Transit New Zealand, Nelson City Council and Tasman District Council

North Nelson to Brightwater Strategic Study

Public Transport Discussion Document

May 2008
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1 Purpose

The purpose of this document is to report on the Public Transport initiatives included within the ‘Preferred Package’ of the North Nelson to Brightwater Strategic Study in such a format that will enable Nelson City Council and Tasman District Council to use the information for their individual Public Transport Strategies.

The North Nelson to Brightwater Strategic Study Consultant Team was originally tasked with preparing a single Regional Land Transport Strategy for the combined regions of Nelson City and Tasman District. Alongside the RLTS would sit a Public Transport (PT) Strategy and a Travel Demand Management (TDM) Strategy which were also to be prepared as part of the Study.

However, after Tasman District Council's decision to pull out of both the Study and the combined Regional Land Transport Committee in August 2007, a combined RLTS was no longer appropriate. Consequently, the responsibility to produce individual RLTS (and the associated PT and TDM strategies) reverted back to the individual Councils.

Nevertheless, a significant amount of work on Public Transport was undertaken throughout the North Nelson to Brightwater Strategic Study, and it is this information which is being presented in this discussion document.

While there was a high level of agreement from both Councils as to the Public Transport measures proposed in the ‘Preferred Package’, it should be noted that the measures contained within the package have not been formally agreed to by either Council, and this report has not been reviewed by Council officers.
2 Introduction to Public Transport

It is now widely acknowledged that unrestricted demand for travel by car alone within populated urban and suburban areas is undesirable and is not sustainable. This generally arises from a combination of financial constraints and concerns over the potential impacts of traffic on local communities and their environment.

High-quality public transport services help improve the sustainability of the transport network by helping obtain the maximum effectiveness of the road network, helping the transport disadvantaged and by offering an acceptable alternative to non-essential use of the private car.

Most urban public transport is provided by buses. Buses can transport large numbers of people while occupying relatively little road space. Buses also provide mobility to those who do not have use of a car, while specially equipped vehicles can also provide accessible transport for people whose mobility is impaired.

Buses can be flexible in operation and can respond rapidly to changing patterns and levels of demand, but are adversely affected by urban traffic congestion.

Public Transport has the potential to ease congestion problems in the short-term. In the longer term it may also defer or avoid altogether the need for some infrastructural improvements, resulting in expenditure savings and environmental benefits. The success of public transport measures is, however, reliant upon the willingness of the community to make behavioural changes in its patterns of travel and this makes the prediction of the impacts subject to uncertainty. For this reason, the Regional Land Transport Strategies need to couple public transport with a high profile promotion campaign, travel demand management measures, and a rigorous monitoring regime. This will allow the success of the measures to be identified as a pre-cursor to the programming of any roading upgrades within the urban area.
3 Strategic Context

The overall framework for planning the land transport system includes three important elements:
- Government policy; the New Zealand Transport Strategy (NZTS) and the draft Updated NZTS.
- Regional land transport strategies and regional land transport programmes.

3.1 Government Policy

The New Zealand Transport Strategy (NZTS) was published by the Government in 2002, with the overall vision that;

‘by 2010 New Zealand will have an affordable, integrated, safe, responsive and sustainable land transport system’.

The NZTS sets out the key Government objectives for transport as;
- assisting economic development;
- assisting safety and personal security;
- improving access and mobility;
- protecting and promoting public health; and
- ensuring environmental sustainability.

This policy signalled a significant change in approach to the development and funding of the land transport system. The emphasis has moved from traffic to transportation by all modes, with a wider range of potential funding sources and increased public participation in the decision making processes.

As part of the draft update to the NZTS, the Government has announced a number of immediate (by 2015) and long term (2040) targets affecting transportation in New Zealand (MOT Discussion Paper, Sustainable Transport, December 2007). This includes the commitment to halve CO₂ transport emissions per capita by 2040 and a number of other targets concerning urban congestion, vehicle fleet composition, mode share and freight. These are the subject of a current LTNZ project which aims to clarify the targets and provide a breakdown into regional (and district) targets. Once finalised, these targets should have a significant impact on any Public Transport Strategy.

3.2 Legislation

Every regional council is required by Section 175(1) of the Land Transport Act 1998 to prepare a land transport strategy for its region.

The Land Transport Management Act (LTMA) came into force in 2003 to provide the legislative framework to give effect to the New Zealand Transport Strategy. This Act seeks to;
- provide an integrated approach to land transport funding and management which takes into account the views of affected communities;
avoid adverse effects on the environment;
give all relevant people and organisations opportunities to contribute to developing land transport programmes;
ensure options and alternatives are given full consideration at an early stage in the development of programmes;
improve long-term planning and investment in public transport;
ensure that land transport funding is allocated in an efficient and effective manner;
improve the flexibility of land transport funding, including provisions enabling new roads to be built on a tolled or concession agreement basis; and
amend the Land Transport Act 1998 to require regional land transport strategies to be reviewed to take account of the objectives of the 2003 Act.

The Land Transport Management Amendment Bill was released for submission in late 2007. The purpose of this bill is to enhance New Zealand’s transport planning and funding system established under the LTMA.

3.3 Regional Land Transport Strategies

The current Regional Land Transport Strategy (RLTS) documents for Nelson and Tasman are dated 2001 and 2003 respectively and precede the enactment of the LTMA. New RLTSs for the region will need to reflect the change in national transport policy and the planning of the transportation network within this area.

The Nelson and Tasman Regional Land Transport Committees (RLTCs) are responsible for the preparation and on-going development and implementation of the RLTSs for the two council areas. The committees include representatives of the respective councils, Transit NZ, Land Transport NZ and representatives of other agencies and organisations.

Responsibility for the delivery of the measures contained within the strategy falls with a number of agencies. Transit NZ has responsibility for maintaining and upgrading the State Highway network, including State Highways 6, 60, 63 and 65. Nelson City Council and Tasman District Council have responsibility for all of the other public roads within their administrative boundaries, for cycle and pedestrian facilities and the provision of infrastructure to support public transport facilities. These three road controlling authorities will need to work together to ensure the needs of the whole area are taken into account when advancing projects and measures.

3.4 Relationship with Other Projects

The projects and measures contained within the PT strategy need to complement and be implemented concurrently with other projects and measures within the Regional Land Transport Strategy. This will ensure that individuals have a greater range of alternative transport modes to consider when planning travel and will help reduce the demand placed on the transport system.

To ensure that these strategies are complementary, the North Nelson to Brightwater Strategic Study investigated the transport needs of the Nelson and Richmond areas and produced a strategy of projects and measures over a 25 year period to cater to this demand. Integral to this strategy were the TDM, public transport cycling and walking projects and measures. Nelson City Council, Tasman District Council and Transit New Zealand are now updating their individual strategies to reflect this study.
4 Existing Public Transport

There are currently two bus companies operating within the study area. There are also inter-urban operators offering tourist and backpacker oriented coach or minibus services that may be used to travel into and out of the study area.

4.1 SBL

SBL is the only operator offering commercial bus services in Nelson/Tasman. Routes are operated between Nelson CBD and Richmond via Rocks Road; Nelson CBD and Richmond via Waimea Road; and Nelson CBD and Motueka via Waimea Road. There is also a loop service connecting eastern and western Stoke with Main Road Stoke, where connections are made to the Richmond – Nelson routes. Service frequencies for Nelson, Stoke and Richmond are given below:

**SBL Bus Routes**

<table>
<thead>
<tr>
<th>Route</th>
<th>Mon-Fri AM peak 7am-9am</th>
<th>Mon-Fri Interpeak 9am-4pm</th>
<th>Mon-Fri PM peak 4-6pm</th>
<th>Sat All Day 9am-5pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nelson CBD - Richmond via Rocks Rd</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Nelson CBD - Richmond via Waimea Rd</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Stoke eastern and western loop</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The timetabled journey time between Richmond and Nelson is generally 28 minutes.

An unusual feature of the SBL timeframe is that the two Nelson CBD – Richmond routes tend to depart at the same time. For example, in the AM peak, buses leave Richmond at 0710, 0740 and 0810 on both the Rocks Road and Waimea Road routes. The two services run in convoy as far as Annesbrook before going their separate ways. If departures were offset by 15 minutes, the effective frequency in the core section through Stoke could be doubled.

SBL also operates the ‘Summertime Bus’: a circular service operating in the clockwise direction from Nelson serving tourist attractions at Founders Park, The Suter, Cathedral Square, Isel Park, Broadgreen House, WOW, Tahunanui Beach and Rocks Road. The hourly service is operated by a single double-decker bus.

School services are operated from Nelson to Nayland College, and Richmond to Nelson College.

4.2 The Bus

‘The Bus’ is the brand name for services operated by Nelson Leisure Travel on contract to Nelson City Council. There are four routes that offer a ‘hail and ride’ service (picking up and setting down wherever it is safe to do so). All routes are circular, beginning and ending at Wakatu Square, in the Nelson CBD.
The Bus Routes

<table>
<thead>
<tr>
<th>Route</th>
<th>Number of Departures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mon-Fri AM peak 7am-9am</td>
</tr>
<tr>
<td>Route 1: Toi Toi / Hospital</td>
<td>3</td>
</tr>
<tr>
<td>Route 2: Atawhai</td>
<td>2</td>
</tr>
<tr>
<td>Route 3: The Brook / Maitai</td>
<td>1</td>
</tr>
<tr>
<td>Route 4: Washington Valley / Port Hills</td>
<td>0</td>
</tr>
</tbody>
</table>

Nelson Leisure Travel also operate a ‘Late Late Bus’ service which operates between Nelson and Richmond on Friday and Saturday nights between the hours of 10pm and 3:15am.

4.3 Other services

There are a number of operators offering coach or minibus inter-urban services that are aimed at the tourist/backpacker market and may be used for pre-booked travel to and from the study corridor, but not, in general, for travel within the corridor. Services are operated towards Murchison (Fox Glacier, Westport, Christchurch); Motueka (Collingwood, Marahau); and Havelock (Picton). Some operate in summer only.
5 Developing a Strategy for Nelson and Tasman

5.1 Modes of Public Transport

During the first round of consultation on the North Nelson to Brightwater Strategic Study, various high quality public transport modes were suggested by respondents, including some that are rail based. There is currently no existing railway in the region – the nearest railhead is at Blenheim where there is one passenger train a day in each direction (to Picton and Christchurch). The remains of a former alignment still exist in the Study corridor as the Railway Reserve. A number of consultation respondents suggested that this could be revived with rail, light rail or tram.

There are many terms covering high quality public passenger transport. This section provides some definitions.

5.1.1 Rail

Railway technology can be divided into light and heavy categories. Conventional rail operates in a completely segregated alignment, often grade separated. Metro is a solely passenger focussed type of conventional rail, with a passenger carrying capacity up to 20,000 passengers per hour per direction (pphpd). Examples are seen in some of the world’s largest cities such as London’s Underground and the MRT in Singapore.

Lower capacity metro systems using a mix of heavy and light rail technology are referred to as light metro, examples of which may be seen in Kuala Lumpur and London’s Docklands.

Light rapid transit (LRT) is the general term covering high quality public transport systems operating with lower passenger carrying capacity than Metro (up to 12,000 pphpd). Such systems generally operate in a partially or fully segregated alignment that can be within or alongside the highway or on a separate right of way. This allows for faster operating speed than normal buses, usually with fewer stops per km. In the UK the term intermediate mode is sometimes used because the capacity, speed and cost are between those of Metro and bus.

Rail based forms of LRT include light rail and tramways: the former term applying to systems that are largely segregated from traffic (e.g. Manchester); the latter to systems that operate mostly on-street (e.g. Melbourne). There is also a variety of innovative but mostly unproven rail technology at the ultra-light end of the spectrum such as people movers and monorail.

5.1.2 Bus

Under the general umbrella term of LRT are also bus-based (that is to say, rubber-tyred) modes such as guided bus, where modified buses operate in a segregated busway. Guidance can be mechanical such as in Adelaide where lateral guidance wheels are attached to the buses, or electronic. These systems generally have a guideway for the core section along which high speeds and frequencies can be attained, with normal on-street operation in the suburbs.
Filling in the territory between LRT and normal bus operations are various high quality bus systems such as modern trolleybus (electric bus) and ‘showpiece’ bus routes incorporating varying degrees of priority, quality vehicles and infrastructure to improve the speed, reliability, quality and image of public transport, without incurring the high costs of LRT.

At the lower end of the spectrum in terms of carrying capacity and segregation are normal Buses, but compared to the more advanced systems, standard buses have the lowest capital and ongoing costs. Buses can be powered by a variety of means besides diesel and electrical including, NCG, LPG, methanol etc, with economies of scale for whole fleets.

5.2 What is Appropriate for Nelson/Richmond?

To be appropriate for Nelson, the public transport system must be financially sustainable and economically efficient. To a large extent this means matching the system costs and capacity with potential demand.

No city in New Zealand has the population or public transport use-density to justify Metro. At system costs of between $25m and $150m per kilometre, new heavy passenger rail is not likely to be economic under any future scenario.

For lower capacities, the choice between bus and light rail technology is also a question of scale of demand. Taking into account whole-life capital and operating costs, Transport for London has determined the ranges of demand that are economic for bus and light rail:

<table>
<thead>
<tr>
<th>Mode</th>
<th>Demand Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Bus</td>
<td>up to 1,500 pphpd</td>
</tr>
<tr>
<td>Bus with high degree of segregation</td>
<td>1,500 to 2,500 pphpd</td>
</tr>
<tr>
<td>Light Rail</td>
<td>over 2,500 pphpd</td>
</tr>
</tbody>
</table>

Below 2,500 pphpd light rail is not economic because of its high capital cost. In Europe, no light rail system built in the modern era has cost less than $15M per km in current prices. A more typical unit rate is $25M per km. For a guided bus system, unit rates in the order of $10M per km are quoted.

Although unit costs may be slightly different in New Zealand conditions, it nevertheless illustrates that light rail technology is appropriate only in situations of very high passenger flows by New Zealand standards. To put it in context, the most heavily used public transport corridors in New Zealand are the Hutt and Kapiti lines of the Wellington suburban rail system where peak volumes are of the order of 2,000 pphpd; not surprisingly, the cost of suburban rail fares are heavily subsidised.
The current use of public transport in Nelson in the morning peak is as follows:

**Bus Patronage (7:00am-9:00am)**

<table>
<thead>
<tr>
<th>Operator</th>
<th>Route</th>
<th>Service Times</th>
<th>Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Bus</td>
<td>1: Hospital / Toi Toi</td>
<td>0750, 0825</td>
<td>19</td>
</tr>
<tr>
<td>The Bus</td>
<td>2: Atawhai</td>
<td>0725, 0750</td>
<td>15</td>
</tr>
<tr>
<td>The Bus</td>
<td>3: The Brook / Maitai</td>
<td>0825</td>
<td>6</td>
</tr>
<tr>
<td>The Bus</td>
<td>4: Washington Valley</td>
<td>0900</td>
<td>-</td>
</tr>
<tr>
<td>SBL</td>
<td>Richmond – Nelson via Rocks Rd</td>
<td>0740</td>
<td>12</td>
</tr>
<tr>
<td>SBL</td>
<td>Nelson – Richmond via Rocks Rd</td>
<td>0740, 0815</td>
<td>46</td>
</tr>
<tr>
<td>SBL</td>
<td>Richmond – Nelson via Waimea Rd</td>
<td>0710, 0740,0810, 0840</td>
<td>124</td>
</tr>
<tr>
<td>SBL</td>
<td>Nelson – Richmond via Waimea Rd</td>
<td>0740</td>
<td>6</td>
</tr>
<tr>
<td>SBL</td>
<td>Wakatu – Nelson</td>
<td>0720</td>
<td>12</td>
</tr>
<tr>
<td>SBL</td>
<td>Nelson – Wakatu</td>
<td>0820</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>290</strong></td>
</tr>
</tbody>
</table>

It can be seen that there are fewer than 150 public transport passengers per hour travelling on the network. The corridor of greatest passenger density is Waimea Road where 136 passengers were observed travelling towards Nelson over two hours (68 pphpd). According to the 2006 Census, the public transport mode share for the journey to work in Nelson and Richmond is less than 1%.

These small numbers suggest that a bus-based system will be appropriate and adequate for Nelson for the foreseeable future, even with substantial increases in public transport patronage. To illustrate this, an extreme optimistic scenario for public transport\(^2\) might be a one-off doubling of patronage followed by annual growth of 5%, giving a maximum corridor demand on the Waimea Road of 140 pphpd in 2005, rising to 500 by 2031 (a more than sevenfold increase in public transport use compared to current levels). This level of demand can be accommodated with a standard bus operating a 5 to 10 minute service interval.

It is difficult to see any role for rail or guided bus technology in the Study area for the foreseeable future even under scenarios of high growth because the population and corridor density are not great enough to support either the high capital cost or the ongoing operating costs. It is telling that no light rail (or guided bus) system has been built in the modern era in a city with a population below 200,000.

The move towards high quality public transport, including light rail, has often been motivated by a desire to replace slow, unreliable, crowded services with modern, fast, reliable services with adequate capacity, accessible vehicles and good ride quality. Although the option of light rail in Nelson must be ruled out on cost and demand grounds, there is nevertheless considerable scope to improve the existing bus services and to introduce elements of the high quality solution in a form that is suitable to the size and budget limitations of Nelson.

A wide range of projects, measures and actions can contribute towards an improved Public Transport system. Table 5-1 overleaf lists a number of these, grouped according to the type of measure. The table outlines whether the measure is applicable to the Nelson/Tasman region.

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2. High quality, high priority, high frequency PT services accompanied by strong mode switch incentives such as road pricing and parking restriction
<table>
<thead>
<tr>
<th>Type of Measure</th>
<th>Type of Measure</th>
<th>Measure</th>
<th>Applicability to the Study Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>Preferential Treatment</td>
<td>Bus lanes</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Traffic signal pre-emption for buses</td>
<td>✓</td>
</tr>
<tr>
<td>Public Transport Operations</td>
<td>Express bus services</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Park and ride facilities</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High quality stops</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New routes</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More frequent/ extended services</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple and efficient ticketing</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public transport image</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High quality public transport vehicles</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High capacity public transport vehicles</td>
<td>✓</td>
</tr>
<tr>
<td>New Infrastructure</td>
<td>New Infrastructure</td>
<td>Guided bus</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Light rail</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heavy rail</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Terminals/interchanges</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 5-1: Applicability of Public Transport Measures
5.3 Linking Public Transport Measures with the Project Option List

What is certain is that public transport measures alone will not provide a solution to urban transportation problems. The North Nelson to Brightwater Corridor Preferred Package therefore combined projects and measures together in order to achieve the overall vision and objectives.

The actual list of individual options is contained within the Technical Report associated with the Study and includes roading options, traffic management, public transport, walking and cycling, and TDM measures as a means of alleviating the existing issues and network problems.

The resultant preferred package of projects and measures provides a balanced solution over a 25 year period that will meet the purpose and objectives of the LTMA. The package includes a number of projects and measures that will help provide a sustainable environment and complements these with roading improvements necessary to ensure a safe and efficient transport system.

Packaging measures together can produce benefits in three main ways.

- Measures can be aligned with one another on the basis that they are complementary.
- Some measures can make other elements of the strategy financially feasible – i.e. parking charges could provide finance for public transport infrastructure.
- Some measures are likely to be more publicly acceptable if combined with others, this being particularly true for harder hitting TDM measures such as road or congestion pricing which can be softened considerably if the resulting revenue is invested in public transport service improvements.

Hence packaging measures and projects together provides greater benefits than that accrued from the sum of the parts as synergy is achieved.

The TDM, roading and other measures within the North Nelson to Brightwater Strategic Study are discussed in the Technical Report and the Travel Demand Management Discussions Document.

The Public Transport measures as agreed to in the strategy are discussed further in the following sections.
5.4 Policies and Activities

The policy for Public Transport in Nelson and Tasman will be determined by the Regional Land Transport Strategies and the Public Transport Strategies that sit underneath. However, the main focus for the North Nelson to Brightwater corridor is relatively simple:

**Public Transport Policy** Increase Public Transport use in Nelson and Richmond

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timing</th>
<th>NCC</th>
<th>DCL</th>
<th>NZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare Regional Passenger Transport Strategies</td>
<td>Short Term</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce a local stopping bus service at 15/30 min headways in peak/off-peak periods between Nelson and Richmond along Salisbury Road / Main Road Stoke / Waimea Road / Rutherford Street</td>
<td>Short Term</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce an express bus service along Richmond Deviation / Whakatu Dr / Annesbrook Dr / Tahunanui Dr / Rocks Rd / Wakefield Quay at 30 min headways in peak periods</td>
<td>Short Term</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce Airport bus services to Nelson CBD, Richmond and Stoke (30 minute headway)</td>
<td>Short Term</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus interchanges at Nelson CBD, Stoke and Richmond with Park and Ride at Stoke and Richmond</td>
<td>Medium Term</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce ‘feeder’ services connecting residential areas to new bus interchanges</td>
<td>Medium Term</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade fleet (to low floor buses), bus facilities and bus-stops</td>
<td>Short Term</td>
<td>●</td>
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<tr>
<td>Introduce bus priority at intersections in Nelson CBD and along Main Rd Stoke / Waimea Rd route</td>
<td>Short Term</td>
<td>●</td>
<td></td>
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<tr>
<td>Ensure concessionary bus fares are available for the mobility impaired</td>
<td>Short Term</td>
<td>●</td>
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6 Activities

6.1 Activity 1: Prepare Regional Passenger Transport Strategy

Regional Councils and Unitary Authorities are each required to produce a ‘Regional Passenger Transport Plan’ in accordance with the ‘Transport Services Licensing Act’. This statute requires regional councils to prepare a document specifying the services that are to be provided in the region.

It is recommended that the two Councils prepare a Passenger Transport Strategy that not only specifies the services to be provided in the region but also outlines the forward expenditure and monitoring to be undertaken. This is important with the new focus that the two Councils will be placing on public transport over the coming years.

6.2 Activity 2: More frequent Nelson-Richmond services

The bus occupancy survey indicates that the Nelson - Richmond services are successful bus routes operating every 30 minutes with an average of around 30 passengers per bus in the peak direction. The current frequency is determined by the operator’s economic perspective (profitability). However, a more frequent service may be preferred from the social economic perspective. It is recommended that the service runs every 15 minutes during peak periods and every 30 minutes at all other times.

Currently, all bus services finish at around 5:30pm. The lack of evening services is a deterrent to use that is likely to increase with the trend for people staying in the city after work for leisure and recreation. The proposal is to test extension of the principal services to 10pm every night.

6.3 Activity 3: Introduce new express Nelson-Richmond service

One option to encourage additional trips from private cars to public transport is to reduce the journey time for the services. It is therefore recommended that an express service be implemented between Nelson and Richmond with few stops. This would run at 30 minute frequencies during peak periods.

6.4 Activity 4: Introduce Airport Service

Although Nelson Airport is one of New Zealand’s busiest commercial airports with more than half a million passengers per year, the airport is not currently served by a fixed timetable bus service. It is recommended that a bus service is introduced between Nelson city centre and the airport via Rocks Road, and perhaps on to Stoke and Richmond.
6.5 **Activity 5: Bus Interchanges with Park and Ride**

New bus interchanges are recommended in Nelson, Richmond and Stoke, with the interchanges in Richmond and Stoke having Park and Ride facilities.

Providing quality interchanges will generate further demand, through provision of good traveller information, seats and shelter. Integration with other modes can be encouraged through provision of taxi ranks, cycle racks, and good pedestrian access routes, as appropriate.

Park and Ride should be provided at the interchanges away from the CBD to encourage the use of public transport over the private car. As with all public transport measures, this will need to be implemented alongside other measures in the preferred package, in particular increasing commuter parking prices in Nelson CBD.

6.6 **Activity 6: Feeder Services**

Providing new interchanges at Nelson, Richmond and Stoke facilitates the introduction of feeder services between residential areas and these town centres.

The exact form of these new services would need to be determined after further investigation however the following routes should, at least, be considered:

- At the south-western end of the corridor, Wakefield could be served by extension of SBL Nelson – Richmond services
- New development areas (e.g. Ngawhatu Rd, Marsden Valley and Enner Glynn) should have bus provision.
- Connection of current services i.e. ‘The Bus’ Route 2 (Atawhai) could be combined with SBL services via Waimea Road to give residents of north-east Nelson direct access to the Hospital.

6.7 **Activity 7: Upgrade buses and facilities**

Replacement of the bus fleet with modern low floor vehicles will improve the image and comfort of public transport, generate additional patronage and unsure easy access for those with mobility impairments who experience difficulties boarding high floor buses.

Improvements to roadside stops will generate further demand, through provision of good traveller information, seats and shelter.

6.8 **Activity 8: Bus priority measures**

The delays suffered by cars are suffered also by buses unless priority can be provided. A simple way of providing priority to buses is to create their own lane at intersections, thereby moving them to the front of the queue. More advanced measures involve tracking of buses and providing them with an early or extended green phase at traffic signals. It is recommended that intersection priority measures be implemented at various locations in heavily trafficked areas including Nelson CBD, Waimea Road/Rutherford Street and Main Road Stoke/Salisbury Road.
There may also be mid-block locations, particularly along the Waimea Road/Rutherford Street route, where segregation by way of bus lanes may be possible and desirable.

The benefit of providing these bus priority measures will depend on the extent that they can be implemented and the impact they have on other traffic.

6.9 Activity 9: Concessionary fares for mobility impaired

The current Total Mobility service assists mobility impaired people by providing subsidised taxi fares. It is recommended that this subsidy be extended to public transport services. This will provide these members of society a greater range of cheaper transport options, enabling them to meet their everyday transport needs.
7 Implementation and Monitoring

This discussion document recommends that the activities above be implemented as shown in the Activity table but ideally as soon as possible.

The two Councils will need to further refine these public transport measures as part of the process of developing individual Travel Demand Management Strategies and Regional Land Transport Strategies. In doing so, it is recommended that the two Councils must work together as there is a large amount of overlap between responsibilities, especially in regard to the services between the two regions.

As with many measures and initiatives, providing an enhanced public transport system will require an ongoing commitment from both Councils. If implemented without subsequent promotion, monitoring or fine tuning, the impact on travel behaviour will diminish. Furthermore, the system may require a long period of promotion before a significant take up is achieved.

It is recommended that a formal monitoring programme be set up to monitor the bus services. Both quantitative and qualitative monitoring will be required to provide input into further improvements that could be undertaken. Monitoring should also measure other effects which influence or have an indirect impact on the uptake of public transport (for example fuel process, vehicle ownership, regulation changes etc.).

The exact form of the implementation, monitoring and ongoing promotion of the public transport initiatives should be determined by the Councils prior to finalising their public transport strategies.
8 References

1. Nelson and Tasman Public Transport Study, Brian Baxter, 2004
2. New Zealand Transport Strategy (NZTS), 2002
4. Land Transport Act 1998
5. Land Transport Management Act 2003
6. The Land Transport Management Amendment Bill 2007
8. Tasman Regional Land Transport Strategy, 2003
11. Tasman District Resource Management Plan