



# THE WELLINGTON REGIONAL LAND TRANSPORT STRATEGY

1999 - 2004

**Realistic Transport Choice**



*caring about you & your environment*

# Contents

# Page

Foreword	4
Executive Summary	5
Maps	7
<b>SECTION A</b>	
<b>INTRODUCTION</b>	9
Context	11
Legislation	11
National Transport Statement	11
Regional Policy Statement	12
Other guiding documents	12
Roading reform	13
Previous strategies, 1993 and 1996	13
Process used in developing the Strategy	13
Stakeholder consultation	14
Technical analysis	16
Identified needs	17
Roles of key stakeholders	23
Transfund New Zealand	23
Regional Council	23
Roading Authorities	23
Private transport organisations	24
Funding and pricing	24
Funding	24
Pricing	25
Roles of different modes	26
Trends	26
Modelling process and modes	27
Slow mode	27
Rail	28
Road	28

# CONTENTS

# CONTENTS

<b>SECTION B</b>	
<b>THE STRATEGY</b>	29
Strategy framework	31
Vision	31
Objectives, performance measures and targets	31
Policies and plans	33
Objective 1: Accessibility and economic development	34
Theme 1.1: Expand and enhance urban public passenger transport	35
Theme 1.2: Improve the effectiveness of the strategic road network	36
Theme 1.3: Influence total travel demand by well considered land use	39
Theme 1.4: Expanding and enhancing walking and cycling routes	40
Objectives 2 & 3: Economic efficiency and affordability	42
Theme 2.1: Price the strategic transport network to encourage its efficient use	42
Theme 2.2: Contain the growth of commuter road traffic	43
Objective 4: Safety	45
Theme 4.1: Improve the safe operation of the transport network	46
Objective 5: Sustainability	47
Theme 5.1: Minimise the impact of transport on the environment	47
Corridor plans: overview	50
Western Corridor: Otaki to Ngauranga Merge	53
Hutt Corridor: Upper Hutt to Ngauranga Merge	55
Wairarapa Corridor: Masterton to Upper Hutt	56
Porirua to Hutt Valley	57
Ngauranga to Wellington CBD	58
Wellington CBD	58
Wellington South to Airport	59
Karori to Wellington CBD	60

<b>SECTION C</b>	
<b>FURTHER REGIONAL PASSENGER TRANSPORT POLICIES</b>	<b>61</b>
Introduction	63
Funding	63
Service levels	63
Reviews of bus services	63
Vehicle capacity and loading standards	65
New services and service extensions	65
Passenger transport infrastructure	66
Fare levels	67
Fare structures	67
Ticketing	67
Transport for students	67
Transport for people with disabilities	69
Transport for the elderly and beneficiaries	70
"Taxi Fair"	70
Special fares for the elderly and beneficiaries	70
Vehicle quality and safety	70
Buses	70
Trains	71
Vehicle and vessel safety	71
Information	71
Taxi services	71
Appendix 1	73
References	73
Appendix 2	75
Schedule of Railway Lines and Roads in the Strategic Transport Network	75
Appendix 3	77
The Wellington Regional Policy Statement	77
The Land Transport Policies and Methods	77

# CONTENTS



## Foreword

This Land Transport Strategy document sets out the objectives, policies and plans for land transport in the Wellington Region for the next twenty years. It offers the potential to significantly improve the economic and social wellbeing of the region. The Strategy fulfils the formal requirements of a Regional Land Transport Strategy for the period 1999 to 2004 and incorporates the more detailed public transport policies of a Regional Passenger Transport Plan.

The Strategy represents a balanced vision for land transport that is shared by local government and transport organisations represented on the Regional Land Transport Committee. In reaching this vision, the Committee has recognised that there is a need for change if we are to ensure the region's ongoing economic growth in a way which is also both environmentally and socially sustainable.

A major change is that this strategy proposes a level of additional road user charges through pricing and levies sufficient to fund new transport projects earlier than would have been possible under current funding arrangements. In the longer term, the Committee envisages pricing may also be used to manage congestion.

A second change in this strategy is the emphasis on maintaining a balance in the network. Every new component in our transport network has effects both on the adjacent competing mode and on other parts of the same mode, upstream and downstream. These interacting effects are particularly pronounced in the Wellington Region. This means that if we are to achieve our vision, our plans and policies need to be integrated and balanced.

We recognise that Government has announced proposals for roading reform. While such reforms may take several years to implement, this strategy is consistent with reform proposals. The Strategy should become a significant 'stake in the ground' to carry this region forward over the transitional years towards a balanced and sustainable transport system that meets the needs of the regional community. At the same time this strategy meets the requirements of current legislation.

I would like to take this opportunity to thank all those individuals and organisations that have contributed to the development of this strategy. Numerous consultants' reports and workshops, both technical and political, have taken place over the last two years in what has been a major effort by the Committee and its constituent stakeholders.



Terry McDavitt,  
*Chairperson of the Wellington Regional Land Transport Committee.*

## Executive Summary

The vision for the Regional Land Transport Strategy is “to deliver a balanced and sustainable land transport system that meets the needs of the regional community”.

### Developing the Strategy

The land transport needs of the region were identified by stakeholders, who then agreed to the five objectives of the Strategy. The objectives are: accessibility and economic development, economic efficiency, affordability, safety and sustainability. These are consistent with the National Transport Statement and the Regional Policy Statement.

An advanced modelling process, based on the needs and objectives, was used to determine the most desirable strategic policies and plans for achieving the objectives. Stakeholders considered the results of this technical work and agreed to a draft Strategy, including a plan for implementing the Strategy. Before finalising the Strategy the draft was made available to the community for comment.

### Timeframe

The Land Transport Act 1998 requires that the Council develop a five year strategy. As much of the stakeholder analysis focused on the medium to longer term, the policies of the Strategy are generally aligned to a twenty year period. The plans are divided into two sections: those which will be achieved in the statutory period; and those which are set within the longer term framework.

### A new approach

This strategy represents a new approach to the Region’s land transport planning. As well as encompassing a longer timeframe, the Strategy is based on a state of the art technical analysis which has produced a “package” or linked set of proposals designed to meet the needs and objectives. It also introduces a pricing mechanism at modest levels to fund some longer term network enhancements. Funding to manage congestion may also be used in the long term.

The package has particular benefits for the Wellington Region where topography limits the options for the development of affordable arterial routes. Capacity needs to be balanced along an entire route in each transport corridor, otherwise capacity increases designed to address a particular bottleneck will both attract more traffic onto the route and transfer the bottleneck further along the route. The package approach produces the most cost-effective set of proposals which meet the needs and objectives.

A preferred package was identified through testing a set of ten basic options in the modelling process, and assessing these against all of the objectives. The modelling included the statutory factors of safety, cost effectiveness and having regard to the effect the transport system is likely to have on the environment. Combinations of options, forming discrete packages of

strategic policies and projects, were refined for further analysis until two candidate strategic packages emerged: a basic low cost strategy; and an enhanced strategy which has medium costs supported by pricing.

The technical analysis determined the most appropriate role for different modes of transport. It balances the provision of road and public passenger transport and includes policies for enhancing walking and cycling, particularly for short journeys.

Public consultation on the Draft Strategy provided support for the enhanced strategy, and for some form of pricing to pay for major network enhancements. The Regional Land Transport Committee will now develop a range of approaches and levels at which pricing might be set. A mandate will then be sought for the introduction of road pricing.

### **A framework for development**

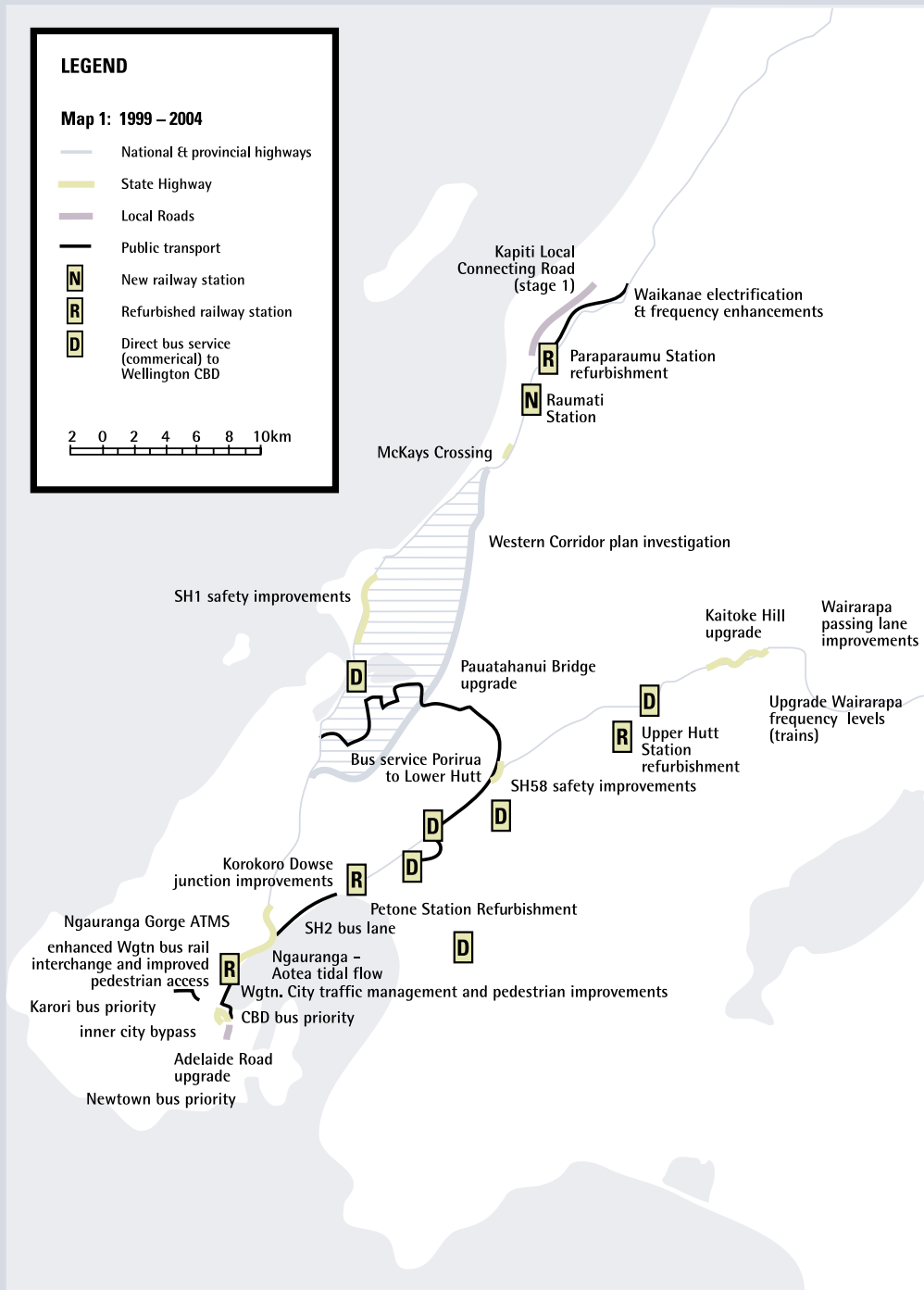
All organisations involved in ensuring the delivery of land transport services are required to act in a manner not inconsistent with this strategy. However alternative projects that equal or better match the framework of the Strategy may be acceptable.

The directions set out in the Strategy provide a level of certainty, in terms of plans for the next five years and directions for the next twenty years. This should facilitate sound planning and investment decisions by all stakeholders.

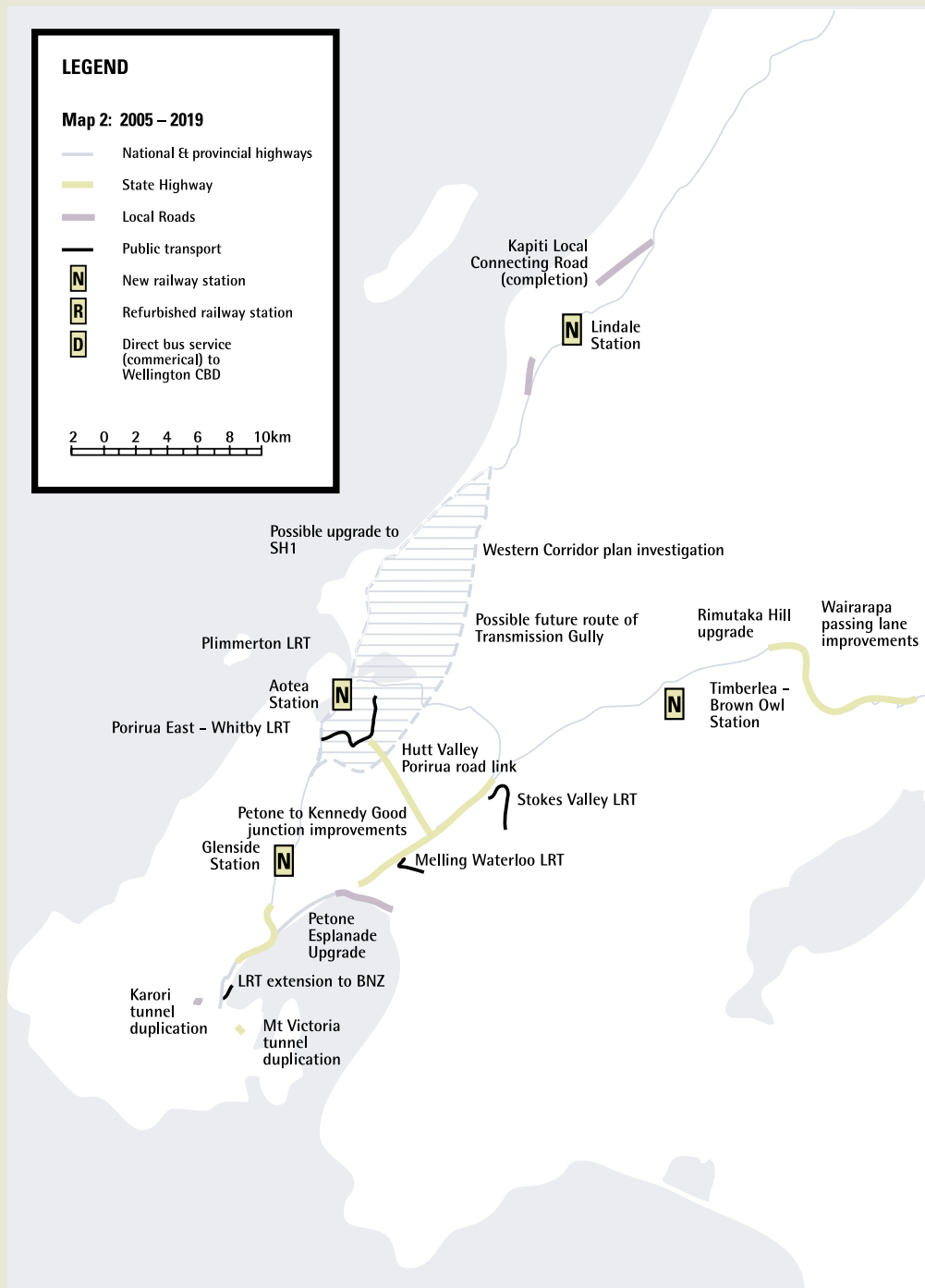
As required by the Land Transport Act, all the performance indicators and targets will be monitored every twelve months, at a minimum, and will be included in the annual report on progress towards implementing the Strategy.



# MAP 1: 1999-2004



# MAP 2: 2005-2019





# INTRODUCTION

# SECTION A



## Context

This Regional Land Transport Strategy has been developed within the context of current legislation, the National Transport Statement, the Regional Policy Statement, guiding documents prepared by the Regional Land Transport Committee, proposed roading reform and the previous two strategies developed by the Regional Land Transport Committee.

## Legislation

The Regional Council Land Transport Committee is required by the Land Transport Act 1998 to prepare a land transport strategy for the Wellington Region. Under Section 175(2) of the Act:

“Every regional land transport strategy prepared under this section must:

- (a) identify the future land transport needs of the region concerned; and
- (b) identify the most desirable means of responding to such needs in a safe and cost effective manner, having regard to the effect the transport system is likely to have on the environment; and
- (c) identify an appropriate role for each land transport mode in the region, including freight traffic, public passenger transport, cycling, and pedestrian traffic; and
- (d) state the best means of achieving the objectives referred to in paragraphs (b) and (c) of this sub-section; and
- (e) include any regional passenger transport plan (within the meaning of section 47 of the Transport Services Licensing Act 1989) that has been prepared by the regional council that has prepared the Strategy.”

The Strategy has effect for a five year period and has to be reviewed at least every two years. Nothing in the Strategy may be inconsistent with any National Land Transport Strategy or Regional Policy Statements or Plans.

## National Transport Statement

The National Transport Statement (1998) sets out the Government's overarching transport policy objectives and the results it expects to achieve. The Statement does not have legal status but is designed to guide policy development by the Ministry of Transport and the operational policies of the Crown's transport organisations.

The Government's overall objective is:

“The New Zealand transport system must contribute maximum benefit at minimum cost to New Zealand, consistent with sustainable development.”

In order to achieve this objective the Government has made a commitment to provide a comprehensive policy framework with specific outcomes for six areas: accessibility, integrated transport system, economic efficiency, safety, the environment, and strategic.

This statement appears to have been prepared in preference to the production of a National Land Transport Strategy.

### **Regional Policy Statement**

The Regional Policy Statement contains statutory transport directives for the Wellington Regional Council. These are provided in full in Appendix 3. In summary, the Regional Council is required to:

- promote a movement away from the use of non renewable fossil fuels as the primary source of motive power for transport in the Region.
- promote the development of transportation systems in the Region that:
  - meet community needs for accessibility;
  - discourages dispersed development; and
  - avoids or reduces adverse effects on human health, public amenity and water, soil and air and ecosystems.
- provide for the accessibility needs of the region by protecting existing transport corridors.
- prepare and review the Regional Land Transport Strategy, and through the Strategy and its other transport responsibilities, in a way which promotes:
  - public awareness about the full social, economic and environmental costs of using different modes of transport;
  - the use of urban transport modes which use renewable energy resources and that are efficient in the use of energy generally;
  - policies that encourage the provision and use of alternatives to individual vehicles as a means of meeting needs for accessibility;
  - fuel efficient driving practices; and
  - provides, where appropriate, funding for the investigation, planning and provision of public transport services.

### **Other guiding documents**

The Regional Land Transport Committee has also produced other documents that are directly relevant to the implementation of the Strategy. These are:

- The Regional Road Safety Strategy which has been developed in consultation with the other stakeholders in Road Safety.
- Four Land Use Guideline documents:
  - Passenger Transport Supportive Land Use and Urban Design Guidelines;

- Cycling Supportive Land Use and Urban Design Guidelines;
- Land Use and Urban Design Guidelines to Support Safe and Convenient Pedestrian Movement; and
- Land Use Guidelines Supporting Efficient Movement of Freight.

Territorial local authorities are encouraged to adopt or adapt the guidelines to their particular circumstances. Deviation from the spirit of the guidelines will need to be supported by evidence that, in a particular instance, the guidelines are impractical.

### **Roading reform**

The Regional Land Transport Committee acknowledges that there may be reform of road management. It is understood that this reform might take a number of years to implement and will be principally focused on charging users more directly for their use of the road and ensuring that road controlling authorities act in a more business-like manner. Once any legislation on road reform is passed, its influence on the Strategy will need to be assessed.

### **Previous strategies, 1993 and 1996**

This is the third strategy produced by the Committee. In producing these strategies, the Committee has always taken the view that it needs to look out 15 to 20 years in policy terms, so as to have confidence in the shorter term policies *and plans* that the Strategy contains.

The first Strategy document was based on work involving looking forward twenty years, from 1991 to 2011. The second Strategy document relied on that earlier work and was mainly a fine tuning exercise. The current Strategy is based on a new analysis within a twenty-year time frame, and using new updated techniques. This third Strategy also needs to embrace the new policy directions being promoted by Government.

The national transport funding agency, Transfund New Zealand, has taken a particular interest in the development of this strategy. Transfund has liaised with the Committee and provided a peer review of the technical work.

## **Process used in developing the Strategy**

This review of the Wellington Regional Land Transport Strategy has followed a robust process involving stakeholder consultation and analysis, combined with detailed technical analysis of options. The identification of the Region's land transport needs informed both streams of analysis.

A description of the different stages of stakeholder consultation, and the nature of the technical process is described below. The section ends with a detailed description of the identified land transport needs.



## Stakeholder consultation

Stakeholder consultation was carried out through a three stage process, ensuring ownership of and commitment to the Strategy.

### Stage one: identifying needs and most desirable outcomes

Initially, the Wellington Regional Council consulted stakeholders to identify transport issues and needs. Stakeholders agreed that the Regional Land Transport Strategy must meet the following major needs:

- improved road, pedestrian, cycling, rail and ferry safety;



- improved affordable access to the Wellington CBD for those employed there;
- improved affordable access to a range of social, shopping and recreational opportunities spread across the region;
- improved affordable access to regional facilities such as the international airport, the port, the rail freight terminal, the main hospitals and universities; and
- enhanced regional economic development.

It must also:

- mitigate the adverse social effects of transport on communities;

- mitigate the adverse effects of transport on the environment; and
- give direction to long term land use management so that the resulting transport demands can be supplied at reasonable cost, and provide a competitive edge to the regional economy.

A more detailed analysis of needs (see below) was carried out by the Wellington Regional Land Transport Committee. The Committee includes representatives from the following organisations:

- The Wellington Regional Council;
- All eight territorial local authorities of the Region;
- Transit New Zealand;
- Land Transport Safety Authority;
- New Zealand Police;
- Transfund New Zealand;
- Commercial road users;
- Automobile Association;
- Public transport users/cyclists/pedestrians; and
- Wellington Regional Chamber of Commerce.

On the basis of the identified needs, and the criteria set down in the Land Transport Act, (that is that land transport is safe, cost effective, and has regard to the effect it is likely to have on the environment), the Committee established the Strategy's vision and objectives.

The objectives, which are described in the Section B, are linked to the identified needs, and represent the most desirable outcomes for land transport in the Region.

### **Stage two: selecting the best package**

Following the Council's technical analysis (see below), a second round of consultation with all key stakeholders was carried out to discuss which of the two options, which resulted from the technical work, was the most favoured.

### **Stage three: confirming the policies and projects**

The preferred option generated a set of linked policies and projects which were considered by the Land Transport Committee. Following some amendments which were consistent with the preferred package, the Committee prepared a Draft Strategy which was sent out to the wider community for the statutory public consultation process.

The policies represent the most desirable means of responding to the identified needs and outcomes for land transport in the Region. The package of projects is the best means, at this time, of achieving these objectives and policies.

## Technical analysis

As noted above the technical analysis was carried out following the first stage of the stakeholder consultation. A state of the art modelling process, based on the identified needs and objectives, was used to determine the best means of achieving the objectives.

## The basic options

At the outset, the Committee defined a set of ten basic options which would be tested in the modelling process. These were:

- Free-flowing Roading: provide sufficient road capacity to meet demand at all times.
- Improved Roading: provide sufficient road capacity to meet off-peak demand and targeted improvements to remove local peak period bottlenecks.
- Modern Public Transport Systems: provide high quality public transport systems (including new methods like light rail) and implement pricing, parking levies and land-use policies supportive of public transport.
- Removal of Operational Subsidies: undertake investment either for road or passenger transport to meet demand subject to available capital. All passenger subsidies on transport are removed.
- Improved Public Transport Systems: enhance the existing public transport system through bus priority systems and improved interchanges with some road capacity restraints imposed.
- Mixed Investment: improve roading and improve public transport strategies.
- Low Fares: enhance the public transport system through higher frequencies and low fares with selective road improvements and parking controls.
- Decentralisation: this is like the mixed investment strategy but with a strong emphasis on developing the sub-regional centres at the expense of Wellington.
- Economically Efficient Pricing: again, based on the mixed investment strategy but with a pricing regime that reflects the true cost of travel, including congestion and externalities.
- Laissez Faire: whatever qualifies for funding, roads or public transport is built.

The impact of topographical limitations meant that the concept of “packages” or sets of proposals designed to improve the entire arterial network, became central to the modeling process. Projects that do not affect network capacity were not included in this analysis. They were added to the final package because other technical analysis demonstrated that they helped achieve at least one of the objectives, such as safety, in a cost effective manner.

Each package was ranked against each objective in terms of how the Strategy performed against the identified performance indicators. Packages were then either refined, combined or deleted depending on their overall performance against the objectives. The new packages were then evaluated in the same way so that after

several iterations, packages that performed well against each of the objectives were identified. In addition, network capacity issues were specifically identified in the evaluation of each package and this was used to refine the package in subsequent iterations. This process is covered in more detail in the four Strategy Scenario Modelling Reports identified in appendix 1.

### **Selecting the best means of achieving the objectives**

The modelling process assessed the performance of each basic option against all of the objectives. Predictably, combinations of options tended to perform better than any singular option. A series of combinations, forming discrete packages of policies and projects, were refined for further analysis to find those which performed best against the objectives. This process was repeated until two candidate strategic packages emerged:

- a basic strategy – low cost, no additional pricing
- an enhanced strategy – medium cost, modest additional pricing.

The proposals in each of these packages are interdependent. This robust technical process means that analysing individual projects against objectives may not give a true indication of their worth; or conversely, individual projects, on their own, will not necessarily achieve the Strategy's objectives.

The modelling for the enhanced Strategy showed a significantly better performance in terms of accessibility and economic development. Under current criteria, however, the proposals in this strategy would not be affordable or fundable. Initial consultation with stakeholders represented on the Regional Land Transport Committee confirmed a preference for the enhanced strategy. The Committee, exercising political judgement, favoured modest additional pricing over full economically efficient pricing. This proposed Strategy develops policies and projects based on the enhanced strategy option. While the package was developed for a twenty year period, it has been prioritised (by sequence of work required) to a five year set of proposals which are the first step towards the twenty year vision.

The detailed analysis has been written up in a series of technical papers. These papers along with others relating to the Strategy development can be viewed at or purchased from the Regional Council. A complete set of documents is set out in the Appendix 1 to this strategy document.

### **Identified needs**

The following summarises the needs which informed the Regional Land Transport Strategy. They fall into four groups: changes in the Region's population and activities; transport problems; the interface between transport and communities; and the needs

that derive from the Region's topography. The technical documents referenced in Appendix 1 contain more detailed descriptions of these needs and trends.

## **Changes in population and activities**

### **Demographics**

The population of the Wellington Region is forecast to continue to grow by around 0.9% per year. Nearly all of the growth will occur on the Kapiti Coast and in Wellington City. Porirua, the Hutt Valley and the Wairarapa will either not grow or show a small decline in population, although there will be variations within districts.

Current forecasts see population growth beyond 2004 as limited.

Average household sizes will continue to decrease slowly. This means that even where there are static or slightly declining populations there will still be some growth in the number of households.

The proportion of older people in the population will continue to increase as a result of natural demographic changes. Consequently, the number of people in the younger age groups will continue to decrease. The total number of cars in the region will increase at about 1% per annum, but changes in employment and recreation patterns will see the number of trips grow by about 3.5% per annum. This reflects the changes in the demographics where older people, the 40 to 60 age range, tend to have more possessions than younger people, because of their place on the economic ladder.

### **Employment patterns**

Sixty percent of the region's employment is in Wellington City, which has only 38% of the region's population. The Wellington City CBD will continue to be the dominant employment centre for the Region but the growth in jobs is expected to be greatest on the Kapiti Coast reflecting the area's population growth.

The major change in employment patterns will come from an increase in the service sector.

Tourism will continue to be one of the employment growth areas. Manufacturing, which has been declining markedly, will continue to do so. A greater proportion of jobs will be part time rather than full time, and women in employment will continue to grow as a proportion of the workforce.

### **Economic growth**

The Region's economy is expected to have a lower output and employment growth than the New Zealand average. Only growth in the primary industries, in particular forestry, will be above the average for New Zealand, and then from a relatively small base. The

service sector will continue to dominate economic activity in the region and will grow steadily, although at a marginally lower rate than the national economy.

There is concern about the region's economic prospects and the role of transportation in providing the region with a competitive advantage. Particular issues include road access from the Wairarapa, access for freight to the Port of Wellington and the rail terminals, and access to major employment centres.

### **Increasing tourism**

One predicted area of growth will be tourism. It is expected that there will be increased tourist trips in the Wairarapa, Wellington and Kapiti Coast.

### **Increases in freight movement**

Freight movements are increasing and will grow significantly across the region with 'just in time' delivery systems in residential areas as well as in CBDs.

In the Wairarapa and the Kapiti Coast, the growth in forestry will see an increase in freight traffic over a mostly rural road network. There will continue to be steady growth on arterial freight routes for local, regional and inter-regional road and rail traffic. Access to the port of Wellington will continue to be important for this growing regional industry.

### **Increases in recreation and shopping journeys**

Growth in recreation traffic will continue, intensifying weekend traffic levels on some roads.

Shopping is becoming a more popular recreational activity. New retail centres are being developed which are accessible primarily by car.

The growing development of shopping facilities and recreational attractions throughout the region indicates the need to continue to refocus off-peak public transport services to these demand centres, and to provide for more cycling and pedestrian activity.

### **Increasing school journeys**

Home to school trips currently are dominated by walking and cycling, for primary schools, and public transport for secondary schools. The Regional Land Transport Committee wishes to maintain this pattern. The Committee recognises the increased use of cars to deliver students to and from school.

## **Transport problems**

### **Peak time congestion**

There is a growing demand for travel, particularly on the Wellington-Kapiti Corridor. There is evidence that peak periods are lengthening on this route both during weekdays and at weekends. Peak time congestion is growing, but to a lesser degree, on other arterial routes. Topographical constraints provide few alternatives for road access to key economic activity centres.

### **Buses and goods caught in road congestion**

Choice of mode is currently affected by slow bus travel times due to buses being caught in traffic congestion. If public transport is to be made more attractive, bus lanes need to be investigated and, if justified, developed along the most congested arterial routes.

### **Safety issues**

A more detailed description of the region's safety issues is provided in the Regional Road Safety Strategy. The Wellington Region has the following safety issues:

- On urban roads. When compared with average national figures the Wellington Region has high numbers of accidents related to loss of control on bends and rear end type crashes. Pedestrians and cycle casualties are also over represented.
- On rural roads. When compared with average national figures the following are over represented: loss of control on bends; rear end type crashes and rural state highway crashes.
- There are a number of specific locations on the strategic road network that have higher than the national average accident rate.

### **Pedestrian and cyclist needs**

Pedestrian and cyclist facilities are often neither safe nor convenient. The technical analysis has shown that efficient and convenient pedestrian connections to the major central areas and key public transport terminals are an important element in achieving this strategy's objectives. In particular, pedestrian connections to the Wellington CBD and Wellington Station that are efficient, safe and convenient are very important in achieving high levels of regional accessibility.

### **Inadequate peak time rail services**

The number of peak time rail users having to stand for all or part of their journey is increasing. This suggests that there is a need to increase commuter rail capacity on the Paraparaumu, Hutt and Wairarapa services.

There is also a need to extend rail services into the CBD to improve the efficiency of rail transport, enhance the interchange between bus and rail at Wellington railway station and enhance pedestrian connections to the Wellington railway station.

### **Limited car parking in Wellington CBD**

Wellington CBD has restricted capacity to provide further car parking as limited room exists and construction costs for parking buildings are high. Land use development in recent times has reduced parking availability. Current parking availability in Wellington CBD on a per gross floor area or per employee basis is already high when compared with major urban areas elsewhere in New Zealand and overseas.

### **Interface between transport and communities**

#### **Environmental impact**

There is a growing awareness about the environmental impacts of transport systems, particularly about the growing level of greenhouse gases. Recent air quality monitoring in the Wellington CBD has confirmed that in specific locations, carbon monoxide and associated emissions are exceeding or close to international health standards.

#### **Traffic impacts on local communities**

There have been objections by community groups, against further roading improvements in the southern part of the Wellington CBD and those areas on State Highway 1 north of Porirua. Arterial road traffic is perceived to sever communities, create safety and noise problems and cause unacceptable changes to urban environments. This is a longstanding problem in many parts of the country where traffic volumes have increased over the years, resulting in conflict between quality of residential life and high volume traffic flows.

#### **Social and economic impacts of pricing**

The introduction of road pricing will generate social and economic impacts. The level of pricing chosen can vary these impacts. For example, the modelling shows that pricing at the most economically efficient levels would result in net economic (and social) losses to the region through severe losses in discretionary income.

#### **Land use management**

The strong linear nature of the region's transport network ensures that changing the distribution and mix of land use can have a significant impact on the demand for travel and the choice of mode.

The convenience of modes other than the private car is strongly influenced by land use patterns and the extent to which the road and rail networks are integrated into land development at the development and design stage.

Stakeholders agreed that the Regional Land Transport Strategy must give direction to long term land use management so that the resulting transport demands can be supplied at reasonable cost, provide a competitive edge to the regional economy and



ensure that the impacts of that demand for travel are sustainable. The Land Use Guidelines are an important resource in this regard.

### Topography

One of the most fundamental needs for land transport in the Region is to utilise the natural topography in a way which is cost effective and which has regard to the effect on the environment.

The topography limits the options for the development of alternative, affordable arterial



routes. There are two existing major state highway corridors utilising the natural topography: one from the Wellington to the Kapiti Coast, and the other from Wellington to the Wairarapa. Both converge at Ngauranga and follow the coastline into the Wellington CBD. These corridors are congested at peak times. Rail passenger services operate alongside the arterial routes.

The topography means that any capacity improvements made at one point on the existing arterial road network must be matched by sufficient capacity along the whole course of the roading corridor. Capacity improvements must also allow for any switch in

travel choice between road and rail, if the benefits of improving congestion at one point are to result in overall improved travel performance.

Because these corridors have a parallel urban rail service, and peak period journey times are much the same on both, there is a strong interaction between rail patronage and road use. Changes to one has an effect on the other and these effects may also be translated within that corridor.

## Roles of key stakeholders

The role of a Regional Transport Strategy is set down in the Land Transport Act and is referred to in the Transit New Zealand Act. The Land Transport Act requires that all organisations involved in ensuring the delivery of land transport services are required to act in a manner not inconsistent with the Strategy. Transfund New Zealand has gone a step further by including consideration of the Strategy in its decision-making processes.

### Transfund New Zealand

Transfund New Zealand provides funding from national sources for State Highways (100%), local roads (average 50%), and most public passenger transport (average 50%). Projects identified in this strategy document will only receive Transfund support if they satisfy the prevailing funding criteria set by Transfund.

### Regional Council

The Wellington Regional Council may participate in transport related matters in the development of district plans or processing resource consents under the Resource Management Act<sup>1</sup>. During these processes, the Council may draw attention to policies and provisions in *this* Regional Land Transport Strategy.

Year by year, the Regional Council will be monitoring progress toward implementation of the Strategy as required by the Land Transport Act. It will therefore be relying heavily on agencies to progress the Strategy. The performance targets used in this monitoring process are listed in Section B: the Strategy.

The Regional Council has a role in planning passenger transport services and funding non-commercial services.

### Roading Authorities

Roading authorities may produce their own transport strategies which in turn are required to be not inconsistent with *this* Regional Land Transport Strategy. While the Regional Land Transport Strategy only addresses local roading issues where they are regionally significant, it also contains policy directions which need to be taken into account in preparing *Local Authority* Transport Strategies. Examples of these policies

<sup>1</sup> Resource Management Act: Method 14.3, p258-260, RPS.

include Policy 1.3.1 "Promote land development that minimises the total demand for travel or policy " or 1.3.2 "Promote land development that ensures that public transport, walking and cycling are convenient and safe alternatives to the private car".

### **Private transport organisations**

Private transport companies, such as Tranz Rail and bus operators can also help to implement the Strategy through their investment decisions. Adoption of this strategy provides operators with an environment of greater certainty within which to enter into longer term partnership arrangements and invest in service quality enhancements.

### **Implementation**

Implementation of the Strategy is in the hands of the following authorities:

- Transit New Zealand for state highways;
- Territorial Local Authorities for local roads;
- the Regional Council as a funder of non commercial public transport services and infrastructure; and
- the Land Transport Safety Authority in conjunction with the Police, road controlling authorities and the Regional Council, for road safety.

## **Funding and pricing**

### **Funding**

Funding priorities for developments of the strategic transport network need to be determined in a way that is consistent with the policies of this strategy. Transfund New Zealand's national funding criteria recognises the need for individual projects to be not inconsistent with Regional Land Transport Strategies.

The Regional Land Transport Committee believes that different modes of transport (car, bus, cycle, rail, ferry, for people or truck, rail or barge for freight) should be funded on a "level playing field" approach based on where they sit in the Strategy.

Analysis has shown that to achieve a significant difference in network performance against the objectives (particularly accessibility) there must be a significant enhancement. Incremental enhancements will not perform much differently from doing nothing. But funding is constrained. Transfund New Zealand, using money collected from road users, funds all State Highway expenditure and contributes on average 50% to territorial local authority and regional council expenditure on local roading and public transport where these conform the Transfund criteria. The other 50% comes from ratepayers. In order to achieve significant enhancement, additional sources of funding will need to be found.

## Pricing

This strategy introduces the concept of road pricing. Road pricing can be set at various levels:

- a modest level to help fund enhancements to the network of about \$20m a year;
- a higher level, to manage congestion and influence behaviour (eg. modal choice); and
- a full economic level, to capture true costs, including externalities.

The modest level, to help fund new infrastructure and services, is proposed in this strategy. This level is proposed because:



- the modelling process has shown that modest pricing can help achieve benefits against the objectives;
- willingness-to-pay research conducted early in this review identified support for pricing at a modest level only; and
- stakeholder consultation undertaken to date supports the enhanced strategy that requires a modest level of funding.

There may be some exceptions to this pricing to fund enhancements to the network. These exceptions would be in cases where new roading, eg Transmission Gully, results in

substantially increased traffic pressure at other points in the network. In this case pricing may be used to manage congestion. Pricing to manage congestion is part of the long term scenario for land transport in the region.

When the Strategy was drafted, a detailed proposal for pricing was not put forward. As the submissions indicated, there is basic agreement that enhancements should be funded through pricing, the Regional Land Transport Committee will now develop a range of approaches to pricing, and levels at which they might be set. A mandate will then be sought for its introduction.

The full economic level of pricing that would capture true costs, including externalities, was modelled. This scenario would contribute significantly to the objectives of accessibility, safety, affordability and sustainability. However, efficient pricing on its own is likely to have disbenefits to economic development in the region by imposing large costs that exceed the benefits received by those who continue to use the road system.

Economically efficient road pricing needs to be applied with the simultaneous optimisation of the total network to maximise the benefits to all users. This is likely to assist economic development prospects in the region. Further work will be undertaken on the issue of road pricing, particularly with respect to its synergy with network development so that a more definitive proposal that is consistent with all this Strategy's objectives can be identified.

## **Roles of different modes**

There are three different transport modes: slow mode (walking, cycling, wheelchairs, skateboarding and roller skating), road and rail. These modes are inter-related parts of the transport system.

Under the Land Transport Act section 175(1)c the Regional Land Transport Committee is also required to consider freight traffic and other public transport services when developing the region's Strategy.

### **Trends**

Socio-economic and demographic trends suggest increased trip-making, regardless of mode, of about 3.5% per year. Recent trends suggest that peak hour trips will continue to increase at a similar or greater rate.

Regionally, there is already a balance between land transport modes for access into and out of Wellington at peak travel times. This balance, which helps offset peak hour road congestion, needs to be retained and enhanced. Transport statistic trends suggest that the current mode split between public transport and private car for the work journey is changing in favour of public transport.

## Modelling process and modes

The modelling process took the socio-economic and demographic trends into consideration. The needs and objectives which were key inputs into the modelling ensured that the Strategy is one which both reflects the need to balance the provision of road and public passenger transport and includes policies for enhancing walking and cycling, particularly for short journeys.

## Slow mode



In urban areas and for short journeys walking will remain as a major mode both in its own right and for access to and from public transport. To a lesser but growing degree, cycling will also remain as an important means of travel. Other slow mode transport includes wheelchairs, including motorised varieties, roller blades and skateboards.

Walking and cycling is available to all people, is an essential part of all transport movements, has a highly positive effect on community cohesion, has few adverse effects on the environment, is safe and has positive health benefits.

The Strategy encourages the increased use of walking and cycling for short journeys and policies are proposed which should make these modes more attractive and safer.

## **Rail**

### **Passenger**

The aim of the Strategy is to promote public transport as an attractive option for all people for journeys in urban congested areas. Rail services are an important mode of choice particularly for commuters. The Strategy aims to enhance public passenger rail services, both by improving existing services and making some additions to the network.

### **Freight**

Rail freight is a key issue particularly for access to the port and inter-island transport. The Strategy is designed to ensure that rail freight is an attractive option for industry within the Region.

## **Road**

### **Private car**

Analysis shows that travel by road will continue to be dominant for longer trips. The Strategy includes policies and plans designed to improve the strategic road network and at the same time, to manage travel demand.

In smaller centres and during the off-peak periods, transport needs will be best met by providing an efficient road system.

### **Public transport**

For journeys in urban congested areas or where passenger demand exists a focus of this strategy is to provide all forms of public transport, including taxis, as a positive choice. Public road transport, by professional operators, increases road safety and helps reduce road congestion.

The growing development of shopping facilities and recreational attractions suggests the need to refocus off-peak public transport services to these demand centres.

### **Freight**

The Strategy recognises that the local movement of freight will best be served by an efficient roading system. Freight traffic needs to flow freely to support economic activity. The quality of road access to major freight nodes needs to be regularly monitored and reviewed.



SECTION B





## Strategy framework

The Regional Land Transport Strategy's vision, objectives, performance measures, targets, policies and plans represent an integrated package designed to meet the Wellington Region's transport needs.

### Vision

The vision or ultimate goal for transport in the Wellington Region is expressed as:

"A balanced and sustainable land transport system that meets the needs of the regional community."

**Balance** – achieving an integrated transport network with capacity balanced within and between each mode.

**Sustainability** – developing a transport system which is environmentally and economically sustainable.

### Objectives, performance measures and targets

Five objectives were developed to produce the optimal transport solution for the region. They are described below.

#### 1. Accessibility and economic development

To provide a transport system that optimises access to and within the region.

##### Performance indicators

- Vehicle travel time to the airport from each of the following nodes: Paraparaumu, Plimmerton, Porirua, Johnsonville, Wellington CBD, Masterton, Upper Hutt and Lower Hutt;
- Total network vehicle hours;
- Total network vehicle kilometres;
- Total network average trip length;
- Total network average travel speed;
- Total network public transport passenger hours;
- Total network public transport passenger kilometres;
- Mode split for journeys to the Wellington CBD;
- Traffic volumes for trips on SH58 or parallel demands; and
- Annual economic cost of congestion.

##### Targets

- AM Peak travel times for motor vehicles from Paraparaumu and Masterton to Wellington Airport and the Port of Wellington should not grow by more than 3% by the year 2004.

- AM Peak total network motor vehicle travel time should not grow by more than 3% by the year 2004.
- AM Peak total network motor vehicle travel distance should increase by no more than 6% by the year 2004.

## 2. Economic efficiency

To implement the most efficient options.

To ensure that all users of land transport are subject to pricing and non-pricing incentives and signals which promote decisions and behaviours that are, as far as possible, in accordance with efficient use of resources and of optimal benefit to the user.

### Performance indicators

- Total system user cost per person kilometre; and
- Total system user benefit/cost

### Target

- Strategy benefit/cost ratio exceeds 4

## 3. Affordability

To plan for a land transport system that recognises funding constraints and ability to pay.

### Performance indicator

- 5 year cost (capital plus operating costs)

### Target

- 5 year costs do not exceed \$250 million

## 4. Safety

To provide a safer community for everyone through a transport system that achieves or improves on the targets of the National Road Safety Plan through the Regional Road Safety Strategy.

### Performance indicator

- Forecast 2001 casualty figures

### Target

- Annual casualties reduced to 1200 or less by December 2001.

## 5. Sustainability

To provide a land transport system that:

- operates in a manner that recognises the needs of the community;
- avoids, remedies or mitigates adverse effects;

- uses resources in an efficient way; and
- supports an optimal demand for energy.

#### **Performance indicators**

- CO emission levels at Vivian/Victoria Street and Willis/Manners Street junctions
- Fuel consumption

#### **Targets**

- Non compliance of CO guidelines in 2004 does not increase by more than 2.5% over 1999 levels at Vivian and Willis Streets
- Fuel consumption not increased by more than 5% by 2004

(Note: transport emissions of carbon dioxide are directly related to fuel consumption.)

#### **Policies and plans**

The Strategy has been developed at two levels – the policies and the projects which combine to produce the corridor plans. Both have been derived as a result of the technical analysis which measured the performance of various scenarios and combinations of scenarios until a single package of proposals was found that would best achieve all the objectives and satisfy the identified needs. A more detailed description of this analysis can be found in companion technical documents (see Appendix 1).

The optimum package suggested strategic policy themes. Specific policies were developed under each theme to achieve the stated objectives and meet identified needs.

Corridor plans are a set of interrelated projects designed to achieve the Strategy's objectives when implemented together with the policies. The modelling process ensured that all projects meet the statutory requirements of cost effectiveness, safety and having regard to the effect that the transport system is likely to have on the environment. At the same time, some projects are able to deliver positive results for specific objectives. The policies relating to each objective are described in the following section.

When the policies and plans are implemented together, the performance measures and targets set out under the objectives above will be met.

It is recognised that many of the policies are only relevant in urban areas and therefore not applicable to the more rural parts of the Region, such as the Wairarapa.

#### **Monitoring**

As required by the Land Transport Act, all the performance indicators and targets will be monitored every twelve months, at a minimum, and will be included in the annual report on progress towards implementing the Strategy. A number of key targets will be monitored more frequently and the results promulgated through the *Transport Futures* newsletter.

## Objective 1: Accessibility and economic development

To provide a transport system that optimises access to and within the region.

### Needs

This objective meets the following key Regional transport needs: improving accessibility to Wellington City for employees from the growing Kapiti Coast region and increasing tourist trips and freight movement in the Region, particularly the Wairarapa; resolving peak time congestion; maintaining and enhancing traffic safety; managing the impact



of traffic on the environment; being responsive to the negative impacts of traffic on local communities; and reflecting topographical limitations.

### Policies

The policies to implement this objective fall into four major themes:

- Expanding and enhancing urban public passenger transport;
- Improving the strategic roading network;
- Influencing travel demand through appropriate land use; and
- Expanding and enhancing walking and cycling routes.

## **Theme 1.1: Expand and enhance urban public passenger transport<sup>2</sup>**

The main purpose of this theme is to promote an increase in public transport patronage by making it a real and attractive alternative to the private car.

### **1.1.1 Improve the accessibility of public transport**

Access to public transport is measured by the physical extent of the public transport network and the frequency of services on that network.

Public transport routes need to be located as close as possible to the origin and destination of people's travel. Convenience and ease of use is a very important factor in making public transport a viable alternative to the private car.

Extensions of both bus and rail services are envisaged where reasonable demand exists. As service frequency is a major contributor to convenience and ease of use, frequency on both bus and rail services will be increased where practical.

Where reasonable demand exists, facilities for parking and carrying bicycles will be provided.

Physical access onto buses and trains will be enhanced through the provision of more low floor buses and, where practical, level access to train carriages.

### **1.1.2 Maintain urban rail as an arterial priority in the public transport network**

The current rail passenger network is regarded as an arterial priority in the public transport network. The quality of the network must be maintained at a high level to attract custom.

Rail is important for the region because it provides a mode of transport that alleviates road-based congestion, as well as meeting objectives such as providing access to areas of economic and social activity.

### **1.1.3 Allow commercial bus and ferry services on parallel routes to rail services where they complement and increase overall public transport use**

There are a number of existing long distance bus commuter services to Wellington out of the Kapiti Coast and the Hutt Valley. There has been an increase in informal van services from a number of locations. Peak hour capacity and costs of the urban rail network is becoming an issue. Significant increases in rail peak hour capacity will not be achieved cheaply. Some bus only facilities on arterial routes could be required to ensure comparable services are efficient and reliable. Bus or ferry services that would merely

<sup>2</sup> Regional Policy Statement. Built Environment and Transport Chapter. Policy 4. Method 3.

reduce rail patronage will continue to be declined registration in accordance with the requirements of the Transport Services Licensing Act 1989.

#### **1.1.4 Enhance the quality, reliability and priority of public transport facilities and services**

Refurbishment and renewal of railway rolling stock and buses needs to continue to maintain existing service quality and passenger comfort. These improvements need to be incorporated into formalised Quality Partnerships between the operator, the Regional Council and the appropriate territorial local authority. Reliability is greatly increased where public transport services are given priority at key intersections or through congested areas. Priority measures can range from a dedicated public transport route to traffic signal pre-emption.

#### **1.1.5 Improve the interchange between bus, rail , car and cycle**

The need for interchange between modes to complete a journey is a major disincentive to public transport use. The interchange procedure needs to be as simple and pleasant as possible.

Commuter car and cycle parks at railway stations and key bus route locations should be provided to encourage public transport use. These facilities need to be close to the station or bus route, and need to be safe and well maintained.

Safe, convenient and sheltered pedestrian access to and from key public transport nodes is essential if public transport is to be a real alternative to private car use.

#### **1.1.6 Improve pedestrian and cycle access to key public transport nodes**

The walking distance between bus and rail needs to be minimal, well signposted and secure. Security systems such as monitored cameras and security patrols must exist at possible trouble spots. All-weather protection should be provided where user numbers are high. All these facilities need to be well maintained.

### **Theme 1.2: Improve the effectiveness of the strategic road network <sup>3</sup>**

A strategic transport network is that part of the network which is designed to carry through traffic rather than local traffic. It is designed to connect the various parts of the Region and connect the region to the rest of New Zealand.

A strategic transport network, such as the strategic road transport network, should exhibit the following features:

- (a) It should be efficient. The standard for efficiency set in this strategy is that the road network should have sufficient capacity to move off peak traffic without undue delay.

<sup>3</sup> Regional Policy Statement. Built Environment and Energy Chapter. Policy 4. Method 4.

- (b) It should be safe to use. Safety improvements to the strategic transport network should continue to be made to ensure that injury accident rates are lower, where feasible, but certainly not greater than comparable roads elsewhere in the country.
- (c) It should not have a conflicting function. The road hierarchy defined in the District Plans of the territorial local authorities of the region should clearly separate roads which have a through traffic function from those roads that provide local access.
- (d) It should mitigate impacts on the local community. These impacts include noise,



vibration, intimidation, vehicle emissions, severance impacts and safety risks. Where possible, community areas should be located away from major roads or rail lines. If this is not possible roads should be integrated into communities in a sensitive way.

- (e) It should be well maintained. An adequate standard of maintenance of the strategic road network is essential if it is to effectively serve its function and achieve the requirements listed above. Poor maintenance gives rise to increased travel costs for the user and will eventually lead to far greater rehabilitation costs for the asset in the long run.



- (f) It should provide for network capacity balance. Where road capacity improvements are proposed they should be compatible with the capacity provided with other parts of the network.

#### **1.2.1 Improve the existing road network to attain interpeak efficiency**

The goal of roading improvements should be to attain interpeak efficiency. This would produce significant local, environmental and safety benefits (including separating local from through traffic) and not rely on additional vehicle capacity being provided on other sections of road.

The strategic road network should continue to be developed so that its strategic function is enhanced. Improvements to the strategic road network are to be prioritised according to their function. Factors that are to be considered in developing the strategic road network are:

- those improvements that better connect the region to the remainder of the country or better connect the various parts of the region to each other (this being the primary purpose of the strategic road network); and
- those improvements that enhance the features (a) to (f) of the strategic road network.

#### **1.2.2 Provide heavy traffic bypasses of local communities on the strategic road network**

The purpose of the strategic road network is to connect major centres in the Wellington Region with the rest of the country and significant destinations such as the port, the airport and the CBDs. It is more efficient for the heavy traffic on the strategic network to bypass smaller centres or communities and CBDs where practical.

#### **1.2.3 Increase the flexibility of the strategic road network**

Parts of the strategic road network are currently operating at capacity at peak times. Analysis has demonstrated that it would be counter productive to merely try to increase the capacity on all the direct routes into and out of Wellington through the construction of additional lanes or roads. New strategic links and more efficient use of the existing routes are a better alternative. In particular, links between State Highways 1 and 2 and the use of automatic traffic management systems and tidal flow schemes on existing routes, would reduce congestion and are achievable more quickly and at less cost. Also in the longer term new North/South routes need to be developed. For example, the Transmission Gully has a low benefit to cost ratio. This ratio is increased if a link is provided from it to the Hutt Valley.

#### **1.2.4 Provide for freight movement**

The movement of freight is vital to the national and regional economy. Freight can be carried on either rail or road, over arterial or local routes. Competition between the two

modes is helpful in keeping the cost of freight operations as low as possible (provided that neither of the modes gains an unfair advantage of being subsidised). The cost of providing roads and rail is high. Freight operations are the greatest cause of wear on roads and in particular rural roads. The wear on roads increases steeply with the weight on the axle.

There are a number of key freight origins and destinations. These include:

- Port of Wellington;
- Wellington Airport and environs;
- Rail freight terminal;
- Gracefield;
- Upper Hutt;
- Porirua;
- Kapiti;
- Wairarapa;
- State Highway 1 north and south of regional boundaries; and
- Wellington CBD.

There are a number of other freight destinations that are of local significance. Forestry related traffic is expected to grow significantly in the Wairarapa, and to a lesser extent on the Kapiti Coast. Forestry has a very intense but usually short lived demand for transport which can cause major damage to roads.

The proposed changes to the arterial road and rail networks, which are described in the section on corridor plans, enhance freight movement through short term traffic management systems, providing access to high occupancy vehicles or bus only lanes on arterial roads and medium term road construction proposals.

#### **1.2.5 Promote the need to provide for increased tourist movement**

Tourism is increasing regionally and has demonstrated dramatic growth in the Wairarapa. In order to cater to the demand for improved access to recreational attractions, roading authorities will be encouraged to prioritise and seal roads which carry high volumes of tourist traffic. Public transport services should also be encouraged where they are economic.

#### **Theme 1.3: Influence total travel demand by well considered land use<sup>4</sup>**

Land use and transport systems are interactive. Residential location, land uses and employment location are themselves a major factor in travel demand. The aim of these policies is to encourage optimal land use and thus reduce the demand for travel. These policies will be implemented by local authorities. Guideline documents on land use to influence more efficient travel have been produced.

<sup>4</sup> Regional Policy Statement. Built Environment and Transport Chapter. Policy 3.

### **1.3.1 Promote land development that minimises the total demand for travel**

The District Plans developed by local authorities should include policies to encourage land use development that minimises travel demand. Again, the Wellington Regional Council has promulgated Land Use Guidelines to assist in addressing this issue.

### **1.3.2 Promote land development that ensures that public transport, walking and cycling are convenient and safe alternatives to the private car**

Often major developments (especially retail) fail to consider or provide for alternative transport modes, such as walking and cycling. There is a need to encourage planning for such large scale facilities to take into account good access to public transport services.

### **Theme 1.4: Expanding and enhancing walking and cycling routes<sup>5</sup>**

The main purpose of this theme is to promote increased use of walking and cycling, for short trips.

### **1.4.1 Develop and enhance safe, attractive walking and cycling routes**

Access to CBDs, shopping areas, schools and public transport can be improved by making walking and cycling more attractive. Roading authorities will be encouraged to make appropriate routes "cycle friendly". More detailed policies are included in the section on sustainability and in the pedestrian and in the land use guidelines.

## **Projects to 2004**

The rigorous technical and stakeholder analysis ensured that the package selected best met the established objectives and satisfied the greatest number of identified needs. The analysis was particularly effective at developing a package of road and public transport proposals which would offer the most desirable means of enhancing accessibility. The model ensured that the preferred approaches were those which are consistent with the Act, that is, that they are safe, cost effective and environmentally sensitive.

Key road and public transport projects to 2004, which enhance accessibility and economic development, are listed below. More detail is shown in the Corridor Plans.

### **Roading**

- Construct the first stage of the Kapiti Western Link Road;
- Implement the Active Traffic Management System at Ngauranga Gorge;
- Construct improvements on the Kaitoke Hill Road;
- Maintain continuous improvements on the Rimutaka Hill Road;
- Construct the Ngauranga-Aotea tidal flow system;
- Design and construct an upgrade of the Korokoro/Dowse intersections on SH 2;
- Construct next phase of inner city bypass through Buckle and Arthur Streets;

<sup>5</sup> Regional Policy Statement. Built Environment and Transport Chapter. Policy 3.

- Enhance traffic management to improve pedestrian, cycle and vehicle flows;
- Upgrade the route through Newtown on Adelaide Road from the Basin Reserve to John Street;
- Develop a Western Corridor Implementation Plan (from Otaki to Ngauranga Merge); and
- Continue land purchase on the Transmission Gully route.

#### Public transport

- Provide additional commuter car and cycle parks at major railway stations;
- Build a new railway station at Raumati;



- Extend the urban electric rail service to Waikanae;
- Increase weekday urban rail service frequency from the Kapiti Coast, Hutt Valley and the Wairarapa to Wellington;
- Allow commercial commuter bus and ferry services to operate from Porirua and the Hutt Valley to Wellington CBD;
- Increase local bus services to connect with increased rail services;
- Improve bus/rail connection at Porirua Railway Station;
- Investigate the construction of a bus lane from Petone to Ngauranga on State Highway 2 without compromising cycling on this route; construct if appropriate;

- Improve bus priority through CBD traffic;
- Enhance bus/rail interchange at Wellington Railway Station;
- Establish priority routes for Newtown buses servicing the southern and eastern suburbs;
- Integrated ticketing;
- Improve pedestrian linkages from Wellington Station to the CBD;
- Promote additional cycle parks at major railway stations; and
- Enhance traffic management to improve pedestrian, cycle and traffic flow.

## **Objectives 2 & 3: Economic efficiency and affordability**

### **Economic efficiency**

To implement the most cost effective options.

To ensure that all users of land transport are subject to pricing and non pricing incentives and signals which promote decisions and behaviours that are, as far as possible, in accordance with efficient use of resources and of optimal benefit to the user.

### **Affordability**

To plan for a land transport system that recognises funding constraints and ability to pay.

### **Policies**

Cost effectiveness is one of the key criteria which must be applied under the Land Transport Act. The modelling process included cost-effectiveness as one of the criteria for developing the enhanced package. The following policies will be needed to implement this objective and ensure that expenditure produces a good rate of return or benefit cost ratio, while at the same time offering affordable transport in the Region.

### **Theme 2.1: Price the strategic transport network to encourage its efficient use<sup>6</sup>**

Analysis shows that pricing of roads can have a major impact on road use. The aim of these policies over the next 20 years is to achieve better traffic flow conditions on the road network at all times of the day through appropriate pricing. Less congestion means the roads are operating more efficiently.

#### **2.1.1 Provide for additional pricing for the use of the roading network as a step towards ensuring all users pay the cost of their use, including externalities**

The Government's roading reform package (announced in December 1998) could result in the proposed roading companies imposing various forms of road user charges. These charges will primarily be geared to rational commercial decision making. They may not reflect the full cost of road use. The Strategy seeks to provide the right modal choice signals. It is possible that the need for public transport subsidies will diminish.

<sup>6</sup> National Transport Statement

### **2.1.2 Provide for pricing on major new roads to manage the demand on the road network and to help pay for additional projects and services**

Major new roads will create downstream network capacity problems that need to be managed. This policy will improve the efficiency of the road network. It will allow in particular road freight that has a time cost, to pay for the ability to meet on time delivery demands. It will also reduce the need for additional road capacity onto routes where it is particularly expensive to provide such capacity.

### **2.1.3 Advocate for levies on the price of long stay parking in publicly and privately owned facilities in the Wellington CBD**

A major cost of private car use is parking. As part of congestion pricing, all long term car parking operators will price parking to include a levy. All funds generated by the levies on parking will be dedicated to help fund other elements of the Strategy.

### **2.1.4 Undertake a more detailed investigation of the role of road pricing in the region**

The technical analysis has shown that road pricing has the potential to deliver significant accessibility, safety and environmental benefits in addition to providing a mechanism to fund investment in the region's transportation infrastructure. Further work will be undertaken to develop a more definitive proposal for the future role of road pricing in this region.

## **Theme 2.2: Contain the growth of commuter road traffic<sup>7</sup>**

The policies in this strategic theme are aimed at influencing peak hour road traffic demand, to ensure the efficient use of the total strategic transport network.

The major urban centres are the areas of greatest concern when attempting to manage congestion. Consequently, commuter traffic management policies are targeted at the major urban city centres. The policies are also a total package: all of them need to be implemented to achieve the desired outcome.

Clearly, several of the policies under Objective 1 will also apply here. This is the nature of the total package approach.

### **2.2.1 Balance the capacity of the existing strategic transport network**

If arterial road capacity is to be increased, there needs to be careful assessment of the impact of those increased capacities on other parts of the road network, the demand for parking and the impact on public transport operations.

Capacity on one section of an arterial road cannot usefully be increased unless corresponding changes are made to handle the increased volume of traffic along the entire route. Capacity increases can be self defeating without this balance.

<sup>7</sup> Regional Policy Statement. Built Environment and Transport Chapter. Policy 4. Method 3.

### 2.2.2 Influence management of the number and distribution of long stay car parking spaces in major urban centres and encourage short stay parking

The use of single occupant private vehicles to travel in peak periods can be an inefficient use of resources and produce significant environmental costs with little benefit to the regional economy. Influencing the number of long stay car parking spaces is a measure to deter such behaviour and encourage other means of travel.

### 2.2.3 Provide for pricing at peak times to manage road demand and reduce road congestion



Congestion pricing, even at modest levels, will reduce peak hour road travel. Some of the demand will be catered for by spreading the peak, some by use of other modes and some by travel demand suppression through increased cost of travel. The level of pricing applied needs to start below the marginal cost. This measure is to be used at selected locations and is not a general tool.

#### 2.2.4 Promote supporting measures which will help reduce peak road demand

These measures include promotion of glide time, tele-commuting, cycling and higher vehicle occupancy. Increased public education about the true costs of car travel will also be beneficial. Government will be encouraged to remove fringe benefit tax on employer subsidised bus and train fares.

#### 2.2.5 Investigate and plan for the growth of major recreational traffic flows

Recreational road traffic growth, especially over holiday weekends, is becoming a major problem at some key points on the roading network. In most cases, roading improvements to accommodate commuter peak hour travel will have beneficial effects for recreational traffic. Public transport alternatives should assist in relieving this problem. Improving weekend services, and providing new services to recreational destinations, could assist in increasing public transport use.

#### 2.2.6 Introduce traffic calming in residential areas.

Road traffic should not unnecessarily use residential streets for through journeys. This can be controlled where appropriate by traffic calming solutions. Roothing authorities will be encouraged to apply these techniques.

#### Projects to 2004

The major project over the next five years, associated with this objective, is the detailed investigation of road pricing in the Region.

### Objective 4: Safety

To provide a safer community for everyone through a transport system that achieves or improves on the targets of the National Road Safety Plan through the Regional Road Safety Strategy.

#### Policies

Safety, like cost effectiveness, is one of the key criteria which must be applied under the Land Transport Act. The modelling process included safety as one of the criteria for developing the enhanced package. The following policies will be needed to implement both this objective and the Regional Road Safety Strategy .

The Wellington Region's Road Safety Strategy has been developed in response to the National Road Safety Plan and is constituted as part of the Regional Land Transport Strategy.



## **Theme 4.1: Improve the safe operation of the transport network<sup>8</sup>**

The aim of these policies is to minimise the number of fatalities and injuries that result from the use of transport.

Road safety initiatives need to be comprehensive in order to achieve the desired goals.

Road safety programmes should seek to develop:

- safer people;
- safer roads and environments;
- safer vehicles; and
- safety management.

The mechanisms required to achieve these aims are:

- education;
- encouragement;
- enforcement;
- engineering; and
- environment.

### **4.1.1 Develop programmes that improve the skills and behaviour of people using the transport system**

These programmes will include a combination of education, encouragement and enforcement. Programmes that enhance driver, cyclist or pedestrian skill levels will clearly have benefit. However these programmes must be complemented by programmes of education, encouragement and enforcement that attempt to address adverse behavioural patterns such as those associated with excessive speed and alcohol. The New Zealand Road Safety Programme administered by the LTSA and local authorities are key sources of funding for these programmes.

### **4.1.2 Plan development and design to improve road infrastructure and safety**

Planning and engineering have the potential to considerably improve the safe use of the transport system. Remedial treatment of accident blackspots is an example of improving the safety of roads. However, the use of good planning and design may prevent accidents occurring. For example, the location of developments relative to nearby roading infrastructure can have major safety implications. A primary school should not be located adjacent to a major arterial road that forces many young children to cross that road. It is therefore highly desirable that Territorial Authorities address road safety issues using a range of mechanisms including district plans and codes of practice, education and information strategies.

<sup>8</sup> National Transport Statement.

#### 4.1.3 Develop a safety culture with respect to travel assisted by more effective co-ordination of the planning and implementation of road safety programmes

Effective planning and co-ordination of road safety *interventions* should result in an enhanced safety culture and awareness of road safety issues. This involves co-ordinating the activities of government departments, territorial authorities and community groups, under the guidance of the Wellington Regional Road Safety Strategy.

#### 4.1.4 Encouraging greater use of cycling and walking for local trips

Shifting travel from high risk modes to low risk modes will enhance safety. District transport strategies will need to ensure a safe environment for cycling and walking where these are high use modes, for example in around shopping centres, educational facilities and transport stations. The four Land Use Guidelines will assist in this regard.

#### Projects to 2004

The modelling process ensured that all projects in the selected package meet the statutory criteria of safety. Some key roading projects have been designed primarily to improve land transport safety. These are listed below.

- Complete the safety improvements at McKays Crossing Junction;
- Complete the safety improvements on State Highway 1 north of Paremata; and
- Provide safety improvements to State Highway 58.

The following project will also significantly improve road safety:

- Implement the Active Traffic Management System at Ngauranga Gorge and three lanes in each direction south to the State Highways 1 and 2 Merge.

### Objective 5: Sustainability

To provide a land transport system that operates in a manner that recognises the needs of the community; avoids, remedies or mitigates adverse effects; uses resources in an efficient way; and supports an optimal demand for energy.

#### Policies

Under the Land Transport Act, all land transport projects must have regard to the effect the transport system is likely to have on the environment. The modelling process included sustainability as one of the criteria for developing the enhanced package. The following policies will be needed to implement this objective.

#### Theme 5.1: Minimise the impact of transport on the environment<sup>9</sup>

The continuing strong growth in demand for personal mobility within the Wellington Region, as in the rest of New Zealand, means that the impact of road transport on the

<sup>9</sup> Regional Policy Statement, Built Environment and Transport Chapter. Policy 4. Method 4.

environment will continue to grow. The Regional Policy Statement also provides a policy framework for measuring the environmental impact of transportation.

These policies aim to mitigate the impact of transport on the environment through encouraging environmentally friendly transport technology, walking and cycling.

#### **5.1.1 Promote environmentally benign transport mechanisms<sup>10</sup>**

The transport industry accounts for 35 to 40% of New Zealand's carbon dioxide emissions. Transport activities also produce significant quantities of nitrogen oxides, carbon monoxide, volatile organic compounds, hydrocarbons, lead, carbon and particulate matter. These emissions will impact on local communities either in the form of airborne pollution or as contaminants in the storm water system.

The responsibility for carbon dioxide emissions is global and is a national level policy issue. Carbon monoxide, however, is an issue that can be addressed at a regional or local level.

There are several mechanisms available to address the issue of impact on the environment. They are as follows:

- encourage the use of efficient and environmentally friendly vehicle technology in our vehicle fleets, for example well tuned engines, small engine sizes, light weight vehicles, efficient aerodynamic designs and catalytic converters;
- encourage the use of environmentally friendly fuels, for example electric vehicles, dual fuel engines, hydrogen fuel cells, CNG and LPG;
- reduce congestion where it occurs – this reduces exhaust emissions from idling vehicles;
- ensure that private cars, where they are used, are used efficiently, for example carpooling; and
- encourage the use of public transport and slow mode, including walking and cycling.

The most successful result will be obtained if all mechanisms are used in combination, rather than just one.

#### **5.1.2 Make cycling and walking more attractive**

At a regional level walking and cycling can be encouraged by:

- ensuring that all roading plans include good quality walking and cycling provisions, though those may not necessarily be on the same route
- ensuring that plans for roads which link communities include provision for walking and cycling.

Territorial local authorities and Transit New Zealand will be encouraged to make cycling and walking attractive by providing and promoting cycle lanes, enhanced crossing and footway facilities, greater priority, secure cycle storage, and by increasing the pleasantness and safety of existing facilities and routes.

<sup>10</sup> Regional Policy Statement, Energy Chapter. Policy 5. Method 4.

Cycling and walking are important modes, both in their own right and for access to and from public transport. Few options are available at the strategic level, but territorial authorities can enhance these modes in stages through a range of measures.

In many cases, separate facilities for pedestrians or cyclists are warranted.

### 5.1.3 Price at peak times on the road network to mitigate adverse impacts of road use

Congested road traffic causes more air pollution than free flowing road traffic. Some streets in Wellington City already have air pollution levels higher than the International



Guidelines. Predictions suggest other roads will also exceed these standards in the future as traffic flows increase. Influencing road congestion through pricing is one way of mitigating these problems.

### Projects to 2004

As sustainability was one of the major factors used in the modelling process, all proposals in the selected packages are those which, on balance with the other four objectives, best meet the need to provide a land transport system which operates in a way that recognises the needs of the community, avoids, remedies or mitigates adverse

effects, uses resources in an efficient way and supports an optimal demand for energy.

Sustainability will be enhanced by balancing capacity along the length of the entire route, managing the growth of commuter traffic, monitoring air quality and fuel consumption, increasing the availability and attractiveness of rail travel, and enhancing rail and slow mode travel.

## Corridor plans: overview

This part of the Strategy translates the objectives, themes and policies into specific action programmes or “packages” for six major transport corridors, the Wellington CBD, and other strategic routes.

A transport corridor is the alignment of transport infrastructure (road or rail) that links activity centres. An activity centre can be a community of people, a commercial area or both. A transport corridor links the main urban areas of the region to each other. Within each corridor there will be a strategic road or public transport service or both.

### The corridors

There are six transport corridors or areas in the Wellington Region. These are:

1. Western Corridor – Otaki to Ngauranga Merge;
2. Hutt Corridor - Upper Hutt to Ngauranga Merge;
3. Wairarapa Corridor – Masterton to Upper Hutt;
4. Porirua to Hutt Valley;
5. Ngauranga to Wellington CBD; and
6. Wellington South to Airport.

The other key transport area is the Wellington CBD.

In addition, there are strategic routes which form an important part of the Region's transport network. These include:

- Wainuiomata to Lower Hutt CBD;
- Karori to Wellington CBD;
- Onslow to Wellington CBD;
- Petone Esplanade to Eastbourne; and
- Stokes Valley/SH2 to Lower Hutt CBD.

Appendix 2 identifies the roads and railway lines in the region's strategic transport network.

## **Matters common to all corridors**

### **Network balance**

The Wellington strategic road and rail network needs to be operated and developed in a way that carefully balances road capacity in one part of the network with other parts of the road and rail network. Accordingly, improvements in one part of the network cannot be thought of as independent to the rest of the network. The impacts of an improvement elsewhere in the network must be provided for if efficient network performance is to be maintained.

### **Corridor Plan Sequencing**

The sequencing of projects may be strategically significant in some corridors. This happens when large new increments of road capacity are provided which will disturb the network balance if the projects are not sequenced correctly. Where the sequencing of projects is strategically significant this will be specified in the corridor plans.

### **Road pricing**

There is a case for introducing road pricing in the Wellington Region. Analysis has shown that where road pricing is used to fund selected new infrastructure and services, there is a gain in total network performance, economic efficiency and benefits to the economy. Road pricing can be useful in managing some of the adverse impacts of new infrastructure such as induced traffic, balancing network flows and environmental impacts. At this stage, road pricing set at a level to change behaviour and reduce demand on total network is not advocated. Analysis has shown that in Wellington such an approach is not required and is likely to lead to a net loss to the local economy. Careful consideration of the mechanism of road pricing is now required.

### **Land use**

Land use measures are useful supporting measures in managing the demand for travel. Careful consideration of how land is developed, particularly in the context of the Wellington Region's strongly linear network, can assist in optimising the demand on the road network. Land use measures can also assist in making other forms of travel such as walking, cycling, car sharing and public transport safe and convenient alternatives to private vehicle travel. The Regional Land Transport Committee has promulgated land use guidelines to assist in achieving these aims. These guidelines are intended to be reflected in local authority District Plans.

### **Locally significant routes**

A number of locally significant routes, such as the Johnsonville Line and the Wainuiomata Road, are not separately identified in the following corridor plans. In these cases, no significant change is proposed as it is assumed that current levels of service will be maintained through appropriate minor works and maintenance, such as refurbishment or replacement of the Johnsonville rail units.

### **Integrated ticketing**

The ability to purchase one ticket for a journey that might involve one or more transfers has advantages for public transport users. In particular, they are not charged more than for a long journey of similar length on a single operator's services. This lack of penalty assists in retaining these users and encouraging new ones. Such a system will be introduced progressively during the first five year term of this strategy.

### **Integrate land with sea/air**

All corridors need to include linkages to and from ferries, the port and the airport.

### **Cost**

The costs provided in the corridor plans are capital costs in 1998 dollars. This means that the considerable operational expenditure required to deliver public transport services are not identified. The transport modelling work has included these public transport annual operating costs. Overall annual expenditure by mode (capital and operational) proposed by this strategy document and averaged over the full twenty year period is similar to the current annual expenditure on each mode.

### **Structure of the plans**

The following plans outline the proposed changes to roading and public transport both for the short term, 1999-2004, and additional projects which may be implemented in the years beyond 2004, subject to pricing strategies. The estimated costs are provided.

The statutory requirements of the Regional Land Transport Strategies (sections 175-183 of the Land Transport Act) only apply to the projects shown for the short term, 1999-2004. Roading authorities, the Regional Council, Transfund New Zealand and the Land Transport Safety Authority have to act in a manner not inconsistent with these projects and the policies set out earlier.

All the proposals in the plans derive from the technical analysis, which has been based on identified needs and issues. The needs and issues for each transport corridor or area are summarised at the beginning of each corridor plan.

The proposals put forward for both the short and medium term are those which best meet the transport needs of the region at this time. Alternative projects that equal or better match the framework of the Strategy may be acceptable. There are existing technical processes, such as benefit cost analysis and the resource consent procedures under the Resource Management Act, for evaluating alternative projects. As well, such projects may need to be formally approved by the Regional Land Transport Committee as being acceptable alternatives. Projects identified in these corridor plans will only receive Transfund New Zealand funding support if they satisfy the prevailing funding criteria set by Transfund New Zealand at the time they are ready for implementation.

The true economic worth of these projects can only be understood as part of the whole package.

## Western Corridor: Otaki to Ngauranga Merge

This corridor generally follows the line of the current State Highway 1 and the North Island Main Trunk Railway from Otaki to Wellington.

### Identified needs and issues

- Peak period road congestion during weekdays and at weekends;
- Inadequate peak and off peak frequency levels of passenger rail in the Kapiti area;
- Increasing demands for access along the corridor because of population growth on the Kapiti Coast and insufficient alternative access ways;
- Lack of direct access to the rail corridors for significant populations;
- Concern about community severance at Mana, Plimmerton and Pukerua Bay;
- High accident rates along State Highway 1;
- Increases in freight movement;
- Increases in journeys associated with recreation and travel;
- Increases in forestry freight movement; and
- Poor quality facilities for bus and rail users.

This strategy recognises the strategic significance of the current capacity constraints on the Western Corridor out of Wellington. This corridor is important for road, rail, freight and passenger services. In addition to the capacity issues there are issues that need to be addressed including community impact of transport activities, safety, environmental impact and slow mode.

A range of options has been proposed to date, including Transmission Gully, upgrading State Highway 1 and providing public transport improvements. A Western Corridor Implementation Plan is needed to identify the best option for addressing these issues.

The community, in response to the need for enhanced road capacity, has expressed a majority support of regional funding for Transmission Gully. Given that there is a statistically significant community preference for Transmission Gully, Transit New Zealand is encouraged to purchase land on the designated route.

These needs and issues were used in the modelling process to identify the following short and long term proposals.



## Projects to 2004

### Roading

- Design and construct the first stage of the Kapiti Local Connecting Road (\$37m);
- Complete the safety improvements at McKays Crossing Junction (\$12m);
- Complete the safety improvements on State Highway 1 north of Paremata;
- Implement the Active Traffic Management System at Ngauranga Gorge and three lanes in each direction south to the State Highways 1 and 2 Merge (\$5m);
- Develop a Western Corridor Implementation Plan that includes both road and rail and identifies the optimum packages for the Corridor, by February 2000; and
- Continue the purchase of land on the Transmission Gully route.

### Public transport

- Provide additional commuter car and cycle parks at major railway stations;
- Seal existing unsealed car parks at stations;
- Upgrade the Paraparaumu Railway Station building (\$0.5m);
- Build a new railway station at Raumati (\$2m);
- Extend the urban electric rail service to Waikanae (\$5m);
- Increase weekday urban rail service frequency from the Kapiti Coast to Wellington to 15 minutes in peak periods and 30 minutes in the off peak (annual additional operating cost of \$1.2m);
- Increase rail feeder bus services to match the increase in urban rail frequency;
- Allow commercial commuter bus services to operate from Titahi Bay and Whitby to Wellington;
- For the longer term, investigate the viability of operating light rail services from Plimmerton and Porirua East to Wellington, or effective alternatives;
- Increase local bus services to connect with increased rail services; and
- Construct an improved bus/rail connection at Porirua Railway Station (\$2.3m).

### Project sequencing

The construction of Transmission Gully would have a major impact on the balance of capacity in the network. The following projects should be implemented in advance of Transmission Gully to ensure that network balance is maintained:

- Implement the Ngauranga Gorge Active Traffic Management System plus three lanes in each direction to the south;
- Extend the electric rail system to Waikanae;
- Increase the weekday urban rail frequency from the Kapiti Coast to Wellington;
- Build a new station at Raumati;
- Upgrade the supporting infrastructure such as Park and Ride and station appearances;
- Construct the Ngauranga-Aotea tidal flow system;
- Construct the Wellington Inner City Bypass;
- Enhance the Wellington Inner City Traffic Management;

- Enhance the bus/rail interchange at Wellington Station; and
- Improve pedestrian linkages from Wellington Station to the CBD.

#### **Projects for beyond 2004**

- Implement the Western Corridor Implementation Plan;
- Construct the remainder of the Kapiti Local Connecting Road (\$24m);
- Provide new stations at Lindale, Aotea Lagoon and Glenside as population growth creates sufficient demand (\$4m);
- Upgrade remaining railway stations on the corridor;
- Provide light rail services or alternatives from Plimmerton and Porirua East to Wellington (enhanced bus and rail services being provided until demand warrants light rail)(\$15m); and
- Provide additional rail services to Otaki and beyond.

### **Hutt Corridor: Upper Hutt to Ngauranga Merge**

This corridor starts at the northern end of the present State Highway 2 bypass of Upper Hutt City Centre, and runs through to the Ngauranga Merge of State Highways 1 and 2.

#### **Identified needs and issues**

- Low population growth in the Hutt Valley;
- Continued employment in Wellington CBD for people living outside of Wellington City;
- Slow down in manufacturing regionally;
- Peak period road congestion;
- Inadequate peak frequency levels of passenger rail in the Hutt;
- Increase in freight movements across the Hutt Valley, particularly near or in residential areas;
- Increase in journeys for recreation and shopping;
- Poor local access in and out of the Hutt Valley;
- Lack of direct passenger rail access to the Lower Hutt Central area; and
- Growing need for improved roads to meet increases in tourism.

These needs and issues were used in the modelling process to identify the following short and long term proposals.

#### **Projects to 2004**

##### **Roading**

- Design and construct an upgrade of the Korokoro/Dowse intersections on State Highway 2 (\$37m);
- Design and construct SH2/58 intersection improvements involving grade separation and removal of traffic signals; and
- Complete design for the upgrade of the Rimutaka Hill road to 70kph standard.

### Public transport

- Investigate the construction of a bus or high occupancy vehicle lane which does not compromise the use of cycles on the route from Petone to Ngauranga on State Highway 2; construct if appropriate (\$15m);
- Allow additional direct commercial bus services from Wainuiomata, Stokes Valley, Western Hills and Northern Upper Hutt to Wellington CBD;
- Allow additional direct commercial ferry services across the Wellington harbour;
- Increase peak hour rail services to a 20 minute frequency from Upper Hutt;
- Increase rail feeder bus services to match the increase in urban rail frequency;
- Provide additional commuter car parks at main railway stations (\$15m); and
- Refurbish Upper Hutt Railway Station (\$450,000) and Petone Railway Station.

### Projects for beyond 2004

- Extend the Melling line (as a light rail service) to Waterloo through Hutt City (\$9m);
- Investigate the use of Petone Esplanade and identify options for an East-West link for reducing congestion. Upgrade Petone Esplanade if appropriate (\$5m);
- Upgrade the Melling and Kennedy Good intersections of State Highway 2 (\$33m);
- Investigate the viability of light rail services or effective alternatives from Stokes Valley to Wellington and provide when this service becomes cost effective (\$15m);
- Upgrade remaining railway stations on the corridor (\$1.5m);

## Wairarapa Corridor: Masterton to Upper Hutt

This corridor follows the current State Highway 2 from the Upper Hutt over the Kaitoke and Rimutaka Hills through to Masterton.

### Identified needs and issues

- Low or declining population growth in the Wairarapa;
- Continuing regional employment in Wellington CBD;
- Above average (for the region) growth in forestry;
- Increase in freight traffic on arterial freight routes to the Port;
- Growth of tourism in the region;
- Increases in recreation and shopping journeys; and
- Poor passenger rail commuter frequency.

These needs and issues were used in the modelling process to identify the following short and long term proposals.

### Projects to 2004

#### Roading

- Construct improvements on the Kaitoke Hill Road (\$10m);
- Maintain continuous improvements on the Rimutaka Hill Road;

- Complete the 70 kph standard design for the Rimutaka Hill Road;
- Develop passing lanes on the Featherston-Masterton Road; and
- Extend the seal on rural local roads of special tourist or forestry significance where cost effective.

#### **Public transport**

- Continuous improvement in the quality and accessibility of passenger rail services on the Upper Hutt – Masterton route including improving commuter train frequency.

#### **Projects for beyond 2004**

- Develop the Rimutaka Hill road to 70 kph standards (\$30m);
- Develop additional passing lanes on the Featherston-Masterton Road;
- Upgrade railway stations on the corridor (\$0.5m);
- Construct a railway station at Timberlea; and
- Extend the seal on rural local roads of special tourist or forestry significance where cost effective.

## **Porirua to Hutt Valley**

This corridor is the area from State Highway 58 south to the Ngauranga Interchange. It is an area of hills bounded by State Highway 58 and State Highways 1 and 2.

#### **Identified needs and issues**

- Low or declining population growth in Porirua and the Hutt Valley;
- Continuing regional employment in Wellington CBD;
- Growth of tourism in the region;
- Increases in recreation and shopping journeys; and
- Lack of a direct road link between Lower Hutt central and Porirua central.

These needs and issues were used in the modelling process to identify the following short and long term proposals.

#### **Projects to 2004**

- Provide safety improvements to State Highway 58 and its junction with SH1 (\$16m); and
- Construct a replacement Pauatahanui bridge (\$2.5m).

#### **Projects for beyond 2004**

- Construct the Hutt Valley-Porirua Road link in conjunction with the Western Corridor Implementation Plan (\$62m).

## **Ngauranga to Wellington CBD**

The Ngauranga to CBD section of the arterial network incorporates the Wellington Urban Motorway from the Ngauranga Gorge Merge through to the end of the Terrace Tunnel.

### **Identified needs and issues**

- Serious peak period road congestion; and
- High accident rates.

These needs and issues were used in the modelling process to identify the following short and long term proposals.

### **Projects to 2004**

- Construct the Ngauranga-Aotea tidal flow system (\$16m).

## **Wellington CBD**

This transport area comprises the Wellington Central Business District from the Wellington Railway Station through to the Basin Reserve. It is bounded by the harbour on the east side and the Urban Motorway to the west.

### **Identified needs and issues**

- Peak period and weekend road congestion;
- Inadequate penetration of passenger rail services into the CBD;
- Inadequate pedestrian connections from the CBD to the railway station;
- Inadequate interchange between bus and rail at Wellington Station;
- Bus services caught in road congestion;
- Poor pedestrian travel conditions; and
- Car parking management and supply.

These needs and issues were used in the modelling process to identify the following short and long term proposals.

### **Projects to 2004**

#### **Roading**

- Construct the next phase of the inner city bypass through Buckle and Arthur Streets (\$26m); and
- Enhance traffic management to improve pedestrian and vehicle flows (\$2m).

#### **Public transport**

- Improve bus priority through CBD traffic (\$1.5m);
- Enhance the bus/rail interchange at Wellington Railway Station (\$6m); and
- Improve pedestrian linkages from Wellington Station to the CBD (\$1.8m).

### Projects for beyond 2004

- Investigate the construction of light rail from the station to the BNZ in Willis Street (estimated construction cost \$20m); and
- Car parking levies.

## Wellington South to Airport

This corridor covers that area of Wellington City south and east of the Basin Reserve through to the Wellington Airport.

### Identified needs and issues

- Peak period and weekend road congestion; and
- Bus services caught in road traffic congestion.

These needs and issues were used in the modelling process to identify the following short and long term proposals.

### Proposals to 2004

#### Roading

- Upgrade the route through Newtown on Adelaide Road from the Basin Reserve to John Street (\$3m); and
- Undertake further investigation of this transport corridor with relevant roading and transport authorities.

#### Public transport

- Establish priority routes for Newtown buses servicing the southern and eastern suburbs (\$0.8m); and
- Provide a bus service to the airport from the CBD.

### Projects for beyond 2004

- Investigate alternative solutions, and if cost effective construct Mt Victoria Tunnel duplication in conjunction with a road toll on the tunnels (\$50m).

## **Karori to Wellington CBD**

This strategic route covers that area of Wellington to the West of the Wellington CBD through to Karori.

### **Identified needs and issues**

- Peak period road congestion; and
- Bus services caught in road traffic congestion.

These needs and issues were used in the modelling process to identify the following short and long term proposals.

### **Projects to 2004**

#### **Public Transport**

- Construct bus and high occupancy vehicle bus priority measures through Karori down to the Karori Tunnel (\$0.4m).

### **Projects for beyond 2004**

Investigate alternative solutions, and if cost effective, construct a second Karori Tunnel in conjunction with a road toll on the tunnels (\$15m).

# FURTHER REGIONAL PASSENGER TRANSPORT POLICIES

# SECTION C





## Introduction

This section contains passenger transport policies which will guide the Regional Council in the delivery of the passenger transport elements of the overall strategy on a day to day basis. They are more detailed than the high level public transport policies in the previous section.

This section and the Schedule of Specified Passenger Transport Services (which is not included in this document, but is available on request) constitute the **Regional Passenger Transport Plan** for the purposes of Section 47 of the Transport Services Licensing Act 1989. The Schedule sets out the current levels of public transport service in each part of the Region.

### Funding

The Regional Council is the purchaser of passenger transport services in the Wellington Region, with funding from regional rates and (through Transfund New Zealand) from road users. The Council is not able to afford, nor is it sensible to provide, equal levels of public transport service in all parts of the region. The level of public funding required to maintain each service is determined by the degree of commercial viability, which in turn is dependent on a wide range of geographic, demographic and historic factors.

Subject to sufficient funding being available, each service in the current route network (as listed in the Schedule of Specified Services) will be maintained where the patronage justifies, unless the Council and the operator agree that a change is necessary.

The Regional Council's Transport Funding Policy, prepared under the Local Government Amendment Act No 3, describes how public transport services in the Region should be funded based on the benefits that those services provide. This involves a mixture of the user, the road user and ratepayers.

### Service levels

Current levels of service are summarised in a separate document - the Schedule of Specified Public Transport Services.

The Council has a contract with Tranz Rail Ltd for urban rail services. Regular reviews of these services are undertaken within the terms of the contract.

### Reviews of bus services

The Regional Council, in conjunction with the present operator and in consultation with users, residents and territorial local authorities, reviews each bus service approximately every five years. The draft programme for reviews (largely determined by contract expiry dates) is provided below.

1999:	Kapiti Coast Newlands/Paparangi to Wellington Churton Park (possible extension into Westchester Drive area) Maungaraki/Normandale to Petone Station and Lower Hutt.
2000:	Western Hutt School Services Eastbourne Schools Lower Hutt–Gracefield–Seaview–Petone Upper Hutt North Upper Hutt South Seatoun Express Miramar North Express Ascot Park – Porirua Days Bay Ferry
2001:	Stokes Valley Naenae Camborne–Plimmerton Shopper Martinborough–Featherston Wainuiomata Newtown–Brooklyn–Happy Valley–Island Bay (Southern Shopper) Happy Valley Brooklyn West/Kowhai Park Mt Victoria–City–Highbury Kelson, Belmont Wellington City School Services
2002:	Campus Connection (Karori–Kelburn–Te Aro–Kilbirnie–Miramar) Masterton Town Masterton–Featherston Wilton–City–Roseneath–Kilbirnie Mairangi–Northland–City–Houghton Bay/Southgate Karori West, South Karori Wrights Hill (Karori)–City–Vogeltown–Kingston Evans Bay Korokoro, Maungaraki, Normandale Eastbourne–Petone–Wellington Titahi Bay Sievers Grove Whitby Upper Hutt School Services Stokes Valley School Services
2003:	Strathmore Miramar Heights Khandallah
2004:	Wellington City trunk routes (the current trolleybus routes)

In addition to these reviews, the Regional Council intends to rationalise the bus route numbering system to eliminate duplication of route numbers in the region. This will reduce confusion and simplify the placing of timetables on the Internet.

## Vehicle capacity and loading standards

225. The following measures will be applied to the average loadings of all trips on a route at the maximum loading point in the dominant direction of travel, during the period concerned.
226. Depending on demand and funds available, the Regional Council will take steps to increase frequency so as to improve the comfort, safety and attractiveness of services in cases where, at the maximum loading point on a consistent basis:

Services at the Peak of the Peak	Patronage exceeds 125% of seating capacity (or the maximum seated + standing load, whichever is the lesser) on weekday services timetabled to arrive in the Wellington CBD and other key nodal points between 7.30am and 8.30am, or to depart between 5.00pm and 6.00pm.
Services at the Shoulder of the Peak	Patronage exceeds 100% of seating capacity on weekday services between 7.00am and 9.00am or between 3.00pm and 5.00pm.
School Bus Services	Patronage exceeds 125% of seating capacity (or the maximum seated + standing load, whichever is the lesser) on school bus services.
Services in the inter-peak, in the evenings and at weekends.	Patronage exceeds 80% of seating capacity on any service at any other time. This measure is designed to encourage further growth in patronage where demand is already strong.

### New services and service extensions

The Regional Council will consider requests for service extensions into new residential areas where loadings consistent with the above standards are likely to be achieved within 3 years of the introduction of services. Any new service or major service alteration will normally be subject to a trial period of not less than 6 months.

Service frequencies, span of operation and/or vehicle capacity may be considered for reduction in the following cases:

Services at the Peak of the Peak	Patronage is less than 80% of seating capacity on weekday services timetabled to arrive in the Wellington CBD and other key nodal points between 7.30am and 8.30am, or to depart between 5.00pm and 6.00pm.
Services at the Shoulder of the Peak	Patronage is less than 50% of seating capacity on weekday services between 7.00am and 9.00am or between 3.00pm and 5.00pm.
School Bus Services	Patronage is less than 80% of seating capacity.
Services in the inter-peak, in the evenings and at weekends.	Patronage is less than 25% of seating capacity on any service at any other time.

The minimum level of service/new service criteria will take into account the impact on the communities serviced.

### Passenger transport infrastructure

The Local Government Act prevents the Regional Council from owning passenger transport infrastructure such as bus stops and waiting shelters. While this situation remains, the Regional Council's role will be to:

- provide funding for passenger facilities from rates and (through Transfund New Zealand) from road users; and
- provide liaison between passenger transport users, operators and territorial local authorities to achieve the best possible outputs for the available funding.

To this end, the Council has developed evaluation procedures to prioritise projects for funding.

The Council has also developed and published guidelines for the construction and maintenance of public transport infrastructure. In the case of railway infrastructure, this is contained within the contractual agreement with Tranz Rail Ltd.

## Fare levels

Fares on all urban passenger services in the Wellington Region will be maintained at a level which compares favourably with the perceived cost of using a private car for the same journey. Currently, fares cover about 70% of the cost associated with providing all services, both commercial and contracted. This ratio will remain the overall goal. This represents a significantly higher fare recovery ratio than is common elsewhere in New Zealand or in comparable communities in other countries.

Fare levels will be progressively adjusted to ensure fares (absolute and per kilometre) are equitable within the Region and stand reasonable comparison with those in other metropolitan areas in New Zealand.

Fare levels will be reviewed from time to time by the Regional Council, to take into account changes in the costs of car travel and in the transport consumer price index.

Current fare schedules are shown in the separate Schedule of Specified Passenger Transport Services.

## Fare structures

The Regional Council will continue to work with operators to rationalise bus fare structures over time, in the interests of user-friendliness and equity between different parts of the region.

The Council's current long-term contract arrangement with Tranz Rail Ltd gives that company the freedom to set train fares within set parameters which relate to the cost of travel by private motor vehicle, without reference to fares on connecting and parallel bus services.

Half fares for school students aged 5 to 15 inclusive will be maintained. Sixteen to nineteen year-olds who are full-time secondary school students are eligible for half fares on production of a photo ID issued by their school. The Regional Council does not fund any concessions for tertiary students (see Transport for Students).

## Ticketing

The Regional Council will encourage operators to develop jointly a region-wide, inter-operator ticketing system which enables travellers to pay for all their public transport journeys using a single ticketing system

## Transport for students

School students have traditionally made extensive use of the region's rail services, and both public and special school buses, for travel to and from school. The Government makes no contribution to the costs of urban school bus travel through Vote: Education.

Schools' and parents' expectations have increased as a result of the Government's education policy which emphasises parental choice rather than attendance at the nearest school. Parents and schools have come to regard half fares for students, and special school bus services, as a right. The cost of that "right" falls increasingly on the Regional Council and the regional community.

The Regional Council will, over the next three years, review the appropriateness of funding concessions and special services for school students.



The Regional Council also recognises the fact that if special services are provided, this reduces congestion on public bus services, and may reduce the use of private cars to take students to and from schools.

In the meantime, and subject to the availability of funding:

- pre-schoolers (all children aged less than 5) will be carried free of charge on all services, if accompanied by an adult or child ten years of age or over; and
- school students aged 5-15 inclusive, plus full time secondary students under the age

of 20 (with appropriate proof of school attendance), will be charged half-fare on all services at all times, subject to some "Adult Fares Only" restrictions where school students have a reasonable alternative service available to them.

The Regional Council will maintain the Concessionary Fares Scheme whereby passenger transport operators are refunded a proportion of the difference in fare between the child fare and the equivalent adult fare. The formula to be applied will be included in the Council's Passenger Transport Tendering and Contracting Procedures.

Special services will be provided for school children where volumes are sufficient for this to be a lower cost option than carrying them on scheduled services, or where distance and/or safety considerations make it desirable and no suitable alternative public services are available. Regional Council funded school bus services will only be provided within (and not between) the urban areas of Wellington, Hutt Valley, Porirua Basin, and Waikanae-Paraparaumu-Raumati.

The Regional Council expects that the Ministry of Education will continue to take responsibility for the provision of transport to and from their nearest school for children living in rural areas.

## **Transport for people with disabilities**

The Regional Council will encourage public transport operators to provide for physically disabled people on ordinary services (largely by means of super-low-floor and "kneeling" vehicles and the provision of wheelchair ramps) where this can be achieved economically and where the measures contribute to the comfort or convenience of other customers.

Where an operator has a proven record of providing a particular service using super low floor buses, the Regional Council will require the use of such vehicles to be continued should the service be contracted in the future.

The Regional Council will continue to fund Total Mobility – subsidised taxi fares for people unable because of their disability to use conventional public transport. As at the beginning of 1999, approximately 4300 people were enrolled in the scheme. The Council will work with disability agencies, other regional councils, and central government agencies to achieve a sustainable long-term future for the scheme nationally.

In the meantime, the eligibility criteria for Total Mobility are:

"Eligible people are those who for reasons of physical, sensory, intellectual or psychological disability, whether congenital, acquired or age-related, satisfy the following criteria: Cannot unaided (or could not if public passenger transport were available) complete any of the component activities involved in making use of public passenger transport.



The component parts of public transport are defined as:

- proceeding to the nearest bus stop/railway station;
- boarding, riding securely and alighting; and
- proceeding from the destination stop to the trip end."

The Regional Council will work with Total Mobility users, disability agencies and taxi companies to develop customer service standards which taxi companies will be required to achieve in order to provide Total Mobility service.

## **Transport for the elderly and beneficiaries**

### **"Taxi Fair"**

Where a passenger transport service is withdrawn leaving no service in the middle of the day on weekdays, the Council may provide limited taxi fare subsidies to elderly people who have regularly used the service which has been withdrawn. This scheme, known as "Taxi Fair", is based on the Total Mobility scheme for people with disabilities, but is more restrictive, and is only used where there is a clear financial advantage, relative to maintaining the service withdrawn.

### **Special fares for the elderly and beneficiaries**

The only discounted fare for residents aged over 60 which the Regional Council funds is the Beneficiary Fare available on bus services in Wellington City south of Ngauranga Gorge. This fare is a "hangover" from the days when buses in this area were operated by the Wellington City Council. The Council does not intend to extend this scheme. Its preference is for interpeak or off-peak fares to be made available to all passengers.

## **Vehicle quality and safety**

### **Buses**

The Regional Council will maintain and review its Vehicle Quality Standards (VQS) for Urban Services which were developed in 1992 and which, among other things, require contracted public transport operators' fleets to have an average age of not more than 10 years, with no vehicle being in service more than 20 years (except for vehicles used exclusively for school bus services, in which case the maximum age is 25 years).

Where operators have introduced SLF (super low floor) buses on particular routes, the Regional Council will require such vehicles to be used by any operators who are subsequently contracted to operate those services. If necessary, the Regional Council will also amend the VQS to impose standards relating to emissions (including noise) and advertising on vehicles.

In the interests of a high quality public transport service, the Regional Council reserves the right to “contract over” commercial services which do not meet the vehicle quality standards for contracted services.

### **Trains**

The Regional Council contracts for the provision of rail services with Tranz Rail Ltd under the “sole supplier” provisions of Transfund New Zealand’s competitive pricing procedures. The contract conditions will include specific requirements for the maintenance, refurbishment, and/or replacement of rail vehicles. The standards required will reflect rail industry best practice, standards offered by road based urban services and consideration of the funding levels available. The safety of these services will be subject to Tranz Rail’s operational Safety Management System, which is monitored for compliance by the Land Transport Safety Authority.

## **Vehicle and vessel safety**

The Land Transport Safety Authority (LTSA) is responsible for setting standards for safety in the operation of passenger transport services. Operators who fail to comply with LTSA requirements will not be eligible for Wellington Regional Council contracts.

The Maritime Safety Authority has a similar role where harbour ferries are concerned, should the Regional Council continue to contract for such services.

### **Information**

The Regional Council will continue to take responsibility for producing and distributing information about bus routes, times and fares. This includes timetable leaflets, timetables at bus stops, general guides to the use of public transport, notices, fliers, print advertisements and the Ridewell telephone enquiry service. Where appropriate, the Regional Council will identify and adopt improved methods for providing information such as “real time” information at bus stops and rail stations.

Tranz Rail takes responsibility for its own timetable production and distribution.

Marketing and promotion of services, as distinct from basic information, is the responsibility of each operator. The Regional Council has the role of promoting public passenger transport as the mode of choice as part of its strategic transport objectives.

### **Taxi services**

See also: Transport for People with Disabilities.

The Transport Services Licensing Act 1989 allows Regional Councils to grant Approved Taxi Organisations exemptions to the requirement to provide a 24 hour, seven day a week taxi service if, in its opinion, the public does not demand such a service. The

Council believes that the public expects taxis to be available continuously in main urban areas, and does not believe that there are compelling reasons for some taxi companies to be granted an exemption to the 24-hour service requirement while other companies are expected to comply.

Therefore, the Regional Council will not grant exemptions for Approved Taxi Organisations from the requirement to provide continuous (24 hours a day, seven days a week) service in Wellington, Porirua, Kapiti Coast (Paraparaumu-Raumati-Waikanae), Lower Hutt, Upper Hutt and Masterton.

In rural areas (including the towns of Otaki, Featherston, Greytown, Carterton and Martinborough) the Council will grant exemptions from the continuous service requirement. This means that any Approved Taxi Organisation (including a sole operator approved by the Ministry of Transport) may provide whatever level of service has been notified to and registered by the council. Any reduction in operating hours will be regarded as a variation to the registration and will therefore be subject to the requirement to provide 21 days' notice.



# APPENDICES

## Appendix 1

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There are a large number of documents that have been produced as part of the development and analysis of this strategy. They are listed below by author.

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## Appendix 2

### Schedule of Railway Lines and Roads in the Strategic Transport Network

North Island Main Trunk Railway  
Wairarapa Railway  
Melling Line  
Gracefield Branch Railway  
Johnsonville Line  
State Highway 1  
State Highway 2  
State Highway 53  
State Highway 58  
Main Road (Tawa)  
Middleton Road  
Johnsonville Road  
Newlands Road  
Burma Road  
Box Hill Road  
Khandallah Road  
Ottawa Road  
Waikowhai Street  
Churchill Drive  
Wilton Road (Churchill Drive To Curtis Street)  
Curtis Street  
Chaytor Street  
Karori Road  
Glenmore Street  
Tinakori Road (Glenmore Street to Bowen Street)  
Whitmore Street  
Adelaide Road  
The Parade  
Hutt Road  
Thorndon Quay  
Ganges Road  
Everest Street (Ganges Road to Ranui Crescent)  
Ranui Crescent (Everest Street to Cashmere Avenue)  
Cashmere Avenue  
Mandalay Terrace  
Homebush Road  
Onslow Road  
Crofton Road (Waikowhai Street to Kenya Street)  
Kenya Street  
Ngaio Gorge Road  
Kaiwharawhara Road  
Featherston Street  
Aotea Quay  
Waterloo Quay  
Customhouse Quay (Waterloo Quay to Jervois Quay)  
Jervois Quay  
Cable Street  
Kent Terrace  
Cambridge Terrace (Wellington)  
Wakefield Street (Cambridge Terrace to Jervois Quay)  
Golden Mile  
Bell Road (Gracefield Road to Parkside Road)  
Cambridge Terrace  
Clendon Street

Daysh Street  
Eastern Hutt Road  
Fairway Drive  
Gracefield Road (Wainuiomata Hill Road to Bell Road)  
Melling Link  
Naenae Road (Clendon Street to Daysh Street)  
Parkside Road  
Randwick Road  
Seaview Road (Seaview Roundabout to Parkside Road)  
The Esplanade  
Wainui Road  
Wainui Hill Road  
Waione Street  
Whites Line East (Randwick Road to Wainui Road)  
Grays Road  
Plimmerton-Pauatahanui Road  
Paekakariki Hill Road (SH58 to Plimmerton-Pauatahanui Road)  
Kenepuru Drive  
Mungavin Avenue  
Te Whaka Whitianga o Ngatitōia  
Titahi Bay Road  
Whitford Brown Avenue  
Fergusson Drive  
Eastern Hutt Road  
Gibbons Street  
Whakatiki Street  
Totara Park Road  
Poplar Avenue  
Raumati Road  
Kapiti Road  
Arawhata Road  
Mazengarb Road  
Te Moana Road

**Note:** For further information on the Strategic Transport Network refer to the District Plan of the appropriate Territorial Local Authority.



### Appendix 3

#### The Wellington Regional Policy Statement The Land Transport Policies and Methods

Relevant RPS policies and methods in the Energy section are:

Policy 5:

*To promote a movement away from the use of non-renewable fossil fuels as the primary source of motive power for transport in the Region.*

Method 4:

The Wellington Regional Council, through its Regional Land Transport Strategy, will:

- (1) Promote existing modes of sustainable transport and their associated infrastructure;
- (2) Promote, in the short-term, more efficient use of fossil fuels in transport; and
- (3) *Promote, where appropriate, in the medium to longer-term, the progressive development and use of cost effective transport modes that are propelled by motive power derived from renewable energy sources.*

Relevant RPS policies and methods in the Built Environment and Transportation section are:

Policy 3:

To promote the development of transportation systems in the Region that:

- (1) Meet community needs for accessibility;
- (2) Use modes of transport that are powered by renewable energy fuels;
- (3) Use energy efficiently;
- (4) Discourage dispersed development; and
- (5) *Avoid or reduce adverse effects on human health, public amenity and water, soil and air and ecosystems.*

Policy 4:

*To provide for the accessibility needs of the region by protecting existing transport corridors.*

Method 3:

*The Wellington Regional Council will prepare and review the Regional Land Transport Strategy and through the Strategy and its other transport responsibilities:*

- (1) Promote public awareness about the full social, economic and environmental costs of using different modes of transport;
- (2) Promote the use of urban transport modes which use renewable energy resources and that are efficient in the use of energy generally;
- (3) Promote policies that encourage the provision and use of alternatives to individual vehicles as a means of meeting needs for accessibility;
- (4) Promote fuel efficient driving practices;
- (5) Provide, where appropriate, funding for the investigation, planning and provision of public transport services; and
- (6) Prepare the annual Regional Land Transport Programme ensuring that it is consistent with the Regional Land Transport Strategy.

Method 4:

To achieve integrated management, other means which could be used to implement Built Environment and Transportation Policies 3-6 include:

- (1) Encouraging the introduction, monitoring and enforcement of emissions' standards for all land transport vehicles;
- (2) Encouraging relevant authorities, in their plans and decisions, to make adequate and appropriate provision for the development, maintenance and upgrading of network utility operations and infrastructure, and for the protection of existing transportation corridors;
- (3) Encouraging the owners and operators of existing infrastructure to ensure that such infrastructure, where practicable and reasonable, is used to capacity before additional infrastructure is programmed and provided; and
- (4) Ensuring that all infrastructure is developed and used in ways that reduce, as far as practicable, any adverse environmental effects.



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