

Report 12.497  
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Committee Economic Wellbeing  
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## Wellington City Bus Review

### 1. Purpose

To approve the Wellington City Bus Review network concept that will be used as the basis for the implementation of changes to bus services within the Wellington City Bus Review study area under the new Public Transport Operating model (PTOM).

### 2. The decision-making process and significance

The matter requiring decision in this report has been considered by officers against the requirements of Part 6 of the Local Government Act 2002 (the Act).

#### 2.1 Significance of the decision

Officers have considered the significance of the matter, taking into account the Council's significance policy and decision-making guidelines. Officers recommend that the matter be considered to have medium significance.

Officers consider the matter to have medium significance due to the high level of public interest in this matter and the likelihood that this interest will continue through the course of the project.

Changes to bus services as a consequence of the review will affect the users of those services. Overall the outcome from the review will improve service levels but some individuals will be negatively impacted.

#### 2.2 The decision-making process

Officers have taken into account the principles set out in section 14 of the Act and the need to manage the Council's resources prudently.

Officers advise that there is no process for making this decision explicitly set out in the Act or any other enactment.

### 3. Options

In light of this assessment of significance and the other factors relevant to the process for making this decision, officers have identified and assessed the reasonable practicable options as follows;

	Option 1 – Adopt network concept	Option 2 – Further revise network concept	Option 3 –Do nothing (status quo retained)
Benefits in terms of the 'four well-beings'	<p>Greater community access to public transport</p> <p>PTOM<sup>1</sup> units can be formulated with the intention of achieving better value for money</p> <p>Reduction in inefficiency means less peak buses on the road and less pollution</p>	<p>It is unlikely that a material increase in network access would be a result of further revision to the Option 1 network</p> <p>Deferment of the PTOM contracting process resulting in deferment of achieving value for money in the contracting process</p> <p>It is unlikely a material decrease in inefficiency could be made by continued revision of the network</p>	<p>Current network coverage remains</p> <p>Expiry of/continued roll over of contracts</p> <p>Current deficiencies remain</p>
Costs in terms of the 'four well-beings'	<p>Potential negative impact on a small number of people who will lose their current services</p> <p>Revised network is cost neutral in terms of budgets</p> <p>Greater potential to achieve RLTS patronage levels</p>	<p>Unlikely to be able to eliminate all negative effects on current users</p> <p>Project continues at fiscal cost to Council and is not budgeted</p> <p>There is unlikely to be any further material advantage to achieve RLTS patronage levels above that of Option 1</p>	<p>Network remains complex and inefficient</p> <p>Opportunities to achieve RLTS patronage levels are limited</p> <p>Unable to improve value for money for funders and users</p>
Promotion of community outcomes	<p>Capacity will meet demand</p> <p>Increase in accessibility to the network for our communities</p> <p>Increase in</p>	<p>Officers consider there is unlikely to be a material change to our ability to provide additional capacity, increased accessibility, increased frequency ,</p>	<p>Current capacity issues will remain</p> <p>Levels of accessibility will not change</p> <p>Service levels will remain as current</p>

<sup>1</sup> PTOM- Public Transport Operating Model

	<b>Option 1 – Adopt network concept</b>	<b>Option 2 – Further revise network concept</b>	<b>Option 3 –Do nothing (status quo retained)</b>
	<p>weekend, evening and off-peak services</p> <p>Less inefficiency in the network through reduction in duplication and better planning of services</p> <ul style="list-style-type: none"> <li>- increase public transport boarding's per capita</li> <li>- increase ease of making a journey across the region by public transport</li> <li>- Increase access to public transport</li> </ul>	<p>or a reduction in inefficiency with further revision of the network</p>	<p>The network remains inefficient with congestion and duplicated routes</p>
Impact on capacity to meet present and future needs	<p>The revised network sets the stage for the formulation of PTOM units</p> <p>The revised network is built to adapt to the future Integrated Ticketing Project as well as the Public Transport Spine Study</p>	<p>Further revision of the network will defer the formulation of PTOM units</p> <p>Further revision of the network will result in potential delays for associated projects</p>	<p>There is potential to reorganise the current network into PTOM units. However, the units would retain inefficiencies of the current network and thus not achieve greatest value for money.</p> <p>A do nothing approach would result in potential delays for associated projects</p>

Officers consider that, in light of their assessment of significance, any more intensive identification and assessment of options than has been undertaken already is not warranted.

#### 4. **Community views and preferences**

Officers have also considered the need to take account of the community's views and preferences in relation to this matter.

Views and preferences are known to Greater Wellington due to extensive consultation with the people affected by the proposed bus network changes. Officers consider that, in light of their assessment of significance and the other factors relevant to the process for making this decision, further engagement with the community to identify views and preferences, such as through formal consultation, is not warranted at this stage.

Public meetings were held in February and March of this year where extensive feedback was received, resident group meetings were held in June and July with follow-up meetings to these in November; in parallel to these meetings we have engaged with stakeholders and public transport advocates on a regular basis. Officers have also held informal meetings with resident/stakeholder representatives to resolve concerns. The network concept and design has been revised based on the feedback received from the public consultation and after each set of meetings detailed above.

#### 5. **Background**

Greater Wellington has an ongoing programme for area-wide reviews; the policies that underpin the programme are contained within Wellington Regional Public Transport Plan 2011-2021 (RPTP). The RPTP requires that all scheduled transport services be reviewed at least once every five years, to ensure that they continue to meet the needs of the community and reflect changes such as shifts in demand (Policy 1.5).

The current operational bus network design in Wellington City has not been significantly reviewed for more than 20 years. The lack of review and the lack of a network concept to guide the ongoing network design has resulted in a network which,

- is inefficient through duplicated services
- both under and over supplies services to certain parts of the study area
- has not evolved sufficiently to meet the changing needs of the communities
- is complicated for users and does not promote ease of use

**Figure 1** below is a schematic diagram of Wellington City's current network design. It illustrates many overlapping and low frequency bus routes, covering significant parts of the study area. The current network comprises 44 bus routes (excluding Hutt Valley services).

# Wellington Bus Service Review

## Existing Wellington City Bus Network

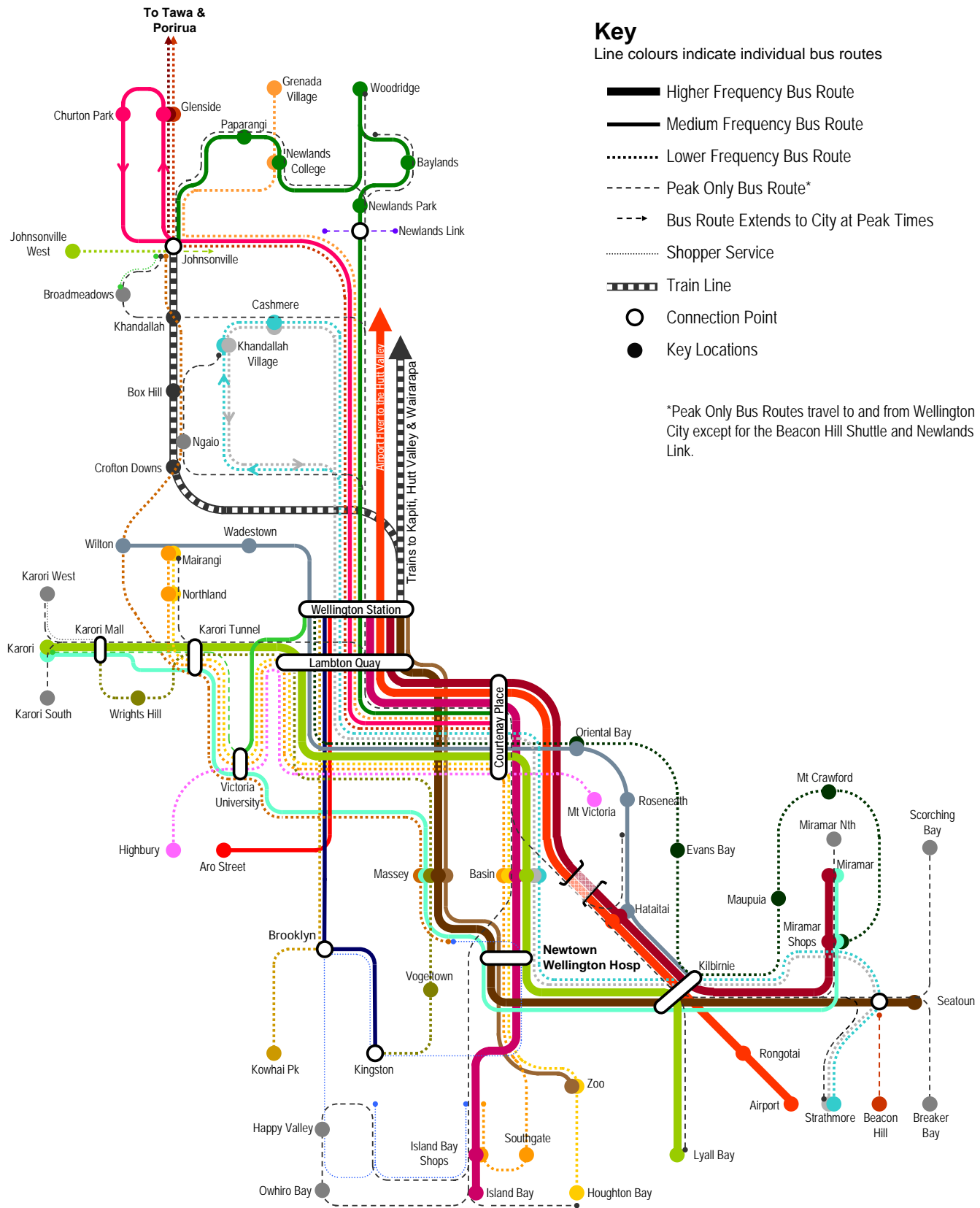


Figure 1

In September 2009 the Economic Wellbeing Committee (Report 09.528) agreed the terms of reference and parameters for the Wellington City Bus Review (Review). In 2011 the Committee adopted a revised terms of reference for the Review (Report 11.16). The primary objective of the Review was:

*“to improve value for money by improving the effectiveness and efficiency of the public transport network within the study area. Other objectives include improved reliability, coverage, connections, access, and service levels, and ensuring that capacity is matched to demand.”*

Over the first two years of the review a number of key activities were undertaken. In November 2009 a number of resident focus group meetings were held to obtain some initial ideas for services and issues with the current network. This was followed in June and July 2009 with an initial public consultation seeking feedback on the existing bus network. Further focus groups were held in June 2010 and November 2011 to test various ideas and concepts. By January 2012, following all the feedback received to this point, and with the assistance of MRCagney (transport consultants to the Review) Greater Wellington officers had designed a proposed future network for the study area which was based on the following concepts:

- an easier to understand network where services followed consistent routes during all hours and days of their operation
- better connections, making it easier to reach a greater range of destinations
- greater access to high-frequency all day routes
- more buses throughout the day, in the evening and at weekends in many areas
- improved bus flows in the CBD by
  - reducing the number of buses coming into the CBD, by improved utilisation and loading of buses and increased requirements to transfer
  - the use of three key routes into the CBD – the Golden Mile, the Terrace, and a peak-only overflow route
- a three layered approach made up of;
  - **core services** - high frequency (at least every 15 minutes, 7 days a week) connecting main transport corridors, suburban town centres and important destinations
  - **secondary services** – lower frequency (30-60 minutes mostly 7 days a week) covering lower populated areas and some running into the CBD and some connecting onto core services at local town centres

- **peak-only services** – peak-only service supplementing the all-day routes that would depend on sufficient demand, with these services providing the only public transport to some fringe areas
- penalty free transfers between buses operated by the same company
- transfers at strategically important stops timed to ensure a seamless journey for the customer

It was felt at the time that these proposed concepts and resulting proposed network design matched well with the Review objectives, and that it was a good starting point for a second round of public consultation.

In February 2012 this proposed network design was published and public feedback was requested. Over 6,500 pieces of feedback were received and the findings of the public consultation were reported to the Economic Wellbeing Committee (Report 12.173) in April 2012.

## 6. Revised network concept

The substantial feedback from the February 2012 public consultation and subsequent meetings with resident groups and other stakeholder groups in July and November 2012 has enabled officers to revise the proposed network's concept and design to better meet community expectations whilst still meeting the Review's objectives.

The proposed revised network is built on many of the key concepts detailed in section 5 of this report, but some changes are proposed.

We propose that the following concepts be added:

- a whole network approach is considered at all stages of the network design
- an integrated approach is adopted, and thus the impacts and opportunities of related and associated projects are considered e.g. the Public Transport Spine Study and integrated ticketing
- stakeholder and community engagement will be undertaken at appropriate times throughout any wider network change in order to test options and obtain feedback

and the following be changed (items in *italic*):

- better connections, making it easier to reach a greater range of destinations, *which is assisted by the greater use of through routing which reduces the need to transfer;*
- improved bus flows in the CBD by *reducing the number of buses coming into the CBD (Industry best practise aims for 1 bus per minute in one direction to allow for delays, early running and passenger loading):*

- *improved utilisation and loading of buses through the use of more through routing of service, and vehicle sizes and service frequency better matched to demand*
- *continuing to use the Golden Mile as the primary all-day route through the CBD, with additional facility improvements along its length e.g. bus stop spacing, traffic light phasing, and traffic light pre-emption for buses*
- *the use of a peak-only overflow route (location and operational matters part of an ongoing discussion with Wellington City Council)<sup>2</sup>*

A complete list of the proposed revised network concept is provided in **Attachment 1**.

It should be noted that the adoption of the proposed revised network concept will enable officers to move forward with the proposed revised network and thus move into detailed planning of timetables.

## **7. Revised network design**

Using feedback from the February 2012 public consultation and subsequent stakeholder meetings, information from operator ticketing systems and cordon count surveys and the above revised network concept, a proposed revised network design has been developed by officers.

Key differences from the network design which went out for public consultation in February 2012:

- reduced need for people to connect at suburban hubs for access to Wellington's CBD
- the removal of a proposed core route along The Terrace
- maintenance of primary access to Victoria University via Kelburn Parade (rather than off The Terrace) and provision of a consistent high frequency corridor between the Kelburn campus and Wellington Railway Station
- direct routes into/out of the CBD to both Johnsonville and Newlands
- direct services to Kilbirnie from the Miramar peninsula
- better matching of through-routing services with regard to demand and frequency

The proposed revised network design delivers the following improvements from the current network:

- more frequent off-peak services for 15 suburbs;

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<sup>2</sup> Further detail on an alternate peak-only overflow route is provided in section 7.1 of this report.



- new weekend service for 11 suburbs
- service running later into the evening for 11 suburbs
- a new weekday service to one suburb
- an easier to understand simplified network (36 routes compared to 44 current routes)
- a network which reduces duplication of services
- greater access to higher frequency routes
- improved reliability due to congestion reduction<sup>3</sup>, by increased use of through-routing and a limited need to connect to core services in a small number of areas
- improved access to local town centres and important destinations within the study area by the use of more through-routing and greater linkages between services and key bus stops.

**Figure 2** below is a schematic map of the proposed revised network design. It illustrates the simplicity and reduction in service duplication of the revised network design. Geographic maps of the proposed revised network design are provided in **Attachment 2**.

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<sup>3</sup> Details of the use of an alternative peak-only overflow route to reduce congestion on the Golden Mile are provided in section 7.1 of this report

# Wellington Bus Service Review

## Revised Bus Network

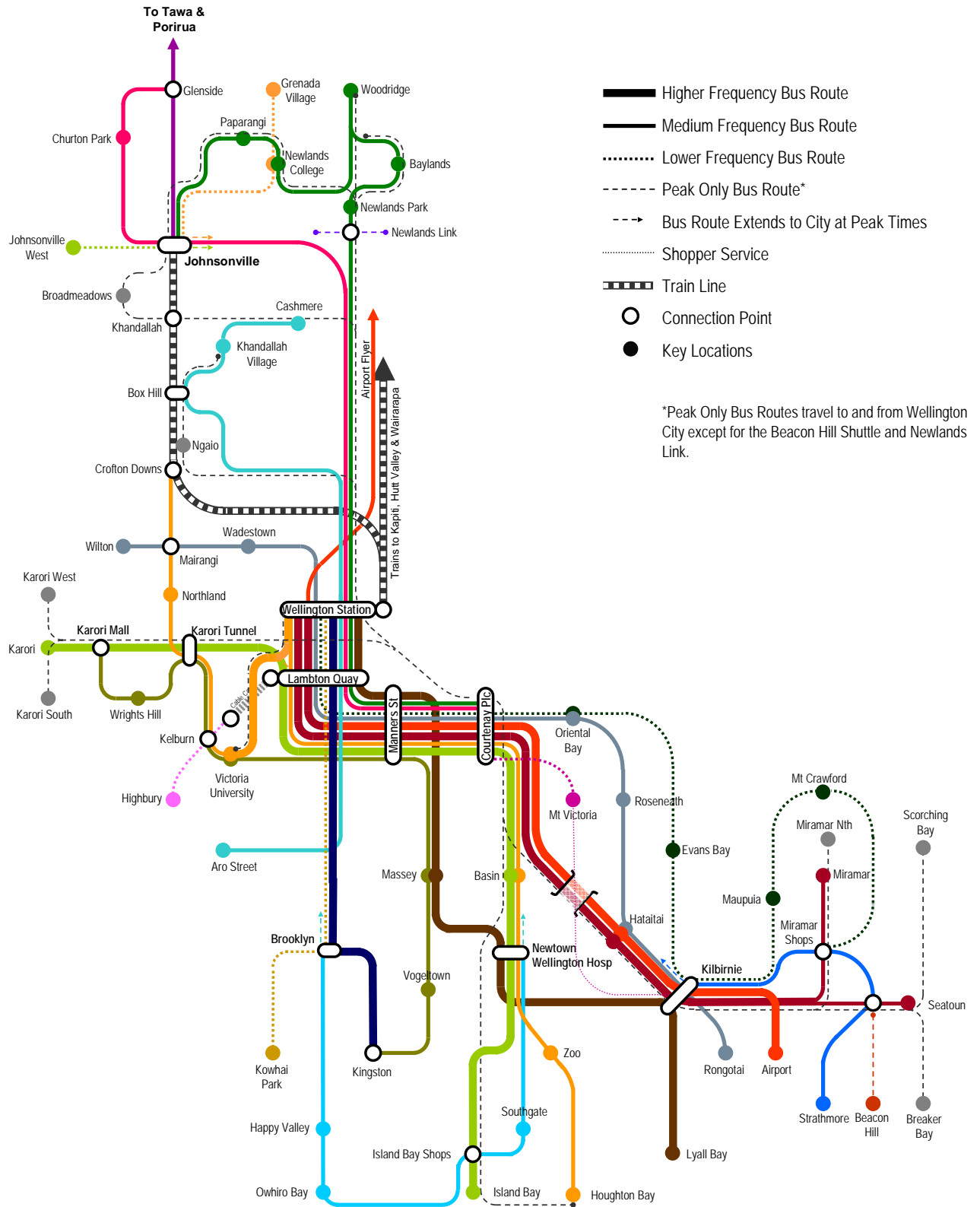


Figure 2

## 7.1 The alternate peak overflow route

MRCagney stated that the optimum number of buses travelling on the Golden Mile per hour is 120, or 60 in each direction. This figure should be seen as an aspirational target. The proposed network design will not be able to attain this optimum but it does not preclude moving forward with the Review.

Currently, 231 buses travel on the Golden Mile during the peak (0800-0900). The proposed revised network design aims to reduce this to 190 buses through better fleet utilisation and through-routing. Better fleet utilisation will mean more efficient use of vehicles matching demand e.g. larger vehicles currently used on some routes being specifically used on high demand services, and smaller vehicles being used on lower demand services.

In order to achieve the figure of 120 buses an alternate peak-only overflow route will be required. The February 2012 network design proposed the use of the waterfront (Customhouse Quay and Jervois Quay) as the alternative route. Public feedback on this alternate route raised the following concerns:

- safety crossing roads
- exposure to weather walking from an alternate route to their place of work
- additional time from alighting point to the CBD (due to the limited number of stops proposed)
- potential traffic impacts of buses on the waterfront

but some positives were also raised:

- consistent in route in both directions
- limited stops meant a faster journey time
- short walk into the CBD

Wellington City Officers have advised their preference for a consistency of routing; they have also stated that the potential use of an alternate peak-only overflow route to the waterfront may not offer the consistency of routing which passengers expect.

The operation of an alternate route is very much dependent on the co-operation of Wellington City Council (WCC). Whilst talks are on-gong with WCC on an alternate route, the revised network design proposal does not feature an alternate route.

The proposed 190 buses per peak hour represents an 18% or 41 bus reduction from the current rate and is achieved without an alternate peak-only overflow route.

Once the detailed timetabling has been completed the bus headway and phasing can be more accurately projected. This will in turn enable officers to create an accurate projection of the alleviation of congestion on the Golden Mile section of the network.

## **7.2 The ever changing environment**

At present our current network design evolves daily with ongoing minor contract variations to meet changing operational circumstances and service demand. It is likely the revised network design may also need minor changes between now and operational implementation. These variations will be considered by officers and if they are considered to meet the Review objectives as well as community needs will be incorporated into the network design.

Changes to the revised network design may also arise through a number of other ways, for example:

- during the development of detailed timetables as the inter-linking and co-dependence of services are highlighted
- during the contracting phase where there is potential for the network design to alter as operators may be able to offer alternate resourcing solutions, which deliver better value for money for the ratepayer whilst still maintaining the network concept
- the outcomes of projects such as the Public Transport Spine Study and integrated ticketing
- the Eastern area wide service review (primarily covers Hutt Valley services and includes services between the Hutt Valley and Wellington City) which is planned to begin in the first half of 2013.<sup>4</sup>

## **8. Other key work streams**

### **8.1 Infrastructure**

OPUS consultants have been engaged to undertake a study of the infrastructure needs of the key stops on the proposed revised network design. The study has included determining the potential for the current key stops to house the infrastructure needed for the proposed revised network design, and potential constraints at each of the key stops.

The key bus stops identified are at the following sites: Karori Tunnel, Karori Shops, Island Bay (Medway Street), Newtown (Wellington Hospital), Kilbirnie, Crofton Downs, Johnsonville and Brooklyn Village.

As the proposed revised network design utilises more through-routing, there is less need for major infrastructure changes at these key stops. We have been able to model the scale of infrastructure that will be needed at each key site based on the patronage and number of services.

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<sup>4</sup> The current services from the Hutt Valley to Wellington City have been included in the revised network design.

The design concept for the key stops is to provide weather protection, lighting, Real Time Information, and Metlink timetable and map information.

Site constraints such as existing buildings and pavement size will clearly influence what can be achieved at each site, but key design concepts will be adhered to.

## **9. Delivery against objectives**

In order to measure the success of the Review to-date officers have assessed the revised network concept and design against the Review objectives.

### **9.1 Improved reliability**

*“To improve value for money by improving the effectiveness and efficiency of the public transport network within the study area”*

The revised network design is designed to be cost neutral in contract payments to operators whilst providing additional weekend, evening, off-peak and peak services by reducing duplication and redeploying resources.

### **9.2 Improved connections**

The revised network design provides enhanced access to local suburban centres such as Crofton Downs, Island Bay Shops, Brooklyn and Newtown through a mixture of new route connections and improved service frequencies and extended days of operation.

### **9.3 Improved coverage and access**

The revised network design gives 72% of people in the study area access to a bus service departing every half hour or better within a 10 minute walk from their point of origin.

### **9.4 Improved service levels**

The revised network design offers additional off-peak services to 15 suburbs, new weekend services to 11 suburbs, services which operate later into the evening to 11 suburbs and additional new weekday service to one suburb.

### **9.5 Ensure capacity is matched to demand**

Analysis of ticketing data in conjunction with the data collected from our cordon count gives us sound information to ensure the right size bus, at the right time to the correct part of the network.

## 10. Next steps

The following is an indicative timeline for the remainder of this project:

Date	Description
29 November 2012	Revised network concept presented to Economic Wellbeing Committee
December 2012 to April 2013	Formulation of detailed timetables based on the revised network design and bus capacity analysis
March/May 2013	Timetable reviews/community meetings
Mid to late 2013	Negotiation with operators
2014 onwards	Community meetings prior to operational implementation
2014 onwards	Phased operational implementation

It is necessary to gain approval for the revised network concept prior to producing a revised network plan (detailed timetables).

Once the detailed timetables have been formulated, and the community engagement and review process has been undertaken, officers will be able to proceed with the formulation of PTOM units. The detailed timetables will give officers the data needed to allocate routes to units. The contracting process will then commence.

## 11. Communication

Shortly after this meeting of the Economic Wellbeing Committee schematic and geographical maps showing the revised network design will be published on the Greater Wellington website, the simpler schematic version of the revised network design will be published in local media, and a media release will also be issued.

An email update will also be sent out to approximately 200 members of the public who provided comment and contact details in the February and March consultation process. This update will consist of maps and a narrative describing the steps taken to date to achieve the revised network design.

Officers will engage with resident groups and stakeholders throughout the remainder of the Review as highlighted in section 10.

## 12. Recommendations

*That the Economic Wellbeing Committee:*

- 1. Receives the report.*
- 2. Notes the content of the report.*
- 3. Approves the revised Wellington City Bus Review network concept as detailed in Attachment 1 of this report.*

4. ***Agrees** that the revised Wellington City Bus Review network design as detailed in Figure 2 reflects the network concept as approved in recommendation 3.*
5. ***Notes** that officers will begin developing detailed timetables for the revised Wellington City Bus Review network design in readiness for operational implementation via the new Public Transport Operating Model.*
6. ***Agrees** that there may be changes to the Wellington City Bus Review network design prior to its implementation, but the network design will remain consistent with the approved Wellington City Bus Review network concept.*
7. ***Notes** that Officers will continue to work with Wellington City Officers on alternative peak-only routes through Wellington CBD.*
8. ***Notes** that any changes to the network design will be made by officers and reported back to the Committee*

Report prepared by:

Report approved by:

Report approved by:

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**Rhona Hewitt**  
Manager, Bus and Ferry  
Operations

**Wayne Hastie**  
General Manager, Public  
Transport

Attachment 1: Revised Wellington City Bus Review Network Concept – November 2012

Attachment 2: Revised Wellington City Bus Review Network Design – November 2012