

Pedalling Along

Nelson City Cycling Strategy



December 2006

Vision

“Cycling becomes a safe, convenient and commonplace way of getting around Nelson”

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This Cycling Strategy document was prepared for Nelson City Council by Roger Boulter of Roger Boulter Consulting. The help of Council staff, members of the Nelson Tasman Regional Cycling Forum, and members of Road Safety Nelson Bays, is gratefully acknowledged.

Nelson City Council

Pedalling Along: **A Cycling Strategy for Nelson City** **2006 – 2010**

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1. INTRODUCTION

1.1 Why This Strategy?

Nelson City Council encourages and promotes cycling for commuting, travel and recreation within the region, as shown by the vision statement. With the continuing rise in fuel costs and obesity, cycling is a sustainable and healthy response to these and other issues. Cycling is therefore an important part of the transport mix.

A good proportion of Nelsonians cycle to work each day. Some of the contributing factors are the compact size of the City, the relatively flat topography, good weather and improved cycle network and facilities. Nelson is one of the few cities to buck the trend of declining cycle use. Although 1.8%¹ of journeys to work nationally might seem small, this is nearly as high as the national figure for public transport use. This figure could also increase, as Nelson has already shown. A feature article in the national Strategy *Getting There – On Foot, by Cycle* reported that Nelson maintained its already-high percentage of cycle-to-work trips at 7.1% between the 1996 and 2001 Censuses.

Cycling's advantages are well known as preventive health, and savings in congestion, pollution, environmental effects and scarce natural resource use, if people cycle instead of drive. And there is more potential for this than many people think – two-thirds of all vehicle trips are less than an easy cycle ride of 6 km.

The NZ Transport Strategy 2002 sees cycling as a way to help achieve all five of its objectives, which are outlined later in this Strategy. Dedicated central government funding for cycling and walking has existed since 2002. In 2005/06 was \$10 million nationally, of which \$3 million is for Transit NZ projects. To attract some of this funding, local councils must have a cycling strategy in place, in which projects are referred to either generically or specifically.

Nelson has had a cycling strategy since 1995, with an updated strategy in 2001 – earlier than most councils in New Zealand. These early strategies mainly focused on developing a cycle route network. Since 1995, 20 km of off-road cycleways and 14 km of on-road cycle lanes have been built. Nevertheless, the cycle route network, though impressive, is not yet continuous.

¹ 2001 Census Travel to Work, Commuters only

This progress has not been at the expense of safety. Cycle crashes reported to the Police were lower in 2005 than the average for 2000 to 2004. The 0800 CYCLECRASH number began in December 2004, so time series data cannot be gathered from this source yet. More cycling does not mean more crashes. In fact there is strong evidence from New Zealand and overseas that higher cycling levels tend to be associated with a lower per-cyclist crash rate. As more people cycle and cycling becomes an everyday activity, the level of awareness and tolerance improves. Since 2001, several initiatives have been taken in areas other than engineering, including the central City Safer Routes projects, the Safe Journeys to School project and the 0800 CYCLECRASH number for reporting incidents.

Nelson is also unusual in having high quality mountain biking trails close to hand (some only just beyond the urban area), and even some of the city's off-road paths have tourist potential. This is important as a generator of wealth for the local economy.

1.2 Strategy Structure and Approach



National strategy and legislation is outlined, bringing out how it relates to cycling, followed by an outline of regional-level strategy. These are important because Land Transport NZ takes them into account in its allocation of funding.

Nelson's Long-Term Council Community Plan (LTCCP) sets out *Community Outcomes*, which sum up how the Nelson community wants the City to develop. The community outcomes are summarised, again bringing out ways in which they relate to cycling. Other relevant city strategies are also summarised.

A Cycling Strategy *Vision* follows, encapsulating in a single phrase the essence of the outcomes referred to above and followed by outcomes more specific to cycling in Nelson. These outcomes will be monitored by reference to the targets set for them.

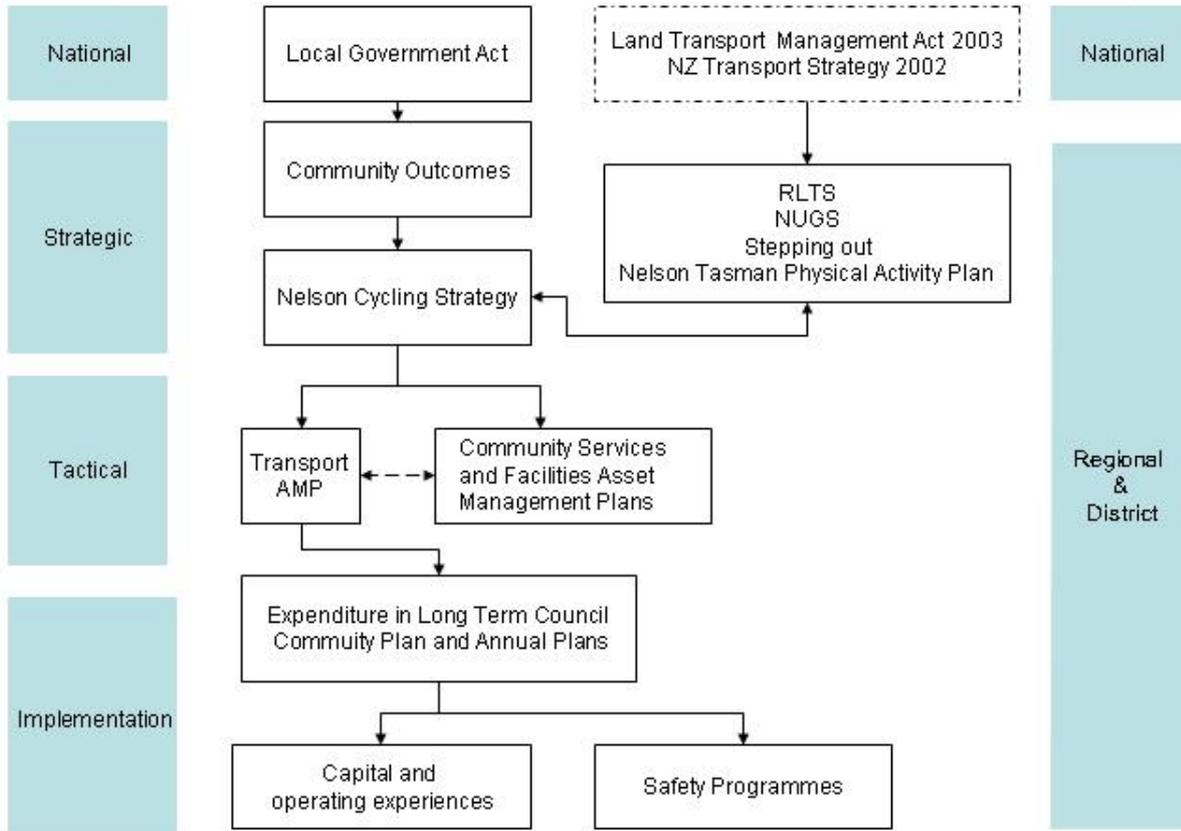
It's important that cycling strategies are practical. They should address specific local situations, and include programmes and actions with a notional indication of the level of funding likely to be required. Refer to page 46 for details of projected expenditure. Land Transport NZ sees these strategies as vehicles for practical implementation.

The possible funding sources are complex. Several Land Transport NZ funding categories relate to different aspects of a strategy, including cycle route infrastructure, travel behaviour change, and road safety. Some aspects, in particular leisure cycling, fall outside what Land Transport NZ, focusing on transport, will fund. School cycling initiatives are given a boost in this strategy, recognising the important health and other benefits, which include reinforcing the choice of cycling over other forms of transport as the transition to adulthood approaches.

The main part of this Strategy identifies issues, then discusses them, and concludes with actions appropriate to address each issue. Many of the actions identified are implementation activities. These are listed on Page 43-46, and broadly scored on their level of benefits, high, medium or low, and likely cost.

A work programme can be devised according to the identified actions and indicative costs. More factors than the level of benefits and costs will be relevant in deciding which implementation activities should be funded in each year and the Strategy will guide and assist in funding decision making. Also relevant will be political choices as expressed through Council decision making processes, and how the implementation activities fit with other elements of the overall transport programme.

This diagram shows the main links to Policies and Strategies



2. STRATEGIC CONTEXT

Increasing cycling in Nelson requires more than just infrastructural improvements. It requires a comprehensive strategy incorporating education, promotion, enforcement, encouragement and improved facilities.

In line with the national cycling strategy, Nelson City Council has adopted the following principles to encourage further participation in cycling within the region.

- Provide a supportive environment for the enhancement of cycling.
- Ensure future land uses support cycling.
- Encourage cycling as a primary travel choice.
- Improve road safety for cyclists.
- Continue to improve and expand the current cycling network and facilities.

2.1 National Strategy and Legislation

Land Transport Management Act 2003

New Zealand Transport Strategy 2002

In 2003, the Government passed the Land Transport Management Act. This, in various provisions, incorporated wording from the *Vision* of the *NZ Transport Strategy*, which had been published the year before by the Minister of Transport. This vision stated that:

“By 2010 New Zealand will have an affordable, integrated, safe, responsive and sustainable transport system”

The Act also required land transport programmes at both national and city/district level to contribute to the five objectives of the *NZ Transport Strategy*:

- *“Assisting economic development”*
- *“Assisting safety and personal security”*
- *“Improving access and mobility”*
- *“Protecting and promoting public health”*
- *“Ensuring environmental sustainability”*

The *NZ Transport Strategy* describes how these objectives will be met – and cycling features strongly in relation to all of them.

**National
Strategy and
Legislation**

Getting There – On Foot, By Cycle”, 2005

Leading on from the NZ Transport Strategy, in 2005 the Minister of Transport also launched the National Strategy *Getting There – On Foot, By Cycle*. This describes itself as:

“A strategy to advance walking and cycling in New Zealand transport”,
with the *Vision:*

“A New Zealand where people from all sectors of the community walk and cycle for transport and enjoyment”

This is supported by three goals:

“Community environments and transport systems that support walking and cycling

More people choosing to walk and cycle more often

Improved safety for pedestrians and cyclists”

and ten priorities for action:

- “1. Encourage action for walking and cycling within an integrated, sustainable approach to land transport*
- 2. Expand our knowledge and skill base to address walking and cycling*
- 3. Encourage collaboration and co-ordination of efforts for walking and cycling*
- 4. Encourage land use, planning and design that supports walking and cycling*
- 5. Provide supportive environments for walking and cycling in existing communities*
- 6. Improve networks for long-distance cycling*
- 7. Encourage positive attitudes towards and perceptions of walking and cycling as modes of transport.*
- 8. Encourage and support individuals in changing their travel choices*
- 9. Improve road safety for pedestrians and cyclists*
- 10. Address crime and personal security concerns around walking and cycling”.*

This gives a good idea of the range of different types of action that will be required to *“advance . . . cycling in New Zealand transport”*. This Nelson Strategy takes a similarly broad approach.

2.2 Regional Land Transport Strategy (RLTS) 2001

The current Regional Land Transport Strategy (RLTS) dates from 2001. This was before the Land Transport Management Act and New Zealand Transport Strategy, which introduced significant changes in national criteria. The RLTS is being revised to take these into account, and is likely to be published later in 2006.

RLTS 2001



The 2001 RLTS came out at the same time as the 2001 Nelson Cycling Strategy, and reflects that strategy's focus on building up a cycle route network, particularly off-road. For example, the 2001 RLTS states (page 17) that *"Separate (off-road) cycling facilities are considered the safest and most pleasant for the cyclist"*.

Of the six issues identified in Nelson's 2001 RLTS, the one specifically relating to cycling was:

"Need to improve cycle and pedestrian networks and increase their use"

Network improvements were seen as a key to both increasing cyclist numbers and along with road safety education, reducing the cyclist crash rate.

The RLTS makes reference to (page 32) *"identifying and prioritising a cycleway hierarchy linking residential areas to centres of common interest such as the CBD, school and community centres/ facilities"*.

Nelson's Long-Term Council Community Plan (LTCCP) 2006-16

The Local Government Act 2002 changed the way local councils plan for their areas. Now councils are required in a long term council community plan to set out community outcomes, or goals describing how the community envisages the area developing over the next 10 years. Annual plans are updates to this longer-term document.

Nelson's Community Plan was released for consultation in April 2006. This includes six community outcomes, and more cycling contributes to achieving at least four of them, as follows:

Outcome	How this Cycling Strategy contributes
Healthy Land, Sea, Air and Water: We protect the natural environment	Cycling economises the use of natural resources and minimises impacts on the environment
People-Friendly Places: We build healthy, accessible and attractive places and live in a sustainable region	Cycling is convenient, cheap, healthy and enjoyable. It contributes to human scale face-to-face interaction and natural surveillance deterring crime, both on- and off-street.
A Strong Economy: We all benefit from a sustainable, innovative and diversified economy	Cycling saves disposable income spent on transport, reduces absenteeism through improved health, and increases accessibility and choice of travel to workplace destinations. By reducing the numbers of vehicles on the road, cycling contributes to the efficiency of commercial road transport.
Kind, Healthy People: We are part of a welcoming, safe, inclusive and healthy community	It is a community building activity. Cycling has proven health benefits, and increased levels of cycling are linked to improved levels of health. Cycling contributes to human scale face-to-face interaction and natural surveillance deterring crime, both on- and off-street.

Three *measures* specifically relating to cycling are listed under two of these outcomes in the Community Plan.

- User and resident satisfaction with cycle network (Residents' Survey)
- Proportion of residents walking and cycling regularly (recreation and commuting).
- Cycle accident data.

This Cycling Strategy's monitoring targets (Section 3) relate to these measures.

Referring to walking and cycling, the Community Plan says:

“Nelson has high numbers of pedestrians and cyclists and has progressively developed footpath and cycling facilities. Cycling and walking transport modes are considered important transport options for handling growth, increasing physical activity and reducing environmental impacts.

“Council has completed the first section of the Atawhai cycleway and is advocating for Transit New Zealand to complete connection through to Tresillian Avenue. Council is currently reviewing its cycling strategy and will consult on this in 2006”

“24 injury cycle crashes were reported in 2004. Cycle crashes are over-represented in Nelson at 17% of all reported crashes compared to the all New Zealand rate of 5% although cycle volumes are higher in Nelson and may account for some of this”.

The Community Plan sets a budget of about \$200,000 per year. The figure for 2006/07 is higher at \$360,000 because of carry over from 2005/06 for the Airport Cycleway. The Community Plan also proposes that the Atawhai Cycleway be constructed between 2006 and 2008, although as a state highway project this would be the responsibility of Transit NZ.

The Community Plan records that public satisfaction with cycleways had met its target 80% satisfaction level.

2.3 The 1995 and 2001 City Cycling Strategies

1995 and 2001 Strategy

Nelson’s first Cycling Strategy in 1995 investigated and proposed a cycle network, much of which has since been implemented, as a broad-scale network of city-wide routes.

The 2001 Strategy took these plans further and, again, much implementation followed. Routes developed pursuant to these strategies included the Railway Reserve (southern/Stoke section), Rocks Road, and off-road paths, underpasses and bridges alongside the Stoke Bypass and through the Bypass/Annesbrook Drive intersection. A Queen Elizabeth II Drive shared path and the Maitai River paths (not to full shared use standards, but available for cycling) were also developed.

These strategies said relatively little about actions other than provision of a cycle route network and cycling facilities. Since the 2001 Strategy, several initiatives have been taken in areas other than cycle network and route planning.

2.4 Regional Land Transport Strategy (RLTS) 2006 (in preparation) and North Nelson to Brightwater Corridor Study

RLTS 2006

The 2006 RLTS is a combined one, covering both Nelson City and Tasman District.

The rejection by the Environment Court of Transit NZ's proposed Southern Link road prompted the North Nelson to Brightwater Corridor Study in response. Work on the 2006 Regional Land Transport Strategy (RLTS) has been timed to incorporate Nelson City Council's response to this study. The RLTS is expected to be completed in mid-2007.

This Cycling Strategy does not presume any particular preferred option arising from the Corridor Study, nor any particular response to this from Nelson City Council, but seeks to ensure that cycling is well-provided for whichever option is chosen. As part of the strategy, however, it is recognised that cycling provides an important part of the overall transport mix, with particular potential to relieve peak time congestion.

Following public consultation in 2005 on several option packages, Transit NZ has indicated that the areas of travel demand management, public transport, cycling, roading and traffic management are important components of a transport solution package to help reduce peak time congestion.

Travel demand management proposals include formal introduction of a "TravelSmart" programme, school and workplace travel plans, and traveller information about alternative travel options. All of these would include cycling promotion, and build on existing Council initiatives.

2.5 Other relevant strategies and plans

Draft Nelson Urban Growth Strategy (NUGS) 2004

The NUGS will set out the form and locations of Nelson's expansion over the next 50 years. Work on a draft urban growth strategy took place during 2004, including consultation with over 900 submissions. Submissions on NUGS tended to support low-rise intensification rather than "greenfields" development. Although it is likely that some land will need to be re-zoned from rural to urban purposes, this may be combined with intensification around suburban commercial centres. Cycling contributes to this intensification through providing accessibility over short distances, whilst requiring less space than motorised traffic. Council will consider how best to provide cycleways in growth areas.

**Other
Strategies**

Nelson Tasman Physical Activity Plan 2006

This Plan proposed the outcome: “*active and healthy communities in Nelson – Tasman through more people being more active, more often, life long*”. It suggests that the two Councils should focus (amongst other things) on “*effective and targeted . . . transport planning, provision and management*”.

In relation to “*walking and cycling for daily life and discretionary travel*” (section 4.2) the plan has two objectives:

- “*A connected and effective network of cycle and walking routes in the Nelson – Tasman region*”
- “*Planning for physical activity opportunities is embedded within land transport planning processes*”

Recommended actions towards this objective include, over the short term:

- “*Councils ensure the draft Regional Land Transport Strategy maximises support for uptake of walking and cycling*”
- “*Councils educate leadership and key professionals to increase understanding of cycling and walking needs and provision of appropriate facilities*”

and over the medium term:

- “*Councils secure expert active transport and urban design input into future reviews of cycling and walking strategies in Nelson – Tasman*”

Nelson Social Wellbeing Policy

Council adopted its Social Wellbeing Policy in late 2003, covering deprivation, employment and economy, education, housing affordability and community cohesion issues. Within this, particular priorities included income levels; youth employment, knowledge and skills; safety, security and crime levels, and cultural identity. The policy supported a range of initiatives and networks (some already existing) including the Mayor’s Taskforce for Jobs, Nelson Safer Community Council, the Community Housing Forum, and Council’s Community and Whanau Network.

Cycling, providing accessibility (and thus access to jobs, schools and facilities) whilst saving personal disposable income, together with other benefits such as ‘eyes of the street’ deterring crime, can be seen as contributing to this policy.

‘Stepping Out’, Nelson’s Walking Strategy, 2005

The Walking Strategy aims to “*increase walking in Nelson*” (the Strategy’s *Vision*), just as this Cycling Strategy aims to increase cycling.



Like this Cycling Strategy (in relation to cycling), “*Stepping Out*” reflects that “*increasing walking in Nelson requires more than just infrastructural improvements. It requires a comprehensive strategy incorporating education, promotion, enforcement, encouragement and improved facilities*”.

Many of the initiatives taken under “*Stepping Out*” to increase walking will be shared with this Cycling Strategy. Examples include developing the shared-use path network, the central area Safer Routes project, and the Safe Journeys to School project. This is because, although walkers and cyclists have different needs, both forms of transport are significantly affected by rising motorised traffic volumes, to which many of the strategies’ measures respond.

In future there may be a case for combining the Cycling and Walking Strategies, and some local authorities have combined them. In Nelson, the needs of cycling and walking differ and at present the cycleway network is still in the development phase. At this stage Nelson City Council sees merit in keeping them separate.

Combining of Nelson City Council and Tasman District Council Cycling Strategies may be considered in future.



3. VISION, TARGETS, MONITORING OUTCOMES, AND REVIEW

3.1 Cycling Strategy Vision

Taking into account the strategic context outlined above, the following vision guides the Cycling Strategy:

Vision:

Cycling becomes a safe, convenient and commonplace way of getting around Nelson.

The rest of this Cycling Strategy aims to translate this vision into reality.

3.2 Cycling Strategy Targets

Based on the *Vision* and *Outcomes* above, the following targets are set by Council, in order to ensure continued progress. Each target shall be reviewed annually or in some cases when research data results become available.

Targets:

An increase in cycling's proportion of journeys to work from 7.1% in the 2001 Census, to at least 10% in the 2011 Census.

Increase numbers cycling to school city-wide, and for individual schools to promote exercise and reduce traffic congestion.

An increase in leisure cycling.

At least a 10% increase in cycle use levels, shown in the proposed 2011/12 comprehensive cycle use survey compared to the proposed 2007/08 survey.

At least a 10% decrease in crashes and incidents, compared to cycle use, between 2007/08 and 2011/12, based on CAS system and 0800 CYCLECRASH analysis, by education and awareness.

Public satisfaction in the safety and experience of cycling in Nelson above the 80% level as measured in the annual residents' satisfaction survey, between 2006/07 and 2011/12.

90% of implementation activities included in each year's Cycling Programme implemented by 31 December following the end of the respective financial year" measured both by numbers of activities and total budget.

Targets

The last of these targets allows that sometimes budgets might need to be carried over into a successive year.

Length of cycleway or on-road cycle lanes has not been included as targets. This is because the focus has now changed from creating significant lengths of linear path for which this type of target was appropriate to completing continuity. This often involves more difficult issues over short lengths. In the situation that now exists, the benefits of completing a missing link - between, say, two substantial cycle routes - will be out of proportion to the link's length. More meaningful measures of success are numbers choosing to cycle, the safety of cycling, and people's satisfaction levels.

3.3 Cycle Strategy Monitoring

Indicators and measures include:

- Proportion of people cycling to work is given in the Census, every five years. The 2006 Census data was unavailable at time of printing.
- Other cycle use data for monitoring purposes will be taken from the cycle counting work recommended in this Strategy (under the Issue "Data"). This will also give data required for monitoring progress towards the cycle crash and incident targets.
- Progress towards the second target, relating to school cycling, will be measured by reference to programmed activities that have been implemented.
- Council's annual (or 3 yearly) residents' satisfaction survey will give information on levels of satisfaction with cycling in Nelson.
- Leisure cycling data is often sparse, but information will be taken from the survey work proposed in this Strategy.
- Survey of school cyclists by volunteers to determine numbers cycling and origin.

3.4 Cycling Strategy Outcomes

In considering how the vision might be achieved, the following Cycling Strategy Outcomes are based on the community outcomes (goals) and other provisions of the LTCCP, and on discussion of issues with a range of stakeholders.

Outcomes

Specific Outcomes

A culture that acknowledges cycling as a part of everyday life, where people support cycling and see it as a safe transport choice

A safe, convenient and continuous cycle route network linking all parts of the City, incorporating best practice design and engineering standards

Monitoring will be based around checking the progress being made towards targets set for these outcomes.

3.5 Cycle Strategy Review

This Cycling Strategy will be reviewed in 2011. Reviewing the Cycling Strategy after the LTCCP and the next RLTS will ensure that the Cycling Strategy's Vision and Outcomes accord with those of the 2009 LTCCP, and sets the updated targets for the 2012 LTCCP.

A further recommendation is a review of projects once the RLTS is completed and that the cycle and Pedestrian strategies be integrated into the RLTS.

Review



4. ISSUES AND ACTIONS

The main issues are outlined below, followed by a discussion and recommended actions.

Where appropriate, the recommended actions are translated into potential implementation activities, which can then be used in formulating outline 10-year and 5-year programmes. These accord with the timelines of the LTCCP, and can be regarded as additional detail expanding on it.

Issues and Actions

N.B. Where cycleways are proposed through parks and reserves, there maybe underlying constraints regarding what can be done there, such as Reserves Act classification or Parks Asset Management Plan policy and the need for the proposed cycleway not to adversely affect other existing users and values of the park.

4.1 Data

Cycle use

Cycle planning is commonly beset by an absence or shortage of data.

Data on cycling use are not gathered as a matter of course, and usually rely on isolated initiatives. Although some automatic counting equipment can detect cyclists, it is still imperfect because such equipment is generally designed to detect much heavier vehicles.

Since 1999 Nelson has undertaken annual cycle counts at three locations – Railway Reserve, Wakefield Quay and Bishopdale – so a time series since 1999 can show trends. This is shown in Appendix 1. However, there is no cycle use data on a comprehensive city-network-wide basis. This can give valuable information on local movement patterns.

A survey of an entire city road and path network is very staff-intensive, but has been done in other cities (e.g. Hamilton) and does not need to be undertaken often. Once every five years might be often enough. This would typically involve counts at every significant intersection on the road and path network, at peak times, on a small number of days, and subject to postponement in the event of rain (which would depress typical cycling levels). The time-series estimates of trends could be based on a few sites possibly using automatic counting equipment to extrapolate city-wide and site-specific estimates for the intervening years. For the first year, automated counting equipment could be trialled alongside manual counts and the two resulting datasets compared to assess accuracy.

Some New Zealand survey work has established profiles of times of day, days of week, and weeks of year, which can be applied to data surveys localised in time to give average use over longer periods. An annual average daily cycling flow estimate can be derived from this information which is important to support funding applications for a Land Transport NZ subsidy.

Consideration should be given to asking schools for data on the numbers cycling and the catchment areas they come from. Some of this work has already been done by the Road Safety Co-ordinators in their work with schools.

Manual counts will generally be more reliable for cyclist behaviour than automated counting. The latter can be used for time series comparisons on the basis that any inaccuracies are likely to be constant over time. Manual counting will also detect cyclists who might not ride over detection equipment, for example when using a roadside footpath to avoid an intersection.

Manual counts at intersections can also record turning movements, which will be useful in planning cycling facilities like providing a cycle lane for the majority movement flow if there is not room to provide for all flows. Such movement counts can also be used to estimate flows on particular route sections between intersections.

Cyclist journey purpose

There is very little data on cyclists' journey purpose. There is the perception that cycling is 'mainly for leisure', when national statistics show that only about one-third of cycling trips are for leisure, about the same proportion as for car trips. This data is from the National Travel Survey. Journey purpose data is useful to distinguish a 'recreational' path from a 'transport' one. The journey purpose distinction is of interest to off-road cyclists, since these tracks do not receive funding. The data maybe of interest for future planning also.

By capturing data such as age, destination and purpose a demographic picture is built up. This will then allow for the refined setting of targets tailored to the various age groups and user types.

Crash, injury and 'incident' data

Crash data commonly suffers from under-reporting, especially for minor injury or non-injury crashes. Some data suggests that a little as one-quarter or one-fifth of minor injury crashes are reported to the Police. Even those

reported may be inadequately analysed regarding lessons that can be learnt. Examples include a straight-ahead cyclist forced off the road by a left-turning car being recorded as 'lost control of vehicle', or a cyclist crashing into a car door opened in their path being recorded as 'hit stationary vehicle'. A motorist 'not seeing' a cyclist may be caused by other factors taking the motorist's attention such as the cyclist being on the edge of the motorist's field of vision, yet interpreted as a failure by the cyclist to make themselves conspicuous by wearing bright clothing.

Some progress has been made by safety agencies in resolving these issues, but cycle crash data generally remain patchy, and open to misinterpretation. Another common problem is of crash data failing to be compared with use data; total crash figure trends are limited in their usefulness if not compared with cycle use trends.

One of the most significant innovations in recent years in cycle safety estimation is the 0800 CYCLECRASH number pioneered by Nelson City and Tasman District. Although anecdotal and uncorroborated, this has significantly increased the available database by two or three times, which is particularly important given under-reporting and the resulting small data set that lowers statistical significance. 0800 CYCLECRASH has also recorded not only crashes but non-crash incidents e.g. near misses.

The 0800 number has so far been supported by Land Transport NZ as a trial. Consideration now needs to be given to whether, and if so how, the 0800 number can be given permanent status as a data source. Consultation as part of this Strategy has shown the 0800 database to have strong support in informing cycle planning, in a context of a general paucity of data.

Land Transport NZ attempted to incorporate the 0800 data in the formal crash recording 'CAS' system ('Crash Analysis System'). Their consultants have reported that this has not been straightforward, and is often time consuming because of poor quality data.

The 0800 number records incidents that, if not involving injury or collision, have been recorded in the CAS system as 'non-injury crashes'. In fact, they are not crashes at all, and this, together with other factors, has led the consultants to recommend that near miss 0800 data should not be included in the CAS system, but kept for separate analysis.

The 0800 data is valued for the information it gives about particular localities, and any information that can inform planning and thus better target funds should be welcome in a general context of a paucity of data.

0800 Cyclecrash



The Land Transport NZ consultants also touched on replicating the 0800 system elsewhere, and concluded that initially this should be restricted to the larger centres. There is much to learn, and Nelson City and Tasman District will be valued for the help they can give other councils in pioneering similar reporting systems.

Actions 4.1:

- Council will undertake a comprehensive city-wide cycle use survey at main intersections on the road and path network during the 2007/08 year, repeat this in 2011/12, and use a small number of annual count sites in the intervening years to extrapolate estimates of all the other count sites.
- Council will continue the 0800 CYCLECRASH system, and seek to attract a national subsidy for it because of its local and national benefits including benefits to other local councils from Nelson's experience.
- Council will undertake journey purpose surveys of a sample of cyclists using different parts of the path system, as well as a corresponding city-wide survey, and compare the results. This currently happens twice per year (summer and winter). This data will help to determine journey purpose, destination and any issues with the existing network. This can then be used for data modelling.
- Data will be used to update the Network Traffic Model to provide a cycle flow model to evaluate cycle volumes and trigger infrastructure upgrades. This could be completed in 2007/08 when the current traffic model will be updated with Census 2006 data.

4.2 Cycling within the central City

For the purposes of this Cycling Strategy, the term 'central City' means the area within the square ring road of Halifax Street, Rutherford Street, Selwyn Place and Collingwood Street.

In the medium term any modifications to traffic management arrangements and/ or streetscape design may be incremental, and cannot be presumed. This Cycling Strategy therefore assumes a streetscape, traffic, walking and cycling environment substantially as it exists now.

During the '90s changes to streetscapes within the central City reduced carriageway widths, ensured the remaining space was used more efficiently, and added angle parking, widened footpaths, and raised tables near intersections. Trees, seats, cycle parking racks and other street furniture were introduced.

**Cycling in
CBD**

Within the central City, the Safer Routes project has gathered a very large amount of data on pedestrian patterns, crashes, and the preferences and perceptions of all who use the centre of Nelson by whichever form of transport, and whatever their purpose for being there. The general conclusion is that the slow-speed, traffic-calmed environment makes walking and cycling popular, but that some concerns remain.

For cyclists, both parked and moving cars within the central City that are of concern, including cars moving into and out of parking spaces. Angle parking has never been favourable for cycling, and 'incidents' (and some crashes) have occurred from cars reversing into cyclists' paths. With parallel-parked cars, the problem is usually car doors being opened into cyclists' paths. Intersections with traffic lights are also of concern as the detector loops sometimes fail to pick up cyclists. Improvements can be made by identifying the loop with road markings so cyclists know where they must stand to activate the lights.

As the inner streets of the central City provide a slow moving environment, confident adult cyclists should be encouraged to ride in the centre of the moving lane to avoid crashes with parked vehicles. Younger, less confident cyclists should be encouraged to park their cycle and walk. This was recommended in the Safer Routes study.

Both cyclists and motorists like to park as close to their destinations as they can. Angle car parking is popular, and provides more parks, which is why there is likely to be resistance to its removal – an issue beyond the scope of this Cycling Strategy. See also the issue *Cycle route network continuity: Beyond and past the central City* on measures to help this situation in part of Trafalgar Street.

As with car parking, cycle parking has been provided throughout the central City, generally as racks worked into streetscape redesign. Cyclists are concerned that these do not support or lock the whole bicycle frame, and are generally not sheltered except for a small number at the Millers' Acre Information Centre. Casual short-term parking takes place on these stands, but commuters generally will not use them for fear of theft or vandalism, which is a persistent problem with this type of cycle parking. A need now exists to provide for longer-term cycle parking, for example regular parking for half a day or a day at a time, as with workplace commuting. This may be via improving existing facilities (e.g. covering existing stands, with added security) or new more secure facilities.

Secure cycle parking, in the form of a few centralised facilities at different places throughout the City centre could help address cyclists' security concerns. These may be best pursued in conjunction with workplace-based travel planning involving central City businesses, since government funding is available, and it is encouraged as a relatively new part of the overall transport strategy.

Secure facilities, in which experience is growing internationally, typically involve enclosing the cycle in a locker, which can also be used for accessories like helmet, panniers and wet weather clothing that would otherwise be inconvenient to carry around all day.

Providing such lockers does not ensure their use. They need to be managed in ways appropriate to the needs of those who use them, including ease of access, security, and convenience. Smart card technology to protect access and monitor use, is one possibility. There are cases in New Zealand of such lockers being unused because provision was not followed by appropriate management.

Lockers also need to be promoted, because regular cycle commuting supported by this type of facility is relatively new to New Zealand, and travel behaviour change requires promotion so habits change over time. This might be best in conjunction with workplace-related travel planning involving central area businesses as a joint initiative or through business associations.

Apart from possible government funding established over the last two years to promote travel behaviour change, the costs of this kind of high-quality facility might be further reduced by business sponsorship. This could itself form part of workplace-related travel planning. Cyclists will often be willing to pay a nominal sum if a high level of convenience and security is offered.

There are overseas examples of secure cycle parking facilities of this kind being combined with other cycle-related services in a 'cycle centre'. Examples typically include cycle repair and accessory shops, or cycle hire. Since Nelson is an established focus of mountain biking and other forms of cycle tourism, there could be commercial opportunities here on which cycling entrepreneurs could capitalise.

In addition, Council should investigate and consider the merits of a Resource Management Plan change to make cycle provisions mandatory for any new facility, business, shops, schools, churches and public facilities

Also when public toilets in the CBD are either constructed or renovated, consideration should be given to installing showers and cycling facilities.

Finding sites for such facilities would require a great deal of co-ordination, and the Nelson City Council is in a key position to lead in this especially since it is only approved organisations such as roading authorities that may apply for a Land Transport NZ subsidy. It would therefore be pragmatic to aim for one such location at first, and then add a second in the light of experiences learnt.

In the interim Council should consider installing canopies over existing cycle stands. These could be retrofitted to existing stands or installed when upgrades are done.

Actions 4.2

- Implement an end of route cycle provision programme including cycle stands and lockers with major employers through the cycling education budget. Funding has been allocated in 2008 to 2011 for this.
- Audit traffic light systems for cycle detection and identify the detector loop by marking it with paint.
- Investigate the possibility of installing shelters over existing cycle stands.
- Investigate and research the needs of providing secure locker facility in the CBD
- Provide first one, then a second, high-quality secure cycle parking facilities, in conjunction with workplace-related travel planning involving central core businesses, including investigating other cycling-related services as a cycle centre. These should be as close to the central City area as possible, and locations will need to be investigated . Funding has been allocated in 2008 to 2009 for this.
- Investigate and consider the merits of a Resource Management Plan Change to make cycle provisions mandatory for any new facility, business, shops, schools, churches and public facilities.
- Longer-term secure cycle parking should be considered in any proposed new car parking or public buildings.

Refer to Section 5 for full funding summary.

4.3 Cycle route network continuity into and out of the central City area

The extensive cycle route network development following the 1995 and 2001 cycle strategies largely focused on longer-distance paths going north and south between Nelson and Richmond.

Apart from an advanced stop box and approach lanes at Trafalgar Street's northern approach, cyclist access has not been specifically addressed into and out of the central City nor on the square ring road itself.

Intersections and cycle routes discussed in this document's recommended actions are numbered and shown on the plan on page 21.

Collingwood, Halifax and Rutherford Streets, and Selwyn Place have traffic signalled intersections, which are safer and easier for cyclists than roundabouts, traffic volumes and speeds remain high. There have also been calls for more cycling facilities, in particular advanced stop boxes and approach lanes. Road dimensions do not make this easy.

Not all parts of the square ring road have the same traffic volumes. Rutherford Street and Halifax Street between Trafalgar Street and Rutherford Street are the busiest parts. Selwyn Place, Collingwood Street, and the rest of Halifax Street are the least busy.

In addition, the routes cyclists want to take into and out of the central City are not evenly spread. Bearing in mind the location of development, there would seem likely to be relatively stronger demand for access to/from:

- The north-east: The Wood, and the Atawhai corridor, including the Trafalgar Cycleway;
- The north-west: Cycle flows to and from Rocks Road that pass by the central City and then approach it from the north-west; and
- The south-west: taking flows from Waimea Road and the Railway Reserve via the Vanguard Street on- and off-road cycling routes.

(see "Data" issue verifying this)

There are two off-road possibilities that could be used to take some of the cycle flow outlined above:

- The Maitai Path to and from the east that passes northwards to skirt the central City's northern side

- Rutherford and Trafalgar Parks could take flows from the Atawhai corridor and Rocks Road.

These desired routes and existing facilities narrow the focus of attention to link the central area with routes to and from the rest of the City. Attention will focus on the following:

- Development of the commuter function of the Maitai Path
- Collingwood Street as a link with the Trafalgar Cycleway, and the Atawhai corridor route beyond this also serving The Wood (M3)
- Wakefield Quay/ Haven Road/ Rutherford Park
- Vanguard Street/ Hardy Street
- Waimea Road – Rutherford Street/ Selwyn Place

Network Continuity

Each of these is discussed in turn below. Items in Brackets, e.g. (T9) refer to Map overleaf.

Development of the commuter function of the Maitai Path (T9)

The commuter function is quite separate from the path's very significant recreational function, leading as it does to mountain biking country to the east of City centre.

This path does not serve a large population area directly to the east, but many cyclists from the more substantial north-eastern areas of The Wood and the Atawhai Corridor would prefer it because it is traffic-free. Once joining the path east of the central City, there is no interaction with motorised traffic until Trafalgar Street and its entry point across Halifax Street.

Developing the path's commuter function would require defining the extent of path appropriate for development to urban standards. See the issue *Engineering Standards consistency*. The location and design of links onto and off the path need to be addressed. In addition the esplanade reserve on which it is located is relatively narrow in places. There are also a number of plants which could constrain path improvements.

In places, the Maitai path esplanade is narrow, and plants may represent a constraint in upgrading to urban standards; these issues should be taken into account in design.

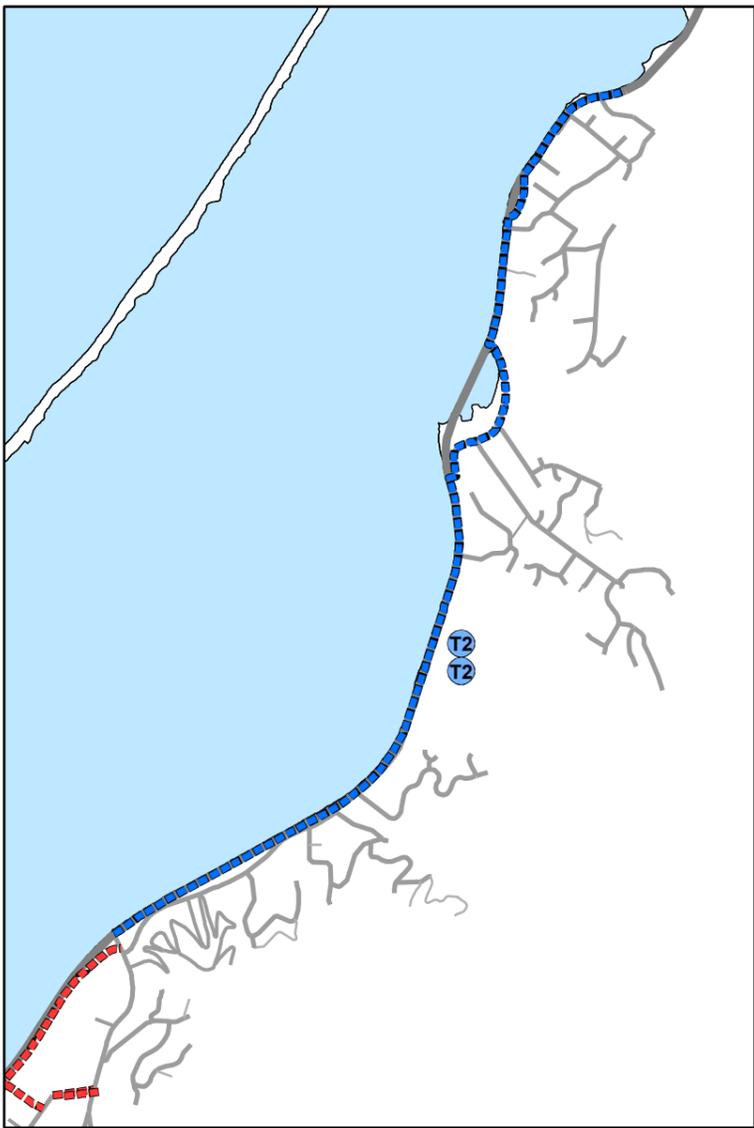
Bearing in mind the preferred routes mentioned above, it is unlikely that an urban commuter path would need to extend beyond the western Nile Street bridge, and possibly not beyond the Domett Street bridge. To do so in any

case would be likely to damage the path's rural nature beyond Nile Street. The already-improved Ajax Avenue section of the path would form the innermost part of this route with attention required to how this would connect with the road system. See issue *Cycle route network continuity: Beyond and past the CBD central area*.

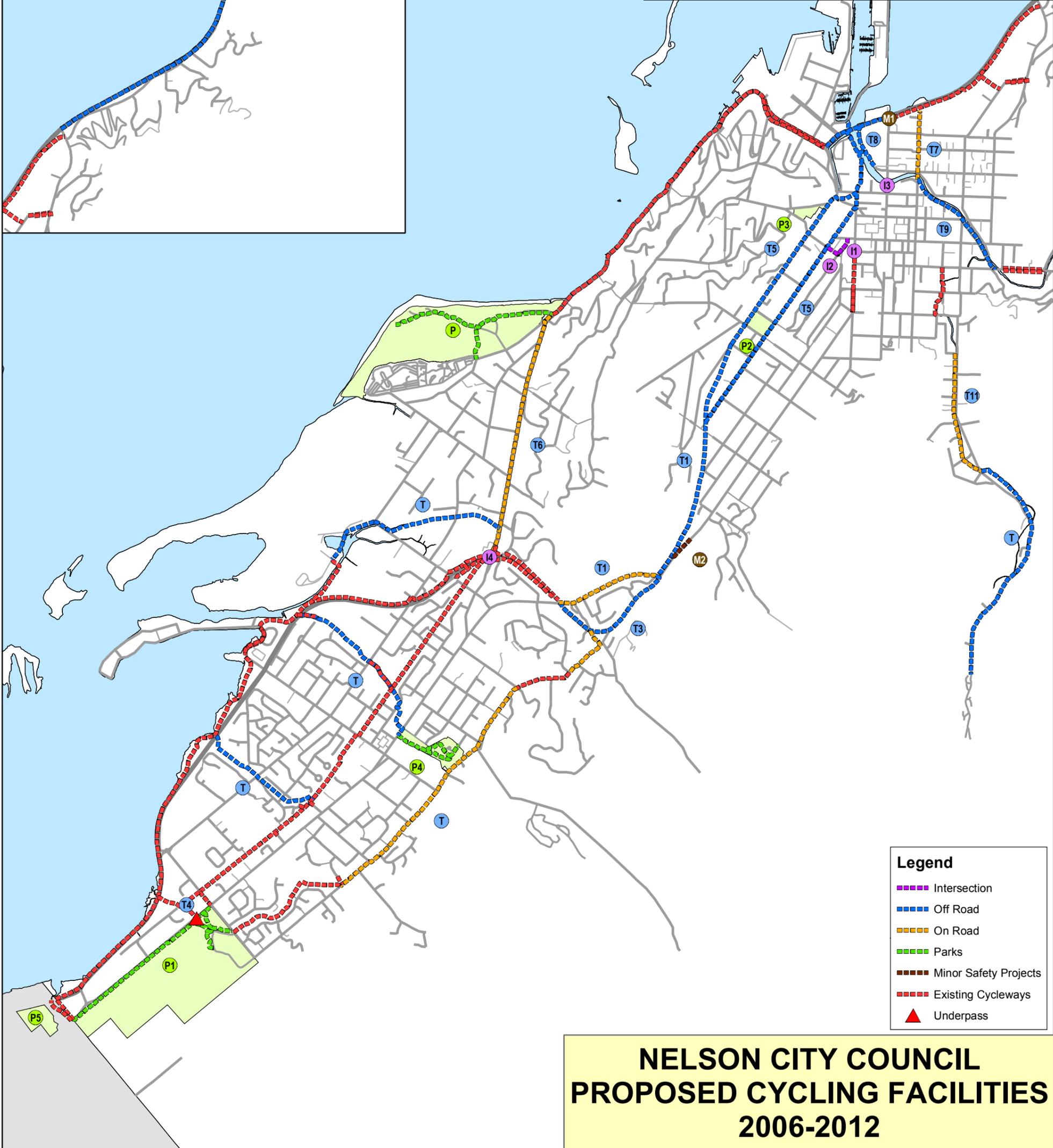
Collingwood Street and Sovereign Street as a link with the Trafalgar Cycleway, and the Atawhai corridor route beyond this also serving The Wood (T7)

A link with the off-road network in the form of the Maitai Path should be provided at this point.

Design will take into account cyclists' need to slow considerably from a road to a path environment. Turning left off the road carriageway and looping anti-clockwise downwards onto the path would allow for this, although warnings to both cyclists and pedestrians as the cycle path crossed the roadside footpath would be useful. A less direct alternative already exists whereby cyclists turn left into Riverside Drive and access the Maitai Path about half way along it.



Transportation Infrastructure	
T1	Sealing Railway Reserve St Vincent Street to Bishopdale Hill
T2	Trafalgar 200 (Atawhai) Cycleway Neale Park to Clifton Tce
T3	Waimea Road Bishopdale Hill to Beatson Rd
T4	Saxton Field Main Road Stoke underpass
T5	Victory Square to QEII Connection
T6	Annesbrook Drive/ Tahunanui Drive
T7	Trafalgar 200 connection via Collingwood Street
T8	QEII to Halifax St to Haven Road connection via Rutherford Park
T9	Maitai Walkway upgrade Collingwood to Nile Street
T10	Path widening in areas shown because of particularly high usage according to study figures.
T11	The Brook – central city feasibility study, design and implementation
T	Possible Links
Parks Infrastructure	
P1	Saxton Field Cycle Facilities Access from Main Road Stoke to Netball Courts and Cycle Racks Realignment of existing cycle track at Saxton Field new entrance Cycle training circuit and ring track Community Parks Cycle Tracks
P2	Victory Square
P3	Pioneers Park
P4	Isel Park
P5	Regional Training Cycle Park
Intersections	
I1	Rutherford Street/Selwyn Place
I2	Vanguard Street/Hardy Street
I3	Maitai River Route
I4	Annesbrook Drive/Whakatu Drive
Minor Safety Projects	
M1	Trafalgar St/Queen Elisabeth II Drive
M2	Waimea Road/Beatson Rd Footpath



Legend	
■	Intersection
■	Off Road
■	On Road
■	Parks
■	Minor Safety Projects
■	Existing Cycleways
▲	Underpass

**NELSON CITY COUNCIL
PROPOSED CYCLING FACILITIES
2006-2012**

Wakefield Quay / Haven Road / Rutherford Park (T8)

At present the Rocks Road cycle lanes are not cycle friendly including, both existing lanes, as well as those proposed under the Southern Corridor options continuing via Haven Road. Even though on-road cycle lanes do exist, they are marginal because of side turnings, narrowed shoulders, and significant traffic activity. Although the Haven Road / Queen Elizabeth II Drive roundabout is approached by Haven Road cycle lanes, only experienced cyclists are likely to be confident using it.

Minor adaptations like lane markings and coloured surfacing might improve the conspicuousness of the Wakefield Quay/Haven Road cycle lanes, but beyond this a connection into, through and out of Rutherford Park into the central City would enable less experienced cyclists to access the central City from the Rocks Road route. Anecdotally (see issue *Data*) many cyclists do seem to use this route, via illegal use of unmodified roadside footpaths.

A route through Rutherford Park needs to connect into the central City. Alongside the river would have the advantage of connecting with the Ajax Avenue path and Trafalgar Street advanced stop box. Paths in this park can also connect with the Port under the Queen Elizabeth II Drive river bridge. Care must be taken to ensure that the planned work is developed in conjunction with the Rutherford / Trafalgar Park Concept Plan and new entrance to the Trafalgar Centre, do not detract from the proposed new cycle routes (a design issue). Some land in this area is in private ownership, and cycle route planning would need to take this into account.

Although the existing path is constricted near Trafalgar Street, widening to urban standard would be feasible via a cantilevered boardwalk. The alternative – taking the cycle route across Halifax Street west of the Trafalgar Street intersection – would be difficult, since this is one of the busiest parts of the square ring road, and the impact on traffic flow would be more significant.

Vanguard Street/Hardy Street (I2)

Vanguard Street, although busy, is a useful route for cyclists accessing the central City from the Railway Reserve where, under different Southern Corridor Study scenarios, a sealed path is proposed. There are two roundabouts between Vanguard Street and the Hardy Street entry into the central City.

The Gloucester Street/Vanguard Street roundabout is small and constricted, with some deflection of vehicle movement, meaning that traffic speeds are

generally low so less experienced cyclists may well be confident using it. However, the connection between the Vanguard Street path and this roundabout needs improvement (see issue *City-wide cycle route network continuity*) and provision of cycling facilities may be possible if adjoining sites are redeveloped.

The Hardy Street/Vanguard Street roundabout is larger, with some double-lane approaches, less traffic deflection and higher circulating traffic speeds.

Many cyclists accessing the central City through this area already use Oxford Street and Kerr Street. Both these link Gloucester Street and Hardy Street. Oxford Street is private and Kerr Street one-way southbound. Options will be investigated including obtaining permission to use Oxford Street, possibly in conjunction with refurbishment, which it needs, and legalising two-way cycling on Kerr Street. This might not be the best solution because of angle parked cars. Options include refuge islands in Hardy Street towards its western end, allowing cyclists to cross one traffic lane at a time away from Hardy Street's main traffic queuing area.

An advanced stop box and approach lane will be investigated for Hardy Street's approach to Rutherford Street. This is tight in engineering terms and might require moving the kerb alignment but would complete access into the central City.

Network Continuity Central City



Waimea Road – Rutherford Street/ Selwyn Place (I1)

There are important destinations along Waimea Road including schools and the Hospital. Cyclists who use it end up on Rutherford Street and need to turn right into the central City at some point.

Selwyn Place would be better than Hardy Street, because there is only one lane to cross at Selwyn Place, but two at Hardy Street. A right-turn cycle

lane could be provided on the Rutherford Street approach. No advanced stop box is necessary because there are no conflicting traffic movements. Placing the cyclists' stop line in advance of the general traffic stop line, a measure endorsed by cycling design manuals, would improve cyclists' visibility.

Actions 4.3:

- T9 The Maitai path will be upgraded to urban standard for a defined length, including improvement of interface locations with the street network, as a cycle commuter link with the central City area.
- T8 Implementation of improvements to the crossing of Haven Road and Queen Elizabeth II Drive;
- T8 A new path to urban standard will be investigated, in Rutherford Park, (in conjunction with the Redevelopment Plan) connecting to the central City via the existing Trafalgar Street advanced stop box and approach lanes, and to the Port under the Queen Elizabeth II Drive river bridge.
- I2 A continuous cycle route will be implemented linking the central City and the Vanguard Street cycleway via Kerr Street and Gloucester Street.
- I1 A right-turn cycle lane will be installed on the Rutherford Street (northbound) approach to the Rutherford Street/ Selwyn Place intersection, to provide for Waimea Road cyclists accessing the central core.

4.4 Cycle route network continuity beyond and past the central City area including to and from the Port.

Several cycling routes would be useful to link some of the routes already discussed to provide for cyclists who are accessing destinations beyond, rather than within, the central City, for which they can use other established cycle routes.

Intersections and Cycle Routes discussed as part of this Strategy's actions are numbered and shown on the plan in the appendices.

The following opportunities exist:

- Trafalgar Cycleway Connections to central City (T8)– Rocks Road: Trafalgar and Rutherford Parks
- Maitai river route (I3)
- Trafalgar Cycleway Connections to Vanguard St and/or St Vincent St (T5)

Each of these is discussed in turn below.

Trafalgar Cycleway Connections to central City (T8)

At present, the Trafalgar Cycleway continuation crosses Trafalgar Street unaided, and continues along Queen Elizabeth II Drive to the Maitai River Bridge. There is insufficient width to continue the cycle route across the bridge, but a path turns down a steep bank alongside the Maitai River. Alternatively, cyclists can access the central City via Sovereign Street and Collingwood Street.

Since a new crossing is proposed above to take the Rocks Road route into the central City by connecting this Trafalgar Cycleway continuation to the new Rocks Road route, a continuous cycle route between Atawhai and Tahunanui via Rocks Road can be achieved. This would require a lessening of the steep gradient downwards from Queen Elizabeth II Drive and construction of new, wider paths to urban standard through the two parks.

The path on the east side of the Trafalgar Street crossing needs to be widened, which would require some minor vegetation pruning.

Maitai River route (I3)

The Maitai River path should be used to provide access from both the east, The Wood and Atawhai corridor, and west, Rocks Road route. These two routes need to access Trafalgar Street from both sides, near the bridge. The crossing at this point will need consideration. Continuing along the Maitai River path would serve cyclists who wished to access points past, rather than within, the central City including The Wood and Port Nelson.



Trafalgar Cycleway Connection to Vanguard Street and/or St Vincent Street
(T5)

N.B. Work on this route has been deferred until the outcome of the Corridor Study is determined.

The routes outlined above come close to connecting with each other, but at present cyclists travelling between the Atawhai corridor and Railway Reserve need to pass through the central City past angle parking (the only alternatives involving heavily trafficked roads and roundabouts). This is not ideal for less confident or inexperienced cyclists.

There are several options for the routes outlined above to bypass the central City. One is a link around or through Anzac Park, although this would need to respect Anzac Park's heritage significance. Another is a clip-on on the Queen Elizabeth II Drive Bridge (a State highway, and thus Transit NZ's responsibility). Both these possibilities could include links (of which again there are several possibilities) through Trafalgar and Rutherford Parks.

Both St Vincent Street and Vanguard Street are useful as cycle routes, for different purposes. Vanguard St is popular with cyclists accessing the central City as it is a direct route, while St Vincent Street, is a traditional cyclists' route to the Port, and connects the Victory Square/Toi Toi valley and Washington Valley residential areas. St Vincent Street leads onto the Haven Road/Halifax Street roundabout, which is not designed for cycling, so alternative routes need to be considered from Washington Valley and the other areas to the Port. A path around Anzac Park connecting Paru Paru Road and along the river bank under Queen Elizabeth II Drive, is one option. The options and issues of the wider area are complex and can only be resolved through an area-wide scoping study.

Actions 4.4:

- T8 Connections implemented between and through Trafalgar and Rutherford Parks, and respectively to Neale Park and the Haven Road/central City route (as mentioned above) to provide a continuous cycle route linking the Trafalgar cycleway with the Haven Road/Wakefield Quay/Rocks Road cycle route.
- I3 Warning signs should be installed for the difficult crossing of Trafalgar Street (just south of the Maitai River bridge), and in the longer term cycle access across this bridge will be investigated.
- T5 Options for cycle route connections in the area between Trafalgar Street and Victory Square will be investigated, covering routes into and past the central City, and between the Port and residential areas such as Washington Valley, and including a link through Anzac Park.

4.5 Cycle route network continuity outside the central City

Outside central Nelson, there are other locations where the already-developed cycle route network has gaps. This is a common problem that besets cycle network planning. It is relatively easy to build a length of cycle path but not so easy to integrate it with the rest of a cycle route network or with the road system. Cycle route networks often suffer from missing links. These are difficult to tackle and therefore tend to be deferred. Gaps can depress cycling levels across the network as a whole because potential journeys cannot be completed and therefore do not take place. Sometimes a continuous cycle route exists, but its quality needs improvement, with required measures varying from relatively minor to more significant.

Most of the routes outlined below are in a generally north – south (or north-east – south-west) direction. This follows the topography, and recognises that ridges of hills intervene in some east – west routes. This topography has constrained cycle route planning in Nelson under the 1995 and 2001 Cycling Strategies on the assumption that this was where cyclists' journey demand lay. This current Strategy aims to see these routes completed. The planned data surveys will provide a fuller picture of where cyclists' journey demands actually lie, and might show the need to develop some east – west routes.

The priority locations requiring attention are listed below. Each of these is cross-referenced to the Cycleway Development Plan included on page 21, with these reference codes:

- T7 / M1 Trafalgar Cycleway connection via Collingwood Street and Trafalgar Street
- T11 The Brook – central City
- T5 Vanguard Street/ St Vincent Street connections north and south
- T3 / M2 Waimea Road Bishopdale Hill to Beatson Road
- I4 Annesbrook roundabout, and nearby roads and paths
- T6 Annesbrook Drive – Tahunanui Drive
- Rocks Road
- Waimea Road
- T1 Railway Reserve, St Vincent Street – Bishopdale
- P1 Saxton Field path

Each of these is discussed below:

Network Continuity



Areas Requiring Attention

Trafalgar Cycleway connection via Collingwood Street and Trafalgar Street
(T7/ M1)

The Trafalgar Cycleway is of an acknowledged high quality, and was a finalist for the Cycling Advocates' Network 2005 Cycle Friendly Awards. Its connections to the central City require attention. The junction of Trafalgar St with the Atawhai Cycleway is a safety concern due to high traffic speed and short sight distances. It is recommended a Minor Safety Project (M1) be initiated to investigate options which may include extending the existing traffic islands and installing a pedestrian / cyclist shelter

Cycle lanes need to be provided where feasible on Collingwood Street including sufficient width protection from opening car doors.

Trafalgar Street is an alternative route for many cyclists especially because of its position in relation to the central City, and its advanced stop box and approach lanes. Cycle lanes should again be provided where feasible here.

Collingwood Street and Trafalgar Street bridges are narrow. Bridge clip-ons could be considered for the future, and in the interim better warning signs should be provided. At the Collingwood St Bridge a direct connection is needed heading into the central City down to the Maitai River Cycleway. (see section 4.3 on Collingwood St)

**The Brook
(T11)**

The Brook – central City (T11)

Brook Street and Westbrook Terrace are not safe for cycling because the traffic width is narrow and the road is straight encouraging higher speeds. They get moderate cycle traffic, including as a feeder route to mountain biking tracks beyond the lower valley. This could be resolved by removing some on-street car parking, although this might not be feasible because of local parking demand. Lack of space precludes indenting the parking. Traffic calming is an alternative and re-marking of traffic lanes to allow on road cycling should be considered.

The roads between The Brook and the central City and the Atawhai corridor via Collingwood Street and Tasman Street/North Road are relatively cycle friendly without dedicated cycling facilities, but the route needs signs (see issue 4.7 Signs and branding).

Vanguard Street connections north and south (T5)

**Vanguard
Street (T5)**

Vanguard Street has both on-road cycle lanes and an off-road path. In spite of this, , it is not a particularly pleasant cycling environment. Motorists,

when driving or parking here, do not always respect the cycling facilities. Extra markings might help improve the situation.

Vanguard Street may well remain the preferred cyclist approach to the central City from the Railway Reserve, because the alternative – St Vincent Street – takes cyclists through an extra roundabout at the St Vincent Street/Gloucester Street intersection.

In order to approach the central City, an east-west movement via one of the side streets between St Vincent Street and Vanguard Street is required. The alternative routes need to be evaluated, and the preferred one defined with signs, road marking and any other facilities necessary for continuity including cycle lanes. Facilities provided here will help make the cycle route clear (also see Issue 4.7 *Signs and branding*)

Connections also need to be improved requiring detailed design at the route's connections with the Kerr/Hardy Street route and the Railway Reserve entrance.

At present, the Vanguard Street off-road path connects to the road very close to the roundabout. For safety and cyclists' convenience, and to avoid cyclists crossing where traffic queues, this connection should be taken further away from the roundabout and some protection provided for cyclists needing to cross the carriageway.

Similarly, design is required to enable cyclists to safely and conveniently transition between the Railway Reserve path and the road system at the other end of this route. This will require detailed consideration of how the Railway Reserve cycle route can be integrated with the road system and the adjoining intersection in ways that are safe and convenient for cyclists travelling in both directions.

Waimea Road Bishopdale Hill to Beatson Road (T3 / M2)

The northern, currently unsealed path emerges into the road reserve and connects to Beatson Road. This path needs some improvement, but this can be readily achieved by attention to the width, gradients along and across the route and alignment, which may require new formation in places.

Cyclists travelling on Waimea Road often use the western footpath between Boundary Rd and Beatson Rd as a preferred route to the carriageway to avoid the high speed traffic. Therefore it is recommended that a Minor Safety Project (M2) be initiated so that this footpath can be widened to full cycleway width from Boundary Rd to the junction with the unsealed Railway Reserve at Station Reserve.

**Bishopdale
to Beatson
(T3)**

Beatson Road is currently a popular link to the southern Railway Reserve path. The berm on the north side of Waimea Road is wide and a path could readily be provided even allowing for possible modification of Waimea Road following the North Nelson – Brightwater Corridor Study.

A difficult continuity issue arises, however, at the Whakatu Drive/Beatson Drive roundabout. Here a narrow footpath is the only facility available for cyclists to access the Whakatu Drive path, the Railway Reserve southern section and other routes. Anecdotally, this path appears to be used illegally by high numbers of cyclists.

The roundabout is on a major traffic artery and has fast and heavy traffic flows. Cycling provision should therefore not be provided on this roundabout although neither should it be banned. The focus needs to be on the path instead. For a similar reason, a cycling connection should not be provided to either of this roundabout's Waimea Road approaches. The path system and routes described here provide relatively safe and convenient alternative routes.

Although difficult, continuity is possible and particularly important since this path is the only effective link between the two main halves of Nelson's cycle route network.

The path can and should be widened, with a cantilevered boardwalk, and fenced off for safety from the roundabout itself. To connect across Beatson Road with the Waimea Road path, just beyond the roundabout approach splitter island, an extra refuge island should be provided where the flush median currently exists and the connecting paths constructed via here. This will also improve access between this path and Beatson Road.



Annesbrook roundabout and nearby roads and paths (I4)

The Whakatu Drive path emerges at Gracefield Street. Cyclists often use the footpaths illegally to access the path to the Dave Langdon Bridge (the long bridge over Annesbrook Drive). Gracefield Street is a minor, lightly trafficked street, and measures to help cyclists are feasible without affecting traffic flow efficiency. This would need detailed consideration of options, involving kerb cut-downs, traffic calming, signs and markings to encourage cyclists to use the carriageway rather than the footpaths, while engaging in the 'dog-leg' movement via the road bridging Whakatu Drive between the two sections of path.

Other path routes in this area seem satisfactory, except that a link is required from the southern approach from Annesbrook Drive to the roundabout onto the path system.

Annesbrook Drive – Tahunanui Drive (T6)

This route is an important link in the City's cycle route network. Many cyclists prefer it for its flatness, directness and pleasant coastal aspect.

Passing shops, it is not easy to achieve a high quality of cycle friendliness for which on-road cycle lanes and side road treatments are required. Options will be investigated, including parking restrictions, indented parking, and cycle lane provision.

Rocks Road

Rocks Road and Waimea Road, two of the routes under the RLTS study are important.

Rocks Road has one general traffic lane and one cycle lane in each direction. It is flat, direct, and because of its coastal aspect, relatively pleasant from an amenity viewpoint. It is well-used route for cyclists commuting into the City centre.

The road is narrow. General traffic lane widths are only 3.0 metres in places. For this reason, and because of frequent bends in the road, it is impossible for trucks to avoid sometimes straying into the cycle lanes.

One of the Southern Corridor Study options proposes three general traffic lanes, two north-bound and one south-bound. The north-bound traffic lane additional to those existing would be used for buses and HOV (high occupancy vehicles and cars with two or more occupants) only. Under this option, a single 5.0 metre wide path is proposed, to be shared by cyclists and walkers in both directions. Segregating users by direction of movement would be advisable (see issue *Cyclist / pedestrian sharing*), and the width should not be lower than 5.0 metres because cyclist speeds are likely to be high.

This path suggestion has been supported by several stakeholders, including both environmental and roading interests. Cyclists are attracted to this idea by the possibility of a high-quality path; other road users by the removal of cyclists from an already-cramped road. Attention will need to be paid to design especially since there are some buildings on the sea side of the road, notably a restaurant and to the need to cross the road carriageway twice, onto it, and off it when travelling southwards. Some access will also be needed to some of the roads joining the new path from above Rocks Road. With this being a steep hill without many destinations, cycle use demand is not expected to be great. The chainlink fence running the length of Rocks Road is of heritage value.

The 5 metre path option would be expensive. Funding could only be justified as part of an overall package of measures, on the basis of benefit not only to cyclists but also to other Rocks Road traffic.

Any improvements to this corridor will be linked with the corridor study outcomes and will be a Transit NZ cost. No actions along this corridor have been included in the cycleway implementation programme.

Rocks Road



Waimea Road

This road goes over a hill into the southern part of central Nelson. It is important since it serves schools and Nelson Hospital, and provides a direct link to the central area.

Waimea Road

In the short term, cyclists should be encouraged to use the Railway Reserve route for destinations not on Waimea Road itself, while intersection treatment and maintenance of wide shoulders are completed.

Any improvements to this corridor will be linked with the corridor study outcomes. No actions along this corridor have been included in the cycleway implementation programme.

Railway Reserve, St Vincent St – Beatson Road (T1)

Although over a hill, this is an integral cycle route into the central City and areas to the west of it. The railway formation has not yet been sealed because of uncertainty over roading plans and the expectation of the Southern Link road, which would have used this route. Beatson Road is commonly used by cyclists as a direct link to the junction of Whakatu Dr and Waimea Rd. One option the North Nelson – Brightwater Corridor Study proposes is that this route be sealed as a shared pedestrian cycle/walkway. This is programmed for 2008/9 as part of the completed Do-minimum option of the Corridor Study

Railway Reserve (T1)

Another option proposes a cycle/pedestrian path at a lower level alongside a local (non-State highway) road on this alignment.

Both these options would significantly help and encourage cycling. If the second option were chosen for later implementation, it would still be worth providing a sealed path because cyclists would still enjoy significant benefit and a link into the central City at reasonable cost (together with improvements to the Waimea Road footpath between Boundary Road and Beatson Road). Some or all of any extra path width may be unsealed to provide a more comfortable surface for walking



Saxton Field path (P1)

The path alongside Saxton Field is usable, but is narrow and uneven, with overhanging vegetation. These matters are straightforward to resolve even though significant works might be involved.

Saxton Field will also be subject to substantial development as a major recreation facility. Full advantage should be taken of this to improve cycling both within and past the Saxton Fields site. Possible measures include piping the stream, removing trees, and providing a cycle learner trail (see Issue 4.12 below).

In conjunction with these developments, attention should be paid to the interfaces this path has with the road system, on Main Road Stoke and any new road entrance to the Saxton Field site.

Bolt Road to Whakatu Drive via Trent Drive (T)

In conjunction with these developments, attention should be paid to the interfaces this path has with the road system (including the underpass), on Main Road Stoke and any new road entrance to the Saxton Field site.

Action 4.5:

Feasibility study, design and implementation, as described above, of the following continuity links:

- T7 Trafalgar 200 Cycleway, and connection via Collingwood Street and Trafalgar Street
- T11 The Brook – central City

- T5 Vanguard Street/St Vincent Street quality, and connections north and south
- T3 / M2 Waimea Road Bishopdale Hill to Station Reserve
- I4 Annesbrook roundabout, and nearby roads and paths
- T6 Annesbrook Drive – Tahunanui Drive.
- T1 Railway Reserve, St Vincent Street – Beatson Road
- P1 Saxton Field paths
- T Bolt Road to Whakatu Dr via Nelson Airport’s Trent Drive

4.6 Engineering Standards Consistency

Nelson City Council aims to use best practice engineering standards. Nevertheless, consistency of standards and designs has been raised as an issue, both in their adoption and implementation.

Implementation is covered under the issue *Cycle audit, standards compliance, BYPAD and dialogue channels*.

Standards have generally differed between urban and rural situations. Generally a higher standard is needed in an urban situation because of higher use. The differences in standards relate to path widths, path gradients, corner sight lines, and standards of construction.

Nelson is distinctive in having highly attractive leisure environments close to the City’s built-up area. Two different sets of standards apply, rural and urban, in the Nelson City Council area, and it needs to be clarified which standard applies in each particular situation.

The most obvious example is the Maitai river path. This is built to the rural standard, yet is used as a key commuter route into the central City between Nile Street and the Port. This Strategy proposes that the section considered to be used for urban shared use purposes be defined, and improved accordingly. This would involve a wider path, although some or all of the extra width may be considered for other surfacing to provide a more comfortable path for walking. The section considered predominantly for rural purposes should, correspondingly, only be subject to rural standards.

Urban standards, which would apply to most paths covered in this Strategy, are contained in best practice engineering guides such as *Part 14 Bicycles* of the *Austroads Guide to Traffic Engineering Practice (Second Edition)*, 1999, and its *New Zealand Supplement* by Transit NZ. Generally, a 3 metre wide path is required in moderate to heavy use situations, or 2.5 metres in lower use situations.

Engineering Standards

Concerns have also been raised by cyclists about consistency between different urban standards used. One example is use of the Trafalgar Cycleway curved side barriers contrasting with the Railway Reserve side bollards, both for the same purposes of defining cyclists' path, slowing their speed, and preventing access by motor vehicles. In this case, the Trafalgar Cycleway barriers were taken from the Austroads guide cited above, published after the Railway Reserve had been developed. Both designs are of good quality and fit their purpose well. Nevertheless, consistency in designs used should be pursued so far as possible to give clear design standards to the cycle route network's implementation (see issue *Signs and branding*).

Action 4.6:

- Which specific paths are subject to 'urban' and 'rural' standards should be clearly defined, and best practice standards applied accordingly
- Parks and recreation staff develop standards for rural shared use recreational paths.

4.7 Signs and Branding

At present there is no national standard for cycle route direction signs, but common themes are emerging and some guidelines appear in MOTSAM (Manual of Traffic Sign and Markings) and in Transit NZ's Addendum of Part 14 (Bicycles) to the Austroads Guide to Traffic Engineering Practice.

Although Nelson has a significant length of cycle routes, especially off-road, the network as a whole is not coherently signed. Signs relate to one route rather than the network as a whole. Signing and publicising a city-wide network may alert cyclists and would-be cyclists to opportunities they would not otherwise know existed. Cyclists might know their local individual cycle routes but not know that they can add these together to make a wide range of journeys in relatively cycle-friendly conditions. Comprehensively signing and branding the network may significantly raise cycling levels at relatively low cost.

The map boards on the Railway Reserve and other places are useful (and will be extended to the north, including the Trafalgar cycleway and Maitai path), but as continuity is improved, cyclists will need better guidance on how they can traverse the City by the most direct, safe, convenient and cycle-friendly route.

Progress has been made with the adoption of the Nelson City Council Sign Policy and a special section on cycleway signs. Further development shall

Signs and Branding



be in conjunction with Parks Sign Policy and tie in with other Departments existing signs

The first of these signs have been installed at the Annesbrook Intersection and Salisbury Road Underpass. Both Tasman District Council and Transit New Zealand have agreed to follow this sign system on a regional basis.

Progress has also been made on producing 'Bike Nelson' a booklet with urban cycleways and mountain bike tracks, similar to 'Walk Nelson'



Actions 4.7:

- A branding theme for cycling in Nelson will be created. This will include consistent use of colour, size, shape and symbols (on both urban and rural paths); will be developed in conjunction with the Parks Sign Policy; and will be consistent with other existing signs. This will be undertaken in 2006/09 as an ongoing project
- The sign and branding theme will be incorporated in implementation activities as continuity features are achieved, and used to promote the network to residents of Nelson and beyond.

4.8 Cycle audit, standards compliance, BYPAD and forums/consultation

An issue has been raised that standards, even if adopted, fail to be implemented satisfactorily. It has been suggested that an audit process be established to ensure that implementation is satisfactory.

The Regional Cycling Forum supports a European system called BYPAD, standing for bicycle policy audit. This is an audit of the whole of an organisation's policy and practice, not, as is more common, of particular projects or designs.

Audits formally accredited by the BYPAD organisation have to date not taken place outside Europe where all accredited auditors are based, but the principles behind the BYPAD system are generic and could be applied here.

BYPAD

BYPAD has five levels, reflecting the extent to which an organisation's commitment to cycling is embedded within its practice. The Regional Cycling Forum supports Council's compliance with level 3:

“System oriented approach: Cycling policies are an integral component of a general mobility policy. They include a wide range of measures (not only infrastructure measures) and are implemented in co-operation with different partners”

Council endorsement of the BYPAD principles indicates that the Council's existing commitment to cycling permeates the whole organisation through this Strategy and the previous 1995 and 2001 strategies. The wide range of different actions, taken by different parts of the Council organisation, demonstrates that Council is already making significant progress according to BYPAD's principles. Since 1995 the range of action has broadened beyond cycle network and route planning to embrace initiatives such as the 0800 CYCLECRASH number, *Safer Routes*, and *Safe Journeys to School* programmes/projects.

It is not suggested that Council should formally ask the BYPAD organisation to audit its practice, but formal support for the Regional Cycling Forum's suggestion would indicate support for the principles behind the system.

Cycle audit is a system adopted in some overseas practice, combining technical and professional skills with the practical knowledge of day-to-day cyclists. This arose because it was discovered that formal safety audits were failing to detect issues of concern to cyclists and in some cases they were worsening the situation.

A cycle audit ideally involves an experienced cyclist who is also professionally qualified in engineering undertaking an audit of both existing situations and new designs, or professional staff work with local cyclists. The latter option has the advantage of also building wider communication with stakeholders.

Consultation and communication is already well-developed in Nelson, in the form of the Regional Cycling Forum and Bicycle Advisory Group. These allow discussion of issues and a constructive relationship between Council, other official bodies, and other stakeholders including cyclists. These forums are better established than in most of the rest of the country, and reflect the consultation provisions of the Local Government Act and Land Transport Management Act. It is proposed that they continue.

This Strategy, in general terms, has audited the existing cycle route network. It may be advantageous to consult local cyclists. Where cycling facilities are planned Cycle groups will be invited to review the design. Issues could be reported and mediated through established consultation processes.

In addition feedback from the cycle groups on the outcomes of the once yearly network audit will be sought.

Actions 4.8:

- Council supports the Regional Cycling Forum’s adoption of BYPAD Level 3.
- Council supports cycle group participation where appropriate in auditing designs.
- Council will invite participation from the cycle group in the once yearly cycleway network audit

4.9 Cyclist/pedestrian sharing

Cyclist/pedestrian conflict is an issue both on-road and off-road. This is not unusual where there are high-quality, straight, flat networks including disused railway formations like Nelson’s Railway Reserve. On these paths users will range from high-speed sport cyclists to small children or elderly on foot.

The present Parking and Vehicle Control Bylaw, section 23 (v) requires that *“Where any land has been set aside for joint use by pedestrians and cycles, any person using the footpath/ cycleway shall have full regard for other users, with pedestrians having the right of way”*.

The pedestrian right-of-way provision could be removed from this wording, but the main issue is mutual respect. That is, all users *“having full regard for other user... ”*. There have been complaints of pedestrians occupying the full path width, not being attentive to the possible presence of cyclists and, intentionally or not, hindering cyclists riding along the path. This behaviour is not in accordance with the bylaw, regardless of the right-of-way issue.

A wider issue is the need to inform both groups about behaving responsibly according to the bylaw, rather than whether its wording should be changed.

Retaining the pedestrians’ right-of-way provision also conveys a helpful message that greater consideration should be given to pedestrians as the more vulnerable of the two groups. This point should be emphasised in future planned educational promotions.

Cycles vs. Pedestrians



This Cycling Strategy does not recommend a change to the Bylaw, but does suggest a need for education and information. Cyclists need to respect pedestrians' presence by not expecting them to move, but pedestrians also need to watch for cyclists and allow them to pass.

Bells on bicycles may also help. There is commercial consumer resistance, but possibilities may be explored with retailers, and bell use encouraged through Council's own initiatives. Signs (e.g. 'share with care') may also encourage more responsible behaviour by both groups. It is desirable to encourage the use of bells and other warning devices. Retailers should be encouraged to promote bells and possibly issue them as gifts with new bicycle purchases. In addition future educational campaigns will focus on promoting the use of warning devices and instructing pedestrians how to react to them i.e. by keeping left

Research shows that walkers and cyclists generally don't comply with separation by a white line. If there is a particular reason for separation e.g. to keep cyclists to the outer side of a visibility-restricted bend, it can work.

Generally, cycling bans on paths do not help the situation. If the path is popular as a cycle route cyclists are likely to ignore the ban and it is impossible to enforce. It is more effective to design the path and network to induce appropriate behaviour, including providing a more cycle-friendly route where cyclists need to be deterred from using a particular path.

Actions 4.9:

- Off-road cycle routes should have signs to alert cyclists and pedestrians to hazards and the need for caution.
- Council will explore possibilities for encouraging provision and use of cycle bells.
- Cyclists and pedestrian users of paths will be provided with information and continued education to encourage responsible use, including respect for other users, whether on foot or cycle, and regardless of rights of way.

4.10 Cyclist/motorist sharing

Relationships between cyclists and motorists in Nelson are no different from the rest of the country. Certainly, stakeholder consultation did not show any unusually high antipathy between the two groups.

Most cyclists and most motorists act responsibly in relation to other groups. There is some tension, however, and stereotypes of the other group acting irresponsibly or possibly dangerously. Cyclists are clearly the more vulnerable group when on roads.



Signs may be useful to encourage attentive and responsible behaviour by cyclists and motorists where paths cross roads (as on the Railway Reserve, where the path's straightness may encourage fast cycle speeds).

In addition to the increase in the quantity of vehicles, the type also affects cyclists. The recent increase in the number of 4WDs on narrow roads and hills affects cyclists due to the vehicles' size and width.

The 0800 CYCLECRASH number has sometimes been used by both cyclists and motorists to complain about the other group's behaviour in general when no specific incident or actual threat to safety was involved.

In countries such as Denmark where cycling is more common, more car drivers are also cyclists. This can improve drivers' awareness of cyclists. Also research shows that as cycling numbers increase, the incidence of crashes decreases which maybe due to wider acceptance and awareness by the motorist. Cycling comes to be seen as a common place activity.



Action 4.10:

- The continuation of education and information campaigns with positive messages to all groups will improve driver and cycling behaviour and compliance with road rules.
- Signs will be provided to alert motorists and cyclists where cycle paths cross roads (e.g. on the Railway Reserve)

4.11 School cycling

School cycling is traditionally thought to be commonplace, but in fact it has declined substantially over the past few decades. Nowadays, only a small minority of children cycle to school, and this can contribute to the rise in childhood, and later adult, obesity.

There are several reasons for this. Cars are freely available to parents, and parents fear for the safety of their children because of more traffic. Parents themselves are less likely to be regular cyclists. Because cars are more affordable, those in their late teens often have their own cars. This, together

with road safety concerns, narrows the age range within which school cycling occurs. It is considered unsafe for children to cycle unaccompanied below about age 10, yet peer pressure beyond age 15 induces a perception that cycling is childish. Also, for the other reasons mentioned, a smaller proportion of the remaining 10 to 15 year old age group cycle. These problems all contribute to children dropping out of cycling during the critical intermediate school stage, continuing into adulthood without cycling as a commonplace part of lifestyle. This is exacerbated in Nelson where there are few safe cycling routes in the large catchment of some Nelson schools, especially Nelson Intermediate.

Views of school cycling as a road safety concern, where children are taught how to respond to motorised traffic have changed markedly over recent years. Travel demand management is now an important part of the NZ Transport Strategy, and councils are required to consider it under the Land Transport Management Act.

Several national funding sources are available to help raise school cycling rates and improve the safety of school cycling. Apart from the road safety funding available for many years, national funding is now available for travel planning, based on employers, schools, and the wider community.

Nelson has pioneered *Safe Journeys to School* projects at five schools: Victory, Nelson Intermediate, Auckland Point, St Josephs, and Nelson Central School. These have combined school-based travel planning with road safety education.

Council plans to continue this initiative in other schools across the City. Cycle network and route planning has tended to be based on longer-distance movements. This was true of the 1995 and 2001 Cycling Strategies, yet a great deal of cycling takes place over short distances within local areas.

School cycling is now of pressing importance. Teenagers who used to cycle regularly are in danger of being lost to cycling resulting in a generation of adults who have not habitually cycled as children. Extending *Safe Journeys to School* to other schools would complement a longer-distance and infrastructure-based approach with a focus on more localised cycling, and the softer (non-infrastructure) initiatives based around schools.

Construction of quality secure cycle storage facilities in schools is also essential to complement other measures. National funding can now cover school cycle storage in appropriate circumstances (53%), often without cost to Council (the funding balance being provided by school boards and/or the

Ministry of Education). Also, the Resource Management Plan Change mentioned in *Action 4.2* above would require cycle parking at new schools.

Engineering changes on routes to local schools will also be considered to ensure they are made as safe as possible for local school journeys. One example is the Vanguard Street/Motueka Street intersection, which has been identified as a deterrent for Nelson Intermediate pupils during the Safe Journeys to School study in 2005.

Council also provides environmental information for schools, conveying the environmental implications of daily life decisions. This includes travel behaviour change, increasing the benefits and reducing the barriers to change. With road safety work expanding to reduce travel behaviour change, Council's environmental education needs to complement its road safety work by addressing school based travel planning and travel behaviour change.

The reduction in cycle use at secondary school needs to be addressed with proactive education and promotion programmes in schools. Girls' colleges need to address cycling in relation to their school uniform by including a variation to school kilts to encourage girls' cycling.

Actions 4.11:

- The *Safe Journeys to School* project will be extended, by one school annually, as proposed in Council's Walking Strategy "*Stepping Out*". Applications for this project will be funded from Land Transport NZ
- Changes to roads, streets and routes around schools will be made as required to address deterrents to school cycling identified in the *Safe Journeys to School* project.
- Council's road safety and environmental education work, both of which potentially embrace travel planning and travel behaviour change, will be co-ordinated.
- Provision of secure school cycle storage will be further implemented.
- A secondary school cycle to school education and promotion programme will be initiated.

4.12 Travel behaviour change

'Travel behaviour change', a technical term for changing habitual transport choices, is now a significant focus of national funding considerations, including allocation of dedicated funding, publication of a *Travel Behaviour Change Handbook* by Land Transport NZ, and new funding criteria.

A travel behaviour change approach recognises that infrastructure alone is not sufficient to encourage permanent changes in habitual behaviour. International research shows that significant changes, in some cases up to 20%, can result from appropriate travel behaviour change initiatives, with many resulting benefits.

Some issues covered elsewhere in this Strategy include a travel behaviour change element. These include school travel planning and environmental education in schools.

The table below (taken from the book “Fostering Sustainable Behaviour” by Doug McKenzie-Mohr & William Smith) demonstrates a typical behavioural change model. It outlines the choices presented to an individual and options for the decision making process.

	New Behaviour: Cycle to work	Competing Behaviour 1: Take a Taxi	Competing Behaviour 2: Take a Bus in Winter
Perceived Benefits	Helps Environment	Fast & saves time	Slow & cheap
Perceived Barriers	Lose time with Family	No Alternative Costly Bad for Environment	Loses more time with Family

A limitation for children or less confident adults who might want to take up cycling, is the lack of places where they can practice before moving onto a busy road cycling environment. To this end, Nelson City Council will investigate off-road park cycle learner tracks. Also branding them as “fun trails” (or similar) may make them ‘cooler’ to children.

A *Bike Nelson* booklet is being produced to describe the urban cycle network and suggest some entry level mountain bike rides. Staff plan to produce 10,000 of these booklets. The maps will also be available on the Council’s website.

Activities under the Government’s national *BikeWise* programme and general safety campaigns will continue, taking opportunities provided by the 2005 funding increase for *BikeWise* that followed the launch of the *Getting There – On Foot, By Cycle* Strategy.

Nelson is also unusual in having adult cycle tuition classes. These provide an opportunity for adults wishing to take up cycling to move gradually to a road environment and help dispel the deterrent to adult cycling of the perception that cycling is childish. The *Re-cycling* programme builds confidence in those who might not have cycled in many years.

Action 4.12:

- Besides travel behaviour change initiatives covered in other action points, provision for cycle learner tracks or “fun trails” will be investigated for local parks (e.g. Victory Square, Saxton Field, Neale Park, and Pioneer Park) in conjunction with the Reserve Management Plan.
- The *Bike Nelson* booklet and map will be produced and distributed.
- General safety campaigns and initiatives under the *BikeWise* programme will continue.
- The *Re-cycling* adult tuition classes will continue.

4.13 Leisure cycling, cycle touring and mountain biking

Nelson is an important leisure cycling, cycle touring and mountain biking destination. This Cycling Strategy mainly focuses on cycling for day-to-day transport, but this cannot be considered in isolation from leisure cycling, cycle touring and mountain biking. This is seen as a popular activity with tourism potential. As part of ongoing work by Community Services Division, the strategic direction for this will be determined in reports from submissions on the Community Plan.

Based on current criteria, Land Transport NZ funding is unlikely to be available for recreational journey purposes, but other sources of funding might be available.

Private sector sponsorship will also be considered. The suggested central City cycling stations could be strengthened in their viability if they attract private sector sponsorship and are aimed at the leisure cycling, cycle touring and mountain biking market, as well as central city commuters. This proposal needs to involve private sector businesses that see commercial advantages in catering for cycle-based tourism. Facilities including cycle hire, cycle repair, maintenance and cycling accessory sales would enhance the viability of cycle stations, given marketing targeted to the leisure cycling, cycle touring and mountain biking sectors. Cycling clubs could also be involved.

**Tourism and
Mountain
Biking**

Action 4.13:

- Central City secure cycle parking and suggested cycle station facilities will include a focus on private sector sponsorship, leisure cycling, cycle touring and mountain biking, with a view to enhancing their commercial viability in conjunction with a Land Transport NZ workplace-based travel planning subsidy, possibly in conjunction with cycling clubs.
- Community Services Division, in conjunction with mountain biking groups, will investigate and report to Council on mountain biking activities and potential.

**4.14 Urban form and subdivision design**

Urban form and subdivision design affects the practicality of walking and cycling compared with car use. Some subdivisions in particular with low density and low connectivity, where there are cul-de-sacs, necessitate long and circuitous journeys. Cycling and walking routes need to be direct to be useful and this is addressed by considerate design and better connected roading layouts. This issue was raised during the consultation for preparing this Cycling Strategy.

Currently Council reviews all subdivision and commercial developments for opportunities to develop connectivity to the existing cycleway system and suggests installation of cycle facilities for staff and customers. Currently council negotiates on a case by case basis with developers and retailers, a small reduction in the number of carparks if they install cycling facilities and a shower for staff. It is recommended that a change be considered to the NCC Resource Management Plan requiring developers to consider connectivity and cycle access as well as providing facilities for stall and customers.

**Urban
Design**

Although more connected street layouts can be less efficient in traffic terms, design needs to address safety issues arising from a greater number of intersections. The advantages of improved layouts to encourage walking and cycling also need to be taken into account by road designers and planners.

Connecting routes within and between subdivisions can significantly contribute to subdivisions' cycle-friendliness. Opportunities can be taken to incorporate paths in linear open space required for underground services and through parks and reserves. By using the CPTED process (Crime Prevention through Environmental Design) issues such as lighting, good visibility, trimmed vegetation, observance and high use, all contribute to making these linkages safe and popular to use.

Action 4.14:

- A Resource Management Plan Change will be considered requiring developers to produce a local cycle network plan as part of new subdivisions and to install cycle facilities for staff and customers,
- Opportunities will be taken to provide connecting paths within and between subdivisions, notably where linear open space is required to accommodate underground services and through parks and reserves where appropriate.

5. PRIORITISATION, FUNDING, AND POTENTIAL IMPLEMENTATION ACTIVITIES

5.1 Prioritisation and Funding Criteria

Based on the listed Actions, the *Implementation* list below includes activities that will form part of an implementation programme. Prioritisation will be according to the Long Term Council Community Plan (LTCCP), and the Regional Land Transport Strategy (RLTS). Council's budget as established in the current LTCCP would not change for 2006/07,.

Funding from the National Land Transport Fund or other funds administered by Land Transport NZ like the regional transport funding will be governed by the criteria set out earlier in this document, including the *NZ Transport Strategy's* five objectives.

Land Transport NZ's criteria do not necessarily align with Nelson's Community Outcomes. It has already been mentioned that Land Transport NZ is reluctant to fund leisure cycling, but it is a priority for Nelson. In this situation, funding would either need to be provided from rates, or from another source.

Prioritisation is kept simple for the purposes of this Strategy document. It inevitably involves judgment and political choices that cannot be captured in any methodological formula. Central Government's *Cycle Network and Route Planning Guide* lists as possible criteria: level of service measures, existing cyclist demand, crash records, removing blockages, demonstrable achievement, and area-wise consolidation, but makes clear that judgment is required regarding their use, calling prioritisation "*a pragmatic art*".

5.2 Implementation Activities

Implementation

Implementation activities are listed in the accompanying table.

Those related to the development of the cycle route network are ranked according to a three-point scale:

- H (high) – very important, widespread benefits
- M (medium) – substantial benefits
- L (low) – some benefits

Most of the **Action** points listed above correspond to items in the table.

Cycle Strategy Implementation Programme

No	Potential Implementation Activity	Benefits	Cost	Funding source(s)	Actioned by	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
	Promotion / Education										
	Education Campaigns Budget Increase	H	M	LTNZ, NCC & Transit NZ	Infrastructural Assets	\$5,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
	Secondary School Promotion Campaign	H	L	LTNZ, NCC & Transit NZ	Infrastructural Assets		\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
	Subtotal					\$5,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
	Surveys and Crash Data										
	Comprehensive city-wide cycling usage counts	H	M	LTNZ, NCC & Transit NZ	Technical Services		\$15,000			\$15,000	
	Annual count sites	H	L	LTNZ, NCC & Transit NZ	Technical Services	\$3,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
	0800 CYCLECRASH system continuation.	H	L	LTNZ, NCC & Transit NZ	Technical Services	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
	Journey purpose surveys	H	L	LTNZ, NCC & Transit NZ	Technical Services		\$5,000			\$5,000	
	Public Satisfaction Survey	L	L	LTNZ, NCC & Transit NZ	Strategic Planning		\$500	\$500	\$500	\$500	\$500
	Develop Traffic Model to include cycling data	H	H	LTNZ, NCC & Transit NZ	Infrastructural Assets		\$10,000				
	Subtotal					\$8,000	\$43,500	\$13,500	\$13,500	\$33,500	\$13,500
	Safety Audits and Studies					2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
	The Safe Journeys to School project	H	L	LTNZ & NCC	Technical Services	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
	Cycle Safety audit	H	L	LTNZ, NCC & Transit NZ	Technical Services		\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
	Minor Safety Projects M1, M2, M3	H	M	LTNZ & NCC	Technical Services		\$50,000				

	Minor Safety improvement Rutherford turn lane into Selwyn Place	M	M	LTNZ & NCC	Technical Services			\$15,000			
	Continued signage upgrade cycle route network, Traffic Services	H	L	LTNZ, NCC & Transit NZ	Technical Services	\$15,000					
	Subtotals					\$25,000	\$61,500	\$26,500	\$11,500	\$11,500	\$11,500
	Plan Changes and standards										
	Plan change to RMP parking rules to require cycle parking				Policy Planning	no cost					
	Plan change to RMP to require cycle plan for large subdivisions				Policy Planning	no cost					
	End of Journey Facilities and Signage										
	Lockers / covered cycle storage facility in CBD. Cover existing cyclestands	H	H	LTNZ & NCC	Technical Services				\$60,000		
	School cycle storage programme	H	L	LTNZ & NCC	Technical Services	\$20,000		\$20,000			
	Upgrade Nelson City Cycle storage racks at key facilities	H	L	LTNZ & NCC	Technical Services			\$20,000	\$20,000	\$20,000	
	Employee cycle storage programme for large employers	H	L	LTNZ & NCC	Technical Services			\$10,000	\$10,000	\$10,000	
	Subtotals					\$20,000	\$0	\$50,000	\$90,000	\$30,000	\$0
	Maintenance										
	Sweeping & cleaning of glass on off-road Cycleways	H	M	LTNZ & NCC	Technical Services		\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
	Subtotals						\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
	Transportation Infrastructure										
						2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
	Items listed below in Brackets, e.g. (T9) refer to locations shown on Map Page 21.										
T	Airport Cycleway (Committed)	H	H	LTNZ & NCC	Technical Services	\$160,000					
	Cycleway Lighting			LTNZ & NCC	Technical Services	\$180,000		\$50,000	\$50,000	\$50,000	\$50,000

T1	Sealing Railway Reserve St Vincent Street to Beatson Rd [Deferred]	H	H	LTNZ NCC &	Technical Services			\$200,000+					
T2	Trafalgar 200 (Atawhai) Cycleway Neale Park to Clifton Tce	H	H	Transit NZ	Technical Services		\$900,000						
T3	Waimea Road Bishopdale Hill to Beatson Rd	H	H	LTNZ NCC &	Technical Services		\$370,000						
T4	Saxton Field Main Road Stoke underpass			LTNZ NCC &	Technical Services		\$70,000		\$700,000				
T5	Victory Square to QEII Connection (deferred till Corridor Study outcome is determined)	H	H	LTNZ NCC &	-								
T6	Annesbrook Drive/ Tahunanui Drive	H	H	Transit NZ	Technical Services			\$300,000					
T7	Trafalgar 200 connection via Collingwood Street	H	H	LTNZ NCC &	Technical Services		\$15,000		\$135,000				
T8	QEII to Halifax St to Haven Road connection via Rutherford Park	H	H	LTNZ NCC &	Technical Services		\$15,000		\$135,000				
T9	Maitai Walkway upgrade Collingwood to Nile Street	H	H	LTNZ NCC &	Technical Services					\$200,000			
T10	Path widening in areas shown as of particularly high usage study	M	H	LTNZ NCC &	Technical Services		\$10,000			\$50,000	\$50,000		
T	Poormans Stream, Main Road Stoke to Nayland Road Cycleway	H	H	LTNZ NCC &	Technical Services						\$140,000		
T11	The Brook – central city feasibility study, design and implementation	L	L	LTNZ NCC &	Technical Services						\$10,000		
T	Waimea Road feasibility study, design and implementation	M	H	LTNZ NCC &	Technical Services			\$20,000					
	Subtotals Stormwater							\$70,000		\$700,000			
	Subtotals Sub Rdg							\$340,000	\$410,000	\$70,000	\$320,000	\$300,000	\$250,000
	Subtotals Transit							\$0	\$900,000	\$300,000			

Parks Infrastructure					2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	
P1	Saxton Field Cycle Facilities										
	Access from Main Road Stoke to Netball Courts and Cycle Racks	M	M	NCC	Parks & Facilities	\$100,000					
	Realignment of existing cycle track at Saxton Field new entrance	M	L	NCC	Community Projects		\$50,000				
	Cycle training circuit and ring track	M	L	NCC	Community Projects			\$300,000			
	Community Parks Cycle Tracks										
P2	Victory Square			NCC	Community Projects		\$80,000				
P3	Pioneers Park			NCC	Community Projects			\$40,000			
P4	Stoke Facility			NCC	Community Projects			\$20,000			
P5	Regional Training Cycle Park			NCC, TDC, Fulton Hogan & LTNZ	Cross-Departmental Involvement		\$50,000				
Subtotals					\$100,000	\$180,000	\$340,000	\$20,000	\$0	\$0	
Total inclusive of Transit Nz works				Annual Total		\$493,000	\$1,685,000	\$820,000	\$1,175,000	\$395,000	\$295,000

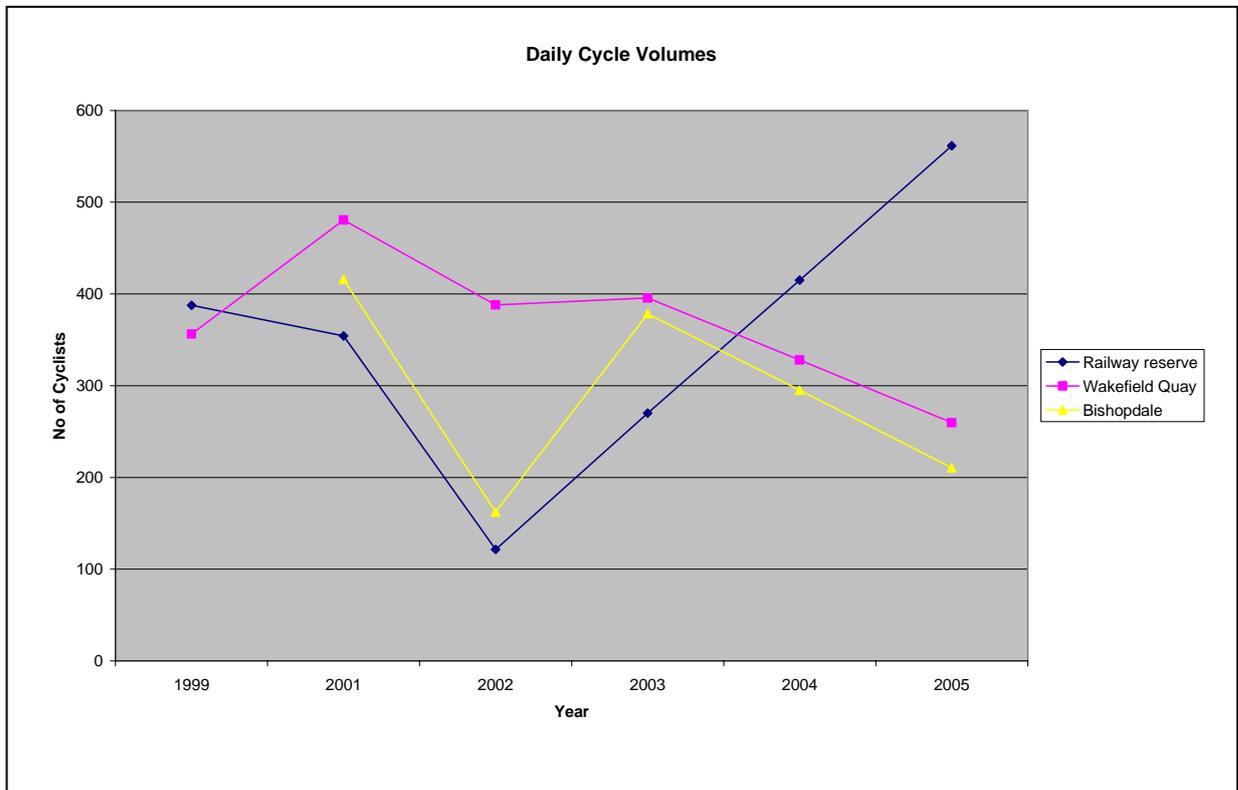
Financial Impact on LTCCP

Description	Category	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011
Total NCC Expenditure for the Strategy Capital	Capital	460,000	660,000	460,000	1,130,000	330,000
	Expenses	38,000	150,000	85,000	70,000	90,000
	Subtotal	498,000	810,000	545,000	1,200,000	420,000
Total LTCCP budget Expenditure	Capital	460,000	324,000	509,000	914,000	219,000
	Expenses	38,000	74,500	39,500	24,500	24,500
	Subtotal	498,000	398,500	548,500	938,500	243,500
Strategy and LTCCP difference	Capital	0	336,000	-49,000	216,000	111,000
	Expenses	0	75,500	45,500	45,500	65,500
	Subtotal	0	411,500	-3,500	261,500	176,500
Net Rate impact on current LTCCP inclusive of compound loan repayments less LTNZ subsidy	Capital	0	12,972	-2,303	10,152	5,217
	Expenses	0	30,200	18,200	18,200	26,200
	Subtotal	0	43,172	15,897	28,352	31,417

APPENDICES

Appendix 1: Cycle Use Data

Graph showing figures for the three count sites, 1999-2005



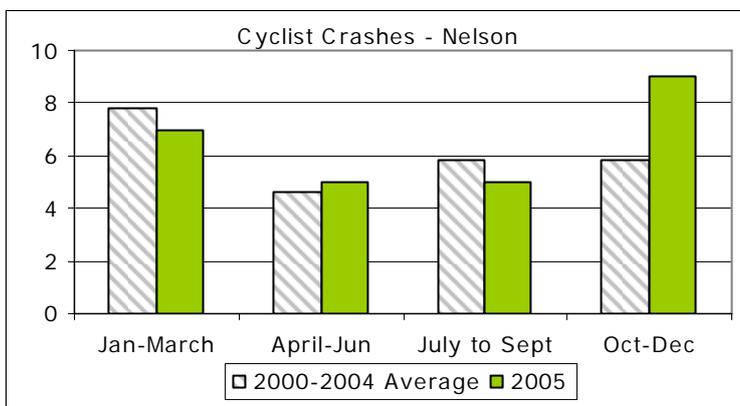
Appendix 2: Cycle Crash and Incident Data

Report to Regional Cycling Forum, giving Crash Analysis System (CAS) and 0800 data

Land Transport New Zealand

Police reported cyclist crashes in Nelson 2000 to 2006 – Summary so far

Cycle crashes in Nelson have decreased in the period January to March and July to September 2005, but increased during April to June and October to December 2005, when compared with the average for 2000-2004.



Of all the 25 cycle crashes recorded in Nelson during 2004, 7 resulted in serious injuries, 17 were minor and one crash was non injury. Of the 25 reported cycle crashes, 18 were recorded on local roads and the remaining seven on the state highway and all occurred in the urban area. Of the 26 crashes recorded in 2005, 24 occurred in the urban area and two in the rural; three were serious, 19 minor and 4 non injury, and 18 were on local roads compared to eight on the state highway.

0800 CYCLECRASH – Nelson/Tasman

Initial crash analysis (reported December 2004-2006)

0800 CYCLECRASH began on 1 December 2004 for the Tasman and Nelson region. This enables the public to report injury and non injury crashes that involve a cyclist as well as other conflicts involving cyclists which are not necessarily reported to or recorded by the New Zealand Police.

The initial crashes and conflicts received to date by Land Transport NZ (March 2006) have been coded and entered into CAS. Their crash/conflict numbers start at 2490 (for 2004) and 2590 for 2005, and have been entered into CAS as non Police reported crashes. They will be treated separately from



the Police reported crashes. Where a crash (injury or non injury) occurred, these have been coded and entered as such. For those conflict or near misses, these have been coded as what could have happened if the incident had led to a crash. The crashes that indicate they have been reported to the Police will be compared with Police crash data to ensure crashes are not double counted.

The data will subsequently be coded as injury, non injury and conflict (or similar) to differentiate them from actual collisions.

So far, there have been 237 crashes or conflicts reported by the public in Tasman and Nelson City, which have been coded and entered into CAS since the start of 0800 CYCLECRASH.

Summary of 0800 CYCLECRASH incidents in Nelson and Tasman

Worst inj	Nelson City				Tasman District			
	2004	2005	2006	Total	2004	2005	2006	Total
Serious	3	4		7	2			2
Minor	8	31	6	45	7	8	4	19
Non inj/conflict	28	81	11	120	9	26	9	44
Total	39	116	17	172	18	34	13	65

Nelson City

There have been 172 cycle crashes or conflicts reported by the public in Nelson City following the start of 0800 CYCLECRASH. Of these, seven involved serious injury, 45 minor injuries, and the remaining 120 were non injury crashes or potential conflicts.

Of these 172 crashes, eight were reported to the Police (all injury crashes) and so were double counted.

Of the 172 crashes in Nelson City:

- 7 occurred on local roads in the rural area
- 118 occurred on local roads in the urban area
- 7 occurred on state highway in the rural area
- 39 occurred on state highway in the urban area

Overall Summary - update May 2006

Nelson - 0800CYCLECRASH in CAS as of 5 May 2006

- 172 recorded crashes or conflicts
- 52 injury crashes (7 serious, 45 minor)

- 120 non injury crashes or conflicts
- 77 of these were conflicts

During 2004 there were 25 Police reported crashes in Nelson, of which:

- 7 were serious
- 17 were minor
- 1 was non-injury

During 2005 there were 26 Police reported crashes in Nelson, of which:

- 3 were serious
- 19 were minor
- 4 were non-injury

Appendix 3: Action Plan Summary

Actions 4.1:

- Council will undertake a comprehensive city-wide cycle use survey at main intersections on the road and path network during the 2007/08 year, repeat this in 2011/12, and use a small number of annual count sites in the intervening years to extrapolate estimates of all the other count sites.
- Council will continue the 0800 CYCLECRASH system, and seek to attract a national subsidy for it because of its local and national benefits including benefits to other local councils from Nelson's experience.
- Council will undertake journey purpose surveys of a sample of cyclists using different parts of the path system, as well as a corresponding city-wide survey, and compare the results. This currently happens twice per year (summer and winter). This data will help to determine journey purpose, destination and any issues with the existing network. This can then be used for data modelling.
- Data will be used to update the Network Traffic Model to provide a cycle flow model to evaluate cycle volumes and trigger infrastructure upgrades. This could be completed in 2007/08 when the current traffic model will be updated with Census 2006 data.

Actions 4.2

- Implement an end of route cycle provision programme including cycle stands and lockers with major employers through the cycling education budget. Funding has been allocated in 2008 to 2011 for this.
- Audit traffic light systems for cycle detection and identify the detector loop by marking it with paint.
- Investigate the possibility of installing shelters over existing cycle stands.
- Investigate and research the needs of providing secure locker facility in the CBD
- Provide first one, then a second, high-quality secure cycle parking facilities, in conjunction with workplace-related travel planning involving central core businesses, including investigating other cycling-related services as a cycle centre. These should be as close to the central City area as possible, and locations will need to be investigated. Funding has been allocated in 2008 to 2009 for this.
- Investigate and consider the merits of a Resource Management Plan Change to make cycle provisions mandatory for any new facility, business, shops, schools, churches and public facilities.
- Longer-term secure cycle parking should be considered in any proposed new car parking or Public buildings.

Actions 4.3:

- T9 The Maitai path will be upgraded to urban standard for a defined length, including improvement of interface locations with the street network, as a cycle commuter link with the central City area.
- T8 Implementation of improvements to the crossing of Haven Road and Queen Elizabeth II Drive;
- T8 A new path to urban standard will be investigated, in Rutherford Park, (in conjunction with the Redevelopment Plan) connecting to the central City via the existing Trafalgar Street advanced stop box and approach lanes, and to the Port under the Queen Elizabeth II Drive river bridge.
- I2 A continuous cycle route will be implemented linking the central City and the Vanguard Street cycleway via Kerr Street and Gloucester Street.
- I1 A right-turn cycle lane will be installed on the Rutherford Street (northbound) approach to the Rutherford Street/ Selwyn Place intersection, to provide for Waimea Road cyclists accessing the central core.

Actions 4.4:

- T8 Connections implemented between and through Trafalgar and Rutherford Parks, and respectively to Neale Park and the Haven Road/central City route (as mentioned above) to provide a continuous cycle route linking the Trafalgar cycleway with the Haven Road/Wakefield Quay/Rocks Road cycle route.
- I3 Warning signs should be installed for the difficult crossing of Trafalgar Street (just south of the Maitai River bridge), and in the longer term cycle access across this bridge will be investigated.
- T5 Options for cycle route connections in the area between Trafalgar Street and Victory Square will be investigated, covering routes into and past the central City, and between the Port and residential areas such as Washington Valley, and including a link through Anzac Park.

Action 4.5:

Feasibility study, design and implementation, as described above, of the following continuity links:

- T7 Trafalgar 200 Cycleway, and connection via Collingwood Street and Trafalgar Street
- T11 The Brook – central City
- T5 Vanguard Street/St Vincent Street quality, and connections north and south
- T3 / M2 Waimea Road Bishopdale Hill to Station Reserve
- I4 Annesbrook roundabout, and nearby roads and paths
- T6 Annesbrook Drive – Tahunanui Drive.
- T1 Railway Reserve, St Vincent Street – Beatson Road
- P1 Saxton Field paths
- T Bolt Road to Whakatu Dr via Nelson Airport's Trent Drive

Action 4.6:

- Which specific paths are subject to 'urban' and 'rural' standards should be clearly defined, and best practice standards applied accordingly
- Parks and recreation staff develop standards for rural shared use recreational paths.

Actions 4.7:

- A branding theme for cycling in Nelson will be created. This will include consistent use of colour, size, shape and symbols (on both urban and rural paths); will be developed in conjunction with the Parks Sign Policy; and will be consistent with other existing signs. This will be undertaken in 2006/09 as an ongoing project
- The sign and branding theme will be incorporated in implementation activities as continuity features are achieved, and used to promote the network to residents of Nelson and beyond.

Actions 4.8:

- Council supports the Regional Cycling Forum's adoption of BYPAD Level 3.
- Council supports cycle group participation where appropriate in auditing designs.
- Council will invite participation from the cycle group in the once yearly cycleway network audit

Actions 4.9:

- Off-road cycle routes should have signs to alert cyclists and pedestrians to hazards and the need for caution.
- Council will explore possibilities for encouraging provision and use of cycle bells.
- Cyclists and pedestrian users of paths will be provided with information and continued education to encourage responsible use, including respect for other users, whether on foot or cycle, and regardless of rights of way.

Action 4.10:

- The continuation of education and information campaigns with positive messages to all groups will improve driver and cycling behaviour and compliance with road rules.
- Signs will be provided to alert motorists and cyclists where cycle paths cross roads (e.g. on the Railway Reserve)

Actions 4.11:

- The *Safe Journeys to School* project will be extended, by one school annually, as proposed in Council's Walking Strategy "*Stepping Out*". Applications for this project will be funded from Land Transport NZ
- Changes to roads, streets and routes around schools will be made as required to address deterrents to school cycling identified in the *Safe Journeys to School* project.
- Council's road safety and environmental education work, both of which potentially embrace travel planning and travel behaviour change, will be co-ordinated.
- Provision of secure school cycle storage will be further implemented.
- A secondary school cycle to school education and promotion programme will be initiated.

Action 4.12:

- Besides travel behaviour change initiatives covered in other action points, provision for cycle learner tracks or "fun trails" will be investigated for local parks (e.g. Victory Square, Saxton Field, Neale Park, and Pioneer Park) in conjunction with the Reserve Management Plan.
- The *Bike Nelson* booklet and map will be produced and distributed.
- General safety campaigns and initiatives under the *BikeWise* programme will continue.
- The *Re-cycling* adult tuition classes will continue.

Action 4.13:

- Central City secure cycle parking and suggested cycle station facilities will include a focus on private sector sponsorship, leisure cycling, cycle touring and mountain biking, with a view to enhancing their commercial viability in conjunction with a Land Transport NZ workplace-based travel planning subsidy, possibly in conjunction with cycling clubs.
- Undertake to write a Mountain Biking Strategy (Parks & Facilities)

Action 4.14:

- A Resource Management Plan Change will be considered requiring developers to produce a local cycle network plan as part of new subdivisions and to install cycle facilities for staff and customers,
- Opportunities will be taken to provide connecting paths within and between subdivisions, notably where linear open space is required to accommodate underground services and through parks and reserves where appropriate.