

<b>AGENDA ITEM NO:</b> 11.2	<b>SUBJECT MATTER: SECOND STAGE OF THE GREATER CHRISTCHURCH METRO POST-EARTHQUAKE REDEVELOPMENT PROJECT</b>
<b>REPORT TO:</b> Council	<b>DATE OF MEETING:</b> 29 March 2012
<b>FILE REFERENCE:</b>	<b>PORTFOLIO:</b> Public Passenger Transport
<b>REPORT BY:</b> Edward Wright, Operations Planner Passenger Services	<b>ENDORSED BY:</b> David Stenhouse, Passenger Services Manager Wayne Holton-Jeffreys, Director Operations
<b>COMMISSIONER:</b> Rex Williams	

## PURPOSE

To update Commissioners on the current challenges facing the Greater Christchurch Metro Bus Network, and to seek approval for changes to bus services to reduce costs and increase financial viability.

Commissioners should note this item is closely related to the Regional Public Transport Plan item also on the agenda for this meeting.

## ATTACHMENT

Revised version of Appendix 1 of the Canterbury Regional Passenger Transport Plan 2006 (as amended 2008 and 2011).

## BACKGROUND

In the period immediately after the February 2011 bus patronage reduced significantly (for example, patronage recorded in March 2011 was 70% less than that recorded in March 2010). There were a number of factors that contributed to this, including a reduction in the number of people travelling in the period immediately after the earthquake; changed workplace locations; and the operation of two temporary exchanges with limited facilities on the periphery of the CBD.

During this period, planning of a two stage network redevelopment project began (as initially presented to Council at the meeting on July 28 2011). The first stage of this project included:

- The opening of a new central city interchange facility (Central Station);
- Discontinuation of services that performed very poorly before the February earthquake, or were not able to resume in the foreseeable future because of road damage caused by the earthquake;
- The restoration of pre-earthquake routes on all other services as far as possible, with the exception of removing unnecessary trips at peak hours;
- The introduction of three new services that provided connections to community facilities and new workplace locations.

These changes were implemented on October 25 2011.

In the period since October 25 other changes to bus routes have also been implemented. These are:

- The introduction of two routes in the east of Christchurch operated using a 10 seat van.
- Changes to routes due to the withdrawal of the Red Bus commercial routes (operated without any subsidy from Environment Canterbury).
- Changes were made to some school services at the start of the 2012 school year because of changes to the locations and hours of some schools.

Commissioner Williams was informed of these changes in his capacity as Public Transport Portfolio chair. An update to Appendix 1 of the existing Regional Passenger Transport Plan will be necessary to reflect these changes.

## **Second stage of network redevelopment project**

As discussed in July 2011 and subsequently, this involves a major redesign of the entire network, with the intention of removing the duplication and inefficiency present in the existing network while providing a more financially viable and user friendly network for passengers. The implementation of the new network is scheduled to begin in October 2012. A considerable amount of investigation and planning has been undertaken in developing the second stage of proposals.

The redesign of the network is part of a wider group of changes designed to restore the financial viability of the Greater Christchurch Metro network in the post-earthquake environment. While passenger numbers have increased since the implementation of stage one of the network redesign and the commerciality ratio of the network has increased accordingly (to 36.6% in February 2012), it is still a long way from the 50% commerciality ratio required by the NZTA. There is little chance that this level will be reached by retaining the status quo, so some level of change is a necessity.

Staff have identified two options for ways the costs of operating the network could be reduced:

- a) *Retain the existing network structure* and reduce service levels. In time it is likely that services with a continually poor commerciality ratio would be discontinued.
 

*Pros:* This option would be less radical, and there would be less change for our passengers to adapt to.

*Cons:* It is likely that patronage will also drop due to the reduced levels of service, which in turn could trigger the need for further service cuts, leading to a downward spiral of retrenchment of services.
- b) *Change the network model* to a hub and spoke type model to more efficiently service the market at a reduced overall cost.
 

*Pros:* This option offers the opportunity to refocus the network onto suburban destinations and provide a platform for future patronage growth. It would allow us to retain a similar level of coverage across the city in a more efficient way. Bus movements in the central city would be reduced, and a simpler core network offers significant marketing opportunities to attract new users. This kind of network design is not dissimilar to the future direction we had aspired to prior to the earthquakes.

*Cons:* Some users would need to transfer buses at suburban hubs for travel beyond their nearest key activity centre. To reach its full potential this model will require an improved standard of suburban interchange facilities, and we are reliant on the Christchurch City Council to supply these. This model is unproven in the Christchurch market to this scale and therefore carries some risk, although this is to some extent mitigated by careful consideration of route changes.

Staff believe that changing the network model is the best way to proceed, as it allows for operating costs to be reduced while limiting the extent of reductions in coverage and service

levels. Previous feedback from Commissioners has also indicated support for this model. The key features of this design are:

- A frequent network of five core routes – four of which would travel across the city via the CBD, as well as the Orbiter which travels around the city in a ring;
- Three less frequent routes that also travel across the city via the city centre;
- Suburban services that both provide linkages across the city and feed into the frequent network at a number of key suburban hubs.
- Services from outlying towns (Rangiora, Rolleston etc) would either feed into the frequent network at suburban hubs or operate as extensions of frequent network routes.

This network design would involve some level of change to all of the current urban public transport services operated in the Greater Christchurch area except the Orbiter route and the Diamond Harbour Ferry. It is estimated that vehicle kilometres could be reduced by around 20% (approximately 3.6 million km per annum), while mostly retaining the existing service coverage, hours and days of operation. This saving is achieved by reducing route duplication and redundancy throughout the network.

This network design was presented to all bus and ferry operators who are currently contracted to provide services to Environment Canterbury on February 16 2011. Subsequent meetings were also held with each operator individually. Some common themes emerged from the feedback received from the operators:

- Concern about the risks associated with changing almost all of the bus routes in the city at once;
- Concern about the extra costs that might be incurred in a model where many services begin and end at suburban hubs that could be located some distance from their depots;
- Suitable infrastructure would need to be in place at the suburban hubs before changes which require passengers to transfer services at these hubs are implemented;
- All operators suggested that not all savings have been realised from the existing network design, and some immediate savings could be made by cutting some late evening and weekend trips;
- A staged approach to introducing the new network would be more palatable. This would involve initially trialling the new network design in some parts of the city, and then rolling it out across the rest of the network if it proves to be successful.

### **Proposed approach to the second stage of the network redevelopment project**

Based on the feedback received from the operators, it is proposed that stage two is implemented in three separate parts:

- Part A: removal of some poorly patronised trips on existing routes – to be implemented May/June 2012;
- Part B: partial implementation of the proposed new network design on the North – South bus route corridor – to be implemented October/November 2012;
- Part C: implementation of the remainder of the new network design (if part B is successful) – to be implemented late 2013.

## Part A: Removal of some trips on existing routes

As previously noted, the feedback received from our operators has pointed to the potential savings that could be made by reducing late evening and weekend services on some routes. It is proposed that passenger loadings on all evening and weekend trips are reviewed, and that trips that are poorly patronised are removed.

In addition to this, staff have identified five routes where the interpeak (9am – 3pm) weekday frequencies could be reduced (these routes are identified in the table below). These routes have been noted as having a relatively low level of patronage on interpeak trips during February 2012. Furthermore, the proposed frequency reductions in the table below are consistent with the frequencies proposed on these services in the new network design.

<i>Route</i>	<i>Change in frequency</i>
23 Hyde Park - Woolston	Reduced from every 30 minutes to every 60 minutes
28 Lyttelton and Rapaki	Reduced from every 15 minutes to every 30 minutes
45 North Shore	Reduced from every 30 minutes to every 60 minutes
46 Marshland	Reduced from every 30 minutes to every 60 minutes
60 Parklands	Reduced from every 15 minutes to every 30 minutes

It is estimated that these changes would result in a saving of at least 750,000 km per annum, which represents approximately 4% of the total kilometres currently operated. The exact cost savings that these changes will realise are not yet established, as variations have yet to be negotiated with the bus operators.

## Part B: Partial implementation of the proposed new network design

It is proposed that the new network design is implemented on services that operate on the North-South corridor, as a pilot for the future introduction of the concept across the rest of the network.

The following existing bus routes would be modified or replaced with new routes if this pilot is implemented:

- 8 Casebrook – Hoon Hay
- 9 Wairakei
- 11 Styx Mill – Westmorland
- 12 Northwood – Murray Aynsley
- 14 Harewood – Dyers Pass
- 15 Bishopdale – Beckenham
- 18 St Albans – Huntsbury
- 20 Burnside – Barrington
- 22 Redwood – Spreydon
- 28 Lyttelton and Rapaki
- 45 North Shore
- 46 Marshland
- 60 Parklands

Northern Star routes (90 Rangiora, 92 Rangiora via Woodend and Waikuku, 912 Woodend Shuttle, 913 Woodend Shuttle via Waikuku).

In February 2012, these routes accounted for 28% of the passenger trips taken and 35% of the kilometres operated in the current Greater Christchurch Metro Network.

Part B is reliant on some aspects of the new Regional Public Transport Plan (RPTP) being adopted. This is because some aspects of the new network design do not conform with policies in the current Regional Passenger Transport Plan, including destinations and service levels.

It is intended that there will be a public consultation process (coincident with consultation on the RPTP) to give current and potential bus users the opportunity to provide comment on the changes proposed under part B. A report detailing the outcomes of this public consultation will be presented to Council, following the presentation of the final draft RPTP, and prior to any changes being confirmed.

Based on the proposed new network design for Part B, it is estimated that these changes would result in an additional saving of approximately 900,000 kilometres per annum (in addition to the savings made in Part A), which represents approximately an additional 5% of the total kilometres currently operated. The exact cost savings that these changes will realise are not yet established, as variations have yet to be negotiated with the bus operators.

### **Part C: Implementation of the remainder of the new network design**

Subject to the successful implementation of Part B, the implementation of the remainder of the new network design will occur in 2013.

## **PROPOSALS**

That the Council approves 'Part A' of the network redevelopment project as described above, so that the savings from these changes can be realised as expediently as possible.

That the Council approves the attached changes to Appendix 1 of the Canterbury Regional Passenger Transport Plan. These incorporate changes that have taken effect since the implementation of stage one of the network redesign project on October 25 2011, and makes other factual corrections to this document so that the information accurately reflects the services currently operating.

That the Council supports further planning for Parts B and C of the network redevelopment project in 2012 and 2013. This will allow staff to proceed with planning these changes, negotiating the changes with our operators, designing the public consultation process for part B, developing the RPTP, and working with our key partners (territorial authorities and the NZTA) on the detail of the changes.

## **RECOMMENDATIONS**

### ***That the Council:***

- a) Approves the changes that constitute 'Part A' of Stage 2 of the network redevelopment project, namely the reduction in interpeak frequency on routes 23, 28, 45, 46 and 60, and the reduction of the number of evening and weekend trips provided across the network;*
- b) Amends Appendix 1 of the Canterbury Regional Passenger Transport Plan as outlined in Attachment 1;*
- c) Approves further planning for Parts B and C of the network redevelopment project to enable implementation in late 2012 and 2013 respectively, subject to the outcome of public and stakeholder consultation.*