

## 9. CITYWIDE PUBLIC TRANSPORT PRIORITY PLAN

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The purpose of this report is to seek the Committee's recommendation to the Council to adopt the Citywide Public Transport Priority Plan.

### BACKGROUND

The draft Citywide Public Transport Priority Plan (separately circulated) has been prepared as a first step towards the development of public transport priority measures across the city, the aim of which being to provide a more convenient metro public transport system with the efficiency and reliability necessary to contribute towards more people making more bus trips in deference to car trips. As the Committee will know from previous reports, this is a key objective of the Christchurch Public Passenger Transport Strategy Update 2003, which was adopted by the Council and Environment Canterbury in July 2003, following consultation with each Community Board.

The purpose of the citywide plan is to develop a list of corridors with identified unreliability and delay problems, and then place them in a priority order using the criteria already adopted by the Council.

These criteria are:

- Most unreliability to most buses
- Most excess bus to 125% car travel time, to most buses
- Benefit to others
- Other factors

It is **not** the purpose of the plan to identify options (or specific proposals) on each of the corridors. This will follow adoption of the plan, at which stage options will be developed in association with people likely to be affected or to have an interest in the particular corridors.

### KEY POINTS IN THE PLAN

Committee members will see from the plan that the three corridors proposed for development and introduction first are:

- Belfast to/from the Bus Exchange, via Papanui Road
- Princess Margaret Hospital to/from the Bus Exchange, via Colombo Street
- Queenspark to/from the Bus Exchange, via New Brighton Road

The following provides a summary of the justification for these recommended corridors, referring to the criteria approved by the Council.

### UNRELIABILITY AND EXCESS BUS TO 125% CAR TRAVEL TIME

It can be seen from the table on page 13 of the plan that very clearly the highest priority corridor in terms of unreliability and delay is Belfast to and from the Exchange. It ranks consistently highest among the indicators for unreliability and delay and comes only marginally second to the Sumner corridor in terms of average excess travel time per section.

It can also be seen clearly from the table that positions 6, 7 and 8 in order of priority are Sumner, Oaklands and the Cranford Street corridor. Whilst the Sumner corridor's 1<sup>st</sup> placing in terms of average excess travel time per section suggests this is a significant problem, the calculation that led to this ranking did not include the Ferrymead to Sumner section, for which data was not available. Potentially this information could have lowered the average excess travel time per section and the corridors rank relative to other corridors. The weight of other evidence does suggest this priority order for the last three placings is appropriate.

The second corridor in priority order is PMH to and from the Exchange. It consistently ranks higher than any other remaining corridor in terms of unreliable and delayed bus trips and if one compares the proportion of unreliable section trips to total section trips made, it reveals that 23% of all sections completed along this corridor in peak periods in the peak direction were unreliable. This was higher than the third ranking corridor which is Hornby Mall to and from the Exchange, of which 19% of all section trips made in the peaks are unreliable.

For positions 4 and 5 one can see that in terms of excess travel time Queenspark and New Brighton are similar. However, both unreliability indicators place the Queenspark corridor ahead of the New Brighton corridor. This is also true in terms of the proportion of unreliable section trips to total section trips made, where the Queenspark corridor has 15% and the New Brighton corridor has 13%.

In terms only of unreliability and delay criteria the corridor priority order is:

1. Belfast to/from the Exchange
2. PMH to/from the Exchange
3. Hornby Mall to/from the Exchange
4. Queenspark to/from the Exchange
5. New Brighton to/from the Exchange
6. Sumner to/from Exchange
7. Oaklands to/from Exchange
8. Main North Road to/from Exchange, via Cranford St.

#### **BENEFIT TO OTHERS**

Reference is made to section 3.4.2 of the plan and the summary table on page 11 of the plan. The summary table ratings have been established through discussions within the Transport and City Streets Unit to establish broad and relative levels of potential to improve the levels of service to cyclists and pedestrians.

Points to note are the high potential along some sections of the Belfast and Queenspark corridors, whilst the PMH corridor ranks low/medium, given facilities are already planned or in place that provide a good level of service.

Following a review of these criteria the priority corridor order was adjusted to:

1. Belfast to/from the Exchange
2. Hornby Mall to/from the Exchange
3. PMH to/from the Exchange
4. Queenspark to/from the Exchange
5. New Brighton to/from the Exchange
6. Sumner to/from Exchange
7. Oaklands to/from Exchange
8. Main North Road to/from Exchange, via Cranford St.

#### **OTHER FACTORS**

##### **Integration Within Existing Capital Works Programmes**

There is one key intersection improvement (planned for the 2004/05 financial year) that justifies a change to the top three priority corridors as they currently stand. This is the Riccarton Road/Clarence Street/Straven Road intersection improvement on Riccarton Road which has been in the capital programme for a number of years. There are also works happening now associated with the Westfield/Riccarton Mall redevelopment close by that could influence a change to traffic flow overall in the area. The intersection works aim to improve capacity and reduce queuing on the approaches to this intersection, which it is possible may reduce the unreliability of this corridor, at least on the sections approaching Riccarton Mall.

Whilst this corridor currently sits at second on the list of priority corridors, it is recommended that the development of this corridor be deferred to a time when the intersection improvements at the Riccarton Road/Clarence Street/Straven Road intersection and the works associated with the mall redevelopment are complete and traffic flows have settled to a predictable and measurable level at which to re-measure the bus performance indicators of unreliability and delay as outlined in section 3.4.1.

Another associated body of work on this corridor is the Riccarton Road Traffic Management scheme, which has also been identified in the five year capital programme for a number of years. It would make sense to integrate this scheme with any bus priority scheme, pending resolution of the issues mentioned above.

### **Integration with the Five Year Capital Works Programme**

Appendix 5 provides a list of capital works associated with each corridor.

The Belfast to/from Exchange corridor remains at number one on the list following a review of the capital works associated with this corridor in the next five years. The schemes associated with Papanui Road and Main North Road identified in Appendix 6 amount to over \$10.5 million worth of capital works (consisting primarily of street renewals but also cycle facilities between Bealey Avenue and Harewood Road) between now and completion of the 2008/09 financial year. This provides a good opportunity to integrate any bus priority works within these schemes.

Following consideration of the criteria so far, the PMH to/from the Exchange corridor is placed at number two on the priority list. In terms of programmed capital works, there are some schemes in the next five years that are associated with the corridor. These comprise street renewals at Angus Street (\$243,000 in 2005/06) and Faraday Street (\$58,000 in 2005/06). Due to the timing of these schemes, they could be co-ordinated well with any related bus priority works. However, since they only join with Colombo Street and not specifically effect it, it is unlikely that there would be any dependency between one or the other from an engineering view point. A budget provision of \$2.15 million has been made for southern central city transport projects over the next five years. This is associated with ongoing investigations into central city concepts that arose from the Lichfield/Tuam swap project.

As discussed above, the impending works at the Riccarton Road/Clarence Street/Straven Road intersection, together with developments at the Riccarton Mall site, have the potential to improve traffic flows in the area and it is recommended that this corridor (Hornby Mall to/from Exchange) be placed at number four on the list of priority corridors. The value of capital works associated with this corridor in the next five years are worth over \$3 million, and include street renewals (Kauri Street in 2006, Harakeke Street in 2009 and Puriri Street in 2009) the intersection improvement at Riccarton Road/Clarence Street/Straven Road this year, the Riccarton Road Traffic Management Scheme towards 2006, cycle facilities at Deans to Mandeville (this year) and a school bubble around Riccarton High School (next year). Completion of the Riccarton Road/Clarence Street/Straven Road intersection improvements this financial year would allow a new review of the bus performance along this corridor to proceed soon after. If found to still rank highly compared to other remaining corridors it could feasibly be one of the next round of bus priority corridors to be developed from 2006 onwards.

With the move of the Hornby Mall to/from Exchange corridor to number four on the priority list, this promotes the Queenspark corridor to number three. As discussed in section 3.4.2, cycle facility schemes are programmed with a value of \$257,000 (New Brighton Road - Avondale Road to Wainoni Road) and next financial year (Fitzgerald Avenue – Moorhouse Avenue to Armagh Street). There are also a number of street renewal projects (Warrington Street in 2005, Bower Avenue in 2008 and North Avon Road in 2008) that are associated with this corridor.

Another corridor with significant capital works in next five years is the New Brighton to/from the Exchange corridor. There are three cycle facilities schemes programmed for completion in 2006 and two schemes due for completion in the current financial year. In total the capital works associated with this corridor amount to over \$800,000 over the next five years. It is recommended that the New Brighton to/from Exchange corridor retains it position at number 5.

## **Adjacent Land Uses**

Primarily the concerns in this respect will be on the potential loss of on-street parking. Until options are developed to resolve the unreliability and delay issues identified on the eight corridors, it is difficult to comment on the local and specific effects of bus priority schemes on adjacent land uses to any level of detail. The actual effects will depend on the type of measure required and the availability of, or potential for nearby off-street alternatives.

Each of the corridors have similar ranges of adjacent land uses including for residential and commercial purposes, in the central city and in the suburbs. It would be fair to say that whichever corridors are first developed, there will be concerns over potential effects such as loss of on-street parking. The important issue in such cases is to establish the actual level and type of use of on-street parking space and to reconcile this with local land owners and users needs within design options that also resolve public transport objectives.

## **Issues of Cost/Benefit, Road Safety, Practicality, Maintenance**

Each of these factors will be relevant to the development of public transport priority measures options, and on any corridor that is selected. Option development will commence at the next stage (see development process on page 20). Some key issues are discussed below.

Costs and benefits can only be accurately measured at the next stage, when options are developed from which the anticipated value of benefits can be compared against the financial and other 'costs'. In terms of benefits, however, one can see with reference to the table on page 12, that an effective and comprehensive treatment of the three proposed corridors would bring corresponding reliability and journey time improvements to bus services on those corridors and the people who use them.

The road safety perception of public transport priority (as shown by the market research undertaken – see Appendix 4) primarily relates to bus lanes, and in particular, the shared use of them by buses and cycles. Transport and City Streets Unit staff have been conscious of this as an issue and have sought evidence from other organisations, both in New Zealand and overseas as to the occurrence of incidents involving cycles and buses in bus lanes. To date no evidence has been found of trends towards such problems, and this research will continue towards the detailed design phase of any corridor proposals that may involve priority lanes.

The issue of practicality is very important, particularly for the bus companies. It is essential that they be involved in the option development process to ensure measures that are constructed can actually be used as they are intended. This stands to reason, but there can be subtle ways in which the effectiveness of bus priority measures are reduced by seemingly innocuous road features.

In most instances the maintenance liability of public transport priority infrastructure will be integrated with existing asset management processes currently in place for street infrastructure. Some debate has taken place in recent months, however, concerning bus lane 'greening' in Auckland and the costs associated with maintaining the coloured surfacing material. The decision as to whether or not greening of bus lanes should form part of proposals should be addressed as and when options are presented for approval. At such time it may prove beneficial to develop a standard for Christchurch, or perhaps instead treat each individual proposal on a case by case basis.

## **OTHER KEY CITYWIDE PLAN ISSUES**

The draft citywide plan also covers the important issue of enforcement. This is important to maintain the benefits of any bus priority scheme, as well as to ensure the safety of other road users.

Enforcement is primarily a key requirement for bus lanes and should these be developed through the consultation and option development process at the next stage, then it is important that they be enforced appropriately.

The draft plan recommends a direction that allows staff to undertake planning for Council enforcement officers to be employed in the enforcement of bus priority measures. This will involve working with central government and the Police to obtain the necessary warrants and delegations of authority for the Council to enforce bus lane moving vehicle violations (currently the Council can only enforce stationary vehicle offences such as parking in a bus lane).

## **CONCLUSION**

This report provides an overview of the analysis undertaken and recommendations provided in the Citywide Public Transport Priority Plan. It explains the reasons why the three proposed corridors are recommended for development, introduction and enforcement towards June 2006.

This conclusion has been reached using recently Council-adopted criteria.

### **Staff**

**Recommendation:** That the Council adopt the Citywide Public Transport Priority Plan and its recommendations.

### **Chairman's**

**Recommendation:** That the above recommendation be adopted.