

Report 17.95  
Date 2 May 2017  
File BOBT-2033272107-77

Committee Sustainable Transport Committee  
Authors Melanie Thornton, Manager Sustainable Transport  
Gail Reeves, Service Delivery Adviser, Bus & Ferry Operations  
Kate Bevin, Sustainable Transport Coordinator

## Bike Racks on Buses

### 1. Purpose

To report back to the Committee on the outcome of the Bike Racks on Buses Trial.

### 2. Commentary

Bike racks on buses was identified in the Long Term Plan 2012-22 as a project the Council wished to progress. The main benefits were identified as encouraging integration of active modes with public transport, encouraging reduced use of the private car and reduced vehicle emissions.

A report to this Committee on 11 May 2016 outlined the need for a trial to investigate any potential issues with bringing bikes racks on buses into the Wellington region. The report outlined three phases to determine a good understanding of the issues involved. These included an investigation phase, a testing phase and a small trial with five racks. The report also included the initial findings from the investigation phase which involved trips to Christchurch and New Plymouth to understand operational and safety issues in each location.

The test phase included testing equipment installation, on-road testing including operation at bus stops, terminals, hills, tight turns etc with Mana Coach Services, along their main bus routes but also in Wellington CBD and surrounds.

The trial phase was designed to test the operational and user procedures, in a live environment. The trial involved the use of bike racks on Mana Coach Services buses. The trial was small in scope with only five racks involved and therefore was not reflective of a larger scale roll out of bike racks on buses. The trial was not designed to test user uptake, however a survey was undertaken to determine user interest in a broader use of bike racks on buses.

In summary the trial was successful, all parties had positive reports and safety concerns were addressed. Officers recommend that with a larger roll out of bike racks on buses, consideration be given to the fact that there will be new bus routes and new buses in operation in 2018. Further testing will be required on the new bus routes and the new bus types.

### 3. Test phase

The test phase involved Mana Coach Services installing one bike rack on a bus and obtaining certification for this. The testing was to determine any infrastructural, manoeuvrability and visibility issues on all Newlands bus routes and bus stops, the Wellington CBD and other parts of Wellington including hilly suburbs such as Mt Victoria and Khandallah. This was to ensure there were no operational or safety issues arising from the use of the bike racks.

The test phase ran during May and June 2016 over two weekends with test drivers observed by Mana Coach Services management and GWRC staff. The testing also helped determine the training needs of bus driving staff and was used to inform the development of the bike rack user brochure. Any policy requirements were to be investigated to support how and when the bike racks can be used.



#### 3.1 NZTA assessment of safety

Although the use of bike racks on buses is legal in New Zealand, NZTA undertook a safety assessment of the test bike rack following a complaint from a member of the public. NZTA identified a number of potential safety issues and GWRC and Mana Coach Services have put a number of measures in place as a result of this assessment. These include:

- a. The fitting of a warning light to indicate to the driver when the bike rack is deployed, with or without a bike on the bike rack. This was

implemented by Mana Coach Services on each bus during the trial. This facility is also recommended to be included in the new PTOM contracts.

- b. Designing driver education around the potential risks of driving with a bike rack deployed, especially in built up areas. Education materials needed to assist in reducing any risks to users. Both of these were addressed during the trial with Mana Coach Services providing driver training prior to drivers operating buses with bike racks on, and GWRC providing users with information on how to use a bike rack and running “have a go” sessions to enable users to practice using the bike racks.
- c. Making sure that if the bike rack itself is removed at any point, the bike rack mounting must have a protective bumper to reduce the risk of injuries from pedestrians connecting with the mounting. A mounting cover was designed and was fitted on all Mana Coach Services buses that have the bumper adaptations for bike racks when used in service with no bike rack installed. This is also to be recommended to be included in the new PTOM contracts.

Remaining concerns articulated by NZTA related to managing any dangerous loads on a bike or from the bike itself. GWRC has included the following in the instructions to users: “You must remove any loose or dangerous items from the bike that could fall off while the bus is moving”.

### **3.2 Wellington City Council**

Before the trial phase Wellington City Council (WCC) staff sought clarification on the trial as there were some concerns regarding bus stop lengths, loading bikes on buses in the Golden Mile and potential pedestrian safety issues. GWRC staff met with WCC roading engineers and outlined the nature of the trial and presented information to WCC councillors prior to the commencement of the trial. The Council requested a copy of this report following the trial.

## **4. Trial phase**

The trial operated for 6 months from 1 October 2016 until 31 March 2017. These dates were chosen because the summer months would see more bike users out and about with a higher possibility of them using the bike racks. The November earthquake probably had an effect on usage, as user numbers dropped and were relatively low during the November and December 2016 period.

Eight bike racks were purchased for the trial and five racks were used each day on a limited number of Newlands bus services. Two racks were used as operational spares and one rack was used for demonstration purposes. An average of 150 bus trips per week were run with a bike rack attached.

Newlands bus routes were chosen for the trial as they operate through the busy CBD bus stops and along one of the major cycle ways into and out of the city (Ngauranga Gorge). Newlands bus routes also have hilly topography and road conditions that were thought to encourage users to view using bike racks as an alternative transport option.

#### 4.1 Driver training

Mana Coach Services, in conjunction with GWRC staff, designed and delivered training materials to all bus driving staff involved in the trial. This included a training manual, a question and answer sheet, familiarisation with the operation of the bike racks and on road driving training.

Driving staff were initially apprehensive about the addition of bike racks. A deployed bike rack extends the length of a bus by approximately one metre, so drivers have to take extra care when manoeuvring. Drivers were also concerned about their responsibilities regarding the loading and un-loading of bikes. After completing their training, drivers quickly adapted their driving style for the extra bus length and information to users made it clear that drivers were not responsible for the loading and unloading of bikes on the bike racks.



#### 4.2 Bus routes operated during the trial

The bike rack trial operated on selected Newlands bus services on route numbers 52, 54, 55, 56, 57 and 58. Timetable information of trips with bike racks on them was made available on the Metlink website. Timetables indicated the services with bike racks available by adding the letters “BRB” as a foot note code.

#### 4.3 Measuring use of the bike racks

The actual individual use of the bike racks was recorded by the bus driver in the Mana Coach Services electronic ticketing system. The total count and where passengers boarded with bike racks is reported in section 5.

#### 4.4 Engagement with public

The need for good communications prior to and during the trial phase was considered to be vital. Cycling advocates were engaged with prior to the trial to ensure there was wide understanding amongst their members of the nature and extent of the trial.

The public were encouraged to visit the Metlink website for information about the bike racks. A brochure was created to provide information on how to use the bike racks, which was available on the bus services and as a downloadable pdf on the Metlink website.

Four “Have a Go” events took place over two weeks prior to the trial starting and were promoted on Facebook. The first one took place at the Johnsonville Community Centre and the other three took place in Odolins Plaza on the Wellington Waterfront. Members of the public were encouraged to practice putting their bike on the bike rack to help them gain confidence before using them on an actual bus journey, and voice any questions they had about the bike racks. Bike Racks on Buses Trial brochures were given out and nearly 80 people participated in the events. Positive feedback was received at these events by most people about the trial.

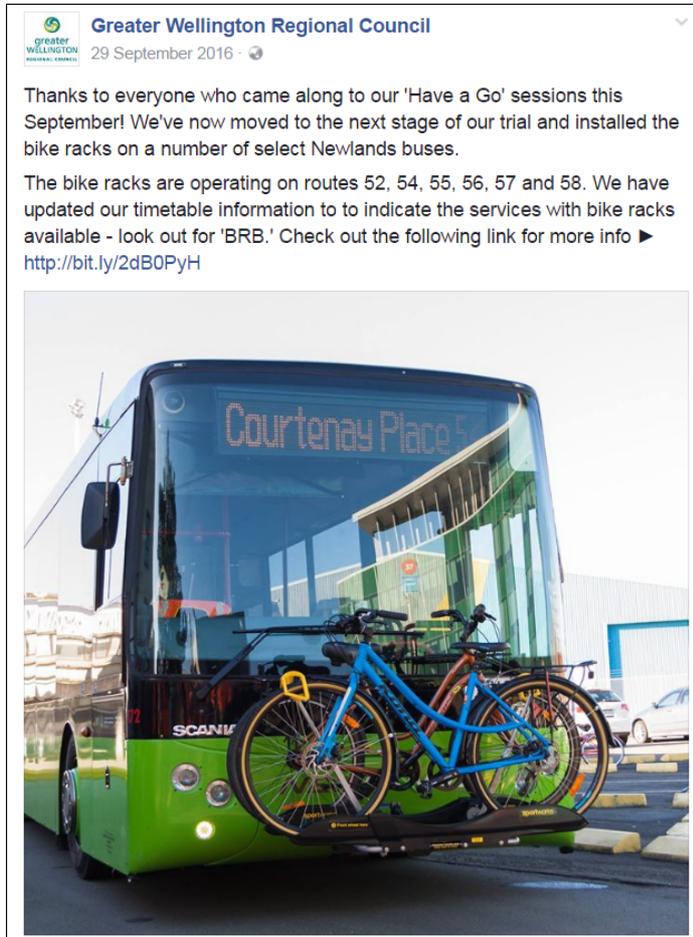
Below are some photos from the “Have a Go” sessions on the Wellington Waterfront:



A poster was produced for the trial and was distributed on bus services, at libraries, community centres and other WCC facilities informing people of the trial.

A number of Facebook posts about the trial were posted on the GWRC Facebook page. These were shared on other Facebook pages such as Cycle Aware Wellington, Cycling Action Network. The trial was also promoted through email networks such as WCC’s Smart Cities Cycle newsletter and the Cycle Aware Wellington newsletter.

Further promotion was also done through networks such as Metlink’s Twitter account and through Neighbourly. Users of the bike racks were able to provide feedback about the trial through the Metlink website or through the GWRC Call Centre.



An example of a Facebook post:

#### **4.5 How issues were to be reported and resolved**

GWRC and Mana Coach Services developed a process to monitor incidents and issues that could arise during the trial. Initially daily and then weekly communication and feedback took place between the stakeholders. Over time it became obvious that the trial and use of the bike racks was causing no operational problems.

GWRC and Mana Coach Services developed a good working partnership during the testing and live phase of the trial. This enabled any potential issues to be assessed and/or resolved quickly and professionally.

The Metlink Call Centre was briefed on the trial and they monitored and collected public feedback. The Call Centre reported a small amount of positive feedback regarding the trial.

#### **4.6 Measures used to assess the trial's effectiveness**

A number of factors were determined to measure the effectiveness of the trial. These included numbers of people using the bike racks, feedback from the public and Mana Coach Services, any reported safety or operational concerns and a survey of users.

##### **4.6.1 Patronage figures**

The average number of users of the bike racks per month was 17 and the total for the 6 months was 105. The majority of trips taken during the trial were for

journeys leaving the city and heading up the Ngauranga Gorge to Johnsonville and Newlands. International experience shows that the more buses and bus routes that have bike racks available, the more usage they will have. This trial involved a small number of buses fitted with bike racks, but the number of uses is encouraging.



#### 4.6.2 Space at bus stops and pedestrian issues

There were no reports of insufficient space at bus stops in the CBD. This may have been because of the small numbers of buses with bike racks on them and the small number of users.

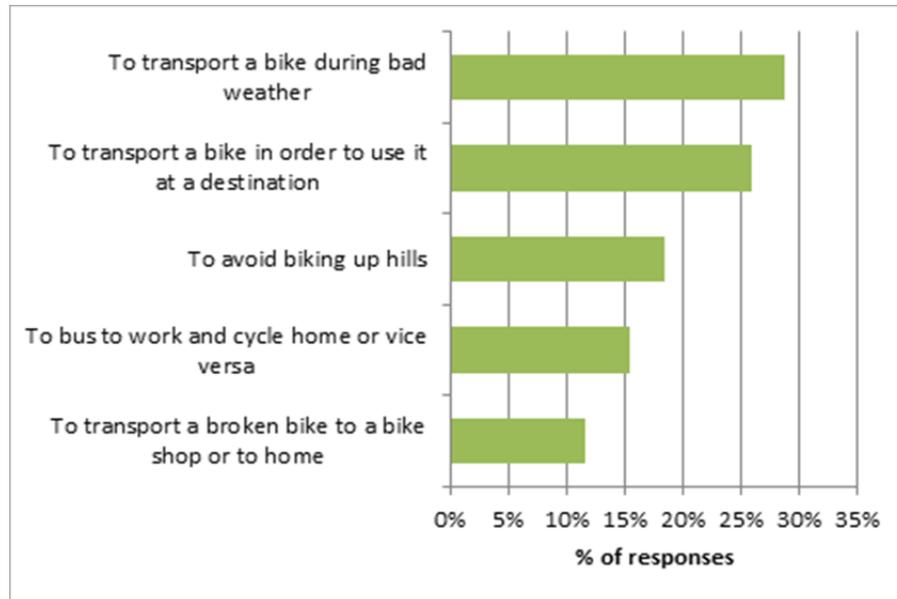
While this trial revealed no pedestrian safety issues, a larger roll out of bike racks on buses will need to ensure that any pedestrian safety issues are considered and prepared for. In Wellington City, along the Golden Mile in particular, there is a high concentration of pedestrians and the potential for risks to pedestrian safety could be more significant.

#### 4.6.3 Survey

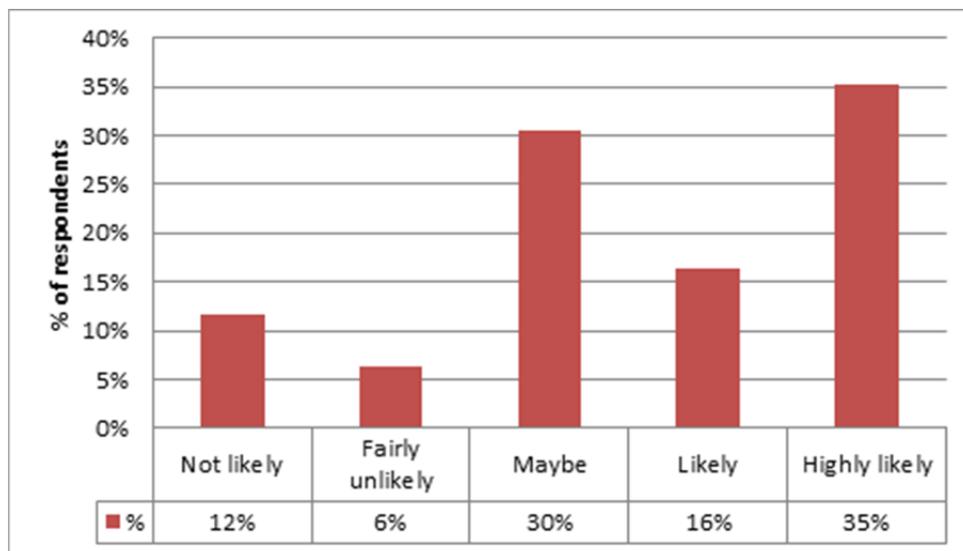
A survey was undertaken to find out information about people's use of the bike racks during the trial and their potential future use; how people found out about the bike racks; what information they found useful; and reasons for using the bike racks. A total of 128 responses were received and from those 67% had heard of the bike racks on buses trial, 30% had not heard about it and 3% were not sure.

People found out about the trial in various ways, with the following channels being the most popular ways: Facebook 28%; media article 23%; and word of mouth 20%.

The following graph shows that the main reasons why people would use the bike racks is to transport a bike during bad weather and to transport a bike to use it at a destination. Just 9% of survey respondents said they are unlikely to use a bike rack on a bus, indicating that there is high demand for bike racks on buses in the Wellington region.



The following graph shows how likely respondents are to use the bike racks, with 81% of respondents saying they would 'maybe', 'likely' or 'highly likely' use the bike racks.



Nine out of the 128 respondents said they had used a bike rack on a bus during the trial and out of those respondents seven said they found it either easy or very easy to use the bike racks. The survey also asked how likely respondents were to use a bike rack on a bus if they were available on all public transport routes in the Wellington region and 82% said they would be 'maybe likely', 'likely' or 'highly likely' to use the bike racks.

Respondents were also asked how likely the availability of the bike racks in the Wellington region will encourage them to travel by bike more often. Sixty five percent said it would either ‘maybe’, ‘likely’ or ‘highly likely’ encourage them to travel by bike more often. Of those that said it wouldn’t encourage them 16% (22 people) said it was because they already cycle everywhere.

Respondents were asked if they had any comments to add about bike racks on buses in Wellington and 70% of the comments made were clearly positive towards the implementation of the bike racks. This is another supporting measure towards the implementation of bike racks on buses.

#### 4.6.4 Feedback and overall success

There has been no negative feedback from users reported either to Greater Wellington Regional Council or Mana Coach Services through the complaints process.

Most of the feedback from users and potential users of the bike racks has been positive and encouraging with many people supporting the roll out of the bike racks across the region. These comments have come through the “Have a Go” sessions, social media posts, the Bike Racks on Buses survey, and direct feedback to Metlink. There have been some queries about the operation of the bike racks and how they will work in Wellington, such as whether it will affect the running time of bus services and the availability of the bike racks. These questions will be addressed with a larger roll out the bike racks across the region ensuring users are properly informed about the bike racks and how to use them.

Mana Coach Services reported some positive comments from users to drivers. They also reported that the trial had been an operational success. After some initial concern expressed by drivers, the operation of the bike racks just became a normal part of operating a bus and drivers and managers’ report no problems.

Given that the Bike Racks on Buses trial was designed to test the operational and user procedures developed in the test phase, this trial was considered successful by the bus operator, GWRC officers and users. No negative feedback was received and the information provided to users was considered helpful and informative. There were no issues drawn to our attention about the timetable information on the Metlink website.

## 5. Future issues

Discussions with bus operators will need to take place in early 2018, prior to the actual roll out of any further bike racks on buses. This is because a process needs to be agreed about how the roll out of bike racks on buses will proceed alongside the implementation of the new bus routes and the contracts being introduced. In addition the need to provide good quality information for the public and driver training will be important.

It is recommended that an additional testing period be implemented prior to the larger roll out of bike racks on buses under the new PTOM contracts and the new bus routes.

## **6. Communication**

Further communication on this will be provided prior to the new PTOM contracts coming into effect in 2018.

## **7. Consideration of Climate Change**

The matters requiring decision in this report have been considered by officers in accordance with the process set out in the GWRC Climate Change Consideration Guide.

### **7.1 Mitigation assessment**

*Mitigation assessments are concerned with the effect of the matter on the climate (i.e. the greenhouse gas emissions generated or removed from the atmosphere as a consequence of the matter) and the actions taken to reduce, neutralise or enhance that effect.*

Officers have considered the effect of the matters on the climate and recommend that the effect is not significant. Providing bike racks on buses will enable some passengers to use active and public transport modes instead of a private car, which will contribute to an overall reduction in gross regional greenhouse gas emissions. As bike rack usage data is collected, the impact upon emissions can be estimated.

### **7.2 Adaptation assessment**

*Adaptation assessments relate to the impacts of climate change (e.g. sea level rise or an increase in extreme weather events), and the actions taken to address or avoid those impacts.*

Officers recommend that climate change impacts have no direct relevance to the matters addressed by this paper.

## **8. The decision-making process and significance**

No decision is being sought in this report as this is an update to the Committee.

### **8.1 Engagement**

Engagement on this matter is unnecessary at this stage and will be determined during the development of processes for the larger roll out of bike racks on buses in 2018.

## **9. Recommendations**

*That the Committee:*

- 1. Receives the report.*
- 2. Notes the content of the report.*

Report prepared by:

**Melanie Thornton**  
Manager, Sustainable  
Transport

Report prepared by:

**Gail Reeves**  
Service Delivery Adviser, Bus  
& Ferry Operations

Report approved by:

**Wayne Hastie**  
General Manager  
Public Transport

Report prepared by:

**Kate Bevin**  
Sustainable Transport Coordinator