

New Zealand walking and cycling strategies – best practice

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Glossary

AA	Automobile Association of New Zealand
CAN	Cycling Advocates' Network of New Zealand
CNRPG	Cycle Network and Route Planning guide
CROW	Centre for Research and Contract Standardization in Civil and Traffic Engineering, The Netherlands
DOC	Department of Conservation
EECA	Energy Efficiency and Conservation Authority
IHT	Institute of Highways and Transportation, United Kingdom
LTCCP	Long Term Council Community Plan
Land Transport NZ	The national agency responsible for transport funding and road safety in New Zealand; the agency which commissioned this research
LTMA	Land Transport Management Act 2003
L TSA	Land Transport Safety Authority (part of Land Transport New Zealand since November 2004)
MOT	Ministry of Transport
NZTS	New Zealand Transport Strategy 2002
Pedestrian	Any person on foot or who is using means of conveyance propelled by human power, other than bicycle
RLTS	Regional Land Transport Strategy
SPARC	Sport and Recreation New Zealand
TLA	Territorial Local Authority
Transfund	Transfund New Zealand (part of Land Transport New Zealand since November 2004)
Transit	Transit New Zealand, the agency responsible for New Zealand's state highway system of about 10% of New Zealand's roads
Walking	The act of self-propelling along a route, whether on foot or on small wheels, or assisted by additional aids

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Executive Summary

In July 2004 Land Transport New Zealand (formerly Transfund New Zealand) commissioned research into best practice for walking and cycling strategies using all known New Zealand strategies (36) and a selection of international strategies (8). A multi-agency project team was established including a number of walking and cycling experts from the public and private sectors, assisted by a reference group drawn from local, regional and national government agencies, walking and cycling groups and others.

The research, carried out between August 2004 and August 2005, involved reviewing existing walking and/or cycling strategies, surveying transportation professionals in local and regional councils, and describing best practice from the perspectives of those involved. Examples of best-practice content from existing strategies are used liberally in the research report to help illustrate the research findings.

A number of significant policy and legislative changes in recent years have occurred such that walking and cycling are now being actively encouraged, at both a national and local level. The government has also released its national walking and cycling strategy *Getting there – on foot, by cycle* (February 2005), confirming government support for these modes of travel.

A walking and cycling project must be identified, either specifically or generically, in a current cycling or walking strategy to qualify for Land Transport New Zealand subsidy. Most local authorities in New Zealand do not yet have both a walking and cycling strategy (or a combined walking and cycling strategy) and many intend to develop such strategies in the next few years. Similarly, most councils with existing strategies intend to review their strategies over the next few years (which is also good practice).

A recommended structure (including a foreword, introduction, vision, objectives, policies, targets and monitoring) is proposed. Specific implementation programmes (identifying engineering projects, plus education, enforcement and encouragement programmes) are also recommended to help translate strategies into practice. The researchers concluded that good strategies can be quite short (say 10 pages), although additional background material can usefully be developed alongside the strategy or included in appendices.

A walking and cycling strategy is an important planning document and effort should be spent to get it right, and to review and refresh it regularly. But a strategy is only as good as its implementation. Successful implementation will take hard work, perseverance and collaboration amongst all stakeholders. Writing or revising a walking and cycling strategy, with the participation of stakeholders, is a powerful step in the right direction towards improving conditions for walking and cycling.

This research project aims to simplify the task of practitioners in developing new walking and/or cycling strategies or reviewing existing strategies. There are many useful strategies available to those interested in or responsible for strategies. In addition to using this report, readers are encouraged to review some of the better existing strategies, as identified in the report.

Abstract

This report describes research undertaken for Land Transport New Zealand on walking and cycling strategies. The study was carried out between August 2004 and August 2005. All (36) known New Zealand strategies publicly available at the end of 2004 were reviewed, plus a selection (8) of international strategies.

The research involved reviewing existing walking and/or cycling strategies, surveying transportation professionals in local and regional councils and describing best practice from the perspectives of the research team. Examples of best-practice content from existing strategies are used liberally in the research report to help illustrate the research findings. A recommended structure (including a foreword, introduction, vision, objectives, policies, targets and monitoring) is proposed.

This research project should simplify the task of practitioners in developing new walking and/or cycling strategies or reviewing existing strategies.

1. Introduction

1.1 Purpose

The purpose of this research, carried out between August 2004 and August 2005, was to:

- review and analyse existing New Zealand and overseas walking and cycling strategies;
- determine current best practice amongst these strategies; and
- publicise results so that practitioners developing new strategies or updating existing strategies can easily access best practice.

The research did not investigate how well the strategies have been implemented or whether their stated objectives and targets have been achieved. An audit function such as this may well be a useful project in future years to ensure that local and regional strategies align with national objectives and that they are being implemented as promised to local communities.

The identification of 'best practice' is a subjective exercise. The researchers' views are expounded here, but the report has also been influenced by the comments of a wide-ranging reference group.

1.2 Context

In February 2005 the government released its walking and cycling strategy, *Getting there – on foot, by cycle* (MOT 2005), confirming its commitment to walking and cycling at a national level. The strategy states:

Our vision for walking and cycling is simple:

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

Achieving this vision will, in turn, help to ensure a healthier population, more lively and connected communities, and a more affordable, integrated, safe, responsive, and sustainable transport system.

The draft strategy in October 2003 contained similar sentiments and its existence has encouraged the development of walking and cycling strategies since that time. *Getting there* provides guidance on walking and cycling policy for both national and local use.

The New Zealand Transport Strategy (NZTS) (MOT 2002) moved New Zealand towards sustainability in transportation. This strategy outlines the government's vision that New Zealand has an "affordable, integrated, safe, responsive, and sustainable" transport system.

Walking and cycling are:

- the most *sustainable* modes of transportation;
- easily *affordable* relative to private motor vehicles and public transportation systems;
- easily *integrated* with other transport systems and modes;
- *responsive* and adaptable to changes such as fuel shortages and price increases;
- intrinsically *safe* – only when motor vehicles dominate in terms of speed or traffic volumes do walking and cycling have negative safety implications.

The *Land Transport Management Act 2003* (LTMA) (NZ Govt 2003) was enacted in November 2003. The LTMA translates the NZTS vision into planning and funding requirements for transport in New Zealand. It attempts to provide a more balanced approach to land transport, and places increased emphasis on walking and cycling.

The objectives of the Ministry of Transport, Land Transport NZ and Transit New Zealand (Transit) are consistent with the NZTS. Each of these government agencies is now required to assist in the development of an “affordable, integrated, safe, responsive, and sustainable” transport system, which will need to pay more attention to walking and cycling.

New Zealand ratified the Kyoto Protocol in 2002, confirming its commitment to managing greenhouse gas emissions. Greater emphasis on providing for and encouraging walking and cycling will assist in meeting New Zealand’s Kyoto Protocol obligations.

A walking and cycling project must be identified, either specifically or generically, in a current cycling or walking strategy to qualify for Land Transport NZ subsidy¹. This requirement encourages the development of walking and cycling strategies.

Land Transport NZ in July 2004 sought to distinguish between “walking and cycling strategies” and “walking and cycling strategic plans”. It determined that: “A walking and cycling strategy is a high level document that provides for the framework and direction of walking and cycling. A walking and cycling strategic plan is a document at the local level that has the purpose of identifying activities that encourage more people to walk or cycle.”

In practice, this distinction is not recognised by councils and all strategies reviewed for this research project include both high level strategic content and activities at the local level. Consequently, within this research report, the term ‘strategies’ is used instead of ‘strategic plans’ as it is more widely used and understood. If a strategy contains an Implementation Programme (as is recommended in this research report) then it is deemed to be a ‘strategic plan’ by Land Transport NZ. Alternatively these activities may be itemised in the council LTCCP (Long Term Council Community Plan).

¹ “To be eligible for funding the work must be identified, either specifically or generically, in a current cycling or walking strategy.” PEM Simplified Procedure No. 6 – Walking and Cycling Projects, *Project Evaluation Manual Amendment No. 8*, 1 October 2004, Transfund New Zealand.

Land Transport NZ currently facilitates the preparation of local and regional council walking and cycling strategies by subsidising the cost of this work with an increased financial assistance rate of 75%. This is an interim arrangement for the 2004/05 and 2005/06 years. The state highway network (managed by Transit), including any associated walking and cycling facilities, is fully funded by Land Transport NZ. Planning for state highway walking and cycling facilities is usually undertaken in conjunction with (and often by) the local authority through a walking and cycling strategy, although planning is sometimes done through a regional land transport strategy or a state highway 10 year plan.

It is in this policy context that local and regional walking and cycling strategies have become increasingly common documents over recent years.

1.3 Methodology

It was found that 36 New Zealand strategies were complete or had been released for public consultation as drafts before December 2004. These, plus eight overseas strategies, were obtained and reviewed by the research team. A complete list of these strategies (and internet website links where available) is contained in Appendix 1.

New Zealand strategies were identified by:

- first-hand knowledge of the research team;
- word of mouth amongst transportation professionals;
- placing articles in *Roundabout* (the journal of the IPENZ (Institute of Professional Engineers NZ) Transportation Group); in *e.CAN* (the electronic newsletter of the Cycling Advocates' Network); and on the lead consultant's website;
- sending emails to all local and regional councils (including a link to an internet-based survey);
- seeking input via a remit at the IPENZ Transportation Group's Traffic Management Workshop in September 2004.

Specialists in planning for cycling and walking in New Zealand, Australia and the United Kingdom, who were known to the research team, were asked to suggest examples of current best-practice cycling and walking strategies from Australia, North America and the United Kingdom. Copies of these strategies were obtained, and the research team selected eight strategies for detailed review.

Over one third (30 out of 86) of the local and regional councils in New Zealand have walking or cycling strategies and a further nine councils² are known to be actively developing strategies for walking or cycling or both. Some 16 councils have either a combined walking and cycling strategy (10 councils), or both a walking and a cycling strategy (6 councils).

² Central Hawke's Bay District, Gisborne District, Kaipara District, Marlborough District, Papakura District, Waimakariri District, Waikato Region, Wellington City and Whangarei District were developing strategies during the latter stages of 2004.

A significant majority of councils (70 in total) thus need to develop either a walking or cycling strategy (or both) to be eligible for Land Transport NZ funding for walking and cycling projects and programmes.

Many existing strategies are also somewhat dated and do not reflect current best practice. Consequently, some councils with existing strategies have begun, or are contemplating, reviews of their strategies.

1.4 Research project participants

The research team of seven was assisted by a large reference group of practitioners who reviewed the draft research report in January 2005. The research team comprised:

- Andrew Macbeth, lead researcher, MWH New Zealand Ltd, Christchurch.
- Roger Boulter, team member, Roger Boulter Consulting, Hamilton.
- Paul Ryan, team member, Opus International Consultants Ltd, Hamilton.
- David Turner, project director, MWH New Zealand Ltd, Wellington.
- Mark Weeds, research assistant, MWH New Zealand Ltd, Christchurch.
- Mike Blyleven, peer reviewer, Environment Canterbury, Christchurch.
- Glen Koorey, peer reviewer, University of Canterbury, Christchurch.

The full list of contributors to the project is shown in Appendix 2.

Transportation professionals from over 50 local and regional councils completed an electronic survey on walking and cycling strategies, mostly in August 2004, either on their own behalf or for their employers. Their contributions provide valuable insight into the topic and are gratefully acknowledged. The survey is described in Chapter 6 of this report.

Potential conflicts of interest were identified among the research team as some team members had been involved in the preparation of some of the strategies being reviewed. These potential conflicts are shown in Appendix 3. Those affected assert that they have attempted to be as objective as possible in reviewing all strategies for this project. The research team was deliberately structured as a multi-agency group to help prevent bias.

For those strategies where research team members were involved in preparation, reviews were undertaken by other members of the team. The peer reviewers and reference group members were specifically instructed to check for bias based on these potential conflicts of interest.

Overall, the project has involved a large number of practitioners from central, regional and local government, academia, and transportation consultancies. Its findings should be useful to anyone involved in the development or review of walking or cycling strategies.

1.5 Walking and cycling strategies – separate or combined?

More recently, councils have tended to develop combined walking and cycling strategies (as opposed to separate strategies for each mode), perhaps following the lead of the Ministry of Transport with its draft national walking and cycling strategy, released in October 2003.

Smaller councils appear to be more likely to combine walking and cycling strategies into one document, perhaps for reasons of efficiency and economy. If walking and cycling strategies are combined in one document, it is important that the issues of each mode are addressed specifically.

In some situations, pedestrians and cyclists can easily and safely share facilities, but in most cases they should be kept separate. Pedestrians and cyclists often have quite different needs. For example, pedestrians typically cross roads at right angles and at quite a different speed from traffic. Cyclists usually move with motorised traffic and may merge to the centre of the road to turn right or cross the road. Technical design guidance should be sought to resolve these issues. The principal design guides for walking and cycling are listed in Appendix 4. Interestingly, these are all separated depending on mode.

While there are significant differences in design requirements for walking and cycling, there are more similarities with the education, enforcement and encouragement components of walking and cycling strategies.

Of those practitioners who responded to the survey (as recorded in Chapter 6), there was a slight preference for separate strategies. Among the research team members there is, however, a slight preference for combined strategies as there is some synergy in thinking simultaneously about both modes and in having stakeholders from both modes working together understanding the issues of the other.

In combined strategies, some discussion of walking and cycling issues is needed as only some features are common. For example, shared facilities are often not the best solution, compromising the needs of both pedestrians and cyclists. The decision to develop separate or combined documents, however, is less important than the decision to produce the strategies. Either format will generally work.

2. Recommended structure for strategies

Early walking and cycling strategies (prior to 2003) tended to build a case for the support of these modes, culminating in the 'business end' of the strategy of objectives, policies and targets, with possibly specific projects for the council to implement. More recent strategies (for example Central Otago District and Tasman District) get right to the point, with the vision, objectives, policies and targets all at the front, allowing the reader to concentrate on the implications for the council and its community. This latter general structure is supported. Often this material can be contained in ten pages or fewer, followed by detailed background, analysis and implementation information.

Now that the principle of walking and cycling strategies is endorsed through central government programmes, policies and legislation (including the existence of the national walking and cycling strategy), there seems less need to justify each strategy with large amounts of preliminary information. The need for strategies is now well accepted. Councillors, stakeholders and other interested parties using strategies benefit by having critical content at the beginning of the document so that it is easy to find.

Background information providing additional justification for the strategy, such as data, trends, and supporting information from other local, regional or national documents, can be contained in additional chapters or appendices, or even in a separate document. Similarly, discussions about the following concepts, while important, can all be contained in appendices:

- The Four Es – engineering, education, enforcement and encouragement (Geelong Bikeplan 1977).
- The five-point hierarchy of measures for cycling provision – traffic volume reduction, traffic speed reduction, junction treatment and traffic management, redistribution of the carriageway, and cycle lanes and cycle paths (IHT et al. 1996).
- The five main requirements for cycling – coherence, directness, attractiveness, safety, and comfort (CROW 1993).
- The five Cs for walking – comfortable, convenient, convivial, conspicuous, and connected (DETR 2000).

Network plans and implementation programmes (sometimes called 'action plans' or similar) identifying specific projects and programmes should be referred to in the strategy to give them status but contained in a free-standing document able to be updated annually. These are as important as the strategy itself, as they translate the visions, objectives and policies into action on the ground and in the community. It is recommended that implementation programmes be incorporated within LTCCPs (and updated annually) and in Transit's 10 year State Highway Plan to help ensure that the strategy is implemented.

The length of strategies needs to be carefully considered. Every page should earn its existence. Many good strategies of under 25 pages exist, yet two existing New Zealand strategies exceed 150 pages with their appendices. In the longer strategies, much of the

material could not be described as 'strategic' and may be better suited to publication as a separate background report (real or virtual) for a more limited audience. The longer strategies tend to be older and to include detailed design information not widely available at the time they were prepared. Since about 2003, several planning and design manuals for walking and cycling have been released in New Zealand, obviating the need for local design information. In general, standards and design guidelines should be established nationally rather than locally. Existing documents are listed in Appendix 4.

A recommended strategy structure is shown in Figure 2.1. Other structures may suit different councils. Further explanation of the recommended components of a strategy is contained in Chapter 3.

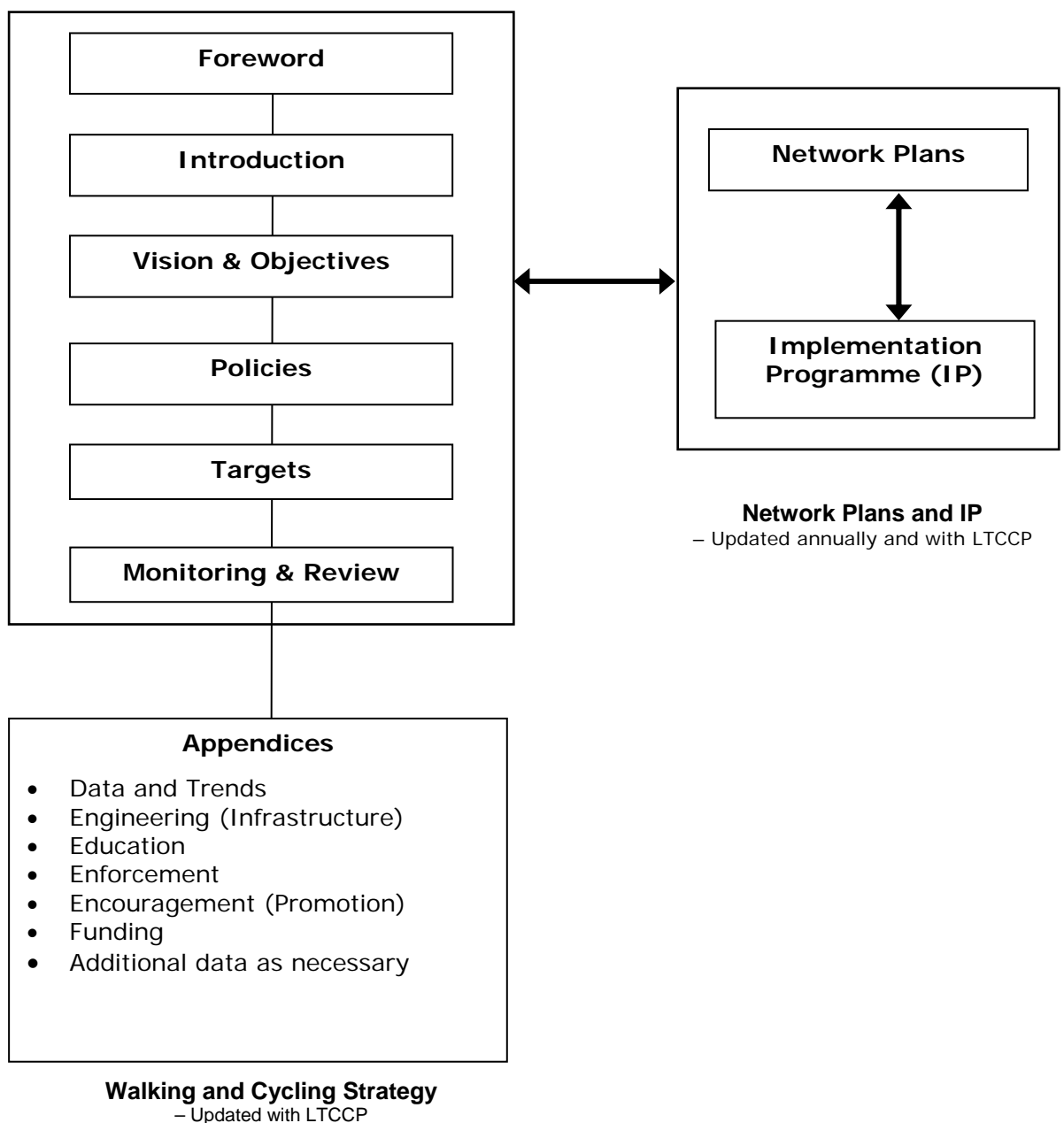


Figure 2.1 A recommended strategy structure.

3. Recommended strategy content

The *Cycle Network and Route Planning Guide* (CNRPG) (LTSA 2004) is an essential resource for developers of cycling strategies. Among other things, it provides a comprehensive list of elements to be included in these strategies. These elements are reproduced for convenience in this report as Appendix 5. This list should be used to check that all key elements of a strategy are included.

The *Pedestrian Planning and Design Guide* (Land Transport NZ 2005) promotes consistent best practice in the planning and design of walking facilities. It is an essential resource for those developing walking strategies. It contains effectively the same elements as the CNRPG and as identified in Figure 2.1.

In addition, the national walking and cycling strategy *Getting there – on foot, by cycle* (MOT 2005) includes a one-page summary of its vision, goals, priorities, focus areas, key principles, and implementation framework. This is a useful starting point for those involved in developing walking and cycling strategies. It is reproduced as Appendix 6.

3.1 Foreword

In practice, many strategies have a foreword signed by a prominent supporter of walking and/or cycling such as a councillor or the mayor. This helps to reinforce the status of the document and provides an opportunity (preferably within one page) to impart some of the key imperatives and council aspirations for the strategy. The date of publication can be placed here or elsewhere.

3.2 Introduction

The introduction to a walking and cycling strategy should be as short as practicable (say two pages). It should explain the purpose and scope of the strategy, by and for whom the strategy has been prepared, its formal status within the council, and its relationship to other council documents such as land use plans and transportation strategies, codes of practice and the LTCCP. Its relationship to Transit's and other organisations' processes and plans should also be explained.

The introduction should also briefly describe the local context for walking and cycling, such as the amount of walking and cycling currently being undertaken (from national or local surveys), overall crash statistics for these modes, and existing networks, facilities and programmes. If desired, this material can be placed in a separate section following the Introduction, entitled 'Context' or similar. Alternatively, more detailed background data can be placed in an appendix.

Getting there – on foot, by cycle should be referred to in any local or regional walking or cycling strategy. It sets the context in New Zealand for these documents and is an essential resource for the development of walking and cycling strategies.

A diagram similar to Figure 2.1 may be useful in the introduction to the strategy to explain the structure to readers.

3.3 Vision

A vision is an important statement of a shared future view of walking and/or cycling for those involved in developing the strategy, and for the affected council and community. It is a relatively easy component to include in a strategy but is a valuable starting point for all involved parties, whether councillors, staff, other agencies, stakeholder groups or residents.

An internet search of 'vision statement', 'strategic planning', 'vision mission goals' and similar will provide extensive background material and advice on the requirements of good visions, goals and targets for any planning document. In addition, the visions of the New Zealand and overseas strategies researched through this project give plenty of options for consideration. Good examples of visions (in order of increasing length) are shown in Table 3.1 (p.18).

These visions range up to 29 words. Some (not included here) were much longer and were not considered to be as effective as the shorter ones. The vision is usually sufficiently brief that it can be combined in a single one page section covering both the vision and objectives. The two are closely related.

3.4 Objectives (or Goals)

The terminology around objectives, goals and targets is often overlapping or conflicting. For the purpose of this research, objectives are considered to be synonymous with goals. They have been taken as important (but somewhat general) intentions that will help achieve the vision, whereas targets (or indicators) are specific and quantifiable. Some of the better examples of objectives found are included in Table 3.2 (p.19).

3.5 Policies

Policies are commitments in principle by a council to do particular things. Policies should be achievable by the agencies responsible. To emphasise this, the agency or agencies responsible for implementing each policy could be identified within the strategy. Examples of useful policies from selected strategies are shown in Appendix 7.

Table 3.1 Examples of visions.

Strategy	Vision
Taupo District	Taupo: The cycle-friendly town
Tasman District	A safe and enjoyable place to walk and cycle
Hastings District	To be a safe, convenient and accessible district for cycling
Auckland Region	The Auckland region is safe, easy and enjoyable to walk in
Portland, Oregon, USA	To make bicycling an integral part of daily life in Portland
Wellington Region	More pedestrians in a convenient, safe and pleasant environment
Bayside, Victoria, Aust.	To make cycling the chosen form of transport for more people, on more trips, more often
New Zealand	A New Zealand where people from all sectors of the community walk and cycle for transport and enjoyment
Christchurch City	That Christchurch is the most friendly, safe and accessible city for pedestrians, where all pedestrians are able to move about freely with confidence
Canterbury Region	An attractive, safe, pleasant and comfortable place for cycling, where people of all ages choose to cycle for transportation, tourism, sport and recreation
Waitakere City	For Waitakere to be a “walking and cycling friendly” city, where walking and cycling are safe, enjoyable and popular forms of transport and leisure
Wellington Region	The evolution of a cycling culture where cycling is a recognised and valued transport mode that is safe, accessible and pleasant throughout the region
Toronto, Ontario, Canada	To create a safe, comfortable and bicycle friendly environment in Toronto, which encourages people of all ages to use bicycles for everyday transportation and enjoyment
Central Otago District	Central Otago is a safe, pleasant and comfortable place for walking and cycling, where people of all ages choose to walk and cycle for transportation, tourism, sport and recreation
SE Queensland, Australia	A sustainable transport system in which cycling is a safe, convenient, efficient and attractive transport mode, that encourages more people to choose cycling as their preferred travel mode
North Shore City	To provide a safe, convenient and enjoyable cycling environment that meets the needs of cyclists and encourages cycling as a mode of transport and as a means of recreation

Note: Visions in this table have often been written for either walking or cycling but are usually easily modified for either or both modes.

Table 3.2 Examples of objectives.

Strategy	Objectives
Christchurch City	<ol style="list-style-type: none"> 1. To increase cycling in Christchurch 2. To increase the enjoyment of cycling in Christchurch 3. To improve safety for cyclists in Christchurch
Rotorua District	<ol style="list-style-type: none"> 1. To make cycling in Rotorua District safer 2. To increase the number of people cycling in Rotorua District
Tauranga District	<ol style="list-style-type: none"> 1. To promote and enhance the opportunities for recreational walking and cycling in Tauranga District 2. To make walking and cycling a more viable and convenient way of getting around Tauranga district 3. To improve the safety of walking and cycling in Tauranga 4. To ensure that adequate funds are available to implement the objectives and actions of this strategy
North Shore City	<ol style="list-style-type: none"> 1. To increase the number of people cycling to work 2. To increase the number of people cycling to school 3. To improve safety for cyclists 4. To improve convenience for cyclists 5. To improve enjoyment in cycling
Wellington Region	<ol style="list-style-type: none"> 1. Ongoing development of pedestrian route connectivity and accessibility 2. Improved safety (perceived and real) of pedestrians from traffic, the physical environment and crime 3. Maintain advocacy towards best practice pedestrian provisions and funding availability
Tasman District	<ol style="list-style-type: none"> 1. To increase the percentage of people who cycle or walk to work (measured by census) and the number of children walking and cycling to school 2. To reduce the number of injuries involving pedestrians and cyclists 3. To increase the understanding of cyclist and pedestrian needs
Oxfordshire	<ol style="list-style-type: none"> 1. To increase the proportion of travel within Oxfordshire on foot. 2. To reduce the actual and perceived dangers from road traffic faced by pedestrians irrespective of mobility or sensory ability. 3. To develop a safe, convenient, efficient and attractive infrastructure for pedestrians 4. To ensure that the needs of pedestrians are always fully taken into account in the County Council's land use and transport planning, engineering and development control processes. 5. To improve actual and perceived personal security for pedestrians

Note: Objectives in this table have often been written for either walking or cycling but are usually easily modified for either or both modes.

3.6 Targets (or Indicators)

Targets (sometimes called ‘indicators’ or ‘progress measures’) are useful to allow progress to be measured in achieving the vision and objectives of a strategy, and in implementing its policies and actions. They should identify milestones as well as timeframes for their accomplishment. In the development of targets, the widely-used ‘SMART’ concept is useful. Targets should be Specific, Measurable, Achievable, Relevant and Time-bound.

The development of targets should be customised for each region, district or city. Local characteristics will dictate what sorts of issues are most important. In some areas, encouraging walking and cycling to school will be considered most important, so targets should be developed to quantify school travel modes. In other areas, completion of a network of cycling facilities, or the safety of pedestrians will be the highest priority, so different targets will be needed. Targets should be consistent with the vision, objectives and policies of the strategy. If the vision is ambitious, the targets should reflect this. The choice of targets in a strategy should influence data collection needs during strategy development and ongoing monitoring. It may also influence the implementation programme.

Care needs to be taken in setting achievable targets. If they are too optimistic, community expectations may be unrealistically high, resulting in dissatisfaction with the strategy and possible policy reversal, if the strategy does not appear to be working, after a few years. Conversely, targets set too low may disillusion community members anxious to change walking and cycling conditions.

Examples of useful targets from selected strategies are shown in Appendix 8.

3.7 Strategy monitoring and review

Monitoring of a strategy will be important to determine whether it is working or whether revisions are needed. An important part of monitoring will be to evaluate performance against targets. Revisions may be needed to the strategy itself, or to the implementation programme or resource levels (including funding and staff). Monitoring tasks can be built into the implementation programme to ensure they are funded and undertaken. Discussion of various types of monitoring activities is contained in Appendix 9 of this report.

Strategies should be reviewed according to the timeframe of the LTCCP process. This ties them strongly to implementation programmes and budgets, and is consistent with advice in the LTMA, which provides for District Land Transport Programmes to be integrated with the LTCCP review process. Councils have some discretion over when they review their LTCCP, so tying walking and cycling strategy reviews to the LTCCP is more appropriate than establishing a different period just for the strategy.

The strategy review should also align with the review of the relevant Regional Land Transport Strategy (RLTS). This will ensure that the strategic direction, policies and implementation plan align with the RLTS. Conversely, when the RLTS is reviewed, walking and cycling strategies need to be considered. The RLTS is used by Land Transport NZ in developing the National Land Transport Programme.

Implementation programmes may need to be revised annually to reflect the budget cycles of councils. Strategies, however, should only need revision every three to five years or more (with the LTCCP and/or RLTS), so there needs to be a clear mechanism articulated in the strategy as to how implementation is to be monitored and fulfilled. This can be facilitated by including specific monitoring tasks, such as surveys, in the implementation programme.

3.8 Network plans

The two levels of walking and cycling plans to consider are:

- In the context of strategies, a plan showing existing and proposed facilities or 'desire lines' superimposed on the street network is strongly recommended, to explain and document the spatial implications of the strategy and implementation programme.
- A specific action item within an implementation programme may be the preparation or revision of a mass-produced public walking or cycling map (typically free for users). These are also a good idea, but are not considered to be a component of a strategy. Christchurch City and Wellington Region, among others, have produced cycling maps and Wellington City (with *Living Streets Aotearoa*) and Palmerston North City have produced walking maps.

Routes for cyclists are an essential component in ensuring that cycling is a viable mode of travel. The geographic coverage and 'connectivity' of routes in the context of the city or district is most easily comprehended by reference to a network plan (as opposed to a list of facilities, for example). A network plan can also show main road, river and railway crossing points for pedestrians and cyclists, as the absence of these often creates barriers to travel by these modes. Physical barriers such as rivers, lakes, motorways, railway lines and steep hills are key features to assist in planning facilities.

Key destinations such as the central business district, schools, shopping malls, parks, recreation centres and swimming pools are useful additions to cycling network plans. These plans can also be helpful in determining whether off-road or on-road facilities are likely to be beneficial in linking different parts of the town, district or region.

Plans should show both existing facilities as well as proposed. A good technique for distinguishing between the two is to use solid lines for existing and dashed or dotted lines for proposed. Different coloured lines are useful for different types of facilities. It may be necessary to have different maps for walking and cycling to prevent the maps becoming too 'busy'.

Proposed facilities may be of differing levels of certainty and it is desirable to distinguish these on the plan. In developing walking and cycling network plans, plots of crash locations and detailed crash analyses are useful to help understand existing network issues and problems.

Walking routes tend to be more diffuse, relying on virtually every street to have basic facilities (footpaths) and crossing opportunities (both at intersections and at mid-block locations). Walking trips are typically shorter and consequently do not lend themselves to

concentrating trips on particular facilities, as is typically a goal of vehicular (both cycles and motor vehicles) transport planning. Accordingly, a plan may not be as necessary for a walking strategy as for a cycling strategy. Virtually every street is a walking and cycling street.

Mass-produced cycling maps, besides being useful for cyclists, are often useful for motorists too. They then perform a useful marketing function to a target audience of potential cyclists. Cycling and walking maps can also provide useful information about the council's cycling and walking programmes, advertisements from local bike or sports shops, safety information, and references to appropriate contact details for council and local walking and cycling groups. Mass-produced cycling or walking maps need to concentrate more on existing facilities and features, whereas planning maps should contain more planning information.

The plans included in the strategies reviewed were generally of poor quality or non-existent. The network plan in the Napier cycling strategy, however, was reasonable, showing on-road routes, off-road paths and recreational routes. The plans in both the Dunedin and Rotorua cycling strategies are printed at a larger scale than most (folded A3 within an A4 document) and show a variety of useful data, including both existing and proposed paths and routes. This larger-size format is recommended so that adequate detail can be shown.

3.9 Implementation programme

Implementation programmes (or 'Action Plans') translate the ideals of the strategy into action on the ground and in the community. Implementation programmes should identify specific projects and programmes (covering the full range of engineering, education, enforcement and encouragement activities) with cost estimates and timeframes. Implementation programmes necessarily change from year to year for a variety of technical, political and financial reasons. By contrast, strategies can and should be more long-term, needing revision only every few (say three to ten) years.

It is recommended that implementation programmes should be included within LTCCPs and land transport programmes to help ensure that they get appropriate public scrutiny and full approval through the political process. By embedding the action items into mainstream council business, this ensures that walking and cycling strategies are implemented. This is consistent with the LTMA, which provides for Land Transport Programmes to be integrated with the LTCCP review process.

Prioritisation of projects is an essential component of an implementation programme. Some projects should be done sooner than others to address key issues or to demonstrate clear council support for walking or cycling, but there will never be enough money or staff time to do everything on the wish list in the first year. Prioritisation methods range from benefit-cost analysis rankings (although these are dependant on assumptions within the standard benefit-cost methodology) to subjective preferences of key participants and stakeholders. For engineering facilities, consideration of usage numbers, crash records, blockage removal, and provision of high quality demonstration projects are all possible techniques to assist in prioritisation, although in most cases a variety of factors should be used to prioritise

projects. Chapter 11 of the LTSA Cycle Network & Planning Guide (2004) provides further advice on prioritisation in the context of cycling projects.

Implementation programmes typically contain more than infrastructure projects. Consequently, other components of the programme will need to be prioritised against each other and against the network elements. This is expected to be a subjective exercise for some time, until reliable quantitative methods can be developed and tested. The political process is a legitimate method of allocating priority to projects within an implementation programme, but the views of staff and stakeholders should always be sought to inform the political debate.

3.10 Appendices

3.10.1 Data and trends

A range of data is available for walking and cycling strategies. A table of potential monitoring activities is contained in Appendix 9, including discussion on the relative merits and drawbacks of these potential data sources. There are many possible data sources, such as crash statistics, traffic counts, census data, user and resident satisfaction surveys, and data from the MOT's New Zealand Travel Survey. Strategies should consider which types of data are likely to be beneficial and implement programmes to collect and analyse appropriate data on an on-going basis.

3.10.2 The Four Es: Engineering, Education, Enforcement and Encouragement

This categorisation originated in the Geelong (Australia) Bikeplan (Geelong Bikeplan 1977) and has since been widely adopted as a common template in walking and cycling strategy development. It acknowledges that improving conditions for cyclists and pedestrians needs to rely on more than just providing a safe infrastructure. While 'Engineering' is important, so are 'Education', 'Enforcement' and 'Encouragement'.

Education can apply to pedestrians and cyclists as well as other road users, enforcement (of pedestrian, cyclist and motorist behaviour) may be necessary, and encouragement can help to market walking and cycling as options for people's travel needs.

Strategies should include the important aspects of education, police and parking enforcement and encouragement, as well as the more obvious engineering (or facilities) components of a strategy.

Detailed sections on each of these facets of strategies can be contained in appendices, although individual projects and programmes from each of the four Es should be included in the Implementation Programme.

3.10.3 Other appendices

Other appendices may contain lists of participants in the strategy development process, extracts from relevant council policies or plans, or additional material on funding and monitoring.

3.11 Examples of good practice

The research team has identified what it considers to be the best 18 New Zealand strategies, representing half of the strategies reviewed. (A description of the review of domestic and overseas strategies is contained in Chapter 5 of this report.) These strategies were scored more highly than the other strategies and collectively represent good practice. Nevertheless, not all aspects of these strategies are exemplary, and there are some good features in the other strategies not featured in the 'top half'.

Of these strategies, 12 were written in 2003 and 2004, and 14 were available on the internet in May 2005. Four of the 18 were walking strategies, reflecting the relatively small number of this type to date. Eight of the top 18 strategies were cycling strategies and six were combined walking and cycling strategies.

The evaluation of both New Zealand and overseas strategies was undertaken using a quantitative approach to understand what each strategy contained. This is more fully explained in Chapter 5.

It is considered more important to learn from the strategies as a group, rather than dwelling on the rankings of individual strategies. This is partly because the methodology used to evaluate strategies was somewhat imprecise, and partly because the evaluation was subjective, reflecting the opinions of a few practitioners. Other people may come to different conclusions. The best New Zealand strategies (in alphabetical order) were considered to be as shown in Table 3.3.

Table 3.3 Best New Zealand strategies.

Walking Strategies	Cycling Strategies	Walking and Cycling Strategies
Auckland Region (2002)	Christchurch City (2004)	Auckland City (1998)
Christchurch City (2001)	Dunedin City (2003)	Central Otago District* (2004)
Hastings District (2004)	Hutt City* (1998)	Manukau City (2004)
Wellington Region (2004)	Napier City (2002)	Tasman District (2004)
	New Plymouth District* (2004)	Tauranga District (now City) (2001)
	North Shore City (2003)	Waitakere City (2003)
	Rotorua District* (1999)	
	Wellington Region (2004)	

* Not available on the internet as at August 2005

3. Recommended strategy content

People responsible for preparing walking and cycling strategies are encouraged to acquire some of these documents to provide insight into different approaches to writing strategies. Individual strategies reviewed as part of this research included a number of useful features and creative ways of communicating information. Particular features of interest and examples of good practice are identified in Table 3.4. These pages are reproduced in Appendix 10.

Table 3.4 Selected pages from examples of good practice.

Strategy (and type)	Page(s)	Feature
1. Wellington Region (walking)	i	Executive summary
2. Toronto City (cycling)	3-2	Bikeplan structure
3. North Shore City (cycling)	iv	"Quick wins" (within two years)
4. Auckland Region (walking)	17	Vision and objectives
5. Tauranga District (combined)	5	Objectives
6. Christchurch City (cycling)	24	Key principles, policies, good use of photos
7. New Plymouth District (cycling)	12	Quantifiable targets
8. Wellington Region (cycling)	12	Action programme
9. North Shore City (cycling)	41	Implementation programme
10. Waitakere City (combined)	15	Implementation programme
11. Napier City (cycling)	9 & 10	Network plan
12. Dunedin City (cycling)	33	Part of Cycle Route Map
13. Christchurch City (walking)	22	Monitoring
14. North Shore City (cycling)	44	Conclusion
15. Central Otago District (combined)	17	Census data
16. Manukau City (combined)	11	Cycle count data
17. Tasman District (combined)	21	Rating of cycling and walking facilities
18. Hastings District (walking)	10	Discussion of footpaths
19. Hutt City (cycling)	12	Principal cycle network table
20. Rotorua District (cycling)	30	Principles of planning for cycling
21. Rotorua District (cycling)	90	Typical costs for cycling facilities
22. Auckland City (combined)	vi	Principles of planning for cyclists and walkers

North Shore's and Christchurch's strategies (and others) have many local photographs, adding visual interest to the documents. The inclusion of photos is strongly encouraged.

4. Recommended process for developing or reviewing strategies

The establishment of a working group has been an effective mechanism in many locations in developing new or reviewing existing strategies. This process is recommended. The group should be selected for its abilities to represent interested agencies and a variety of potential users, age groups and geographic areas. Participants should represent local walking and cycling groups, transportation and road safety agencies, the police, and the road network consulting engineers (if used). Other interests should also be considered, including education, sport and recreation, tourism, health, and agencies for the aged, disabled or blind.

One essential party in the process, besides the council itself, is Transit. As Transit is responsible for only 10% of the country's road network spread throughout New Zealand, it is not able to plan or provide a comprehensive network for walking or cycling, especially in urban areas. Conversely, territorial local authorities do not own and manage all roads that might be useful for walking and cycling, so a collaborative effort for the planning, design, implementation and management of walking and cycling networks is essential between the two road controlling authorities (Transit and the local council). Walking and cycling strategies developed by local and regional councils consequently must include Transit and the state highways in the area.

Pedestrians and cyclists (and motorists) are usually unaware and unconcerned as to who is the road controlling authority for any particular road, but they expect a 'seamless' travel network. If it makes sense to walk or cycle on a portion of the state highway network for all or part of a trip, then this portion of the state highway network should be designed and managed to accommodate pedestrians and cyclists appropriately. Consequently, whenever local authorities are preparing or reviewing walking and/or cycling strategies, Transit should be intimately involved in the process.

Other facilities besides roads (whether state highways or local authority roads), such as railway corridors, parks, and the DOC (Department of Conservation) estate, are potentially important components of the walking and cycling travel network. When strategies are being developed, owners and operators of these facilities should be part of the process too.

Working groups should ideally be limited to about a dozen participants. Other parties with less direct involvement or interest can be included in the process by circulating draft documents and progress reports to a wider consultation group. Elected members or other key stakeholders who will ultimately endorse or support the strategy will also need to be kept informed of progress as the strategy develops.

A series of working group meetings is scheduled at regular intervals, with a timetable established at the outset so that all parties understand what their obligations will be. An initial meeting can be held to develop and discuss ideas. A recent strategy from another area that is considered a suitable prototype can be pre-circulated to focus thinking. Working

group members can be directed to a number of existing strategies on the internet to get a feel for how different communities have responded to the challenge of preparing a strategy. After each meeting, staff or their consultants revise the strategy, implementation programme and network plans based on feedback from stakeholders, for refinement at subsequent meetings. Meetings can be quite lengthy (three or four hours or more) and a skilled facilitator can be helpful. But time spent early on, working through the issues around the table, can be much more efficient than attempting to resolve strong differences of opinion amongst stakeholders later in the process. The exercise of developing a cycling and/or walking strategy can often be as productive in improving conditions for walking and cycling as the strategy itself, particularly in its ability to raise consciousness of walking and cycling issues amongst key players in the community.

Public consultation is an essential component in the development of a walking or cycling strategy. This phase is typically undertaken after the development of a draft strategy by key staff, interested groups and agencies, and council. However, the working group process recommended above ensures that key stakeholders from the walking and cycling communities are involved early in the process. This is an important part of the public consultation requirements of the LTMA.

Most councils prefer to review a draft walking or cycling strategy before its release for public consultation. Once public feedback has been received, the strategy should be finalised and endorsed by council. This final stage is essential to ensure the strategy has status within the council and wider community. Posting first the draft and then the final strategy on the council's website is recommended, with documents being carefully formatted to ensure that their files are not too large for easy downloading. Photos are very helpful to improve the attractiveness and readability of a strategy, but the file size of images needs to be carefully controlled to ensure that the overall document size is manageable.

Strategies need to be reviewed periodically to ensure that they continue to represent the aspirations of the community and council. Strategies should be reviewed according to the timeframe of the LTCCP. This ties them strongly to implementation programmes and budgets, and is consistent with advice in the LTMA that encourages Land Transport Programmes to be integrated with the LTCCP review process.

Implementation programmes need to be revised annually to reflect the budget cycles of councils, whereas strategies should only need revision every 3 to 10 years. Consequently, a clear mechanism needs to be articulated in the strategy as to how and when the strategy and implementation programmes are to be reviewed.

5. Detailed analysis of walking and cycling strategies

5.1 Methodology

Some 36 strategies were identified that had been published for public consultation as drafts or released as final documents, from 30 councils in New Zealand. A number of others were in preliminary draft stage³ but were not included in the study because they were still subject to considerable change. In addition, eight overseas strategies were reviewed.

Of the New Zealand strategies reviewed, 18 were cycling strategies, 8 were walking strategies, and 10 were combined walking and cycling strategies⁴. Five of the overseas strategies were cycling strategies and three were walking strategies. Some 27 (35%) of New Zealand's 74 local councils (including two of the four unitary authorities where no regional council exists) and 3 of the 12 regional councils (25%) had published strategies by December 2004.

A spreadsheet was developed to summarise and analyse the contents of individual strategies. It contained over 20 characteristics that could be useful within walking or cycling strategies, such as whether a strategy contained a vision, whether it included a network plan, and whether it covered promotional activities, education and enforcement as well as engineering measures.

This quantitative analysis (of what was included or excluded in each strategy) allowed the components of the strategies to be evaluated and compared on a systematic basis. In addition to this quantitative assessment, the research team used its collective experience to recommend features for inclusion in a good strategy.

The characteristics used to assess strategies have been grouped by importance into two groups, as determined by the research team. These are shown in Table 5.1. Within the groups, these characteristics are shown in the order in which they might appear in a strategy. The complete list of characteristics and the weights given to each in the evaluation are contained in Appendix 11. An explanation of selected strategy components in Table 5.1 follows.

³ Central Hawke's Bay District, Gisborne District, Kaipara District, Marlborough District, Papakura District, Waimakariri District, Waikato Region, Wellington City and Whangarei District were developing strategies during the latter stages of 2004.

⁴ Including Kapiti District's walking, cycling and bridleways strategy and Timaru District's 'active transport' strategy which includes pedestrians, cyclists and horse riders.

Table 5.1 Importance of strategy components.

Very Important*
1. Data (crashes, Census travel to work, NZ Travel Survey, pedestrian and/or cyclist traffic counts, user satisfaction surveys, data trends)
2. Vision
3. Objectives or goals
4. Policies and/or actions
5. Quantifiable targets
6. Monitoring process for implementation
7. Network plan
8. Implementation programme
9. Covers "the 4 Es" (engineering, education, enforcement and encouragement)
10. Addresses needs for off- and on-road, utilitarian and recreational provision
11. Relevant walking and cycling groups involved in strategy development
12. Relevant outside agencies (e.g. Transit, Land Transport NZ, Police, region or district) and others involved in strategy development
Somewhat Important*
13. Identifies prioritisation method(s) or criteria for projects and programmes
14. Identifies strategy review period (years)
15. Deals with all road types (including state highways [#])
16. Identifies appropriate design guides or standards
17. Refers to CROW's five requirements for cycling (coherence, directness, attractiveness, safety, comfort)
18. Refers to DETR's five Cs for walking (comfortable, convenient, convivial, conspicuous, connected)
19. Refers to IHT five point hierarchy for cycling (traffic volume reduction, traffic speed reduction, junction treatment and traffic management, redistribution of the carriageway, cycle lanes and cycle paths)
20. Discussion of the merits of inter-modal linkages such as bus/bike, ferry/bike or rail/bike transfer options.

* Within each of the groups, these components are shown in a likely sequential order within the strategy rather than in order of importance.

Or equivalent overseas.

Addresses needs for off- and on-road, utilitarian and recreational provision (Item 10 above)

Strategies that focus on just off-road facilities or just recreational walking and cycling will fail to capture the potential for these modes. People may walk or cycle for a range of purposes, perhaps starting walking or cycling for one particular purpose and then broadening their scope of use over time. An off-road path may be used both as a commuter route and for other practical purposes, not just the recreational uses for which it may have been intended. Similarly, much recreational walking and cycling takes place on the road system. Most trip origins and destinations are adjacent to roads. "Every street is a cycling and walking street" is a philosophy for use in planning for walking and cycling which encourages road designers and managers to think about and to attempt to provide for these modes on every street.

All of the strategies to a greater or lesser extent balanced off-road with on-road facilities, and catered for recreational as well as utilitarian walking and cycling. 'Balance' does not necessarily imply that equal attention will be paid to off-road and on-road facility provision or that utilitarian and recreational walking and cycling will be given equal attention. Instead, a

suitable balance must be found for each strategy based on local users, circumstances and aspirations.

Relevant groups involved in strategy development (Items 11 and 12 above)

Public consultation is an essential component for a walking or cycling strategy. This phase, however, can legitimately be done after a draft strategy has been prepared. As many of the New Zealand strategies reviewed were at the draft stage, the research did not evaluate whether public consultation had been undertaken. Nevertheless, even draft strategies should demonstrate that relevant stakeholder groups had been involved in strategy preparation. Typical stakeholder groups include:

- various council departments (works / traffic / roading, parks, planning),
- Transit,
- local road safety co-ordinator,
- Land Transport NZ – Safety,
- New Zealand Police,
- Sport and Recreation New Zealand (SPARC),
- health sector (e.g. District Health Board),
- schools and tertiary education providers,
- local cycling and walking advocacy groups,
- recreational walking and cycling groups,
- sport cycling and athletics groups.

Less directly involved stakeholders should also be included in the process by information bulletins, focus groups or other mechanisms. They may include the Automobile Association (AA), the Road Transport Association, the Bus and Coach Association, BikeNZ, the Cycling Advocates' Network (CAN), Living Streets Aotearoa (LSA), the Disabled Persons Assembly, Age Concern NZ, Royal NZ Foundation of the Blind, and many others.

Councils typically engage members of the public and/or key walking and cycling groups in the preparation of draft strategies, in a variety of ways. Public consultation is increasingly expected in strategic planning documents within New Zealand, and is a requirement under the LTMA and the *Local Government Act 2002*. Consultation methods may include press releases, public meetings, focus groups, special strategy preparation working groups, and community board, committee and council meetings.

5.2 Results

Each strategy was reviewed and analysed to determine whether it contained the components identified above. The results of this analysis are shown in Table 5.2. The overseas strategies scored an average of 66%, while the New Zealand strategies scored an average of 56%. The overseas strategies were on average twice as long (90 pages) as the New Zealand ones (45 pages).

Table 5.2 Results of the strategy analysis.

Component	NZ Strategies (36)	Overseas Strategies (8)	Total (44)
1. Vision	61%	75%	64%
2. Objectives or goals	83%	100%	86%
3. Policies and/or actions	83%	100%	86%
4. Quantifiable targets	53%	75%	57%
5. Crash statistics	64%	63%	64%
6. Other data (Census travel to work, NZ Travel Survey, pedestrian and/or cyclist traffic counts, user satisfaction surveys, data trends)	86%	88%	86%
7. Network plan	72%	50%	68%
8. Implementation programme	47%	63%	50%
9. Covers "the 4 Es" (engineering, education, enforcement and encouragement)	78%	63%	75%
10. Addresses needs for off- and on-road, utilitarian and recreational provision	94%	100%	95%
11. Relevant walking and cycling groups involved in strategy development	42%	100%	52%
12. Relevant outside agencies involved in strategy development	44%	100%	55%
13. Identifies monitoring process for strategy implementation	56%	63%	57%
14. Identifies prioritisation method(s) or criteria for projects and programmes	33%	63%	39%
15. Identifies strategy review period (years)	58%	88%	64%
16. Deals with all road types (eg state highways and council roads)	61%	100%	68%
17. Identifies appropriate design guides or standards	69%	63%	68%
18. Refers to IHT's 5 point hierarchy for cycling, CROW's 5 main cycling requirements, or DETR's walking 5 Cs	36%	13%	32%
Average score (weighted)	56%	66%	58%
Average length of strategy (including appendices)	45 pages	90 pages	53 pages

Note – this table contains some aggregation of characteristics. The complete list of characteristics is contained in Appendix 11.

5.3 Lessons learned from overseas strategies

The overseas strategies contain similar visions, objectives, targets and policies to the New Zealand strategies. Some of the larger centres overseas are likely to be able to bring more resources to the task of preparing strategies, although New Zealand now has an environment where preparation of walking and cycling strategies is seen as a more central part of overall transport strategy development. This has generated a lot of energy around the country for the development of strategies, resulting in some good examples.

A main lesson from the overseas strategies is the link with broader strategies, probably because overseas jurisdictions have been preparing cycling (and to a lesser extent walking) strategies for many years. For example, the NZTS was released in 2002 and the LTMA was passed in 2003. In the USA, the Intermodal Surface Transportation Efficiency Act (ISTEA) was passed in 1991, while the UK's *A New Deal for Trunk Transport: Better for Everyone* was released in 1998.

These overseas policy documents both changed the emphasis from 'predict and provide' policies for road building to more integrated transportation solutions including travel demand management. Similar initiatives were occurring in The Netherlands and Denmark in the early 1990s. Further integration of walking and cycling into mainstream transport planning and provision is likely to be a future dominant theme in New Zealand.

6. Internet survey of New Zealand local and regional councils

An internet-based survey of all New Zealand's local (74) and regional (12) councils was undertaken in August 2004. The survey was sent by email link to key staff of all local and regional governments in New Zealand. The survey is reproduced in Appendix 12. The researchers were trying to reach people responsible for developing and maintaining walking and cycling strategies.

The purpose of the survey was to learn about a number of aspects behind the strategies that generally could not be found by analysing the strategies themselves. It was also hoped that the views of those councils who did not have walking or cycling strategies (or their key staff) could be canvassed. There were 55 responses. These came from 53 councils out of 86 (62%), and include all but three of the 30 councils that have strategies.

The survey identified that 26 of the 55 responses (47%) were from staff of councils that did not have strategies, while 7 related to walking strategies (13%), 17 related to cycling strategies (31%) and 8 related to combined strategies (15%). These data are shown in Figure 6.1.

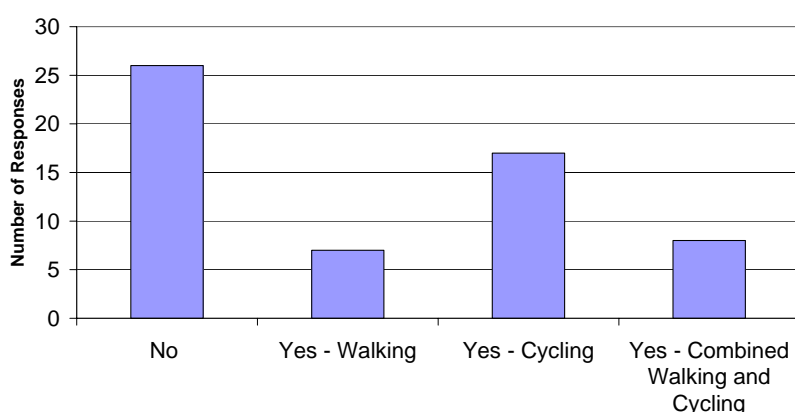


Figure 6.1 Respondents' strategy types.

Approximately half of the strategies were said to be available on the internet, as shown in Figure 6.2. (In fact, almost all of the newer strategies are on the internet.)

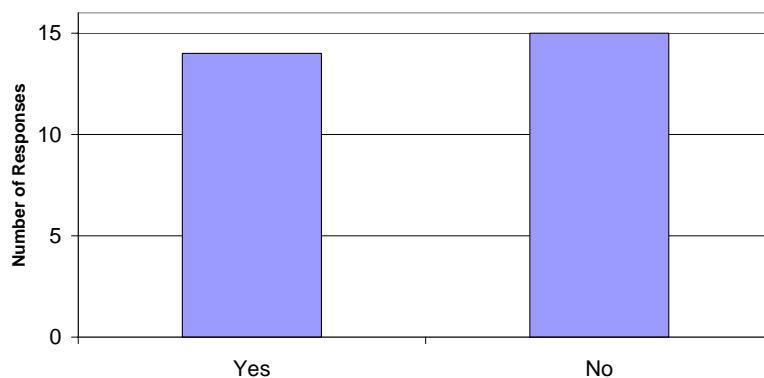


Figure 6.2 Availability of strategies on the internet.

Most strategies were published during 2003 and 2004, as shown in Figure 6.3.

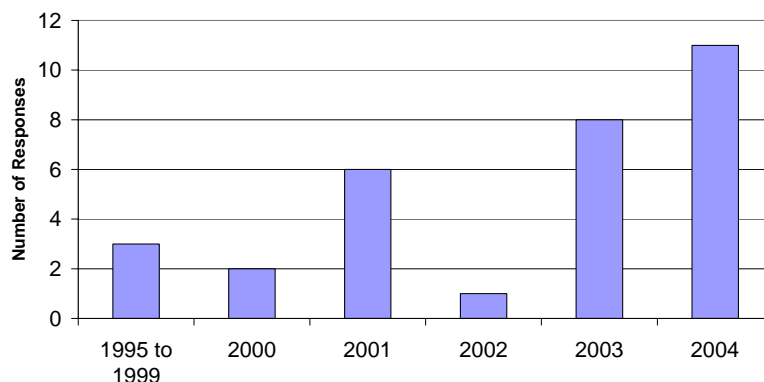


Figure 6.3 Publication year of strategy.

Most of the strategies reviewed were the first version of the strategy from a particular council and are likely to be revised over the next few years. The results to this question of the survey are contained in Figure 6.4.

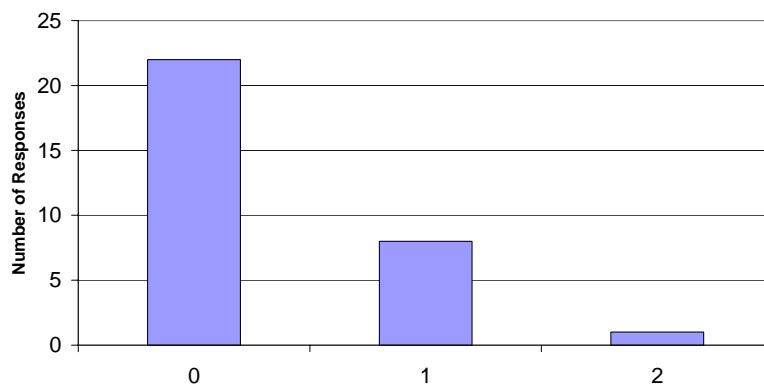


Figure 6.4 Number of previous versions of strategy.

All but three strategies were expected by staff to be reviewed within five years, as shown in Figure 6.5.

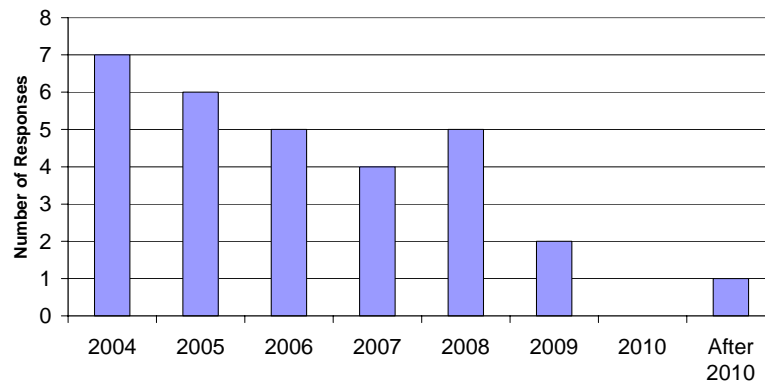


Figure 6.5 Year of next strategy review.

In response to the question “who published the strategy?”, almost all respondents identified “the council”, although a consultant published one strategy on behalf of a council.

Most strategies were prepared “mostly by council staff” as shown in Figure 6.6.

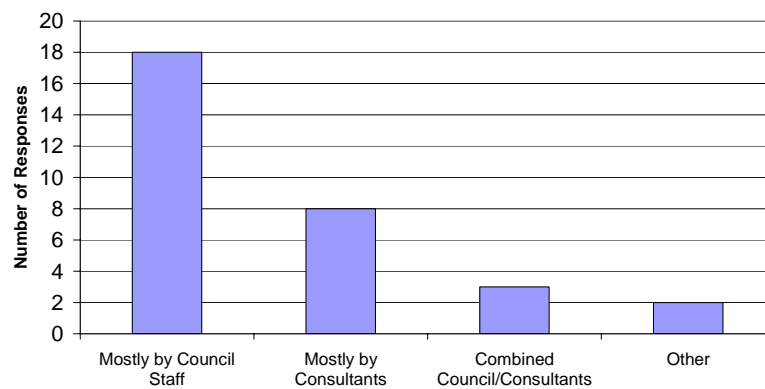


Figure 6.6 Preparer of strategy.

Respondents were asked to identify how much money they spent externally (consultants, publication, etc.) preparing their strategies. The responses were fairly evenly divided with six spending less than \$2,000; six spending between \$20,000 and \$40,000, and four each spending between \$2,000 and \$5,000; between \$10,000 and \$20,000, and over \$40,000. These results are shown in Figure 6.7.

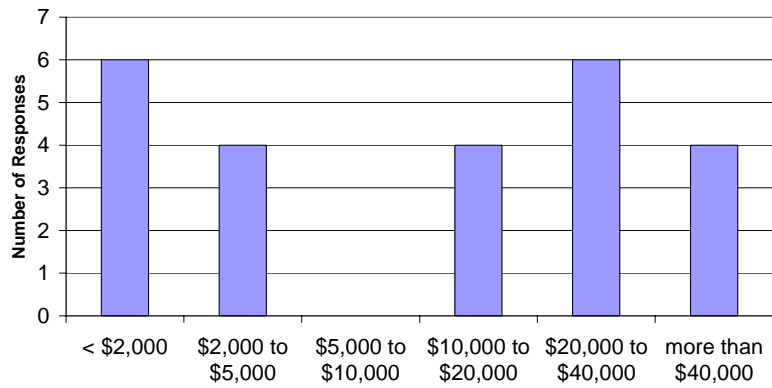


Figure 6.7 External strategy preparation costs.

Of the 24 responses to this question, external strategy costs are estimated to average around \$20,000 per strategy.

Most councils spent between \$5,000 and \$20,000 internally on strategy development, as illustrated in Figure 6.8.

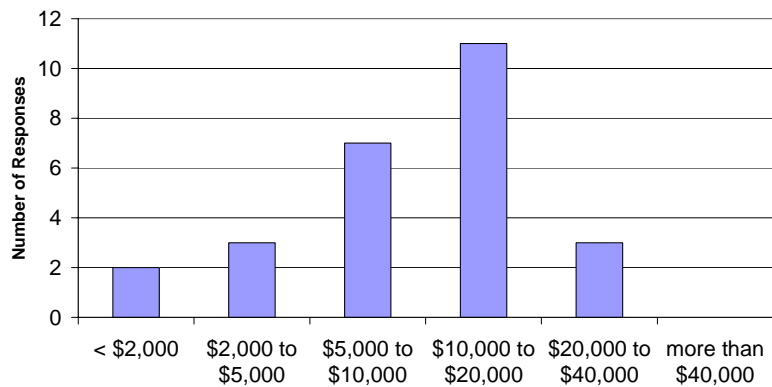


Figure 6.8 Internal strategy preparation costs.

Average internal costs for strategy development are estimated at around \$12,000 per strategy for the 26 responses received.

Total costs for strategy preparation have been estimated by combining internal and external costs. Estimated total costs are as shown in Figure 6.9, with an average cost estimated at \$31,000 (based on 26 responses).

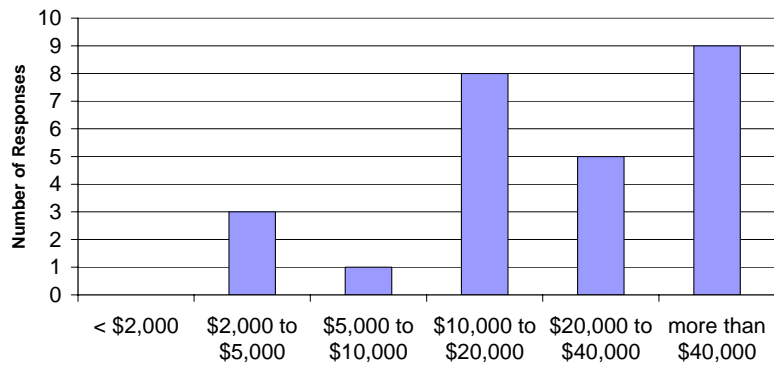


Figure 6.9 Estimated total strategy preparation costs.

Most respondents felt that there was room for improvement in how well strategies were integrated with capital works and maintenance budgets and other expenditure programmes, as illustrated in Figure 6.10.

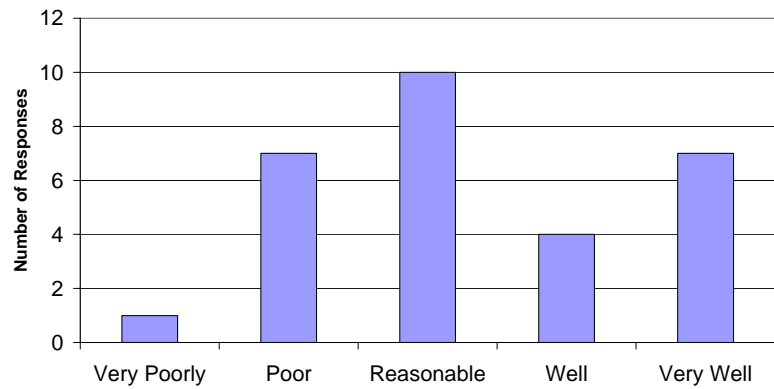


Figure 6.10 Integration of strategy with expenditure.

Among the 31 respondents to the question, a preference was expressed for separate walking or cycling strategies (42%) over combined walking and cycling strategies (32%), as shown in Figure 6.11, although 26% had no preference or opinion.

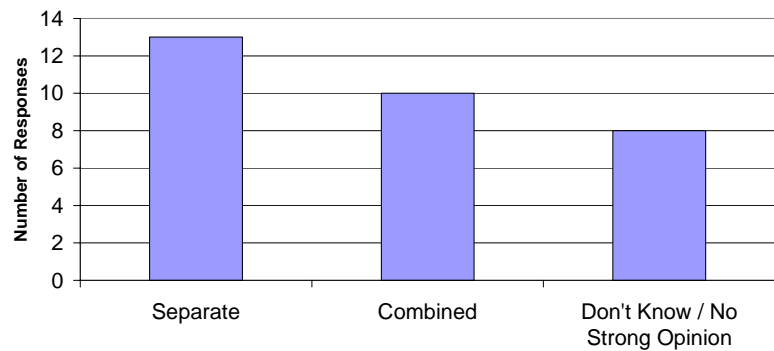


Figure 6.11 Preferences for separate or combined strategies.

Among 54 respondents to this question, 25 (46%) did not intend to develop a walking and/or cycling strategy during the next year, as shown in Figure 6.12. But of these, 11 already had both walking and cycling strategies or a combined strategy and 6 had either a walking or cycling strategy. Put another way, of the 26 councils who responded to the survey and did not have strategies (from Figure 6.1), 17, or 65%, intended to develop strategies during the next year.

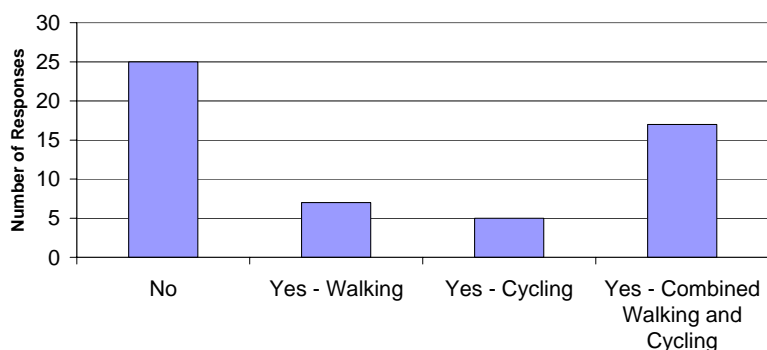


Figure 6.12 Intention to develop a strategy within next year.

Respondents were asked to identify the strengths of their strategies. Survey respondents felt that the strength of their walking or cycling strategy was that it formalised and promoted walking and cycling within the council and the wider community. The strategies were beneficial in bringing together key stakeholders and in assembling walking and cycling data in one place. These views are documented in Appendix 13.

Respondents were asked what they would do differently if they were preparing their strategies again. Generally respondents would widen the scope of their strategy. This might be through inclusion of both walking and cycling (rather than just one), or the addition of more content covering health, recreation, travel demand management, or data. Better public consultation was also identified as an area for improvement. Responses to this question are contained in Appendix 14.

7. Conclusions

Collectively the New Zealand walking and cycling strategies represent a huge amount of expertise and effort by many staff, councillors, representatives of other agencies, members of walking and cycling groups and individuals over many years. This research has found that the existing strategies are very useful examples, but no single strategy represents 'best practice'.

The better strategies, including those from overseas, provide useful models for structure and content for anyone interested in preparing or revising walking and cycling strategies. This report brings together the best examples of strategies, through the filter of an expert group, to facilitate the task of strategy development. It is expected that the report will help practitioners and interested members of walking and cycling groups and the general public to articulate and realise their visions for walking and cycling.

The development of an effective walking or cycling strategy is an art as much as a science. It needs to be tailored to local aspirations and conditions. The use of the best people (from near and far, as needed) can make the process satisfying and productive. The journey can be just as rewarding as the destination, as hinted at in the title of the national walking and cycling strategy *Getting there!*

A walking and cycling strategy is an important planning document and effort should be spent to get it right, and to review and refresh it regularly. But a strategy is only as good as its implementation. Successful implementation will take hard work, perseverance and collaboration amongst all stakeholders. Writing or revising a walking and cycling strategy, with the participation of stakeholders, is a powerful step in the right direction towards improving conditions for walking and cycling.

8. References

- CROW. 1993. *Sign up for the bike: Design manual for a cycle-friendly infrastructure*. Centre for Research and Contract Standardization in Civil and Traffic Engineering (CROW), The Netherlands.
- DETR. 2000. *Encouraging Walking: Advice to Local Authorities*. Department for the Environment, Transport and the Regions (DETR), United Kingdom.
http://www.dft.gov.uk/stellent/groups/dft_sustravel/documents/page/dft_sustravel_504172.pdf
- Geelong Bikeplan Study Steering Committee. 1977. *Geelong Bikeplan*. Geelong Regional Commission, Victoria, Australia.
- IHT et al. 1996. *Cycle friendly infrastructure: Guidelines for planning and design*. Institution of Highways and Transportation, Cyclists' Touring Club, Bicycle Association, Department of Transport (IHT et al.), Cyclists' Touring Club, Godalming, United Kingdom.
- Land Transport NZ. 2005. *Pedestrian Planning and Design Guide*. Land Transport NZ, Wellington, New Zealand.
<http://www.landtransport.govt.nz/consultation/ped-network-plan/>
- L TSA. 2004. *Cycle Network and Route Planning Guide (CNRPG)*. Land Transport Safety Authority, New Zealand. <http://www.ltsa.govt.nz/roads/cycle-network/index.html>
- MOT. 2005. *Getting there — on foot, by cycle. National walking and cycling strategy*. Ministry of Transport (MOT), New Zealand.
<http://www.transport.govt.nz/business/land/getting-there/index.php>
- MOT. 2002. *New Zealand Transport Strategy*. Ministry of Transport, New Zealand.
<http://www.beehive.govt.nz/nzts/>
- NZ Government. 2003. *Land Transport Management Act (LTMA)*. NZ Government, New Zealand.
- Transfund NZ. 2004. PEM Simplified Procedure No. 6 – Walking and Cycling Projects. *Project Evaluation Manual Amendment No. 8*, 1 October 2004. Transfund New Zealand, Wellington, New Zealand.

Appendices

Appendix 1 List of Strategies Reviewed

New Zealand Strategies

Strategy	Type	Year	Internet Link (valid as at August 2005)
Auckland City	Combined	1998	www.aucklandcity.govt.nz/auckland/transport/public/strategy1.asp
Auckland Region	Cycling	2002	http://www.arc.govt.nz/arc/library/m15469_2.pdf
Auckland Region	Walking	2002	http://www.arc.govt.nz/arc/library/x28086_2.pdf
Canterbury Region	Cycling	2004	http://www.ecan.govt.nz/Plans+and+Reports/transport/Draft-cycling-strategy.htm
Central Otago District	Combined	2004	
Christchurch City	Cycling	2004	http://www.ccc.govt.nz/recreation/cycling/strategymonitoring/cyclingstrategy.pdf
Christchurch City	Walking	2001	http://www.ccc.govt.nz/consultation/pedestrianstrategy/pedestrianstrategydraft.pdf
Dunedin City	Cycling	2003	http://www.cityofdunedin.com/city/?MIvalObj=tp_dftcyc_strat04&MItypeObj=application/pdf&ext=.pdf
Dunedin City	Walking	2003	http://www.cityofdunedin.com/city/?MIvalObj=policy_pedestrianstrat&MItypeObj=application/pdf&ext=.pdf
Hamilton City	Cycling	2000	
Hamilton City	Walking	2003	
Hastings District	Cycling	2001	http://www.hastingsdc.govt.nz/property/Roading/cycling/part1.pdf
Hastings District	Walking	2004	http://www.hastingsdc.govt.nz/Documents/draftwalking_strategy.pdf
Hutt City	Cycling	1998	
Kapiti Coast District	Combined	2003	http://www.kapiticoast.govt.nz/NR/rdonlyres/15805B80-E89A-49DD-AA82-F1CAEE4E4ECE/11940/CWBStrategy.pdf
Manukau City	Combined	2004	http://www.manukau.govt.nz/documents/cyclestrategy04.pdf
Masterton District	Cycling	2004	
Napier City	Cycling	2001	http://www.napier.govt.nz/council/docs/cyclepolicy.pdf
Nelson City	Cycling	2001	http://www.nelsoncitycouncil.co.nz/sports/cycleways/cyclestrat-01.pdf
New Plymouth District	Cycling	2004	
North Shore City	Cycling	2003	http://www.northshorecity.govt.nz/transport_and_roads/cycle-strategy/contents.htm
Palmerston North City	Cycling	1998	http://www.pncc.govt.nz/NR/rdonlyres/7A1768EE-A4EF-46B4-AEE9-615447257280/3946/BikePlan.pdf
Porirua City	Walking	2001	
Queenstown Lakes District*	Combined	2004	http://www.qldc.govt.nz/portal.asp?categoryid=253
Rotorua District	Cycling	1999	
South Waikato District	Combined	2003	
Tasman District	Combined	2004	http://www.tdc.govt.nz/story.asp?id=1423
Taupo District	Cycling	2001	http://www.taupodc.govt.nz/councilservices/roading/cycling.htm
Tauranga District (now City)	Combined	2001	http://council.tauranga.govt.nz/cm/strategies/WalkingCycling.pdf
Timaru District	Combined	2004	http://www.timaru.govt.nz/pdf/publications/draft%20active%20transport%20strategy.pdf

Strategy	Type	Year	Internet Link (valid as at August 2005)
Waikato District	Walking	2003	
Waitakere City	Combined	2003	http://www.waitakere.govt.nz/AbtCnl/pp/pdf/walkandcyclestrat.pdf
Wanganui District	Cycling	2003	http://www.wanganui.govt.nz/publications/policies/CyclingStrategy.pdf
Wellington Region	Cycling	2004	http://www.gw.govt.nz/section1142.cfm?
Wellington Region	Walking	2004	http://www.gw.govt.nz/section109.cfm?PublID=624
Whangarei District	Cycling	1999	
* published by Wakatipu Trails Trust			

Overseas Strategies

Strategy	Type	Year	Internet Link (valid as at August 2005)
Bayside, Victoria, Australia	Cycling	2003	http://www.bayside.vic.gov.au/Documents/bayside_bicycle_strategy_february_2003.pdf
Oxfordshire, UK	Cycling	2000	http://www.oxfordshire.gov.uk/occ_cycling_strategy.pdf
Oxfordshire, UK	Walking	2000	http://www.oxfordshire.gov.uk/occ_walking_strategy.pdf
Portland, Oregon, USA	Cycling	2001	http://trans.ci.portland.or.us/Plans/BicycleMasterPlan/Default.htm
Portland, Oregon, USA	Walking	1998	http://www.trans.ci.portland.or.us/Plans/PedestrianMasterPlan/default.htm
South Sydney, NSW, Australia (merged with City of Sydney in 2004)	Walking	2004	http://www.cityofsydney.nsw.gov.au/AboutSydney/ParkingAndTransport/PedestrianPlan.asp
SE Queensland, Australia	Cycling	1999	
Toronto, Ontario, Canada	Cycling	2001	http://www.toronto.ca/cycling/bikepan/index.htm

Appendix 2 Research Project Participants

Reference Group	Organisation
Andy Smith	Walk Auckland, Living Streets Aotearoa
Axel Wilke	Cycling Advocates' Network (CAN)
Celia Wade-Brown	Living Streets Aotearoa
Ian Clark	Transit New Zealand
Mark Yaxley	Land Transport NZ – Funding
Matt Grant	Land Transport NZ – Safety
Michael Thomson	Christchurch City Council
Natasha Abram	Land Transport NZ – Funding
Rachel Algar	Manukau City Council
Rebecca Loader	Hutt City Council
Ron Minnema	Dunedin City Council
Stephen Knight	BikeNZ
Tim Hughes	Land Transport NZ – Safety

Research Team	Function	Organisation
Andrew Macbeth	Lead researcher	MWH New Zealand Ltd
Roger Boulter	Team member	Roger Boulter Consulting
Paul Ryan	Team member	Opus International Consultants Ltd
David Turner	Project director	MWH New Zealand Ltd
Mark Weeds	Research assistant	MWH New Zealand Ltd
Mike Blyleven	Peer reviewer	Environment Canterbury
Glen Koorey	Peer reviewer	University of Canterbury

Appendix 3 Declared Potential Conflicts of Interest

Strategy	Researcher	Nature of Conflict or Potential Conflict	Year
1. Christchurch CC Cycling Strategy	Koorey	Commented as advocate (Spokes Canterbury) on draft strategy	2004
2. Christchurch CC Cycling Strategy	Macbeth	Commented as advocate (Spokes Canterbury) on draft strategy	2004
3. Central Otago DC Walking and Cycling Strategy	Macbeth	Prepared strategy as consultant	2004
4. Dunedin CC Cycling Strategy	Macbeth	Prepared strategy as consultant	2003
5. Environment Canterbury Cycling Strategy	Blyleven	Prepared document as employee of council	2002
6. Environment Canterbury Cycling Strategy	Koorey	Commented as advocate (Spokes Canterbury) on draft strategy	2002
7. Environment Canterbury Cycling Strategy	Macbeth	Developed initial concepts as consultant	2002
8. Cycling in Hamilton 2000 (Hamilton CC strategy)	Boulter	Led preparation of strategy as council employee (based on 1999 report in 10 below)	2000
9. Hamilton City Cycle Network Strategy Report (precursor to Hamilton strategy)	Ryan	Prepared document as consultant	1999
10. Draft Manukau City Cycling and Walking Strategy	Ryan	Prepared document as consultant	2004
11. Masterton Cycling Strategy	Ryan	Peer reviewed draft strategy	2003/04
12. Rotorua Cycleway Policy and Action Plans	Ryan	Prepared document as consultant	1999
13. Tasman Regional Cycling and Walking Strategy	Ryan	Assessed proposed cycle routes and peer reviewed draft report	2004

Appendix 4 New Zealand Design Guides and Standards

1. Austroads Guide to Traffic Engineering Practice Part 13: Pedestrians, Austroads 1995
2. Austroads Guide to Traffic Engineering Practice Part 14: Bicycles, Austroads 1999
3. Cycle Network and Route Planning Guide, LTSA 2004
<http://www.ltsa.govt.nz/roads/cycle-network/index.html>
4. Fundamentals of Planning & Design for Cycling, Training Course Notes, Transfund NZ 2004
5. NZ Standard 4121:2001: Design for Access and Mobility: Buildings and Associated Facilities, Standards NZ 2001.
6. NZ Supplement to Austroads Part 14 Bicycles, Transit NZ October 2004
http://www.transit.govt.nz/technical_information/content_files/ManualSection42_FileName.pdf
7. Pedestrian Planning and Design Guide, Land Transport NZ 2005
<http://www.ltsa.govt.nz/consultation/ped-network-plan/index.html>
8. RTS 14 Guidelines for Blind and Vision Impaired, LTSA 2004
<http://www.ltsa.govt.nz/roads/rts/rts-14-2003.pdf>

Appendix 5 CNRPG Recommended Elements for Cycling Strategies

This appendix describes the elements that should be included in a cycling strategic plan (note other terms may be used such as bike plan and cycling strategy).

A1.1 Policy context

An outline of the relevant broader policies and strategies, which often contain the justification for preparing the cycling strategic plan (see chapter 2).

A1.2 Authorship and participation

A local authority or regional council usually authors a cycling strategy. However, other appropriate agencies should be closely involved and agree to any content that they are responsible for implementing. Other agencies include Transit New Zealand, local councils (regional/city/district), the LTSA, Transfund New Zealand and the New Zealand Police. Local cycling advocacy group(s), other road user groups, employers and cycle retailers will also need to be consulted.

A1.3 Cycling policy objectives

Brief statements setting out, in general terms, what is intended to be achieved.

A1.4 Targets

Targets against which achievement is measured could include:

- cycle use and modal share
- cyclist injuries and hospitalisations
- satisfaction levels regarding cycle facilities
- cycle facilities' condition
- cycle network implementation
- LOS improvements
- the proportion of school pupils trained to basic competence each year.

A1.5 Actions

These will include both engineering and non-engineering actions. They will tend to be in generalised terms within the cycling strategic plans, and where necessary supplemented by other documents specifying the requirements. Typical elements include:

- cycle route network planning and implementation (the subject of this guide)
- educating cyclists in road rules, bicycle maintenance, safety precautions and practical skills in relation to other traffic
- educating motorists and pedestrians on the cyclists' needs and likely behaviour
- educating cyclists and pedestrians on safe path sharing
- enforcing correct and appropriate behaviour by motorists and cyclists

- measures to overcome perceived negative aspects of cycling
- measures that integrate cycling with travel behaviour change programmes
- crash reduction studies focusing on cycle crash patterns
- measures to integrate cycling with public transport, such as secure parking at stations and cycle carriage on buses
- a cycle parking strategy and implementation programme (covering different types of parking demand)
- recommended actions by non-RCA agencies (for example, Police, regional council, schools, employers), sometimes with funding assistance
- an outline of the sources and roles of funding for implementation of the cycling strategic plan
- incorporating the network and any associated rules into the district plan
- a programme of signs for cycling facilities.

A1.6 Cycling data

The data needed to plan and implement the cycling strategic plan, including cycling usage and crash data.

A1.7 Liaison channels

An outline of the formal channels and processes (for example, cycling advisory group) by which politicians, officials (both within the RCA and between it and other governmental bodies) and cycling advocacy groups are consulted and involved in progressing the cycling strategic plan.

A1.8 Cycling engineering standards

An endorsement of *Austrroads' Guide to traffic engineering practice: Part 14: Bicycles* as amended by the *New Zealand Cycling design supplement*, with allowance for local variations.

A1.9 Cycle route network prioritisation criteria

A statement of how priorities are set for implementing cycling infrastructure projects.

A1.10 Cycle network plan

A map of the proposed network.

The timeframe and proposed investment by which the entire cycle route network will be implemented. This should include a general staged programme and description of the

geographical areas and particular needs or problems that will be tackled.

A1.11 Short-term cycling route network implementation programme

A description of projects and detailed costings for the next three years of the cycle route network implementation programme. Costings should preferably be based on the outcome of formal project feasibility studies. On first adoption of a cycling strategic plan, the outcomes of such studies may not be available; in this case these elements should be incorporated in the cycling strategic plan at its first review.

A1.12 Review period

The term after which the cycling strategic plan will be reviewed. This will often be three years, but should align with the review periods and timings of other relevant RCA documents (such as LTCCPs).

A1.13 Monitoring indicators

Progress towards targets as measured by appropriate indicators should be included in an annual report. For a discussion on these see sections 13.5–13.10. In addition to these measures, the reach and effectiveness of cycling promotions and the number of school students that pass the basic competence road test following school cycle education could be monitored.

A1.14 For more information

A generic cycle strategic plan is available from the Environment Canterbury website www.ecan.govt.nz.

A discussion of the range of policies needed to support cycling is provided in Koorey, 2003.

Appendix 6 Getting There – Overview

Getting there - on foot, by cycle

A strategy to advance walking and cycling in New Zealand transport

February 2005

OUR VISION

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

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

REQUIRING ACTION ON 10 PRIORITIES, ACROSS FOUR FOCUS AREAS

FOCUS ONE

Strengthening foundations for effective action

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

FOCUS TWO

Providing supportive environments and systems

Priorities for action

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

FOCUS THREE

Influencing individual travel choices

Priorities for action

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

FOCUS FOUR

Improving safety and security

Priorities for action

9. Improve road safety for pedestrians and cyclists
10. Address crime and personal security concerns around walking and cycling

INFORMED BY SIX KEY PRINCIPLES

- Walking and cycling face similar issues, but are different modes of transport with different needs
- Providing a transport system that works for pedestrians and cyclists means catering for diversity
- Walking and cycling are important for all communities, but critical in urban areas
- Increasing the use of walking and cycling requires a comprehensive approach
- Safety needs to be integrated with promotion
- The needs of current users must be addressed alongside those of new users
-

UNDERPINNED BY A NATIONAL FRAMEWORK FOR IMPLEMENTATION

- Central co-ordination process, supported by national advisory groups
- Annual implementation plans for national agencies
- Performance indicators, plus regular monitoring and evaluation
- Informed government investment
- Early emphasis on supporting effective local action

Appendix 7 Examples of Policies

Strategy	Policies
Manukau City (combined walking and cycling strategy)	<ol style="list-style-type: none"> 1. Complete the strategic cycle network by 2014. 2. Incorporate cycle lanes and bus priority lanes along key arterials across the City. 3. Roll out a programme to complete the key pedestrian safety network improvements by 2014 in the key pedestrian destinations as identified. 4. Include planned improvements for walking and cycling in all nodal development and town centre strategies. 5. In accordance with the Parks Strategy, enhance the opportunities for recreational cycling and walking specifically: <ul style="list-style-type: none"> - Improve existing recreational paths and walking routes; (as identified) - Develop additional recreational cycle and walking facilities (as identified) 6. Include appropriate cycle and pedestrian facilities, in all greenfield developments, alongside new roads, road upgrades and land redevelopments. 7. Improve integration for multi-modal travel that is, combined cycle/walking and public transport initiatives. 8. Support Safer Routes and Walking School Bus/School Travel Plan projects in Manukau through engineering improvements. 9. Investigate opportunities to provide cycle parking at all major Council-owned key facilities and public transport interchanges (e.g. libraries and recreation centres) where there is a demonstrated demand. 10. Promote the need for improved cyclist and pedestrian linkages within neighbourhoods, town centres and other key destinations. 11. Investigate opportunities for additional walkway linkages within neighbourhoods, town centres and other key destinations. 12. Investigate opportunities for additional walkway linkages between key destinations (e.g. a 'themed' walkway between Manukau City Centre and Telstra Clear Events Centre). 13. Support regional co-ordination in the planning and promotion and regional network of cycle and walking facilities. 14. Each year, review the City's pavement reseal, shape correction, safety improvements and other road works programs, and, where possible, make provision for cyclists and pedestrians in these works. 15. On a 5 yearly basis, conduct an audit of existing pedestrian crossings to assess the suitability and safety of facilities. 16. Develop and adopt appropriate engineering quality standards for new cycling and walking facilities and for roads used by cyclists. 17. Carry out safety audits on all proposed major town centre upgrades, road improvements at the feasibility, scheme assessment, design, construction and post construction stages to ensure that adequate safe space is provided for cyclists and pedestrians. 18. Bi-annually undertake pedestrian- and cyclist-focused crash reduction studies. 19. Ensure that major road projects are accompanied by a safety audit that comments on any cyclist and pedestrian safety issues. 20. Monitor footpath reinstatement work. 21. Set higher performance standards for road sweeping of the streets identified as part of cycle route network. 22. Introduce cycle-friendly traffic calming measures in priority areas (e.g. town centres, schools, etc.). 23. Include monitoring of cycle facilities in network inspections.

Strategy	Policies
	<ol style="list-style-type: none"> 24. Develop promotional campaigns following the completion of any significant walking and cycle improvements. 25. Support other organisations in the promotion of walking and cycling. 26. Develop and support the promotion of school travel-wise and safe routes programmes. 27. Support national and regional events for promotion of walking and cycling (e.g. National Bike Week). 28. Maintain active involvement in the Auckland Regional Cycle Group. 29. Work with local authorities to ensure co-ordination of a regional network of cycle facilities. 30. Communicate regularly about cycling issues with other territorial authorities and key national organisations (including 'Cycling Support NT' and 'Transit NZ') in order to share experiences and learn from others. 31. Attend regional forums which contribute to the development of best practice measures (e.g. Travelwise, Travel Demand Management, etc.). 32. Facilitate the establishment and operation of a Bicycle User Group (BUG). 33. Consult key agencies (e.g. Cycling Advocates' Network, CCS, Safekids). 34. Establish a five-year cycling and walking network implementation plan, and include in the Annual Plan process. 35. Report annually progress towards achieving the objectives in the Strategy. 36. Review the Cycling and Walking Strategy after five years and set a new funding and implementation plan for the following five years. 37. Develop an annual survey programme to assess trends in cycle usage across Manukau City.
Hutt City (cycling strategy)	<ol style="list-style-type: none"> 1. That the Council recognises that for the foreseeable future exclusive-use cycleways can only make a limited contribution to improved cycle conditions, because of high costs and problems in making them effective. 2. That the Council makes a commitment to making the existing street network safer and more convenient for cyclists, through improved road design of carriageways and intersections. Particular emphasis should be place on roads and intersections with high traffic flows that are used by cyclists. 3. That the Council notes the desirability of reducing kerbside parking on roads with high traffic flows. 4. That sites with poor cycle safety characteristics be specifically addressed as part of Road Accident Investigation Team studies. 5. That Council notes the importance of safe, secure parking and storage for cycles. 6. That Council adopt a policy requiring provision of suitable cycle parking as part of new retail development. As a minimum requirement this provision shall ensure that retail premises have available to customers space clear of roadways or pedestrian routes, with a wall, post, rail or other object so that cycles can be leant neatly and padlocked to an immovable object. <p><i>The Hutt City Cycling Strategy includes another 8 policies.</i></p>

Appendix 8 Examples of Targets

Strategy	Targets
Kapiti Coast District (combined strategy)	<ol style="list-style-type: none"> 1. To double the number of primary school children and college students cycling to school and sports in the district by the end of 2010. 2. To double the number of cycle commuters and residents who cycle on trips less than 5 km by the end of 2010.
Dunedin City (cycling strategy)	<ol style="list-style-type: none"> 1. Increase the proportion of people who cycle to and/or from work from 2.9% of all commuters in 2001 to 3.8% (increase of 30%) by 2006 and to 4.9% (increase of 70%) by 2011. 2. To increase the length of on-street cycle lanes, off-street cycle paths or wide road shoulders with cycle route markings by 5 km per year. 3. To increase the number of public bicycle parking spaces by 20 spaces per year. 4. The Cycling Interest Group should meet at least twice a year. 5. To maintain or increase funding levels at \$100,000 per annum for the cycling infrastructure programme. 6. To provide one full-time DCC staff equivalent dedicated to implementing this cycling strategy.
Hastings District (walking strategy)	<ol style="list-style-type: none"> 1. Increase the number of recreational walkers by 20% by 2015 2. Reduce public complaints about footpath damage by 50% by 2015 3. Increase the percent of children walking to school by 20% by 2015
Central Otago District (combined walking and cycling strategy)	<ol style="list-style-type: none"> 1. To maintain the proportion of commuter trips made by walking and cycling at 18% in 2006 (same as 2001 level) and to increase this proportion to 25% by 2011 (based on Census "Travel to Work" data). 2. To provide adequate resources so that the proportion of students who have the opportunity to undertake LTSA-sanctioned cycle training by Year 7 (Form 1) is 100% per annum, by 2006. 3. To achieve and maintain a level of at least 20% more cyclists who are satisfied with Central Otago's road and cycle path surfaces from the 2004 level by 2007. 4. To achieve an improvement in the overall quality of cycle facilities available each year. 5. To increase the length of on-street cycle lanes, off-street cycle paths or wide road shoulders by 10 km per year (for example, cycle lanes on both sides of a 5 km stretch of road). 6. To increase the number of public bicycle parking spaces by 10 spaces per year. 7. To reduce the percentage of cyclists that think cycling on the road is either dangerous or very dangerous from 2004 levels by 20% by 2007. 8. To reduce the percentage of non-cyclists that think cycling is dangerous or very dangerous from 2004 levels by 20% by 2007.
Oxfordshire (cycling strategy)	<ol style="list-style-type: none"> 1. To increase the proportion of trips for the journey to work from 9.2% in 1991 to 20% in 2011. 2. To increase the proportion of travel to school undertaken by non-car modes, from a baseline in 2000 of 56% for primary schools and 89% for secondary schools.

Strategy	Targets
	<ol style="list-style-type: none"> 3. To achieve a 10% reduction in the number of reported cyclist casualties by 2010, compared with the average of casualties for the period 1994-98. 4. The County Council will implement the identified cycle networks for Abingdon, Banbury, Bicester and Witney by April 2006. A network for Didcot will be implemented within 5 years of being agreed. 5. The Council will introduce 75 km of new cycle routes in smaller Oxfordshire and 85 km of rural cycle routes by April 2006. 6. To introduce Vulnerable Road User Audit procedures by the start of 2002. 7. To achieve year-on-year reductions in the number of reported cycle thefts. 8. The Council will provide, or secure the provision of, 500 new cycle parking places per annum at locations which are accessible to the general public. Priority will be given to key destinations such as town centres, shopping developments, employment locations, public transport nodes, schools and colleges, public buildings, hospitals and leisure facilities. The Council will seek to ensure that all new cycle parking provision is designed and installed in accordance with the standards set out in Appendix C.
<p>Bayside (cycling strategy)</p>	<ol style="list-style-type: none"> 1. 5% of commuter trips to be made by bicycle by 2008. 2. 0.1-0.15 bike trips per person per day within Bayside by 2008 3. Bike ownership to increase from 0.54 to 0.58 by 2008 4. Cycling accidents to decrease by 15% each year 5. A 5% increase each year in bikes parked at a representative selection of key locations 6. 10% of council staff to cycle to work by 2008 7. 80% of cyclists to rate cycling positively, 50% of non-cyclists to rate cycling positively 8. 20% increase in cycling volumes by 2008

Appendix 9 Possible Monitoring Activities

Data Set	Comments
1. New Zealand Travel Survey (Ministry of Transport)	This comprehensive study of travel behaviour is household based and can be used to analyse trip-making by different purposes and modes of travel. Trip lengths are also recorded. It uses a relatively small sample and has some limitations at the local level, but is worth considering for trends. The first survey was done nationally in 1989/90; the second survey was done in 1997/98 and since 2003 annual surveys are being undertaken on a rolling basis to cover the country every few years.
2. Census journey to work (Statistics New Zealand)	Good long-term data series of trends for walking and cycle commuting ("main means of travel to work") but does not capture school or recreational traffic. Disadvantages are that the data are collected only once every five years, and may be weather-dependent on any particular Census day. The data can be disaggregated to small geographic areas to help understand local travel patterns.
3. Collision statistics (Land Transport NZ)	<p>Walking and cycling collisions tend to be statistically rare events. This means that potentially dangerous locations are unlikely to be identified by conventional "black spot" collision analysis, and also that locations with one collision (or more) may not be any more dangerous than other locations. In addition, many walking and cycling crashes are not reported to the authorities, and this "under-reporting" reduces the effectiveness of crash data for rigorous analysis of network safety analysis.</p> <p>Overall trends in walking and cycling crash numbers, however, are useful indicators of walking and cycling safety, and should be monitored routinely.</p>
4. Walking and cycling infrastructure	An inventory should be established and maintained of public walking and cycling facilities. These include: footpaths, cycle lanes (on-street), cycle paths (off-street), wide shoulders on rural roads marked as cycle routes, bicycle parking facilities, suitably "quiet" local streets, pedestrian refuges, and kerb cut-downs at intersections for pedestrians, wheelchair users or mobility scooter users. A component of this inventory should be walking and cycle network plans.
5. Funding and staffing	Funding and staff resources will be needed to develop, implement and maintain the walking and cycling strategy. Tracking these items will demonstrate commitment to walking and cycling.
6. Automatic traffic counts	Routine classified traffic counts identify the proportion of traffic of each vehicular mode (including cars and many different classes of truck and bus). With a little extra effort or cost, traffic counters can count bicycle traffic too. Routine counts can be established to collect bicycle traffic in a sample of future automatic traffic counts.

Data Set	Comments
7. Manual traffic counts	Manual surveys are needed to count pedestrians and to help distinguish between school and other types of cyclists. They are also needed for counting turning or crossing movements at intersections. They tend to be more expensive than automatic counts and consequently may be carried out less frequently and for shorter intervals.
8. Special pedestrian and cyclist counts	Some data may need to be collected for special locations or events.
9. School bike stand surveys	Cycling to school gives an indication of the use of cycles by younger residents of the community. If this number declines then future numbers of cyclists may decline. Bike stand surveys do not quantify walking trips so student surveys may be necessary instead or as well.
10. Bicycle tourism	Numbers of visitor nights of cyclists on organised cycle tours in the district are sometimes available from the tourism industry and provide useful data on the significance of cycle tourism to a district or region.
11. Walking and cycling events	Numbers of walking and cycling events (and participants) such as Bike Week promotion, fun rides, road or off-road races.
12. Opinion surveys of pedestrians/cyclists	Attitudes of existing pedestrians and cyclists toward walking and cycling facilities can be documented through opinion surveys. These are often done as part of regular resident satisfaction surveys.
13. Opinion surveys of residents	Attitudes toward walking and cycling in general can be documented to ascertain what would be needed to encourage people to walk and cycle more.
14. BUGs	Number of cycle friendly workplaces or bicycle user groups (BUGs) established to support commuters or students cycling to work, university, college or school.
15. Walking school buses and cycle trains	Number of schools that have walking school buses or cycle trains, parent-assisted groups of school children walking or cycling together to and from school. Alternatively, the number of students who use these.
16. School or workplace travel plans	Number of schools or workplaces that have written travel plans aimed at minimising motorised travel.

Appendix 10 Selected pages from examples of good practice

Strategy (and type)	Page(s)	Feature
A10.1 Wellington Region (walking)	i	Executive summary
A10.2 Toronto City (cycling)	3-2	Bikeplan structure
A10.3 North Shore City (cycling)	iv	"Quick wins" (within two years)
A10.4 Auckland Region (walking)	17	Vision and objectives
A10.5 Tauranga District (combined)	5	Objectives
A10.6 Christchurch City (cycling)	24	Key principles, policies, good use of photos
A10.7 New Plymouth District (cycling)	12	Quantifiable targets
A10.8 Wellington Region (cycling)	12	Action programme
A10.9 North Shore City (cycling)	41	Implementation programme
A10.10 Waitakere City (combined)	15	Implementation programme
A10.11 Napier City (cycling)	9 & 10	Network plan
A10.12 Dunedin City (cycling)	33	Part of Cycle Route Map
A10.13 Christchurch City (walking)	22	Monitoring
A10.14 North Shore City (cycling)	44	Conclusion
A10.15 Central Otago District (combined)	17	Census data
A10.16 Manukau City (combined)	11	Cycle count data
A10.17 Tasman District (combined)	21	Rating of cycling and walking facilities
A10.18 Hastings District (walking)	10	Discussion of footpaths
A10.19 Hutt City (cycling)	12	Principal cycle network table
A10.20 Rotorua District (cycling)	30	Principles of planning for cycling
A10.21 Rotorua District (cycling)	90	Typical costs for cycling facilities
A10.22 Auckland City (combined)	vi	Principles of planning for cyclists and walkers

A10.1 Wellington Regional Pedestrian Strategy – Summary

Executive Summary

The vision of this Regional Pedestrian Strategy is “more pedestrians in a convenient, safe and pleasant environment”. Pedestrians are a critical element of the transport system that often form essential links with other modes.

Strategy development

This strategy has been developed with a technical group comprised of representatives from Greater Wellington Regional Council, the region’s territorial authorities, Transit New Zealand, the Land Transport Safety Authority (Wellington region), Living Streets Aotearoa (Wellington) and Regional Public Health.

Framing the issues

Wellington region is making some gains in pedestrian safety, and casualties are decreasing with increasing usage. However, the safety of the pedestrian environment is not improving to the same extent as the motor vehicle environment. Pedestrian casualties as a proportion of total casualties are increasing. Safety needs to be an integral feature of this strategy with safety improvements integrated to service level provisions and programmes such as Safe Routes to School and Walking School Bus.

There is also a need to move the region toward consistency of pedestrian provisions across RCA boundaries. This requires the identification of appropriate best practice standards. GWRC has a role in coordinating and advocating for this approach. As a region we need to ensure pedestrian requirements are adequately taken into account during planning activities. Ideally TA and GWRC expectations need to be aligned and opportunities for this will stem largely from future plan changes and District Plan reviews. We expect TAs and GWRC to work together closely in these processes.

A wide body of pedestrian statistics is available from varying sources (ACC, LTSA, SPARC, local authorities, regional councils etc). Some information has been drawn together in this strategy to capture the pedestrian profile in the Wellington region. However, clarity is needed regarding the information each agency has at hand and the programmes with which they are involved. Information sharing, facilitated by GWRC, will assist in coordinating pedestrian programmes among agencies.

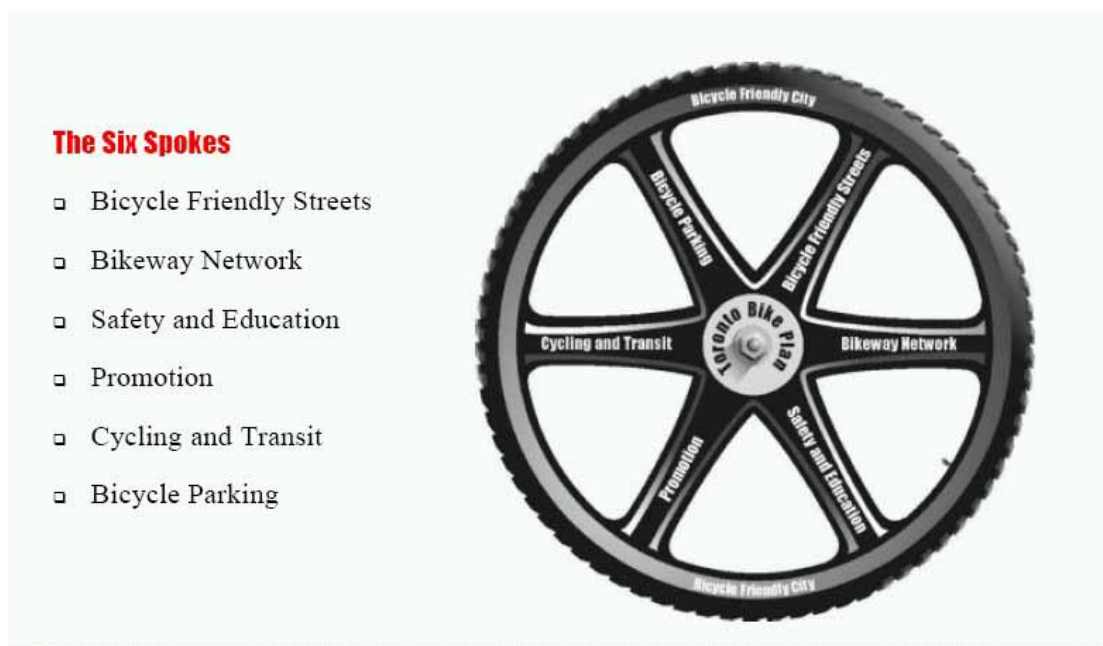
The Strategy

The objectives for the Regional Pedestrian Strategy are:

1. Ongoing development of pedestrian route connectivity and accessibility.
2. Improved safety (perceived and real) of pedestrians from traffic, the physical environment and crime.
3. Maintain advocacy towards best practice pedestrian provisions and funding availability.

The strategy action programme is an integrated package of interventions. GWRC has a clear role in facilitating and monitoring strategy implementation, however the effectiveness of the strategy relies on commitment from all key stakeholders, particularly from RCAs in establishing a pedestrian review programme for their respective roading networks.

A10.2 Toronto City Bike Plan – Structure



Bicycle Friendly Streets (Chapter 4)

Principle:

Every Toronto Street is a Cycling Street.

Objectives:

The City of Toronto will:

- Ensure that transportation policies, practices and regulations support increased bicycle safety and access for intersections, roadways, bridges and underpasses;
- Expand and improve road maintenance programs to enhance cyclist safety, access and comfort; and
- Ensure that cyclist safety, access and comfort are maintained through or around construction zones.

Bikeway Network (Chapter 5)

Principle:

All Toronto residents will be within a five minute bicycle ride to the bikeway network.

Objectives:

The City of Toronto will:

- Complete the bikeway network in 10 years;
- Ensure the safe and comfortable year round operation of bikeways through design, signage, enforcement and maintenance; and
- Connect Toronto's network to bikeways in adjacent municipalities.

A10.3 North Shore City Strategic Cycle Plan – Quick wins

Cycle Strategy — Quick Wins

Initiatives that could be completed within 2 years of adoption of the cycle strategy

- **Citywide Cycle Safety Campaign** — to improve safety and accident prevention
- Introduction of over 14 km of new cycleways including
 - 8 km of strategic cycle network
 - 4 km of local cycle network
 - 2 km of green cycle ways
- Installation of cycle parking facilities for at least 100 bicycles throughout the city
- Introduction of new facilities at ferry terminals
- Trail of **first Bike Aid** programme in New Zealand, which will aim to
 - Install additional parking at key employment & education sites
 - Improve cyclist security
- **Completion** of cycle infrastructure audit
- Adoption of National Cycle Design Guidelines for cycle network design
- Investigation of Driver Improvement Programme with LTSA
- Bid for additional cycle scheme funding to Infrastructure Auckland

A10.4 Auckland Regional Walking Strategy – Vision and Objectives

Strategic Policy for Pedestrians

Our vision

The Auckland region is safe, easy and enjoyable to walk in

What do we want a walking strategy to do?

Walking in the Auckland region needs to be recognised and valued as a mode of transport for all ages. Pedestrians are legitimate road users, their needs and rights in the road environment need to be well understood, and the use of 'best practice', pedestrian supportive urban planning, road design and transport management methods are required.

What will be the outcomes?

We are seeking by 2015 that Auckland will be a region where:

- The region's communities are walkable (safe, direct and pleasant for pedestrians, with a variety of destinations within walking distance);
- Walking is a natural choice (rather than the car) for short journeys in and around local communities;

- The use of walking is on the increase and pedestrian injury rates have declined; and
- That higher levels of pedestrian activity have resulted in an increase in community cohesion and safety.

Our objectives

1. To facilitate pleasant, safe and direct access for pedestrians, ie a walkable community where a variety of destinations are within walking distance.
2. To increase walking's modal share, in particular for short trips and for trips where walking is the only mode of transport used.
3. To improve pedestrian safety and the perception of pedestrian personal and physical safety in the Auckland Region.

A10.5 Tauranga District Walking and Cycling Strategy – Objectives

Objectives, Strategies and Actions

Objective 1: Recreation

To promote and enhance the opportunities for recreational walking and cycling in Tauranga district.

Objective 2: Accessibility

To make walking and cycling a more viable and convenient way of getting around Tauranga district.

Objective 3: Safety

To improve the safety of walking and cycling in Tauranga district.

Objective 4: Funding

To ensure that adequate funds are available to implement the objectives and actions of this strategy.

Strategies, Actions and Priorities

Tables 1 to 4 (following pages) outline the key strategies and actions necessary to achieve the objectives of this Walking and Cycling Strategy.

A10.6 Christchurch City Cycling Strategy – Key principles and policies

4.4 Policies and Implementation Approach

4.4.1 Engineering (Cycle Network)

Key Principles

A set of key principles has been developed to provide guidance for those strategies that include or impact upon cycling but fall outside the influence of this Strategy, such as the MCTS, RLTS and NZ Transport Strategy. This hierarchy of solutions may also be used as a practical tool at a locational level in the network plan (for example, when considering developing cycle routes).

The hierarchy of solutions in the following priority order is:

1. Traffic reduction
2. Traffic calming
3. Intersection treatments and traffic management
4. Redistribution of the carriageway
5. Cycle lanes and cycle paths

Policies

Policy 1 Provision of a Cycle Network

To ensure the continued development of a cycle network for Christchurch.

Policy 2 Provision of Cycle Routes

To develop cycle routes for Christchurch that:

- consider the needs of all cyclists and potential cyclists (including children, inexperienced adults, elderly people, people with disabilities, commuter adults and sports cyclists)
- recognise the national cycle design guide (supplement to Austroads Part 14, Guide to Traffic Engineering Practice - Bicycles, 1999) currently being produced as an aid to the National Walking and Cycling Strategy

Discussion

This updated Strategy recognises that enhancing the physical environment is a key method to reduce cycle collisions, increase the number of people who like cycling, and thereby increase the number of cyclists.

A network is a series of routes connecting destinations. Developing this cycling infrastructure can enable cyclists to travel more conveniently, feel more comfortable and safer than without them. The network is planned to cater for existing and increased future growth.



A10.7 New Plymouth District Cycle Strategy – Quantifiable targets

4. Targets

Progress made in meeting the objectives and working towards the vision of this strategy will be measured against the following targets:

CT1

To define a strategic cycle network by June 2004.

CT2

To establish by way of the LTCCP, a percentage of capital investment in new transport infrastructure to be spent on cycling specific schemes;

CT3

To achieve a reduction in the rate of cycling casualties equivalent to over a third by 2012;

CT4

To increase the proportion of commuter trips made by cycle from the estimated 2001 level of 4% to 6% by 2007, and 9% by 2012;

CT5

To increase the proportion of school students who currently cycle to school at an annual rate which enables a total level of 35% to be reached before 2008 and 50% to be reached and maintained before 2012;

CT6

To increase the proportion of the general population who cycle for recreation both on and off the road, at an annual rate which enables a total level of 20% to be reached before 2008 and 35% to be reached and maintained before 2012;



CT7

Strategic cycle network (as defined) to be completed by 2012;

CT8

To ensure the proportion of cyclists who are satisfied with the provision of cycle parking in the CBD, transport interchange points, new developments and recreation areas grows at an annual rate that enables a total level of 70% to be reached and maintained before 2012;

CT9

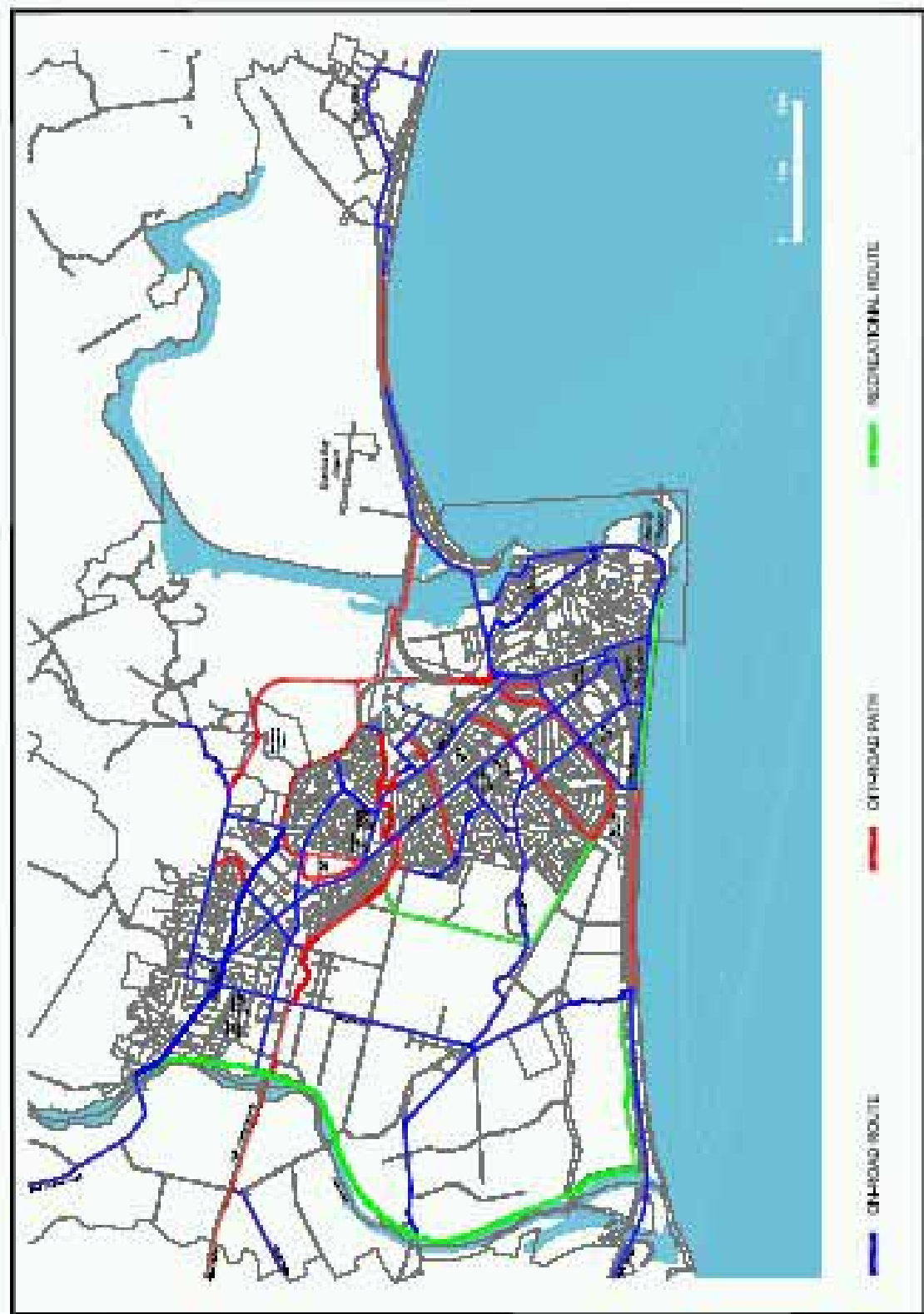
To ensure the proportion of cyclists who are satisfied with the provision of secure covered bicycle storage and shower/change amenities at the workplace grows at an annual rate which enables a total level of 60% to be reached and maintained before 2012;

A10.8 Wellington Regional Pedestrian Strategy – Action programme

A10.9 North Shore City Strategic Cycle Plan – Implementation programme

**A10.10 Waitakere City Walking and Cycling Strategy –
Implementation Plan**

A10.11 Napier Cycle Cycling Strategy – Network plan



A10.13 Christchurch City Walking Strategy – Monitoring

Monitoring

It is important that information about the pedestrian environment and pedestrian movements is gathered regularly to give a base for on-going decisions to be made in the area of implementation. Data is also important as a means of analysing changes and trends in provision and perception, which will help to find out the level to which the strategy is being implemented. The indicators listed previously form the basis of the monitoring programme.

7.1 Data available

There is a variety of information available related to aspects of the pedestrian environment, however there is a need to develop more data sources for some of the indicators. Some current indicators (types of data collected) include:

- A nation-wide Census - carried out every five years by Statistics New Zealand, it gives specific geographical information about the means of travel to work - including walking.
- Annual residents' survey - this is carried out by the Council every year. This survey covers issues such as resident's perception of the quality of the pedestrian environment.
- City Streets Unit Performance Monitoring survey - carried out for the City Streets Unit every year; this document contains a number of questions relating to walking.
- Pedestrian counts - a count of pedestrian numbers at different sites in the Central City is conducted by the Institute of Valuers every two years. In addition to this the Council will periodically survey the number of pedestrians in various areas related to specific projects.
- Pedestrian Activity survey - a three-yearly Council survey, which aims to highlight types of pedestrian activity within the Central City.
- Pedestrian Safety Campaign monitoring - this is carried out by the Council annually to monitor the effectiveness of pedestrian safety campaigns and to find trends in pedestrian and driver attitudes.
- Household Travel Survey - these are conducted periodically by the Land Transport Safety Authority to monitor travel patterns in order to investigate exposure to risk.
- Crash database - this is held by the Land Transport Safety Authority and contains the reports of all road crashes. This is reported annually.
- Specific surveys / focus groups - periodically there may be surveys undertaken to investigate the general or specific feelings of the public or groups of the public, toward the pedestrian environment.
- Feedback from the public - there is on-going feedback gathered from public enquiries and requests, particularly related to the provision of infrastructure.

7.2 Indicators

The following indicators are repeated from previously in the document and include the monitoring techniques that will be used to gather data on each indicator. As data is gathered, specific measurable targets will be developed for each indicator.

This section gives a broad outline of the monitoring that will occur and the areas in which new data sources need to be found. A detailed monitoring plan and reporting programme will be developed as an additional document to this strategy.

A10.14 North Shore City Cycling Strategy – Conclusion

9. Conclusion – what this strategy will do for the people of North Shore City

This strategy aims to outline what we can do to encourage cycling across the city.

Too often we find people really enjoy cycling or clearly indicate they would like to cycle, but cite many (justifiable) reasons why they don't. In this summary we address many of those reasons and hope to show in plain English just what this strategy will do for people on the North Shore.

I don't cycle because...	What this cycle strategy will do
It's too dangerous	<ul style="list-style-type: none"> Over 70kms of new cycle lanes will offer cyclist more protection. Safety training will ensure children and motorists are better equipped to travel around the Shore by bike Bike Aid and Road Safety will encourage Bicycle User Groups (BUGs), which will encourage safety and cycle training.
It's too hilly	<ul style="list-style-type: none"> Our cycle network has been designed to complement the local terrain wherever possible. Local routes and recreational routes will be selected to cross less hilly areas so that cycling is easier.
There's nowhere to park my bike safely	<ul style="list-style-type: none"> Bike Aid and our bike-parking programme will provide over 1000 new secure parking spaces across the North Shore. Bike parking will be placed in visible areas to deter vandalism.
It's too far	<ul style="list-style-type: none"> 90% of the population will live within 1500m of the strategic cycle network. This network will make cycling more convenient and easier. Remember – the more you cycle the fitter and quicker you'll become.
It's too hot & I sweat a lot	<ul style="list-style-type: none"> Our Bike Aid initiative aims to provide cycling facilities for local organizations and businesses. This means organizations can apply for grants from North Shore City Council to get facilities like lockers, showers and bike racks fitted on their site to encourage cycling. Regular cycling means you get fitter and will sweat less, then again you can always wear more deodorant!
I'm too old	<ul style="list-style-type: none"> Our green cycle ways offer a gentler alternative and a safer introduction to cycling. These green ways are more suited to leisure and short distance cycling. Remember cycling has less impact on the body than many other forms of exercise.
I'm not fit enough	<ul style="list-style-type: none"> The range of different networks means inexperienced cyclists could begin on shorter journeys using the local networks or green ways and slowly build up to longer journeys. This strategy will provide different types of networks for cyclists of different abilities. Through working with local communities or BUGs, cyclists can gain confidence and fitness to make cycling easier.
It's always raining	<ul style="list-style-type: none"> This cycle strategy can only do so much! However statistics show that if you were to cycle to work every day, you would only end up wet on 12 days of the year (but that's statistics for you!).

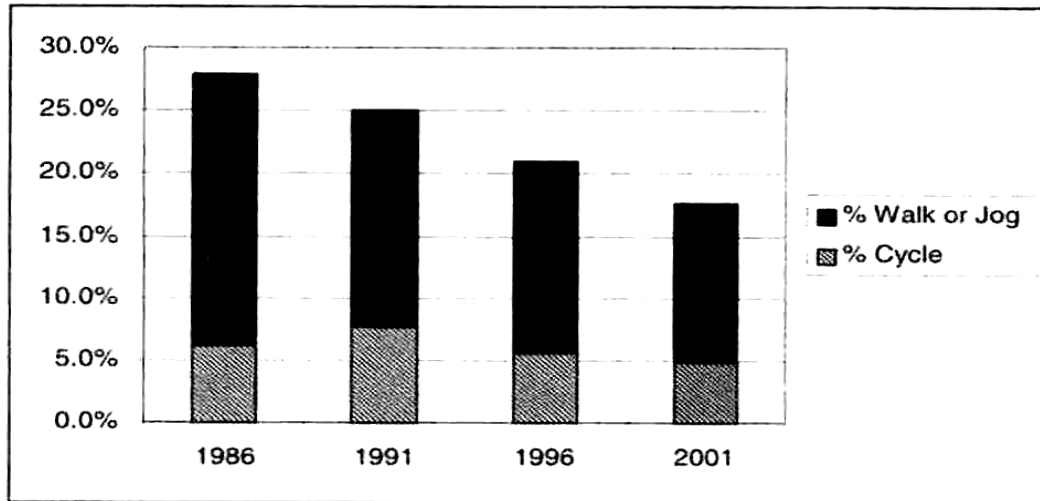
A10.15 Central Otago District Walking and Cycling Strategy – Trends

8 Trends

8.1 Census Data

Trends emerging from data for Central Otago have been analysed and are shown below. The overall trend in Central Otago from Census statistics shows that since 1986, walking and cycling to work have been steadily declining. Combined travel to work by these modes has declined from 28% to 18%. These data are illustrated in Chart 1 below.

Chart 1: Travel to Work Trends by Walk and Cycle 1986 – 2001



Source: Statistics New Zealand

Note: In this graph a commuter is someone that travels to work; it does not include those that work from home.

We know that 4968 people travelled to work in Central Otago on Census day in 2001. The Census recorded 873 people who walked or cycled to work, a significant proportion (nearly 18%) of all those who travelled to work. As noted above, however, this figure has fallen from nearly 28% in 1986.

For Central Otago's more urban residents, walking and cycling are more common than for rural residents, as might be expected. Relevant Census New Zealand data from 2001 are shown in Table 1 below:

A10.16 Manukau City Cycling and Walking Strategy – Cycle count data

3.3 Cycle Counts

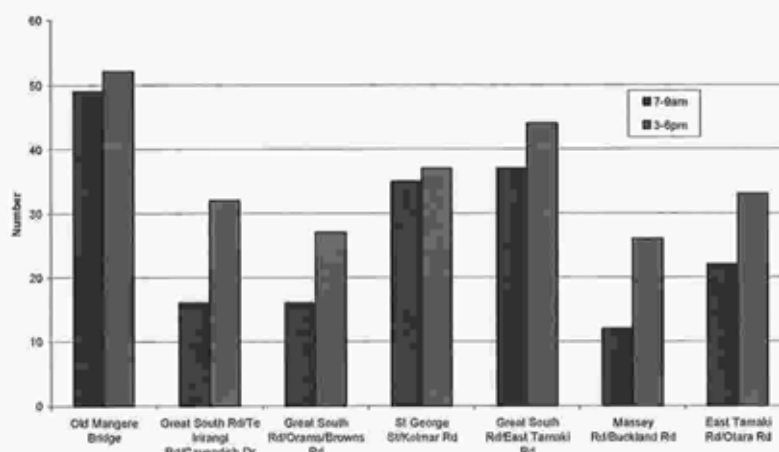
Bicycle counts were conducted in April 2004 at several key intersections on arterial routes across the City during weekday peak times. The bicycle counts provide a snapshot of the frequency of cyclists on the main arterial routes at selected locations.

The counts were spread over a period of three days and comprise of a snapshot of a 'typical' day of bicycle movements across the morning (7-9am) and afternoon/evening periods (3pm-6pm). The results indicated that the most popular cycle route was via Old Mangere Bridge – an important route for sports and recreational cyclists. Other more popular routes include St George St/Kolmar Road (Papatoetoe) and Great South Road/East Tamaki Rd – possibly linked with travel to the MIT in Otara.

Figure 3.5 Data of Bicycle Traffic Counts, April 2004

Location	7-9am	3-6pm	Total
Old Mangere Bridge	49	52	101
Great South Rd/Te Irirangi Dr/Cavendish Dr	16	32	48
Great South Rd/Orams/Browns Rd	16	27	43
St George St/Kolmar Rd	35	37	72
Great South Rd/East Tamaki Rd	37	44	81
Massey Rd/Buckland Rd	12	26	38
East Tamaki Rd/Otara Rd	22	33	55
Total	190	257	447

Results of Bicycle Counts, April 2004







3.4 International Comparison

A comparison of Manukau City with selected cities overseas identifies that higher levels of cycling and walking are associated with the following factors:

- ▶ Higher population density: The population densities of European and Asian cities are generally significantly higher than those of American or Australian cities.
- ▶ Modest levels of road provision: Asian and European cities have only about 12-30% of the level of per capita road provision of that found in American and Australian cities.
- ▶ Lower overall car ownership and use.
- ▶ High levels of public transit.

A10.17 Tasman District Cycling and Walking Strategy

Type of Facility	Photographic Example	Walking Responses	Cycling Responses
No dedicated facilities		Approval: 20 %	Approval: 30 %
Road-side footpath		Approval: 76 %	Approval: 40 %
Road-side footpath		Approval: 84 %	Approval: 85 %
Shared off-road facilities for cycling and walking		Approval: 89 %	Approval: 90 %

Participants were also invited to add comments on specific services and facilities they would like to see Council provide. The most common facility requested were:

- Appropriate links between Nelson and Richmond including continuation of the Whakatu Drive and Main Road Stoke cycleways.
- Dedicated cycle lanes on the direct commuter routes.
- Cycling and walking links between smaller urban settlements, particularly in Golden Bay where smaller coastal settlements (e.g. Pohara, Rangihaeata) are linked by arterial roads (SH60, Abel Tasman Drive) that, in places, are unsuitable for cycling, walking or riding horses.
- Links to existing and new recreational resources such as Rabbit Island, beaches, Saxton Sports Field and established Council reserves.
- Specific off road pedestrian facilities linking residential areas to schools, particularly where the children have to walk down high volume or high-speed roads.

Crime Prevention Review

Crime Prevention Through Environmental Design (CPTED) aims to improve the quality of life by designing the built environment to reduce personal security concerns and the incidence of crime.

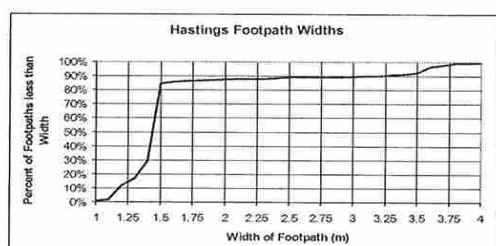
An analysis of crime statistics for the Tasman District reveals that Tasman has a lower incidence of violent offending than the national average, however there has been an increasing trend in the rate of offending over the past five years. This is shown in Figure 6 below.

A10.18 Hastings District Walking Strategy – for footpaths

FOOTPATHS

The urban area of Hastings has 415km of footpaths, along 265km of road. The Council is responsible for maintaining all of these existing public footpaths, as well as for ensuring that new footpaths are constructed to appropriate standards.

The Council's Road and Traffic Engineering Standards specify road reserve and carriageway criteria. Local streets with less than 200 vehicles per day, or 25 houses, are only required to have a single footpath. All other urban roads require two footpaths. There are no specific requirements for minimum footpath widths, but reference is made to the Austroads Guide to Traffic Engineering Practice, Part 13 Pedestrians and the New Zealand Standard 4121 : Code of Practice for Design and Access for Disabled Persons.



As shown in the chart above, about half of all footpaths in Hastings are 1.5m in width, and about a third are narrower than 1.5m. Around 10% or 40km of existing footpaths are narrower than the nationally recommended minimum width of 1.2m.

A clear width of 1.5m allows a wheelchair and a pram to pass each other, and 1.8m is required for two wheelchairs to pass comfortably.

While pedestrian crossings aid walkers to cross the road safely, too many crossings reduce their effectiveness as drivers lose their respect for them. Compliance with recognised pedestrian crossing warrants is

therefore important in not only providing for pedestrians but also providing for their safety.

Not all pedestrians have full visibility, and many blind and visually impaired pedestrians need extra assistance to enable them to walk safely. Approximately 3% of the population is blind or vision-impaired. They are unable to drive vehicles, so they rely on walking as their independent mode of transport. To provide for these users, footpaths should be constructed with reference to the recognised RTS14 document Guidelines for Facilities for Blind and Vision-Impaired Pedestrians.

It should be remembered that there can be a number of other uses of footpath space. These include street signs, parking meters, cafés and seating, shop displays, and street furniture. The minimum widths need to be widened to allow for these. Footpaths can also provide space for wheelchair users, pushchairs, young cyclists and runners.



A10.19 Hutt City Cycling Strategy – Principal cycle network

8. PRINCIPAL CYCLE NETWORK

8.1 The Principal Cycle Network is shown on Diagram 1.

The table below shows the streets used for the cycle network and the measures proposed for more detailed study, consultation and design within those streets.

Street	Prevailing Width	Suggested Measures for further detail and consultation	Reference Diagram(s)
Stokes Valley Road (Manuka to Eastern Hutt)	10.7m	Remove on street parking	A
Eastern Hutt Road (whole length)	10.7m	Remove on street parking and/or use footpath	A, B
Cambridge Terrace (whole length)	8.7m	Remove on-street parking and/or use berm	D
Whites Line West (whole length)	16m	Signage but no other specific measures	
Whites Line East (Ludlam Cres to Wainui Rd)	Various	Special study required	
Wainui Road (whole length)	10.5m	Remove on street parking and/or use footpath	A, B
Wainuiomata Hill Road (whole length)	N/A	Off road cycle track	
Wainuiomata Road (whole length)	Divided carriageway	cycle/parking lane	
Woburn Road (whole length)	13.8m	Shared cycle/parking lane	B, E, F
Main Road (Fitzherbert to Moohan)	10.5m	Remove on street parking and/or use footpath	A, B
Moohan Street (whole length)	9.1m	Remove on street parking	A, B
Nelson Street (Moohan to Fitzherbert)	9.1m	Remove on street parking	A, B
Parkway (including extension) - (whole length)	Various	Various	A, E
The Esplanade (whole length)	6.4m + 6.4m	Two way foreshore route	
Waione Street (Esplanade to Eastern stopbank)	8.8m	2 x 4.4 shared cycle/traffic lanes connection to Eastern stopbank	
Eastern stopbank (Waione Street to Melling Bridge)	2.0m	sealed shared cycle/pedestrian track	
Cuba Street (whole length)	13.0m	Remove on street parking	A, B, F
Victoria Street (whole length)	14.8m	Remove on street parking on one side only	G, B, F
Railway Avenue (whole length)	14.5m	Remove on street parking on one side only	G, B, F
Hutt Road (whole length)	14.0m	Remove on street parking on one side only	G, B, F
Knights/Oxford Terrace/Waterloo Road linking to Cambridge Tce (whole length)	14.8m	Shared cycle/parking lanes	E, B
Fairway Drive/Daysh Street (whole length)	Daysh 10.2m	Remove on street parking	A, B
	Fairway 14.0-16.4	Share cycle/parking lanes	E

A10.20 Rotorua District Cycleway Policy – Principles of planning for cycling

6. THE PRINCIPLES OF PLANNING FOR CYCLING

6.1 Cyclists' Needs

Davies (1996, pp.9-10) states: "Providing cycle facilities should not be an objective in itself. Cyclists do not want cycle facilities *per se*. They want routes that are fit for cycling ... With the increase in traffic volumes and speeds, many roads have become less attractive for cycling; and the design of new roads has often ignored the needs of cyclists. However there is little prospect of constructing a totally separate cycle route network that ... avoids all existing roads. Planning for cycling must therefore start from the premise that, whatever special facilities are provided, the [urban roading] network should be made as convenient and as safe as possible for cyclists".

Davies (1996, p.10) recommends that the following hierarchy of measures be considered before a design solution is chosen for any particular section of road or urban area:

- (1) Traffic volume reduction
- (2) Traffic calming
- (3) Junction treatment and traffic management
- (4) Redistribution of the carriageway
- (5) Cycle lanes and cycle tracks.

These measures are not mutually exclusive. Measures higher up the hierarchy [(1) or (2)] will help ensure that lower measures will either be successful or be unnecessary.

Case studies cited in Mathew (1995, p.57) show that bicycles account for between 14 and 43 percent of all trips in the centre of some European cities. The high cycle usage has been achieved as a result of combinations of traffic restraint measures, traffic calming, parking reduction and the development of cycle networks.

6.2 Cycle Route Network Planning

"In order to plan in a rational and comprehensive way, and to integrate measures to assist cyclists with other transport or planning developments, it is important to identify a cycle network. Network planning is not intended to imply that cyclists should be restricted to a limited set of routes, but it is a tool to help set priorities and to ensure route continuity" (Davies, 1996, p.12).

Cyclists require a cycle network to be coherent, direct, attractive, safe and comfortable - as follows:

- (1) **Coherent:** Ideally, the cycle infrastructure should connect all trip origins and destinations. Routes should be continuous and consistent in standard.
- (2) **Direct:** Routes should be as direct as possible and based on desire lines. Detours and delays will deter use.

A10.21 Rotorua District Cycleway Policy – Typical costs for cycling facilities

Table 12.1 Typical Treatment Costs

Treatment	Typical Cost
Kerb side lane alter existing shoulder to no parking for motorists (signs or markings)	\$500 per km
Kerb side lane minor widening to create shoulder (i.e. increase width from 0.5m to 2.0m)	\$200,000 to \$400,000 per km
Cycle Lane signs & pavement marking only (including existing marking removal)	\$5,000 to \$10,000 per km
Cycle Lane minimal widening to provide for cycle/carparking lane (as per Figure 9.3)	\$150,000 to \$250,000 per km
Cycle Lane Extensive widening to provide for cycle/carparking lane (as per Figure 9.3)	\$300,000 to \$500,000 per km
Cycle Under Pass box culvert structure	\$100,000 each
'T' Intersection (signalised) signs and altering pavement marking (including marking removal)	\$3,000 - \$8,000 per intersection
'X' Intersection (signalised) Altering pavement marking (including marking removal), installing new induction loops, colour slurry seal (as per Figure 9.7).	\$20,000 per intersection (four legs)
Off-road cycle path: 3m wide, concrete pavers, flat terrain)	\$240,000 per km
Off-road cycle path: 2.5m wide, steep terrain, concrete pavers	\$420,000 per km
Off- road cycle path (asphaltic concrete)	\$60,000 to \$100,000 per km
<p>Notes: The above typical costs show large variations which take into account the following:</p> <ol style="list-style-type: none"> 1) The costs reduce substantially if only one side of the roadway is widened. 2) Widening costs will depend on whether or not a footpath needs to be reinstalled. 3) The amount of existing pavement marking to be removed will vary from site to site 4) Nominal figures have been allowed for relocation of services 5) No provision is made for land purchase. 6) The off- road path cost does not allow for construction of bridges or other structures for crossing waterways or swampy land. 	

A10.22 Auckland City Cycle and Walking Strategy – Principles of planning for cyclists and walkers

PRINCIPLES OF PLANNING FOR CYCLISTS AND PEDESTRIANS

Designing for pedestrians and cyclists should not take place as an ancillary activity to designing for motor vehicles. Safe pedestrian and cyclist friendly environments take heed of the principles detailed below.

- implement a hierarchy of solutions, including traffic reduction, traffic calming, reallocation of road space and expansion of facilities
- plan land use so that there is a reduced need to travel distances longer than can be travelled easily by bicycle or on foot
- take a positive approach
- providing infrastructure is not enough; education, enforcement and encouragement are also needed
- access, rather than mobility is important
- integrate cycling and walking into every level of the planning and engineering process
- improve intermodal integration
- use landscape and urban design to create attractive routes
- provide for recreation as well as transportation
- provide a network with linkages
- provide routes for cyclists not cycle routes
- create safe environments from the outset
- traffic modifies pedestrian behaviour.
- pedestrians have diverse characteristics that must be recognised

BENEFITS

Cycling and walking have a range of community, health, social, economic and individual benefits. The benefits of cycling and walking are:

- recognised medical benefits can be accrued from daily life activities such as cycling and walking.
- walking and cycling are available to the majority of the population.
- cycling and walking allow for increased community interaction.
- cycling and walking are non-polluting sustainable activities.
- cycling and walking are significantly more resource efficient and cost effective than any other form of transport.

Appendix 11 Characteristics and Weights Used in Strategy Evaluation

Characteristic	Weight
1. Vision	5
2. Objectives	5
3. Policies & actions	5
4. Quantifiable targets	5
5. Network plan	5
6. Implementation programme	5
7. Covers the four Es	5
8. Addresses needs for off- and on-road, utilitarian and recreational provision	5
9. Crash statistics*	5
10. Census data*	4
11. NZ Travel Survey*	4
12. Pedestrian or cyclist counts*	4
13. User surveys (pedestrians or cyclists)*	3
14. Trends in the data*	3
15. Monitoring process for implementation	4
16. Deals with all road types (including state highways)	4
17. Identifies design standards	4
18. Prioritisation method or criteria	3
19. Walking groups involved	3
20. Cycling groups involved	3
21. Strategy review period (years)	3
22. Refers to DETR's walking 5 Cs	3
23. Refers to IHT's 5 step hierarchy	2
24. Refers to CROW's 5 requirements	2
25. Transit NZ involved [#]	1
26. LTSA involved [#]	1
27. Police involved [#]	1
28. Other levels of government (City/District/Region) involved [#]	1
29. Other stakeholders involved [#]	1
30. Inter-modal linkages (e.g. bus/bike, ferry/bike or rail/bike)	1
Total	100

* Grouped as "data" in summary tables.

Grouped as "relevant outside agencies" in summary tables.

Appendix 12 Internet Survey

Walking and Cycling Strategies - Best Practice

- 1 Does your Council have a walking or cycling strategy? (Note, if your Council has more than one relevant document, please complete a survey for each one.)

- No (please go to Question 14 by pressing submit at the bottom of this page - you're almost finished!)
- Yes - Walking
- Yes - Cycling
- Yes - Combined Walking and Cycling
- Yes - Other (please describe)

- 2 Is this strategy available on the Internet?

- No
- Yes
- If yes, please provide a URL:

- 3 When was the latest edition of your strategy published?

- Prior to 1990
- 1990 to 1994
- 1995 to 1999
- 2000
- 2001
- 2002
- 2003
- 2004

- 4 How many previous versions of this strategy has your Council published?

- 0
- 1
- 2
- 3
- More than 3 (please specify):

5 When do you expect this strategy to be reviewed next?

- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- After 2010

6 Who published this strategy document?

- The Council
- Other (please specify):

7 How was this strategy prepared?

- Mostly by Council staff
- Mostly by Consultants
- Other (please specify):

8 How much did this strategy cost to your Council to prepare, in EXTERNAL costs such as external consultants' fees and consultation? (Note - answers to this question will not be published individually but will be aggregated with figures from other Councils).

- < \$2,000
 - \$2,000 to \$5,000
 - \$5,000 to \$10,000
 - \$10,000 to \$20,000
 - \$20,000 to \$40,000
 - More than \$40,000
-



9 How much did this strategy cost your Council to prepare, in INTERNAL costs, such as staff time publication and distribution? (Note - answers to this question will not be published individually but will be aggregated with figures from other Councils).

- < \$2,000
- \$2,000 to \$5,000
- \$5,000 to \$10,000
- \$10,000 to \$20,000
- \$20,000 to \$40,000
- more than \$40,000



10 In your opinion, how well is the strategy integrated with your capital works, maintenance and other expenditure?

Very Poorly	?	?	?	Very Well
1	2	3	4	5



11 What are the strengths of this strategy in your view?



12 What would you do differently if you were revising this strategy?



13 Do you personally prefer separate walking and cycling strategies or combined ones? (Note - answers to this question will not be published individually but will be aggregated with responses from other practitioners).

- Separate
- Combined
- Don't know / No strong opinion



Please go to Question 15 (press submit to go to next page).



Walking and Cycling Strategies - Best Practice

14 Does your Council intend to develop a walking or cycling strategy during the next year?

- No
- Yes - Walking
- Yes - Cycling
- Yes - Combined Walking and Cycling

Yes - Other (please describe):

15 Do you have any other comments about walking and cycling strategies?

16 What is your name?

17 What is your position within your organisation?

18 What organisation do you work for?

19 If you are a consultant, which Council are you responding for this survey; and who is your Client?

20 What is your e-mail address?

21 What is your phone number?



Appendix 13 Strengths of strategy identified by Internet Survey respondents

These responses were received from internet survey respondents in answer to the question "What are the strengths of the strategy?"

- Simplicity
- Takes a strategic view of the cycling network
- Determines standards & positive regional goals
- Projects listed, network approach
- Public input
- Gave council clear objectives and action plan
- Primarily addresses safety on existing routes
- Encourages public support and assistance
- Regional networks
- Integrated approach, clear actions
- Sets a plan for the future that has been lacking
- Reconfirming council's political vision for cycling
- Highlighting the issues to the community
- Walking and cycling now formally part of RLTS
- Regional co-ordination for development of strategic network
- It is reasonably concise
- Regional cycling coordinator appointed & TA buy in
- Providing additional focus to cyclists needs
- Will rationalise the way council looks at walking
- Recently reviewed, articulates priorities
- Identified ways of changing District Plan
- Bringing together info
- A start, identifies issues
- Network approach
- Simplicity
- Extensive consultation, all user types incorporated
- Practical, usable for funding applications.
- Sets out a programme of works
- Now have a number of agencies working together

The main theme emerging from these comments is that respondents feel that the existence of a walking or cycling strategy formalises and promotes walking and cycling within the council and the wider community. The strategies were also beneficial in bringing together key stakeholders and in assembling walking and cycling data in one place.

Appendix 14 What Survey Respondents would do differently for next strategy

These responses were received from electronic survey respondents in answer to the question “What would you do differently if you were revising this strategy?”

- More street width information
- Include walking within the report
- We need better consultation, Strategic goals
- More emphasis on staffing resources
- Expand on recreational & health benefits
- Ensure implementation plan with timings / costings
- Nothing, but might change mind after start implementing
- Have more staff so that I/we could focus on this
- Nothing significant – stay with the same format
- Include more urban & travel demand management (TDM) context
- Too early to say. Still in process of development.
- Only just released strategy
- Goals that are not specific as councils change
- Have trends as targets instead of point figures
- Separate cycling and walking
- More field research and pedestrian surveys
- Set priorities better in terms of works
- Did not identify practical solutions or funding
- Possibly focus more on recreational routes rather
- More verbal description
- Incorporate implementation plan detail
- Including walking (which will happen in 04/05)
- More public participation/ wider consultation
- Think bigger in terms of the projects proposed
- Nil (2 responses)

Generally respondents would widen the scope of their strategy, if they were doing them again. This might be through inclusion of both walking and cycling (rather than just one), or the addition of more content covering health, recreation, travel demand management, or data. Better public consultation was also identified as an area for improvement.