Regional Cycling Strategy

May 2004

Quality for Life

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Executive Summary

The vision of the Regional Cycling Strategy is "the evolution of a cycling culture where cycling is a recognised and valued transport mode that is safe, accessible and pleasant throughout the region".

Process

This strategy has been developed from the policies of the RLTS and in conjunction with a technical group comprised of representatives from Greater Wellington Regional Council Access Planning, the region's Territorial Authorities, Transit New Zealand (Wellington region), the Land Transport Safety Authority (Wellington region), Cycle Aware Wellington and Regional Public Health.

Problem Framing

An extensive problem framing exercise was undertaken in the preliminary stages of strategy development. It showed that cycle use in the Wellington region is declining and currently comprises only 2% of all trips. Further, cycling is less safe than travelling by car, bus or as a pedestrian. People's perception of safety while cycling is also low. Drivers were shown to be at fault for the majority of crashes resulting in cyclist casualties.

A high standard of accessibility is desired throughout the region. However, significant deficiencies in the regional network can be clearly identified. Further barriers to accessibility exist with the limited integration of cycles with public transport.

Competition for funding is inherent in road controlling authorities and cycling has not traditionally been a priority in the funding allocation process. Greater Wellington Regional Council has the opportunity to have an advocacy role in seeking increased cycle planning and funding at both national and local levels.

The Strategy

The Strategy seeks an interactive culture among agencies for the advancement of cycling in the Wellington region with an action programme linked directly to the problem framing above. The objectives of the Strategy are:

1. Create an advocacy ethic that facilitates coordination among lead agencies.
2. Enhance cycling safety throughout the region via education initiatives.
3. Increase accessibility, integration and safety for cycling.
4. Improve awareness of all forms of cycling.

Cycling conditions are affected by a number of agencies and the Strategy intends to clarify and coordinate the roles of these agencies in working toward the vision and objectives. Three critical integrated interventions are outlined:

1. increased political advocacy by Greater Wellington Regional Council at local and central government levels;
2. development of Road Controlling Authority cycling work programmes; and
3. establishment of a Regional Cycling Coordinator to enable the delivery of educational and promotional interventions.

The Strategy action plan extends to 2006/07 and will be monitored against performance measures linked to specific interventions. An annual monitoring programme is also in place to measure system wide indicators for cycling. The Strategy will be reviewed by March 2007.

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PART ONE

Introduction

The Regional Land Transport Committee (RLTC) wants to make cycling safe, accessible and pleasant for the people of the greater Wellington region. We envisage the growth of a regional cycling culture in which cycling is a recognised transport mode that is safe, accessible and pleasant.

The Wellington Regional Land Transport Strategy (RLTS) suggests that cycling has few adverse effects on the environment, is safe and has positive health benefits (Wellington Regional Council (WRC), 2000, p29). Cycling needs represent an integral part of the RLTS direction for our transport system.

The Regional Cycling Strategy aims to:

- address the needs of the region;
- seek means of improving the regional level of service for cycling;
- promote cycling as an activity and mode of transport; and
- improve the safety of cycling.

This strategy sets out a vision shared by the region's key agencies involved in cycling and sets objectives for the promotion and development of cycling.

Vision

The evolution of a cycling culture where cycling is a recognised and valued transport mode that is safe, accessible and pleasant throughout the region.

Strategy Purpose

The purpose of this strategy is to signal key regional intentions for cycling; setting out a blueprint for making progress in the development of a cycling culture.

This strategy seeks to enable a proactive and interactive culture among agencies for the development and advancement of cycling in the greater Wellington region. It intends to clarify and coordinate the roles of Road Controlling Authorities, the Land Transport Safety Authority, health authorities and Greater Wellington Regional Council (GWRC) in working toward the vision and objectives.

This strategy frames cycling issues from a regional perspective and identifies key objectives and actions that are:

1. directly aimed at resolving regional cycling issues;
2. achievable at regional and local levels; and
3. measurable, to enable an adaptive and ongoing strategy for cycling.

This strategy forms a chapter of the RLTS.

Strategy Development

This strategy has been developed from the policies of the RLTS and in conjunction with a technical group comprised of representatives from GWRC Access Planning, the region's Territorial Authorities, Transit New Zealand (Wellington region), the Land Transport Safety Authority (Wellington Region), Cycle Aware Wellington and Regional Public Health.

Roles and Responsibilities

Regional Land Transport Committee (RLTC)

The Land Transport Act 1998 requires every regional council to establish a Regional Land Transport Committee comprised of representatives as stated in s178(2) of the Act. The RLTC is to prepare a Regional Land Transport Strategy for approval by the council.

Greater Wellington Regional Council (GWRC)

GWRC participates in planning and monitoring the regional transport network via the RLTC and subsequent RLTS. GWRC monitors progress toward implementation of the RLTS, as required by the Land Transport Act 1998. GWRC relies heavily on transport agencies to progress RLTS policies and provisions. This Regional Cycling Strategy stems from the policies contained in the current RLTS (WRC, 2000) which establishes a direction for improving travel by cycle in the region.

GWRC also has a role in planning passenger transport services and funding non-commercial services.

Road Controlling Authorities (RCAs)

RCAs are responsible for identifying transport needs (including cycling) and implementing remedial measures as necessary on their respective networks. RCAs include Transit New Zealand and Territorial Authorities.

Territorial Authorities (TAs)

Territorial authorities have a number of regulatory, road safety and planning roles, and ownership interests in transport, largely set out in the Local Government Act 1974. The Local Government Act 2002 also sets out their role in providing for sustainable development in local communities; of which, active transport mode provisions are a key component. District and city councils own and operate the local road network. However, their land transport decisions are required to take into account the RLTS relevant to their area. Cycling needs represent an integral part of the current RLTS.

Transit New Zealand (Transit)

Transit is responsible for managing the state highway network, and in a similar manner to TAs, must take into account the current RLTS.

Transfund New Zealand (Transfund)

Promotion of walking and cycling is an output group first signalled in the 2002/03 National Land Transport Programme (NLTP) and provides financial assistance for related activities. It also provides for stand-alone cycling projects that do not otherwise comprise an integral part of a road construction project. Projects can either be for state highways or local roads.

Transfund's *Project Evaluation Manual* has been updated to include a specific health benefit for increased cycling activity.

Land Transport Safety Authority (LTSA)

The main purpose of the LTSA is to reduce death and injury, including from cycling, on our road systems through activities that promote safety at reasonable cost. The LTSA manages the safety framework for users of the roading network, in part by promoting improvements in the roading environment, ensuring compliance with safety standards and providing safety information and advice and fostering education programmes.

Regional Public Health Service (RPH)

Regional Public Health promotes positive health outcomes by supporting healthy public policy, community action, healthy environments and the development of individual skills for wellbeing. Both the Injury Prevention and Nutrition, and Physical Activity teams have a strong interest in the strategy.

Cycle Aware Wellington (CAW)

CAW is a cycling advocacy group based in Wellington and active since 1994. They aim to encourage cycle use, improve cycling conditions and safety for cyclists, and improve the image of cycling. This is carried out with lobbying, supporting and leading promotional events, skill training and liasing with planners and engineers in RCAs.

Strategy Structure

Part One of this report frames the regional context for cycling, including agency roles, cycling issues, and policy context. Part Two presents the Strategy, including the vision and objectives. A detailed action plan describes more specifically how the objectives are to be achieved. The anticipated strategy cost is also outlined. Performance measures are specified to enable monitoring and review of the Region's progress toward its objectives and ultimately the vision. Appendices provide further context to the strategy.

Strategy Context

Policy Context

National Cycling Strategy Work

The New Zealand Transport Strategy (NZTS), released in December 2002, supports promoting cycling as a transport mode. *Getting There – on foot, by cycle*, the national walking and cycling strategy released as a draft in October 2003, will build on the NZTS and provide further direction for the role of cyclists in New Zealand. The strategy communicates the government's vision of a New Zealand where people form all sectors of the community choose to walk and cycle for transport and enjoyment – helping ensure a healthier population, more lively and connected communities and a more affordable, integrated, safe, responsive and sustainable transport system. A finalised strategy is expected in July 2004.

The LTSA is also developing a pedestrian and cycling safety framework that will sit under to the national walking and cycling strategy and *Road Safety 2010*. This framework is currently in the finalisation stage. Within the framework sits *Cycle Network Planning Guide* and the *New Zealand Cycle Design Guide* – an addendum to Ausroads 14: Bicycles.

It is intended that the principles of this strategy and the above work are consistent.

Regional Land Transport Strategy (RLTS)

The Land Transport Act 1998 requires regional authorities to produce regional land transport strategies that contribute to the overall aim of achieving an integrated, safe, responsive, and sustainable land transport system. The region's RLTS (WRC 2000, p29) recognises that cycling has few adverse effects on the environment and has significant positive health effects. Technical input to the RLTS shows that efficient, safe and convenient connections across the region are an important element in achieving high levels of regional accessibility (WRC 2000, p22).

The RLTS has responded to these needs in a number of its objectives and are further detailed in subsequent policy themes.

<u>Objective 1 Accessibility and economic development</u>

- Improve interchange between bus, rail, cycle and car
- Improve pedestrian and cycle access to key public transport nodes
- Develop and enhance safe, attractive cycling routes

<u>Objectives 2 & 3 Economic efficiency and affordability</u>

- Promote supporting measures that help reduce peak road demand. This includes cycling

<u>Objective 4 Safety</u>

- Develop programmes that improve the skills and behaviour of people using the transport system
- Encourage greater use of cycling for local trips

<u>Objective 5 Sustainability</u>

- Promote environmentally benign transport mechanisms. Encourage the use of 'active mode' transport

- Make cycling more attractive. Ensuring all road plans include good quality cycling provisions

This strategy is derived directly from the RLTS and intends to develop and respond to the needs, objectives and themes detailed above.

Greater Wellington Regional Council 10 Year Plan

GWRC's strategic direction is set out in 'Take 10', the Long Term Community Council Plan, of which Transport is a significant feature. More short trips made by cycling are desired, the target being "75% of all trips up to 1km are walked or cycled and 56% of all trips up to 2km are walked or cycled by 2013". This strategy forms an integral part of achieving the cycling targets.

Framing the Issues

Safety Risk

We can currently describe the safety risk for cyclists relative to other modes of transport. Private car, walking and bus are the most likely alternatives to a potential cyclist, and are used here to provide a relative measure. Appendix 1 provides a detailed report on the relative risk of cycling.

Available figures provide a strong indication that cycle use in the Wellington region is declining. Journey to Work census data shows a significant decline in the usage of cycles since 1986. Wellington City is the only centre where journey to work cycle use has been steadily increasing (see Figure 6, Appendix 1). LTSA data further illustrates that cycling is less safe than travelling by bus, car or as a pedestrian. Two key age groups experience a relatively high level of safety risk when cycling with the 5-19 and 20-39 age groups well over-represented compared with usage. Regional LTSA data also shows that while other transport modes are reducing their share of total road casualties, (despite an increase in use), the proportion of cyclist casualties is increasing (despite a decrease in use). Therefore, improving cycling safety is an important objective of this strategy and is inherent in the action programme.

While we can conclude that cycling has more risks imposed on it than other modes and there is a definite need for improvement, cycling in itself is not 'unsafe', and the associated health benefits are significant (Wardlaw, 2002, p420). It is important to recognise these points and overcome some of the negative perceptions toward cycling.

Perception of Vulnerability

In a perception survey of Wellington region conducted in July 2003 (NRB, 2003) 42% of respondents believed people to be unsafe when cycling around the region. In addition, 60% of respondents would not let their children cycle to school unsupervised. Reasons cited were mostly related to high traffic volumes, lack of cycling provision and dangerous driving behaviour. These negative safety perceptions represent a clear barrier to their cycling more often or at all. Only 19% of respondents had made a trip by cycle in the six months prior to the survey.

Lack of 'Share the Road' Ethic

LTSA crash statistics indicate a 2:1 ratio of driver:cyclist fault for crashes in the Wellington region. The dominant vehicle-cycle crash factors are being in an incorrect lane or position, failing to adequately check prior to manoeuvring, and failing to giveway. While vehicle drivers are predominantly at fault, cyclists also contribute to a significant proportion of crashes involving motor vehicles. Hence, strategy interventions need to target both user groups, with the aim of improving driver awareness of cyclists, and the skill level of cyclists.

Limited Public Transport Integration

Cycle integration with public transport has three limitations: cost of carriage, carriage capacity and the adequacy of physical links into these nodes for cyclists.

Cyclists' limited ability (prohibitive cost and capacity limitations) to carry cycles on the metropolitan train service of the Wellington Region is a recognised barrier to their moving with ease and convenience between and through local body areas. However, GWRC has an opportunity to influence the fare structure and carriage 'rules' with the new operator contracting process currently underway.

The demand for cycle carriage on buses within the Wellington region and the adequacy of physical cycling links into stations/terminals is not currently known. A clearer understanding of the demand for these features is required prior to any actions being directed to such initiatives.

Inadequacy of Regional Cycling Links

38% of respondents to the perception survey believe that getting around the region by cycling is easy, while 25% believe it poor. In addition, only 28% of respondents believe there to be a good level of service for cyclists, with 32% believing the level of service poor. This compares to a 67% 'good' rating for pedestrians, and only 9% 'poor' rating (NRB 2003).

The regional network has been mapped and is shown in Appendix 2. Information was sought from TAs regarding their local cycle networks. Each TA identified relevant sections as representing their portion of the regional through route. The network extends from Wellington Airport at the southern end, to the regional boundary in the Wairarapa, and to Otaki in the northwest. This route represents the part of the network designed to carry through cycle traffic and is intended to provide connections into and within the region. Accordingly, a high standard of accessibility is desired. Some deficiencies in the regional network can clearly be identified. However, there is a need to investigate this further and specifically 'map' particular sections that are inadequate. An investigation is currently being undertaken and is due to be reported in April 2004.

Competition for Funding

Competition for funding is inherent in road controlling authorities and traditionally, cycling has not been a priority in the funding allocation process. The strategy makes recommendations for a number of initiatives to raise the awareness, safety and level of service for cycling in the region. Elements of these will need to be implemented on a local level. Implementation activities at a local level or on the State Highway network can be clearly advocated by GWRC to give weight to funding requests. Advocacy can be better directed if RCAs have in place dedicated cycling work programmes for their areas.

Opportunities for Coordination

Coordinated initiatives, particularly those that have region-wide or cross-boundary implications, are likely to hold more weight politically. Limited availability of funds for cycling initiatives in recent years has meant uncertainty and a perceived inability to coordinate efforts aimed at cycling. Government/Transfund endorsement and promotion of cycling initiatives in the NLTP has created a more favourable political environment for cycling at all levels of government and agencies involved in this strategy should maximise any opportunities for coordinated initiatives.

Challenges and Risks

Cycling programmes require political stamina due to the time required for substantial change in cycling usage, infrastructure and general perception. We are unlikely to see any significant changes in cycling numbers or risk in the near future. This may result in waning political support and subsequently, reduced funding. This strategy and subsequent RCA work programmes will require ongoing political support.

A key aspect of achieving a cycling culture is overcoming the perception of vulnerability by potential cyclists. To a degree this will involve highlighting the importance of an enhanced cyclist presence in reducing cycling risk. Users of the road network need to 'expect' cyclists.

PART TWO

The Strategy

Vision

The evolution of a cycling culture where cycling is a recognised and valued transport mode that is safe, accessible and pleasant throughout the region.

Objectives

The objectives for the Regional Cycling Strategy are as follows:

1. Create an advocacy ethic that facilitates coordination among lead agencies.
2. Enhance cycling safety throughout the region via education initiatives.
3. Increase accessibility, integration and safety for cycling.
4. Improve awareness of all forms of cycling - commuting, recreational and tourism.

The strategy takes a balanced and integrated approach incorporating physical works, education and promotion to achieve the outcomes listed below. No element on its own will achieve the gains desired for the region. Critical to this integrated approach and the strategy's effectiveness are three interventions outlined in the action programme on the following pages. These are political advocacy, RCA cycling work programmes and a Regional Cycling Coordinator.

Cycling conditions are affected by a number of agencies including Road Controlling Authorities, Regional Public Health, the LTSA, schools and user/advocacy groups. Agencies involved in development of this strategy discerned a clear need for education and promotional initiatives to be centrally coordinated. The success of these activities relies upon ongoing and active support from the above groups. However, this can be best facilitated by a position dedicated to coordinating relevant strategy actions.

Advancing the vision of a cycling culture also requires RCAs to engage in dedicated work programmes and active coordination to ensure ongoing improvement to the cycling network. Coordinated initiatives, particularly those with region-wide or cross-boundary implications, are likely to hold more weight politically. GWRC is in a position to advocate at political levels for adequate funding, locally for RCA programmes and centrally for ongoing cycling funding.

The creation of a cycling culture in the region is explicit in the vision and stems from:

- the region wide decline in cycling; and
- the desire for improved safety.

Outcomes

The major outcomes sought from this strategy are an improved level of service for cycling; increased proportion of all trips cycled; a perception of cycling safety, convenience and ease; and reduced relative risk of cycling as a transport mode.

We expect to see positive outcomes over all indicators as a result of successful implementation of the interventions detailed in the action programme.

Action Programme

1. Objective: Advocacy

Create an advocacy ethic that facilitates coordination among lead agencies.

Actions	Responsibility & Role	Timing	Cost	Funding	Target	Performance Measure
Local Level Strategy Programme Implementation Advocacy at local political level during annual planning process for approval and funding RCA cycling programmes	GWRC Access Planning	March 2004 & ongoing	Administrative	GWRC Administrative Budget (25% Transfund)	Funding levels to meet that recommended in RCA cycling work programmes	Actual cycle programme funding in Annual Plans compared with that requested by RCAs
Coordinated Programmes Regional Cycling Forum	GWRC Regional Coordinator	Quarterly, ongoing	$1,000 pa	GWRC Administrative budget (25% Transfund)	Host quarterly	Cycle Forum continues 20 – 30 attendees per meeting
Regional Cycling Coordinator position (See Appendix 4)	GWRC	July 2004	$45,000 salary + budget support	GWRC (50%) Transfund (50%)	To start 04/05 financial year	Position appointed
Central Government Actively participate where appropriate in national level programmes/strategy development that have regionally significant impacts upon cycling	GWRC Access Planning	Ongoing	Administrative	GWRC Administrative budget (25% Transfund)	Every opportunity to participate taken	Participation in policy development opportunities

2. Objective: Safety

Enhance cycling safety throughout the region via education initiatives

Actions	Responsibility/ Role	Timing	Cost	Funding	Target	Performance Measure
Driver Education 3 year education campaign promoting 'share the road' ethic. Adapt "Don't Burst My Bubble' Campaign.	GWRC Regional Coordinator Road Safety Coordinators	1. 03/04 financial year 2. 04/05 financial year 3. 05/06 financial year	$60,000 $30,000 $30,000	GWRC LTSA Transfund	Campaign implemented 1. 03/04 FY 2. 04/05 FY 3. 05/06 FY	Campaign implemented
Cycling Skills for Adults Assess and investigate the need for conspicuity/ light use campaign Investigate promotion of community education courses, e.g. "Cycling Skills in the City"	GWRC Regional Coordinator GWRC Regional Coordinator	04/05 financial year 2004/05	$10,000 Administrative	RSC GWRC LTSA GWRC	04/05 financial year 2004/05	Investigation complete Investigation complete
Kiwi Cycling (Bikewise) Determine a schedule of programmes in schools throughout the region. Set number of schools per year Implementation of schedule (Instructor time)	GWRC Regional Coordinator (schedule set up) Bikewise Regional Coordinator	04/05 financial year + ongoing 2005 + subsequent years	Administrative $25,000 per annum	GWRC Regional Coordinator administration Health Sponsorship Council Transfund	Year 6 schedule established to begin 2005 school year 90% of schools in schedule by third year of programme	Schedule in place Programme implemented at all scheduled schools 90% schools participate in schedule & programme

3. Objective: Accessibility

Increase accessibility, integration and safety for cycling.

Actions	Responsibility & Role	Timing	Cost	Funding	Target	Performance Measure
<u>Regional Cycling Network</u> Identify the regional strategic network	GWRC Access Planning	June 03	Administrative	GWRC	Regional Network published in draft strategy	Network identified
Identify inadequate sections on the regional network. Investigate cost and feasibility of improving level of service on these sections. Prioritise based on strategic importance, lowest level of service and cost.	GWRC Access Planning	March 04	$17,000	GWRC	Network inadequacies identified and remedial actions prioritised	Report published and disseminated to RCAs
<u>RCA Work Programmes</u> Develop a work programme for improving the level of service for cycling on respective local networks. Programmes will recognise current best practice guidelines[1] and should adequately consider the following service level elements: ▪ Space allocation ▪ Surface smoothing ▪ Connectivity ▪ Traffic calming measures ▪ Bicycle detection at traffic signals ▪ Maintenance ▪ Links to and from public transport terminals ▪ Priority on roading networks ▪ Bicycle parking Incorporate cycle facilities auditing processes	RCAs	Programme by December 2004 ready for 2005/06 Annual Plan process Ready for 05/06 financial year	Each RCA to determine	RCAs Transfund (Strategy Development)	All by start of 05/06 financial year	All RCAs have work programmes in place

[1] Including New Zealand Cycle Design Guidelines (Transit New Zealand) and the Cycle Network Planning Guide (LTSA) when published and as appropriate.

Actions	Responsibility & Role	Timing	Cost	Funding	Target	Performance Measure
<u>Public Transport Integration</u> Facilitate cycle carriage on regional train services by reviewing the fare structure to: ▪ Small charge for peak cycle carriage ▪ Free off-peak cycle carriage	GWRC Transport Procurement and Transport Service Design	During tendering/ contract process with new operator	-	-	Specified in new contract	Specified in new contract
<u>Survey</u> ▪ Perception of service levels into and out of stations/terminals for cyclists ▪ Demand for cycle carriage on trains ▪ Demand for cycle carriage on buses ▪ Perception of how a cycling journey could be more attractive	GWRC Access Planning	July Issue of *Bikenews*	-	Covered as part of standard $700 monthly contribution	July 2003	Survey undertaken
<u>Regional Cycling Maps</u> Develop a set of maps for cyclists, covering the major regional areas	GWRC Access Planning	Publish July 2004	$25,000 (initial)	Transfund GWRC TAs Sponsorship	July 2004	Maps published and distributed
Distribute in cycle shops, information centres, council offices & centres etc	GWRC Regional Coordinator	July 2004 & ongoing	Reprints $5,000			
Update in 2007	GWRC Regional Coordinator	2007	Initial update $20,000		Update 2007	Updates undertaken
<u>Perception Survey</u> Undertake a survey to determine the perceived level of service for cyclists around the region and the perception of risk in cycling	GWRC Access Planning	July 03, 04, then 2 yearly	$8,000 per survey	GWRC: RLTS AMR budget	Survey July 2003, 2004 then 2 yearly	Survey completed and results reported in AMR

4. Objective: Awareness

Improve awareness of all forms of cycling - commuting, recreational and tourism.

Actions	Responsibility & Role	Timing	Cost	Funding	Target	Performance Measure
Contact Bikenews One page spread on cycling in the Wellington Region; printed on odd page number. Focus: Events, strategy work, cycle safety & skills, general information	WCC Road Safety Coordinators CAW GWRC Regional Coordinator	Monthly to June 2004 (GWRC contribution)	$1,400/ month	GWRC $700/month WCC $700/month	Monthly publication	Page published
Group Rides Annual localised fun rides held in TA areas	GWRC Regional Coordinator RSC CAW RPH	Annual events in individual or combined TA areas as appropriate	~$10,000 each ride	GWRC Sponsorship Transfund TAs RPH	Increasing participation in each successive event. Four events held per year (accounting for combined TA rides)	Participant registration figures Four events held
Webpage Assist development of CAW webpage as main Wellington Region cycling webpage	GWRC CAW	December 2004	$2,000 design & build, $500 per annum updates	GWRC	Site redeveloped by December 2004	Site redeveloped

Anticipated Strategy Cost

The anticipated strategy cost is expected to start at $109,000 in the first year, and ranges from $136,000 to $156,000 in the following three years. Appendix 3 gives a breakdown of this cost. It is further anticipated that some strategy costs will be ongoing for an indefinite period, if proven as effective intervention measures.

There is an expectation that TAs will contribute to the funding of initiatives relevant to their local body areas, such as the group fun rides and regional cycling maps. Additional funding may be sought in contribution to the regional monthly *Contact 'Bike News'* page, which is currently funded by GWRC and Wellington City Council. GWRC's financial contribution will cease in June 2004.

Monitoring and Review

Greater Wellington Regional Council will have primary responsibility for all monitoring. Progress with strategy actions will be monitored against respective performance measures on an ongoing basis. Monitoring of system wide cycling indicators will be undertaken within the RLTS Annual Monitoring Report process.

The system wide indicators are:

- Level of service for cycling
- Proportion of all trips cycled
- Perception of cycling safety, convenience and ease
- Relative risk of cycling as a transport mode (measured against vehicle, pedestrian and bus travel).

The Strategy will be reviewed by March 2007.

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Appendix 1

Wellington Region's Cycling Profile

The *2002/03 Annual Report on the Regional Land Transport Strategy* (AMR) (GWRC, 2003) provides indicators of transport accessibility within the greater Wellington region which enables us to build a picture of cycling perceptions and activity for the region. Crash data from the Land Transport Safety Authority (LTSA) also allows illustration of the relative risk to cyclists in our region, by making comparison with risk data for other dominant mode choices: car, bus and pedestrians.

Travel estimates generated by the *New Zealand Travel Survey 1997/98* (LTSA, 2000) can be used to describe travel behaviour generally, and also to calculate accident risks (Frith, 2000). Notes at the end of this document detail the limitations of this kind of data and should be read in conjunction with the report. Other data sources for this report include *Census Journey to Work* (Statistics New Zealand, 1986, 1991, 1996 and 2001) and the *Household Travel Survey* (WRC, 1988 and 2001).

Mode Use, Accessibility and Safety Perceptions

A perception survey (NRB, 2003) conducted in July 2003 and published in the 2003 AMR shows that in the six months preceding the survey, only 19% of respondents indicated they had made trips by cycling.

Currently 33% of trips less than 2 km and 44% of trips less than 1 km are made by cycling or walking. The majority of these proportions are likely made up of walking trips, given 78% of the respondents to the above question indicated they made trips by walking. Cycling in the region comprises only 2% of all trips (LTSA, 2000). This figure represents a variety of cycle user groups – commuting, recreational, sporting or tourism. Fifty two percent of weekday and 28% of weekend cycle trips are for commuting purposes (including work, education, shopping or personal business). Sport or recreation trips comprise 6% of weekday and 35% of weekend trips (WRC, 2001).

In addition, 38% of respondents believe that getting around the region by cycling is easy, 25% believe it poor. Twenty eight percent of respondents believe there to be a good level of service for cyclists, with 32% believing the level of service poor. This compares to a 67% 'good' rating for pedestrians, and only 9% 'poor' rating.

Safety appears to be a considerable barrier to respondents cycling more. Forty two percent think people in the region are unsafe when cycling. Results were similarly high for child safety while cycling to school. Sixty percent of respondents would not let their child cycle unsupervised to and from school. Conversely, only 23% would not let their child cycle unsupervised in the vicinity of their home. The majority of reasons cited were too much traffic, lack of cyclist provisions and dangerous driving behaviour.

Cyclist Casualties

Total casualties

Table 1 details the breakdown of total cyclist casualties from 1993 to 2002 in the Wellington region, by local body area. The majority of casualties are occuring in Wellington and Hutt Cities, however,

they also have the largest number of cyclists. Fault rests approximately two thirds with drivers and one third with cyclists. Figure 1 illustrates the generally flat trend for the region as a whole.

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Wellington City	52	47	55	59	52	44	26	35	47	37
Porirua	4	7	5	10	1	1	1	3	6	7
Upper Hutt	7	7	11	5	8	5	12	8	8	9
Hutt City	24	19	19	22	27	19	22	15	18	15
Kapiti Coast District	8	6	4	2	8	9	9	6	5	3
Masterton District	9	8	8	6	10	8	9	6	7	14
South Wairarapa District	0	2	1	0	0	0	0	1	0	1
Carterton District	0	1	0	0	0	0	1	1	0	2
Wellington Region	104	97	103	104	106	86	80	75	91	89

Table 1: Total cyclist casualties 1993– 2002 for Wellington Region, broken into local body areas (LTSA, 2002b)

Relative modal risk using exposure indicators

Determining the relative risk of each mode is done so using 'exposure-to-risk' indicators of injury crashes per kilometres travelled, hours spent travelling and per trip (Frith, 2000). Figures 2, 3 and 4 illustrate these risks for Wellington region. Note that pedestrian and cycling injuries and deaths are only those involving a motor vehicle.

The graphs show that a cyclist is roughly three times more likely than a vehicle occupant, on any given trip, to be involved in an injury/death crash; and eight times more likely than a pedestrian.

The numbers are similar using time-based exposure for cars, however the cycling risk is six times that of pedestrians per hour travelled. Using kilometre based exposure rates, the risk to cyclists is 10 times that of cars. There is no data for kilometre travel for pedestrians. Bus travel represents the least 'risky' mode of transport.

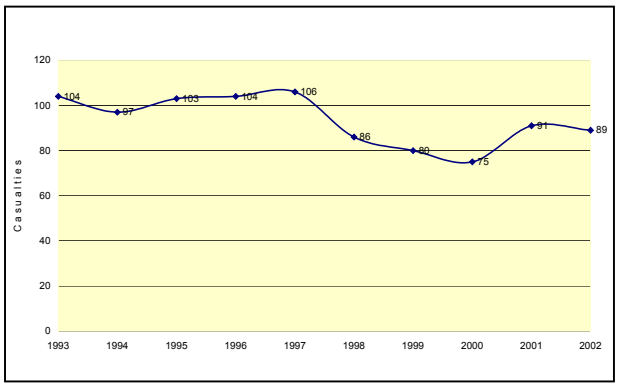

Figure 1: Total cyclist casualties, Wellington region, 1993–2002 (LTSA, 2002b)

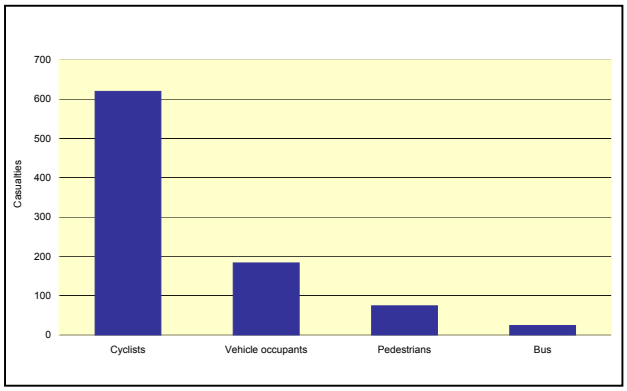

Figure 2: Reported deaths and injuries per 100 million trips (LTSA, 2000)

Cycling risk by age group

The cycling casualty figures for the 20 to 39 and 5 to 15 year age groups are over represented in Wellington region. The 5 to 15 age group casualties, while well below the national figure, is additionally important because: 1) there is significant potential for improvement in cyclist skill over this age range, and 2) the proportion of trips to school that are cycled has decreased from 8.5% in 1988, to 2.6% in 2001 (WRC, 1988 & 2001) (figure 5).

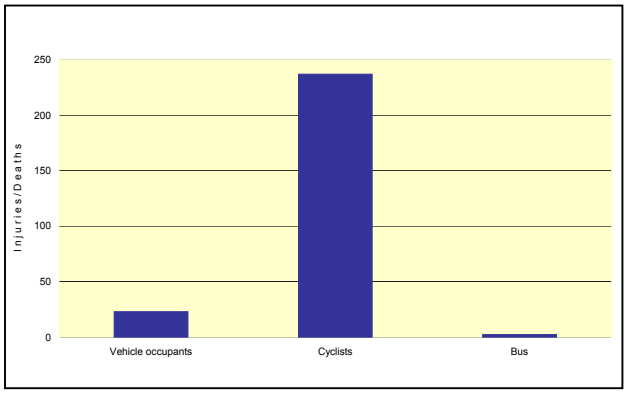

Figure 3: Reported deaths and injuries per 100 million kilometres travelled (LTSA, 2000). NB: Figures are not available for kilometres travelled by pedestrians

The decline in cycling as a means of travelling to school corresponds with a general decline in cycling as a means of transport in the region. Figure 6 illustrates this point and shows that between 1986 and 2001 all local body areas, apart from Wellington City, experienced a decline in the proportion of people travelling to work by bicycle. While cycle counts have been carried out sporadically throughout the region, available data corresponds to that above, indicating low cycling numbers. For the purpose of the Regional Cycling Strategy, the data provided by Census Journey to Work , the Household Travel Survey and the New Zealand Travel Survey are sufficient to give an indicative picture of regional cycling patterns.

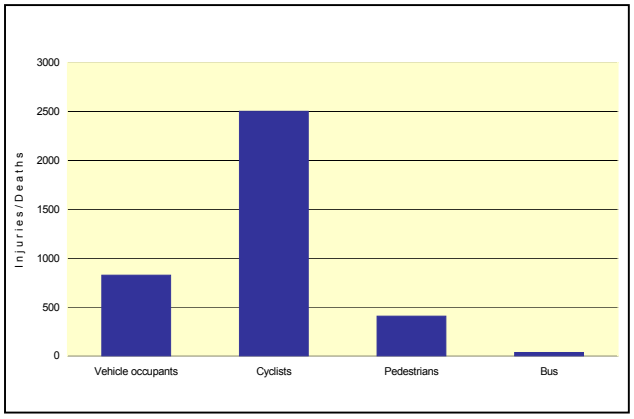

Figure 4: Reported deaths and injuries per 100 million hours spent travelling (LTSA, 2000)

Cycling casualties over time proportional to total crashes

Cycling casualties as a proportion of total road casualties in the region have increased over the previous decade by approximately 3.5%, despite a general decline in cycling numbers (figure 7). Conversely, car driver and passenger casualties have decreased by approximately 2-5%, despite a considerable increase in vehicle occupancy numbers over last decade. Cycling casualties in Wellington region, as a percentage, were almost twice the national figure in 2001.

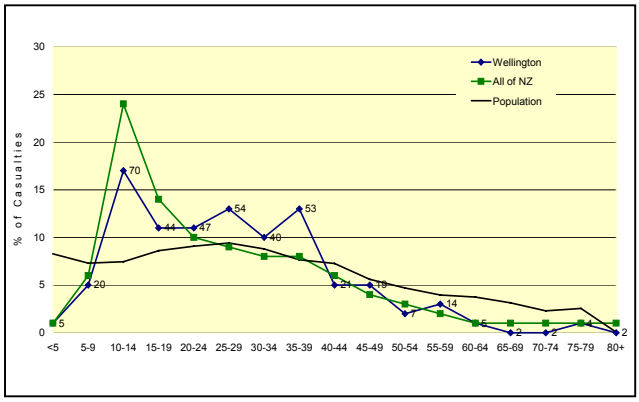

Figure 5: Wellington region cyclist casualty age profile 1998–2001 (LTSA, 2003)

Strategy implications

These figures provide strong indications that cycle use in the Wellington region is declining and is less safe than travelling by bus, car or as a pedestrian. They show two key age groups that experience a relatively high level of risk when cycling with the 20-39 age group well over-represented compared with national figures. They also show that while other transport modes are reducing their share of total road casualties, (despite increases in their use), the proportion of cyclist casualties is increasing (despite decrease in their use). Therefore, improving cycling safety is an important objective of the strategy. This must be inherent in the strategy's programme of action. Relevant safety components are promotion, education programmes, the identification of key physical deficiencies, and the development of action plans to address these components.

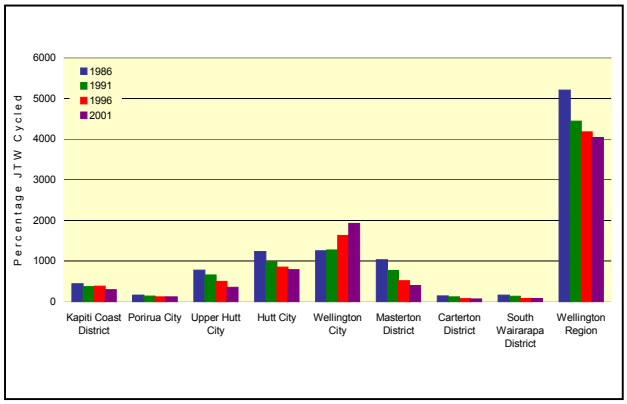

Figure 6: Proportion of journey to work by bicycle, comparison of 1986–2001 census data (Statistics New Zealand, 1986, 1991, 1996 & 2001)

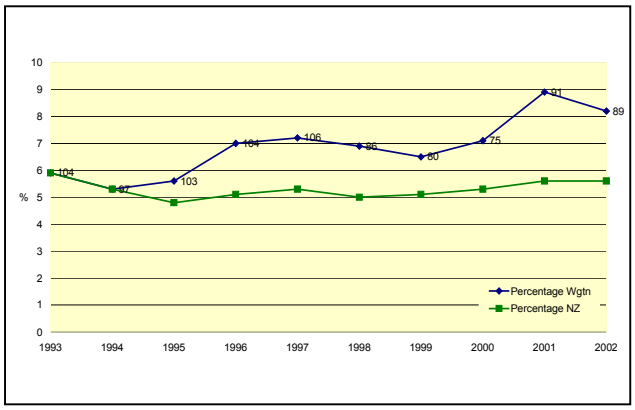

Figure 7: Cyclist casualties as a percentage of total casualties (LTSA, 2003)

While we can conclude that cycling is 'less safe' than other modes of transport, it is important to note that cycling in itself is not 'unsafe'. There is only 1 chance per 40,000 hours cycled of experiencing a casualty (see figure 4). The drive to create a cycling culture in the region is explicit in the vision and stems from:

1. the region wide decline in cycling; and
2. the desire for improved safety.

A growing body of international research supports the key assumption of this focus; that is, a level of safety is achieved with increasing cycling frequency and therefore, visible presence. This 'safety in numbers' concept is also embodied in the New Zealand Walking and Cycling Strategy, *Slow Modes in the Fast Lane* (Ministry of Transport, 2002).

A key aspect of achieving a cycling culture is overcoming the 'vulnerability' and generally poor perceptions of cycling. To a degree this will involve highlighting the importance of an enhanced cyclist presence in reducing the risk. Users of the road network need to 'expect' cyclists. Improving safety will also be underpinned by instituting a 'share the road' ethic/educational programmes; targeted at both drivers and cyclists.

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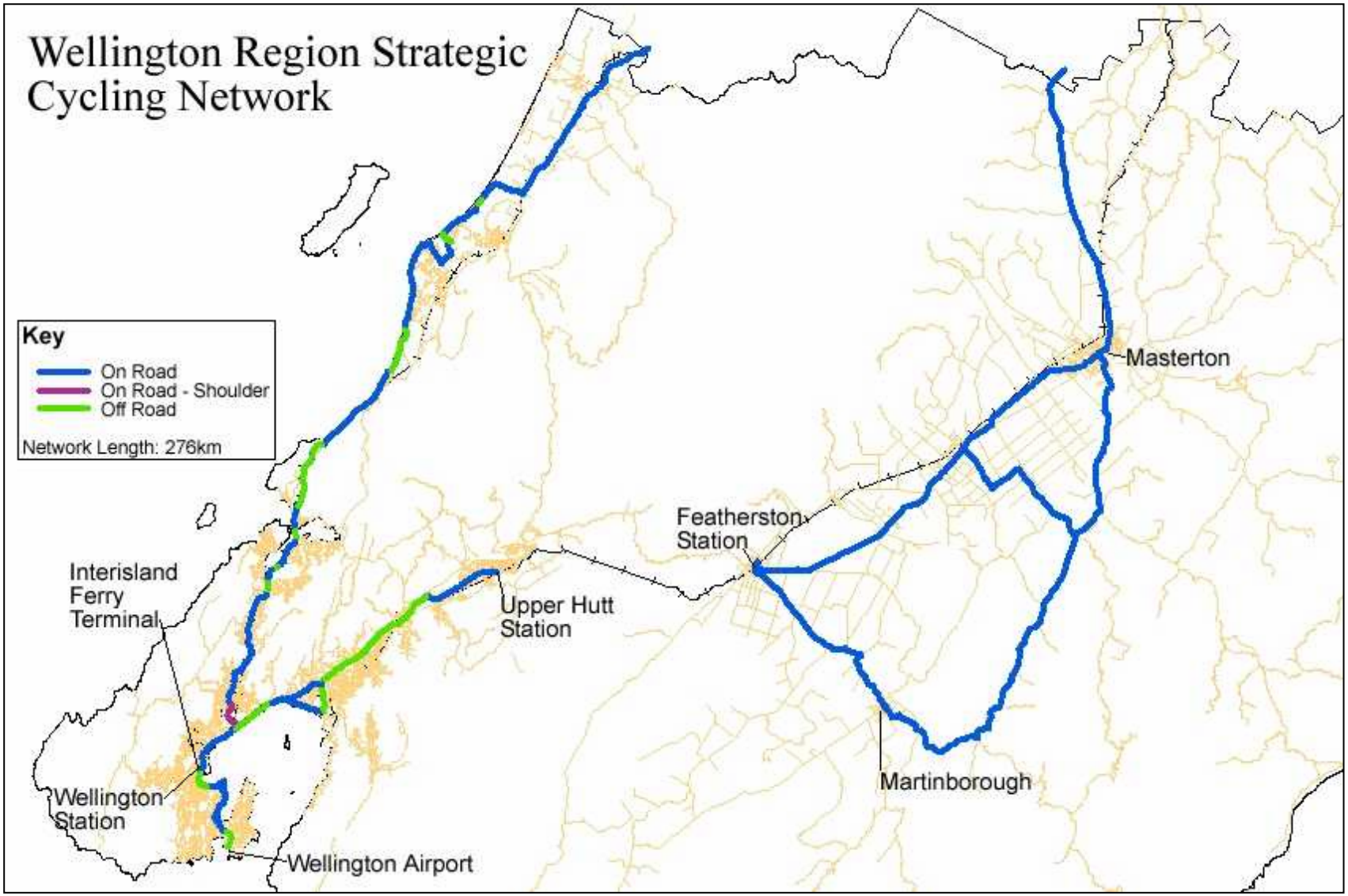
Notes on the *New Zealand Travel Survey* Data

1. Injury data: reported motor vehicle injury crashes from the Police Traffic Crash Reports database maintained by the LTSA.

2. Regions: the Travel Survey regions refer to residents of the selected regions. In the crash data, the given region is the region in which the crash occurred. These are not identical. For cyclists one would expect a high correlation. For the risk estimates to be valid for vehicle occupants, it is necessary to assume that travel by regional residents outside the region is matched by travel by non-residents inside the region.

3. The injury statistics only include injuries in crashes reported to the Police and which involve a motor vehicle. Cyclist-only or cycle-pedestrian crashes are not included in these figures. The risk estimates will therefore underestimate the total injury risk to cyclists. Information on cyclists hospitalised from on-road non-motor vehicle crashes may be obtained from New Zealand Health Information Services, but the two data sets deal with different populations and shouldn't be combined.

Appendix 2


Wellington Region Strategic Cycling Network
Key
On Road
On Road - Shoulder
Off Road
Network Length: 276km
Masterton
Featherston Station
Upper Hutt Station
Interisland Ferry Terminal
Martinborough
Wellington Station
Wellington Airport

Wellington Region Strategic Cycling Network

Wellington City

Northbound
Airport
Stewart Duff Drive (off road)
Cross Broadway
Subway
Coutts Street
Te Whiti
Rongotai
Cross Rongotai
Through Pedestrian link to Kemp Street
Evans Bay Parade
Evans Bay Parade - Cobham Drive Intersection
Evans Bay Parade
Oriental Parade
Herd Street
Waterfront (to Island Wharf)
Bunny Street
Thorndon Quay
Hutt Road

A: To Porirua	B: To Hutt City
Hutt Road	Hutt Road (on road shoulder)
Centennial Highway (Ngauranga Gorge)	(Ngauranga Motorway interchange)
Johnsonville Road	Hutt Road (on road shoulder)
Middleton Road	
Willowbank Road	
Main Road (Tawa)	
(Boundary: Linden Park)	

Southbound

A: Porirua - Wellington:	B: From Hutt City to CBD:
Reverse Route	Hutt Road (off road and shoulder)
	(Ngauranga Motorway interchange)
	Hutt Road (on road)

Interislander Ferry Terminal
Hutt Road
Over bridge to Aotea Quay
Main road link into Ferry Terminal

Hutt City

Northbound
Hutt Road (on road)
Petone off ramp
Hutt Road
Railway Ave
Hutt River Trail - continues through to Upper Hutt

East
Hutt Road
The Esplanade
Waione Road
Hutt River Trail to connect Northbound

Southbound
Reverse Route

Upper Hutt City

Northbound (on road)
Hutt River Trail - continues from Hutt City
Enter County Lane
Fergusson Drive
SH2 north
Cyclists recommended to take train from Upper Hutt Station to Featherston

Upper Hutt Station
Fergusson Drive
Station Crescent

Southbound
Reverse Route

Wairarapa

Northbound from Featherston Station
Harrison Street West
Johnston Street
Fox Street
Birdwood Street
SH2

Featherston - East to Martinborough
SH53

Carterton - Masterton - Martinborough link
Masterton-Martinborough Road

Link from Masterton via:
Church Street
Colombo Road
Johnstone Street

Link from Carterton via:
Park Road
Carters Road
Gladstone Road

Porirua City

Northbound
Main Road
Kenepuru Drive
Off road at old hospital buildings to Porirua Stream Track
Porirua Stream Track
Bullock Lane
The Ramp (footpath) - SH1
Okowai Lagood Track
Okowai Road
Whitford Brown Ave
Papakowhai Road
Paremata Crescent
Cross SH 58 to off road track alongside SH1
Mana Esplanade
St Andrews Road
Plimmerton Street
Ulric Street
Dismount bike, cross private land to off road cycle track parallel to St Andrews Road
Off road track through Taupo Swamp
Airlie Road
Off Road Track continues alongside SH1
Enter Main Road at point in line with end of Elizabeth Street
Exit Main Road to off road track at Teihana Road West
Off Road between Teihana Road West and Te Kura
Enter Te Kura, Cross Wairaka to off road track
Cross Pukerua to Haunui, zigzag down to Waimarino, through to Onepu onto coastal route between Pukerua Bay and Paekakariki (SH1)

Southbound
Reverse Route

Kapiti Coast District

Northbound
SH1
Ames Street
Beach Street
The Parade
Henare Street
Wellington Road into Queen Elizabeth Park
Inland Track
Through Car Park roads at QE end of Whareroa Road
Inland Track
The Esplanade
Poplar Avenue
Rosetta Road
Matatua Road
Wharemauku Road
Marine Parade
Manly Street
Ngapotiki
Te Kupe Road
Mazengarb Road
Ratanui Road
Otaihanga Road
Makora Road & off road at bend over Otaihanga Domain Footbridge
Waikanae Christian Camp Trail
Tutere Street
Heperi Street
Field Way
William Street
Rutherford Drive
Off road through reserve adjacent to oxidation ponds
Paetawa Road
Peka Peka Road
SH1 to (& through) Otaki

Southbound
Reverse Route

Appendix 3

Anticipated Strategy Cost 2003 – 2007

Strategy Actions	2003/2004	2004/2005	2005/2006	2006/2007
Advocacy at political level during annual planning for approval and funding of draft RCA cycling programmes.	Administrative	Administrative	Administrative	Administrative
Regional Cycling Forum	$1,000	$1,000	$1,000	$1,000
Regional Cycling Coordinator position		$45,000	$45,000	$45,000
Actively participate where appropriate in national level programmes/strategy development that have regionally significant impacts upon cycling.	Administrative	Administrative	Administrative	Administrative
Driver Education Campaign	$60,000	$30,000	$30,000	-
Assess and investigate the need for conspicuity/ light use campaign.	-	$10,000	-	-
Investigate promotion of community education courses. E.g. "Cycling Skills in the City".		Administrative	Administrative	Administrative
Determined schedule of programmes in schools throughout the region. Set number of schools per year.		$10,000	$15,000	$25,000
Identify the regional strategic network. Publish in strategy.	Administrative	-	-	-
Identify inadequate sections on the regional network. Investigate cost and feasibility of improving level of service on these sections. Prioritise based on strategic importance, lowest level of service and cost. Publish in strategy.	$17,000	-	-	-
Develop work programme for improving level of service for cycling on respective local networks.	Determined by RCAs	Determined by RCAs	-	-
Public Transport Integration Facilitate cycle carriage on regional train services in region incorporating. Fare structure: Charge for peak run carriage Free off-peak run carriage.	Administrative	Administrative	-	-
Bikenews Survey – Public Transport Integration	Administrative	-	-	-
Regional Maps: Develop set of maps for cyclists, covering the major regional areas.	$15,000	$10,000	$5,000 (reprints)	$20,000 (updates)
AMR Perception Survey ▪ Level of service for cyclists around the region ▪ Perception of risk in cycling	$8,000	$8,000	-	$8,000
Contact Bikenews One page spread on cycling in the Wellington Region; printed on odd page number. Focus: Events, strategy work, cycle safety & skills, general information.	$8,000	-	-	-
Group Rides: Annual localised fun rides held in TA areas.		$40,000	$40,000	$40,000
Webpage Assist development of CAW webpage as central wellington region cycling webpage. Incorporate advertisement of Bikeweek, and other relevant cycling events.		$2,000	$500	$500
Total Anticipated Cost	**$109,000**	**$156,000**	**$136,500**	**$139,500**
				$541,000

Appendix 4

Regional Coordination

The coordinator position will be a regional role similar to the Road Safety Coordinator concept. Eventually we envision a cycling coordinator based at each TA. However, to prove the concept in the initial stages of strategy implementation, a centralised position is appropriate.

Function

A position dedicated to facilitating, coordinating, organising promotional and education activities arising from the Regional Cycling Strategy.

Key Functions of Regional Cycling Coordinator		Level of Involvement/Responsibility		
		GW Policy	Coordinator	TA
Coordinating community cycling initiatives to contribute to the Regional Cycling Strategy vision and objectives.		Low	High	Mod
Identifying, defining and prioritising cycling issues, with regard to national priorities.	Regional	High	Mod	Mod
	Local	Low	Mod	High
Developing effective relationships, promoting and encouraging inter-agency collaboration and effective cycling partnerships at regional and local levels.		Mod	High	Mod
Identifying and contacting regional cycling stakeholders at various levels from institutional to community.		Mod	High	Low
Establishing and maintaining networks of regional cycling stakeholders		High	High	Mod
Establishing and maintaining working groups to address identified regional cycling issues, where an appropriate community agent cannot be identified.		Low	High	High (involvement)
Developing an annual plan for the region in association with the regional cycling agencies/stakeholders to meet the objectives of the Regional Cycling Strategy and Regional Land Transport Strategy.		High	High	High (involvement)
Identifying and generating resources that are available for cycling activities and ensuring they are used effectively.	Regional	High	High	Mod
	Local	Mod	Mod	High
Providing advice, training and support and encouragement to individuals and community groups carrying out regional and local cycling activities.		Low	High	Mod
Facilitating the development and implementation of regional and local cycling initiatives.		Mod	High	Mod
Monitoring and ensuring the evaluation of regional cycling projects.		High	High	Mod (monitoring)
Reporting on the progress of community cycling activities for the region.		Mod	High	Low

Water, air, earth and energy: elements in Greater Wellington's logo that combine to create and sustain life. Greater Wellington promotes **Quality for Life** by ensuring our environment is protected while meeting the economic, cultural and social needs of the community.

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