay intersection to address traffic queuing,
- Improved signage to clarify movements between left-turning vehicles and people on bikes.

Adaptations to be made based on community feedback after installation:

- Adapt the Tinakori Road/Bowen Street bus stop to improve the experience for people getting on and off the bus especially those with disabilities, and to improve traffic flow given its proximity to the Bowen intersection,
- Reinstate the pedestrian crossing facility at Europe Lane.

Suggested adaptations for more permanent projects:

- Include inbound bus light at Terrace/Bowen intersection,
- Include right-turning cycle facility from Bowen Street to Tinakori Road if project scope allows,
- Reinstate the Stout Street right-turn lane from Whitmore Street if project scope allows,
- Improve sightlines on the Bowen Street/The Terrace general traffic slip lane.

Botanic Garden ki Paekākā city

Bus and bike improvements
are now installed between
Botanic Garden ki Paekākā
and the city.



Use the route and tell us
what you think, feedback
closes **5pm, 8 May**



Submit your feedback at
[transportprojects.org.nz/
botanicfeedback](https://transportprojects.org.nz/botanicfeedback)

Absolutely Positively
Wellington City Council

Let's GET Wellington MOVING



Place-making – sites of significance

Te Āti Awa Taranaki Whānui has been working in partnership with Wellington City Council to bring an ao Māori perspective to the development of the city's bike network.

As routes and connections are planned, places of cultural and historical significance are being identified and highlighted. These include awa that once flowed through these areas and are now piped underground.

Along this particular route, four awa were identified and highlighted (Figure 13), including with a mural.

Further information on these awa is available online: <https://wellington.govt.nz/arts-and-culture/heritage/cultural-and-historical-sites-along-bike-network/botanic-garden-ki-paekaka-to-the-waterfront>



Figure 12 Sites of historical significance along the project route

The mural named Kaitoa was painted by artist Ariki Brightwell. Kaitoa embraces the historical kainga (food garden) along the Bowen Street hillsides and other māramatanga (meanings). The main subjects at the centre of the mural are two atua Rongomatāne and Haumietiketike – gods of cultivated and uncultivated food respectively.

Further information about the symbolism and storytelling of the work can be found here: <https://wellington.govt.nz/news-and-events/news-and-information/our-wellington/2023/02/ariki-brightwell-mural>

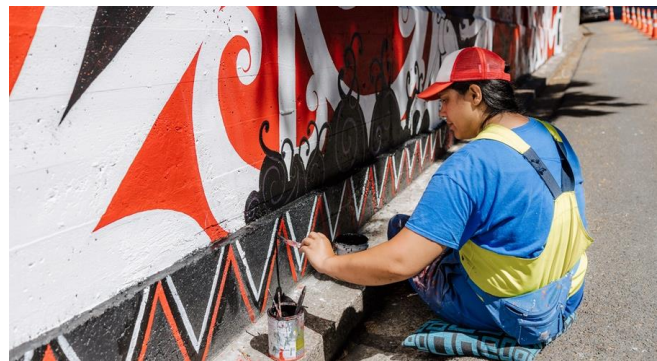


Figure 13 Ariki Brightwell painting Kaitoa mural 2023, WCC



Figure 14 Kaitoa mural Bowen Street 2023, WCC



Mana whenua dawn blessing (top), awa marking (bottom): WCC

Retail impacts

Wellington City Council’s Changing Lanes report documents the extent that changes to street layouts affect nearby businesses.

The retailers near this route are situated on Tinakori Road, east of Bowen Street, where no parking changes were made, although concerns were raised about the displacement of parked vehicles into this area. The Tinakori Road data set is made up of 15 retailers.

The August Changing Lanes report had the following findings for this route (Figure 15):

Tinakori Road retail activity compared to suburban retail activity

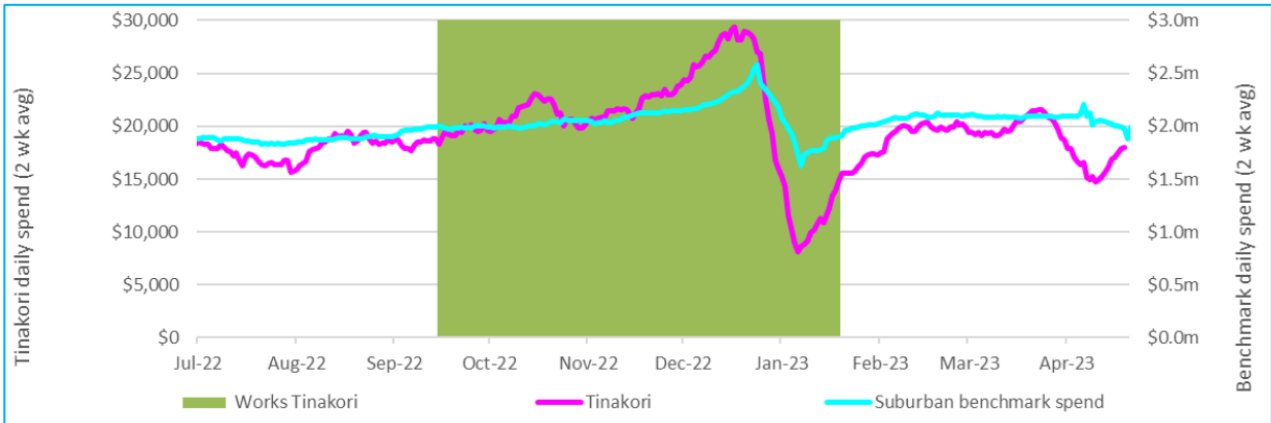


Figure 15 [wellington.govt.nz/-/media/wellington-city/poneke-pulse/files/2023-changing-lanes-retail-report-august.pdf](https://www.wellington.govt.nz/-/media/wellington-city/poneke-pulse/files/2023-changing-lanes-retail-report-august.pdf)

Observations based on this data found there was no significant change during and immediately after the period of installation work for this project. A Christmas-induced activity spike was followed by a New Year decline with recovery as normal.

Vehicle travel time

There has been a slight increase to vehicle travel times through the project area (Table 6).

Outward bound (away from city) there was a 4 second increase (2.1% increase) from Bowen Street and The Terrace to The Rigi, and 20 seconds (7.8% increase) from Waterloo Quay to The Rigi.

Inward bound (towards the city) there was an 11 second increase (6.1% increase) from The Rigi to Bowen Street and The Terrace (1.8km), and +6 seconds (2.3% increase) from The Rigi to Waterloo Quay (2.2km).

This travel data (Tomtom Traffic Stats) is comparing June, July and August in 2022 with the same months in 2023.

Table 6 Vehicle travel time (Tomtom Traffic Stats) comparing July and August 2020/2023

Route		City - Inward			City - Outward		
		Distance	% change in travel time	Seconds change in travel time	Distance	% change in travel time	Seconds change in travel time
Project route	Glenmore Street at The Rigi to/from Bowen Street and The Terrace	1.83km	6.1%	11	1.76km	2.1%	4
Project route	Glenmore Street at The Rigi to/from Waterloo Quay	2.22km	2.3%	6	2.21km	7.8%	20
Control route	Upland Road (Kelburn Viaduct) to/from The Terrace at Salamanca Road	2.03km	1.6%	4	2.03km	0.6%	2
Control route	Aro Street at Willis Street to/from Raroa Road at Plunket Street	2.16km	-1.4%	-3	2.16km	-2.2%	-5
Control route	Glenmore Street at The Rigi to/from Karori Road at Hatton Street	2.19km	1.4%	3	2.19km	1.2%	3



Before and after street changes, Bowen Street: WCC

Speed of delivery

This project was delivered according to the June 2021 Council decision in the 2021-2031 Long Term Plan to accelerate and rapidly roll out a Wellington bike network. The Botanic Garden ki Paekākā to City project took 18 months from initiation to the end of construction. This is significantly faster than comparable projects being delivered using traditional processes but not as fast as originally conceived.

Construction on this project started in October 2022, and the full route was in use by March 2023. The planning stages were delayed by legal proceedings relating to the Newtown judicial review and a shift to a more traditional consultation process, which pushed the installation out by around six months. The construction period was extended due to longer than expected civil works and resourcing constraints due to cyclone Gabrielle.

For comparison, the delivery timeframes of other cycling projects led by Wellington City Council and other agencies can be seen in the summary here from 2021 (Figure 18):

Past/ongoing project timelines

Project	Timeline		Status
Island Bay (current layout)	2013 – 2016	3 yrs	In use
Newtown Connections	2014 – present	7 yrs+	On hold (LGWM)
Evans Bay (Carlton Gore Rd to Greta Point)	2015 – present	6 yrs+	Under construction
Evans Bay (Greta Point to Cobham Dr)	2015 – present	6 yrs+	Planning
Kilbirnie Connections (Crawford Rd, Evans Bay Pde, Rongotai Rd, Te Whiti St, Upper Wilson St)	2015 – 2019	4 yrs	In use
Kilbirnie Connections (Childers Tce, Coutts St, Lower Constable St, Queens Dr, Rongotai Rd (town centre), Tirangi Rd)	2015 – present	6 yrs+	On hold (funding)
Miramar Connections	2015 – present	6 yrs+	On hold (funding)
Cobham Drive	2016 – 2021	5 yrs	In use
Island Bay (redesign)	2016 – present	5 yrs+	On hold (funding)
Miramar town centre (Shelly Bay Rd to Tauhinu Rd)	2016 – present	5 yrs+	Under construction
Miramar town centre (Tauhinu Rd to Park Rd)	2016 – present	5 yrs+	On hold (funding)
Hutt Road	2017 – 2019	3 yrs	In use
Oriental Bay	2017 – 2018	2 yrs	In use
Thorndon Quay	2017 – present	4 yrs+	Planning
Wakely Road shared path	2017 – 2020	3 yrs	In use
Brooklyn Road (Innovating Streets)	2020 – present	1 yr+	Trial

Figure 16 From Tonkin and Taylor Cyclways Masterplan Refresh 2021

Ongoing data collection

Additional monitoring and evaluation will be required following the delivery of other related projects in this part of the city including Karori connections, Thorndon connections and Wadestown connection as these will connect the existing route to main population catchments and continue to deliver on the programme objectives.

The following data sources will be used for ongoing monitoring:

- New digital sensors will replace electronic loop counters and observational snapshot counts for providing data on the number of users on the route.
- Crash Analysis System (CAS) only reports on police reported crashes and is updated six to nine months after an incident has occurred. CAS data will provide a future data source for more long-term safety trends.
- Bus travel times and patronage will continue to be monitored in partnership with Greater Wellington Regional Council.

- Vehicle travel times throughout the city will continue to be monitored as the network extends into more suburbs.
- City transport surveys and other data sources will be considered as a more suitable source of information on micromobility user diversity.
- The annual residents' satisfaction survey and a Pōneke travel survey will continue to be conducted yearly to track travel perceptions of the Wellington region.
- Retail data will continue to be monitored and future Changing Lanes reports will analyse retail trends in other parts of the city.

Absolutely Positively Wellington City Council

Me Heke Ki Pōneke