



greater WELLINGTON
REGIONAL COUNCIL

Wellington Regional Land Transport Strategy 2007-2016

Adopted July 2007

For more information, contact:

Greater Wellington
142 Wakefield Street
PO Box 11646
Manners Street
Wellington 6142
T 04 384 5708
F 04 385 6960

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info@gw.govt.nz
www.gw.govt.nz

Contents

Chairperson's foreword	1	8. Policies	29
Executive summary.....	3	8.1 Network management	29
1. Introduction	5	8.2 Travel demand management	30
2. Vision	6	8.3 Safety	30
3. Regional transport network - pressures and issues	7	8.4 Environment and public health	30
3.1 Wellington's regional transport network	7	8.5 Planning and integration	30
3.2 Key transport pressures.....	8	8.6 Securing transport funds	31
3.3 Transport issues	10	8.7 Implementation policies.....	31
3.3.1 Access and mobility.....	10	8.8 Programme prioritisation and funding policies	31
3.3.2 Climate change.....	10	8.9 Links between strategy policies and objectives.....	32
3.3.3 Rail network	11	9. The role of transport modes	38
3.3.4 Safety and personal security.....	11	9.1 Introduction	38
3.3.5 Transport network reliability.....	12	9.2 Private vehicles	38
3.3.6 Integration of transportation and land use planning	14	9.3 Passenger transport	39
3.3.7 Economic development.....	15	9.4 Walking.....	40
3.3.8 Freight	15	9.5 Cycling	41
3.3.9 Traffic congestion	16	9.6 Freight	41
3.3.10 Strengthening east-west connections	16	9.7 Other modes	42
3.3.11 Rising oil prices.....	16	9.8 Integration of modes.....	42
3.3.12 Environmental impacts	18	10. Implementing the RLTS	44
3.3.13 Public health.....	18	10.1 Introduction	44
3.3.14 Access for mobility impaired and an ageing population.....	19	10.2 Implementation plan summaries	45
3.3.15 Travel to educational facilities	19	10.3 Corridor Plan summaries.....	49
3.3.16 Cycling.....	20	11. Funding	51
4. Strategy development	21	11.1 Types of available funding	51
4.1 Strategic framework	22	11.2 Regional Transport Programme	52
4.2 Strategic options.....	22	11.3 Funding gaps	52
4.3 Impact assessments	22	12. Monitoring, evaluation and review	54
5. Objectives	23	12.1 Monitoring and evaluation.....	54
6. Land transport outcomes	24	12.2 Strategy review	54
6.1 Links between strategy objectives and outcomes ..	24	12.3 Implementation and corridor plan reviews	55
7. Strategy targets	26	12.4 Review of the Regional Transport Programme	56
7.1 Introduction	26	Glossary	57
7.2 Key outcome targets	26	Abbreviations	60
7.3 Related outcome targets.....	28	Appendix 1 - Strategic transport network	61
		Appendix 2 - Statutory Context	64
		Appendix 3 - Strategic options	74
		Regional Land Transport Committee members	81



Chairperson's foreword

Creating an integrated land transport system presents many challenges. It must provide for equitable access, support a thriving economy, respond to change, improve safety, strive for environmental sustainability, promote health and participation and remove vulnerability. The Regional Land Transport Committee has developed a transport strategy that endeavours to meet these challenges in a balanced way.

The long term aspirations of the Committee are: to deliver a regional road network that is resilient enough to cope effectively with predicted trends and incidents; an outstanding public transport system; and improved travel efficiency through better matching of mode choice with trip purpose, including an increase in the use of cycling and walking for shorter journeys and an increase in the use of rail for longer journeys.

The Regional Land Transport Strategy (RLTS) establishes a framework of objectives, outcomes and policies to guide intervention. Implementation of the RLTS is provided for by a number of companion documents in the form of implementation plans, corridor plans and a Regional Transport Programme. These documents describe the region's desired responses to issues and needs region wide and in each transport corridor. Review of these companion documents will be against the framework set by the RLTS and any relevant national statements.


The strategy is the product of months of deliberation by regional leaders and advisors through the Regional Land Transport Committee. The Committee is required to balance statutory criteria and local aspirations against time and resource limits. As a result of the market research survey and submissions, the Committee has shifted the strategy's emphasis towards improving sustainability. Greater priority has

been given to improving passenger transport reliability and increasing its use. Challenging targets have been set for reducing transport-related greenhouse gas emissions. Achieving these goals will require action from all parties including central government.

It is very much a Wellington regional transport strategy. Network resilience is a chronic problem in every corridor of our region. Our geography, history and urban form make for a strong public transport network that can be improved further. Rail is a prominent mode here and the programme proposes early reversal of the long term neglect of rail infrastructure. We are a region full of magnificent villages and local environments that transport should connect rather than threaten.

Transport is about making connections, both in the physical sense and in the broader social and economic sense. The RLTS has been developed in parallel with the Wellington Regional Strategy (WRS), indeed, it was delayed to take account of WRS conclusions. The two documents have a close strategic relationship and therefore consistency between them is vital. The WRS sets out a longer term vision for the region and the key action areas it identifies are addressed from a transport perspective in the RLTS. Similarly, we expect the RLTS will also connect with relevant sections of the Regional Policy Statement, developed under the Resource Management Act.

Developing the strategy is just one of the Regional Land Transport Committee's tasks. Facilitating its delivery and monitoring performance against indicators are equally important. The Committee looks forward to shifting its focus to these latter tasks, while maintaining its watch on the overriding objectives and outcomes.



The Committee recognises that the strategy cannot provide a perfect solution to the greater Wellington region's transport needs. Our regional transport network requires further investment, we are always learning more about problems and issues, and demand trends are not sustainable under some scenarios. In this regard, our Travel Demand Management Plan is a key initiative. This is a dynamic strategy and adjustments will be made in response to developing trends and new information.

Transport structural, policy and funding settings are all subject to review at the time of writing. Every effort has been made to keep this RLTS aligned to the thrust of these changes, and to preserve flexibility to adjust to future changes. We note in the strategy that implementation and funding plans are likely to require further adjustment as more information comes to hand.



Terry McDavitt

Chairperson of the Wellington Regional Land Transport Committee

Executive summary

The vision of the Wellington Regional Land Transport Strategy (RLTS) 2007 - 2016 is:

'To deliver, through significant achievements in each period¹, an integrated land transport system that supports the region's people and prosperity in a way that is economically, environmentally and socially sustainable.'

This RLTS has been developed within a broad legislative and policy framework. It meets the requirements of the Land Transport Act 1998 and supports the vision of the New Zealand Transport Strategy 2002, that is, *an affordable, integrated, safe, responsive and sustainable transport system.*

Regional pressures and issues

This strategy seeks to address key issues and pressures faced by the region including:

- Access to goods and services, employment and amenities
- Transport related greenhouse gas emissions
- Public transport capacity and mode share
- Reliability of the transport network
- Severe traffic congestion, particularly at peak times
- East-west connections between key transport corridors and regional centres.

The strategy responds to the region's expected economic and population growth and the need to manage an increasing demand for travel. The RLTS and Wellington Regional Strategy development processes have been closely aligned to ensure integrated transport and land use outcomes as both are fundamental to the economic and social functioning and future growth and development of the greater Wellington region.

The provision of an affordable, integrated, safe, responsive and sustainable land transport system relies on integration between all modes that

make up the regional transport network. Many journeys are multi-modal and to ensure such journeys are as quick, safe and convenient as possible, a good level of integration between the different transport modes is sought by the RLTS.

Proposed activities and projects in the supporting implementation plans will continue to enhance the prosperity of the Wellington City Central Business District as a major catalyst for growth in the region and provide for efficient freight movement and increased productivity.

Objectives, outcomes, targets


The RLTS objectives are:

- Assist economic and regional development
- Assist safety and personal security
- Improve access, mobility and reliability
- Protect and promote public health
- Ensure environmental sustainability
- Ensure that the Regional Transport Programme is affordable for the regional community.

The strategy identifies a number of key outcomes which the strategy seeks to achieve over the long term. Outcomes have been given a hierarchical structure of 'key outcomes' and 'related outcomes' to clearly signal priorities for the strategy over the next 10 years. Key outcomes of the strategy are:

- Increased peak period passenger transport mode share
- Increased mode share for pedestrians and cyclists
- Reduced greenhouse gas emissions
- Reduced severe road congestion
- Improved regional road safety
- Improved land use and transport integration
- Improved regional freight efficiency.

¹ Short term 0 - 3 years; medium term 4 - 10 years; long term beyond 10 years.



A series of targets have been developed in order to signal the magnitude of the changes that the RLTS seeks in relation to each of the strategy outcomes. These targets will provide a benchmark against which to measure progress. Targets enable the region to monitor not only whether the strategy is achieving progress in the general direction set by the outcome, but also to measure whether progress has been made to the extent desired.

Policies

The strategy includes a list of policies that support the desired outcomes. Policy areas include network management, demand management, safety, environment and public health, planning and integration, securing transport funds, implementation and programme prioritisation and funding.

Implementation

The vision, objectives and outcomes of the RLTS are translated into action programmes for the next 10 years through implementation plans and corridors plans which sit alongside and support this strategy. Longer term initiatives are also included, where possible, to give a future view of transport planning.

A Regional Transport Programme consisting of a 10-year Passenger Transport Programme and a 10-year Strategic Roding Programme is prepared alongside the RLTS. The programme

sets out the project priorities for the region with estimated timing and costs. It will be confirmed annually using an agreed prioritisation tool, and will need to take account of the strategic framework provided by the RLTS.

The most significant features identified in the strategy to be progressed through the supporting implementation documents are:

- The improvement of the region's rail network, including infrastructure and rolling stock upgrades
- A comprehensive programme of measures to manage the demand for travel
- Progress on specific roading projects, such as the proposed Transmission Gully Motorway route, within the next 10 years.

Funding

The RLTS must be delivered within available funding. The funding chapter sets out the likely funding available to the greater Wellington region over the next 10 years, some \$2649 million, and identifies a funding gap of \$416 million.

Monitoring, evaluation and review

The strategy concludes with measures for monitoring, evaluating and reviewing the strategy (and supporting implementation and corridor plans) to ensure it maintains its relevance and delivers its vision and objectives within a changing environment.

The Wellington Regional Land Transport Strategy (RLTS) is a statutory document prepared in accordance with the Land Transport Act (LTA) 1998. It has been developed by the Regional Land Transport Committee (RLTC) of the Greater Wellington Regional Council (Greater Wellington).

The LTA requires the strategy to contribute to the overall aim of achieving an integrated, safe, responsive and sustainable land transport system. To meet this requirement the strategy has a long term vision for the region's land transport system and outlines regional objectives, outcomes and policies covering the period 2007 to 2016.

This strategy replaces the previous RLTS 1999 – 2004. A review was delayed, initially, due to the legislative reform which resulted in the Land Transport Management Act (LTMA) 2003 and, more recently, to allow for the completion of the Wellington Regional Strategy (WRS) and Western Corridor Plan.

Chapter 2 of the strategy describes a long term vision for the region's transport network.

Chapter 3 identifies the pressures and issues for the region's land transport system.

Chapter 4 describes the strategy development process.

Chapter 5 identifies the six objectives of the strategy.

Chapter 6 sets out the desired outcomes of the strategy.

Chapter 7 identifies a series of targets in relation to the strategy outcomes.

Chapter 8 sets out a list of policies.

Chapter 9 describes the role of each land transport mode.

Chapter 10 provides an introduction to the detailed implementation and corridor plans which support and give effect to the strategy.

Chapter 11 outlines the strategy's land transport funding sources and funding issues.

Chapter 12 identifies how the strategy will be monitored and evaluated, and outlines the proposed review programme for the strategy and its implementation documents.

The appendices provide further context to the strategy.

2 Vision

The strategy's vision is:

'To deliver, through significant achievements in each period², an integrated land transport system that supports the region's people and prosperity in a way that is economically, environmentally and socially sustainable.'

The following detailed aspirations support this vision and give a clear picture of what the region wants for its transport network in the long term and provide some specific context for shorter term decision making.

The regional transport network will provide a high level of access, reliability and safety for both passengers and freight travelling within and through the region. The regional transport network will be developed in a way which recognises the vital national role of Wellington as the capital city and the region's geographical position at the northern end of the Cook Strait.

Access to and between key destinations such as Wellington City Central Business District, regional centres, CentrePort, Wellington International Airport and Wellington Regional Hospital will be quick, easy, reliable and safe. Effective safety measures on the road and rail networks will ensure that no one is killed or injured as a result of road network deficiencies when travelling within or through the region.

In urban areas there will be viable alternatives to travel by private car for most trips. People will generally walk or cycle for short and medium length trips. Pedestrian and cycling networks will be convenient, safe and pleasant to use. The majority of people will use passenger transport to get around during the peak period along key commuter routes. Passenger transport trip times and comfort will compete reliably and favourably with private cars for a majority of commuter trips. The passenger transport system will effectively connect people with key destinations. All passenger transport services will be fully accessible, including physical access, access to information and simple streamlined ticketing.

People will need to travel less because they have access to excellent telecommunications, local job opportunities and live closer to their main destinations for work and play. More vehicles will run on renewable fuels that are non-polluting. People's travel choices will recognise the risk and impact of climate change and diminishing non-renewable resources.

More bulk freight will be moved by rail and coastal shipping.

Traffic congestion will be managed at levels that balance the need for access against the ability to fully provide for peak demands due to community impacts and cost constraints.

² Short term 0 - 3 years; medium term 4 - 10 years; long term beyond 10 years.

3.1 Wellington’s regional transport network

The greater Wellington region’s topography and geographic constraints means it has developed a relatively compact urban form along the region’s transport corridors (Figure 1). State Highway 1 and the North Island Main Trunk (NIMT) rail line enter the region near Otaki and extend southwards through Kapiti Coast, Pukerua Bay, Porirua and Northern Wellington and through to the Wellington City Central Business District (CBD). State Highway 1 continues through to Wellington International Airport. State Highway 2 and the Wairarapa Line railway enter the region north of Masterton and extend south-west through Wairarapa, the Hutt Valley and on to merge with State Highway 1 and the NIMT line at Ngauranga. State Highway 58 provides a vital east-west link between State Highways 1 and 2.

The regional transport network (Figure 1 and described in Appendix 1) provides vital access to key regional destinations including the

Wellington City CBD, regional centres, CentrePort (Wellington’s sea port) and Wellington International Airport for freight and passengers, and Wellington’s regional hospital in Newtown. The compact corridor form supports a good public transport network and consequently reduces some of the energy and other costs associated with private transport.

The region’s transport network also provides important access for local trips within communities. It is also important to recognise that some parts of the region are largely rural in character and have different issues and requirements of the region’s transport network to urban and suburban areas.

3.1.1 Current transport network performance

The RLTC receives an annual monitoring report (AMR) which reports measured network performance against a comprehensive list of indicators. This report tracks the progressive

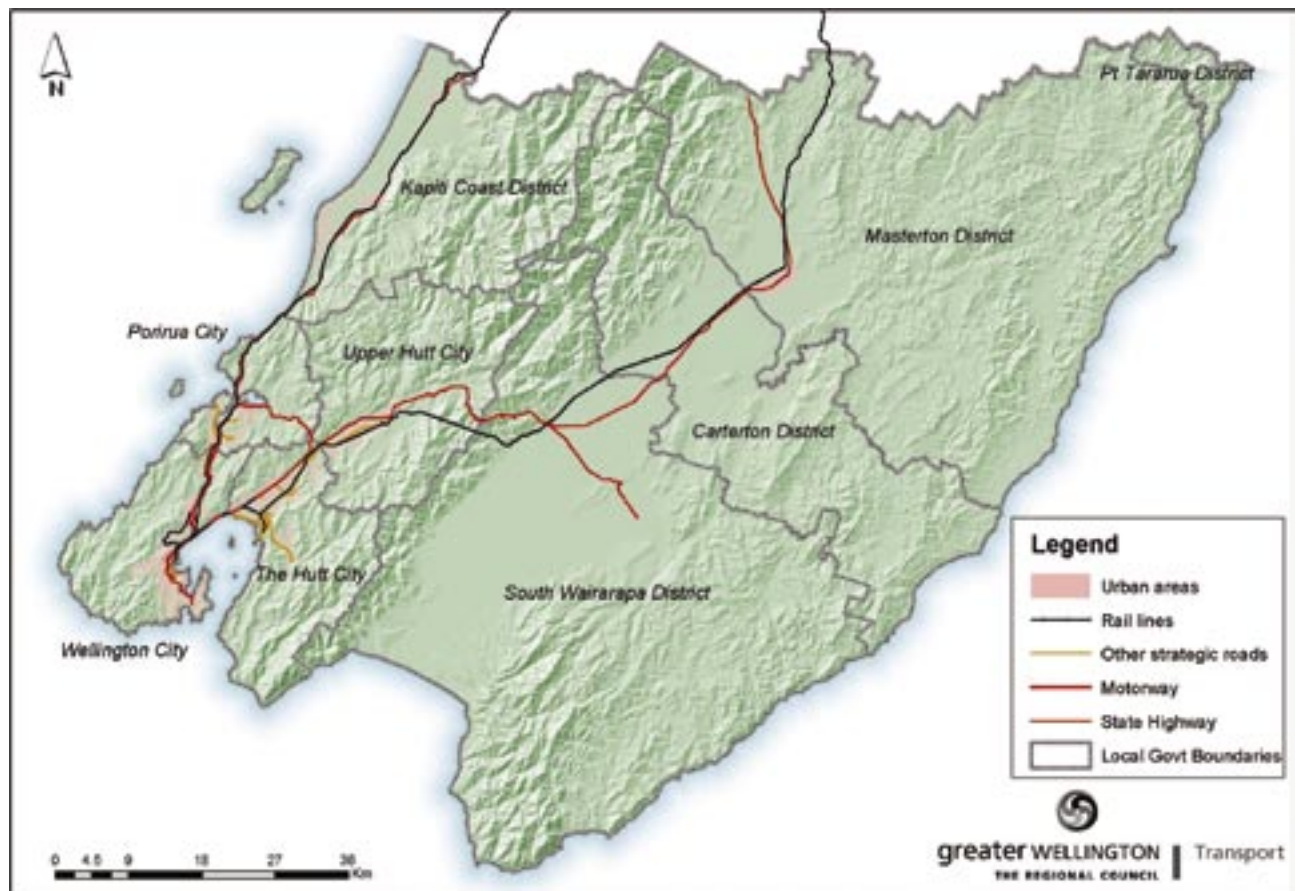


Figure 1: Wellington’s regional transport network.

effects of pressures and interventions. The most recent AMR³, released in September 2006, contains the following key conclusions about the current transport network performance:

- Regional public transport patronage showed exceptional growth in the 2005/06 year. Peak passenger trips increased by 1.9 million due to significantly increased bus and train patronage. Off-peak passenger trips by all public transport modes also increased during 2005/06 by 4.6%, or over 700,000 trips.
- The total number of cars travelling into the Wellington CBD during the morning commuter period decreased by 8% in 2006.
- Greater Wellington's road congestion dropped to 2003 levels across most periods of the day. All-day average congestion decreased 17% between 2005 and 2006 or from 25 seconds to 21 seconds delay per kilometre travelled.
- Road crash numbers continued to increase in general throughout the region. There has been an increase in total recorded casualties for all vehicle types since 2001 and total crash numbers have trended upwards from the year 2000. Regional casualties per 100,000 population remained lower than those of Auckland and Canterbury regions.
- Cycle casualty numbers for the region increased to 112 in 2005, the highest toll for a decade.
- Regional fuel consumption increased by 1.2% between 2004 and 2005, slightly below the previous year's increase in fuel sales of 1.6%. Consequently, while transport-generated greenhouse gas emissions have increased, their rate of growth has slowed.

3.2 Key transport pressures

3.2.1 Growing population

Between 1991 and 2001 the region as a whole experienced population growth of 5.8%. The region is forecast to experience moderate population growth over the next 10 years, with an extra 40,000 people expected to live here by 2016, a 9% increase from 2001 (Statistics NZ, 2005).

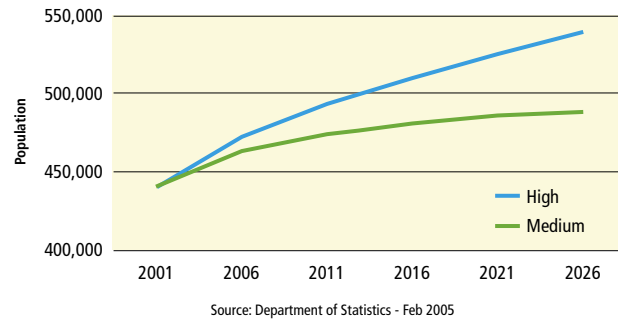


Figure 2: Wellington region's projected population growth. Source: Wellington Regional Strategy (WRS) Growth Framework, 2005.

Within the region the rate of growth varies widely between districts. Projections developed by Statistics NZ suggest that Wellington City and the Kapiti Coast are likely to experience the most population growth, while it will remain stable or decline in other areas (WRS, 2005).

There is also wide variety in the way our households are made up around the region. Like national and international trends, our regional population is ageing with a high proportion of people aged over 65 years. In contrast, some areas (for example, Porirua) have a high proportion of children. Region-wide a significant gap has been identified in the key working age groups, particularly 25-35 year olds. Household size is falling across the region; the largest households are in Porirua, the smallest in Kapiti (reflecting the large proportion of retirement-aged population in this area)⁴. Overall, the growing population will drive an increase in demand for travel.

3.2.2 Growing economy

In 2004 the Wellington region contributed around 13% of all the goods and services produced in New Zealand (GDP or Gross Domestic Product). In the same year our regional GDP per capita was \$36,700, the highest regional figure in New Zealand. Despite this, our per capita GDP only rose by 1.6% per year between 1998 and 2003 compared with the national average of 2.3%. Job

³ 2005/2006 Annual Report on the Regional Land Transport Strategy, GWRC, September 2006 (Available on GWRC website).

⁴ GWRC 2004/2005 Annual Report on the Regional Land Transport Strategy.

numbers in the region are also growing, but at a slower rate than the national average (WRS, 2005).

The region’s economy is expected to continue to grow at a modest rate, driving an increasing demand for travel and freight movement. The efficient movement of people, goods and services is crucial to ensure continued economic growth and prosperity.

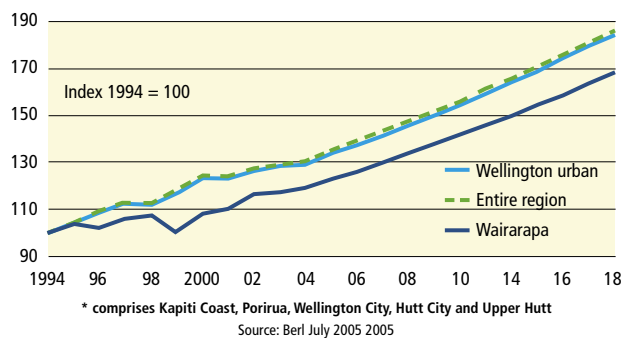


Figure 3: GDP growth index for the Wellington region (actual and forecast). Source: WRS Growth Framework, 2005.

3.2.3 Increasing travel demand

Population growth and economic growth are key contributors to the regional demand for travel. Faster population growth on the Kapiti Coast is partly driven by people relocating from other areas within the region. Increased numbers of commuters travelling between Kapiti and Wellington will put greater demand on existing transport networks.

Car ownership numbers are steadily increasing in the region. Over the five years from 2000 to 2005, the total number of cars registered in the region rose by 11% (Figure 4). Increasing car ownership may also contribute to increased car use and greater demand on the road network.

The demand for travel is steadily increasing as a result of increasing population and economic growth, increasing car ownership and a growing expectation of mobility and convenience.

The underlying trend is for people to make more trips, more often, over longer distances. This means more vehicle kilometres travelled (VKT), contributing to additional CO₂ emissions and other environmental impacts and increased peak period journey times reflecting increased congestion.

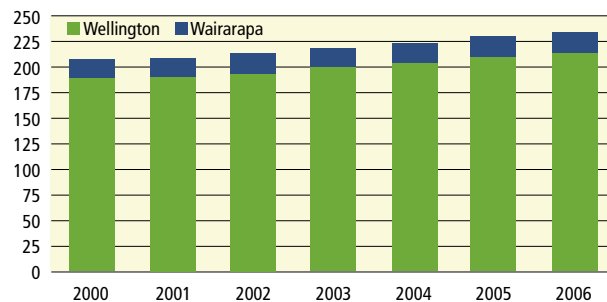


Figure 4: Car registrations (000), Wellington region. Source: Land Transport New Zealand, 2006.

Historically in the Wellington region, VKT growth is closely related to economic growth. Figure 3 shows a forecast further 30% economic growth between 2006 and 2016. As shown in Figure 5, we are forecasting around 11% growth in VKT over the next 10 years. Interventions to reduce growth in VKT need to ensure a high level of access and interaction is maintained to minimise disruption to social and economic activity.

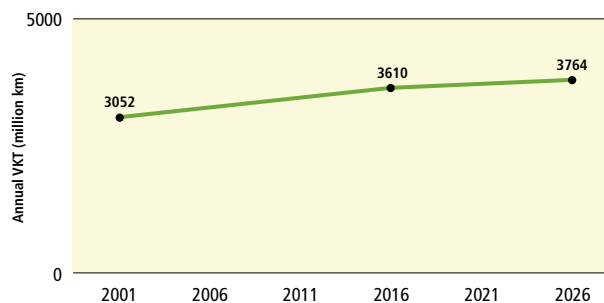


Figure 5: Projected regional vehicle kilometres travelled (VKT) per annum. Source: Wellington Transport Strategic Model.

The number of trips made by passenger transport in the region is also increasing (Figure 6). Total patronage by bus, train and ferry for the 2005/06 financial year was 35 million passenger trips, an increase of 2.6 million (or 8.1%) over the previous year. This increase was most notable during the peak period, with a lesser increase off peak.

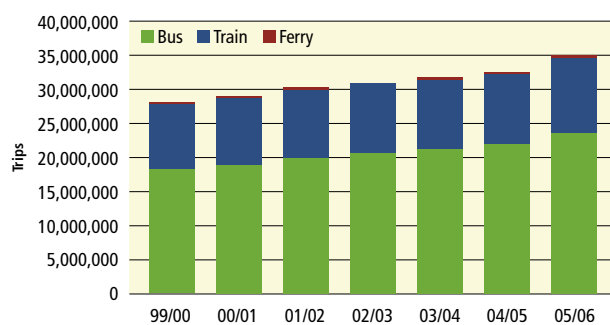


Figure 6: Total annual passenger transport patronage by mode. Source: Greater Wellington Regional Council 2006.

A future demand on the region's transport network is the predicted growth in forestry in Wairarapa and the associated increase in log freight volumes. Of Wairarapa's total land area, over 45,000 hectares (or 5%) is planted in forestry⁵. With log prices beginning to improve, a significant increase in log production is anticipated. Wood volumes in Wairarapa are predicted to increase from around 800,000 m³ to 1,600,000 m³ between 2006 and 2016⁶. We need to recognise and provide for the additional pressure this will place on the region's strategic transport network between Wairarapa and CentrePort in Wellington City.

3.3 Transport issues

3.3.1 Access and mobility

The region's transport network enables people to access key goods and services, work, education and leisure opportunities. Access to walking in the region is continually improving, as is access to passenger transport services. However, while increasing vehicle ownership reflects increased mobility, this can have a negative impact on overall transport system accessibility, for example, the adverse impacts of severe congestion on travel by private car and other modes. To maintain a good level of access, there is a pressing need to limit the growth in car traffic and ensure viable alternatives to travel by private car are available.

3.3.2 Climate change

Climate change is a global problem. Worldwide effects to date are evident in the unusual weather conditions experienced in most parts of the world over the last few decades. In future, New Zealand is expected to suffer from more extreme weather patterns and a rise in sea level. While solutions to this issue require international attention and effort, there is a need for responses at a local level⁷.

The regional transport network plays a part in contributing to this global environmental issue, through the consumption of non-renewable fuels and the consequent production of greenhouse gas emissions.

Greenhouse gas emissions are made up of carbon dioxide (CO₂) and non-CO₂ emissions. The national energy sector contributes around 42% of the total greenhouse gas emissions. The transport sector is a subset of the energy sector, contributing around 45% of the CO₂ emissions, or 19% of total national greenhouse gas emissions. The principal growth in greenhouse gas emissions comes from increased CO₂ emissions, particularly from electricity generation and transport⁸.

The Kyoto Protocol sets targets for reducing greenhouse gas emissions in developed countries. The first commitment period is from 2008 to 2012. New Zealand is bound by the Kyoto Protocol and has a target to reduce its greenhouse gas emissions to 1990 levels or to take responsibility for excess emissions (NZCCO, 2005). While the region's contribution to reducing transport related greenhouse gas emissions is only a small part of this wider national commitment, the need for the region to play its part in reducing its share of greenhouse gas emissions is recognised as very important.

There are a number of ways for the region to play its part in addressing this issue. These include the continual improvement of the region's passenger transport network (particularly electric buses and trains) to encourage and provide for increased use of passenger transport, continuing to promote and provide for an increased uptake in walking and cycling, managing the demand for travel and increasing travel efficiency (through network management systems, travel planning programmes and land use integration).

There are also many mechanisms for addressing this issue which primarily fall outside the scope of this strategy. These include improving vehicle fleet efficiency and advances in the availability of alternative fuels. It is appropriate that central

⁵ Source: Masterton Business Enterprise website.

⁶ Source: Masterton Business Enterprise website.

⁷ GWRC, May 2006, 'Our Region, Their Future' RPS Discussion Document.

⁸ From New Zealand Climate Change Office website.

government take a much stronger lead in relation to these issues and that as a region we advocate for them to do so.

There are two key ways in which our region's transport network can respond to climate change. The first is reducing transport's contribution to greenhouse gas emissions, as discussed previously. This strategy sets ambitious targets to reduce CO₂ emissions to reflect this goal. The second is to ensure our transport network is resilient and adaptable to the potential impacts of climate change. These issues are important considerations when planning the transport network, particularly in a longer term context.

3.3.3 Rail network

The rail network is particularly important in the Wellington region, providing the key medium to long distance and high volume passenger transport service between the Wellington City CBD and the region's other centres and townships, and vital freight connections. Rail connections to CentrePort and the Cook Strait ferries mean the region's rail network is of national importance.

The recent decades have seen a lack of investment in necessary maintenance and renewal of the rail network nationally and regionally. In particular, unsolved bottlenecks at Kaiwharawhara Throat (North Island Main Trunk line/Wairarapa Line junction) and North-South Junction (Paekakariki to Pukerua Bay) cause delays to rail services which have regional and national consequences. There is an urgent need for key stakeholders (Greater Wellington and ONTRACK) to examine rail track issues and prioritise responses in this region. Similarly, a previous lack of investment has resulted in an urgent need to upgrade ageing rail rolling stock and rail stations.

Rail movements that occur across Waterloo Quay during the morning commuter peak period contribute to substantial traffic congestion along the waterfront route and queuing back onto the

Wellington Urban Motorway at Aotea Quay. Less severe traffic congestion also occurs at other railway level crossing locations, such as Tawa and elsewhere.

3.3.4 Safety and personal security

Despite extensive improvements to road safety made in the 1990s in the Wellington region, casualties over the last four years have plateaued and renewed efforts are required to ensure the region is contributing towards the national *Road Safety 2010* strategy targets. The annual social cost of crashes to the Wellington region in 2005 was \$258 million⁹.

At the regional level, four significant road safety issues were identified as being of particular concern:

- Intersections
- Loss of control
- Vulnerable road users (pedestrians, cyclists and motorcyclists)
- Road user behaviour (alcohol, speed, inattention).

The perceived and actual safety of pedestrians and cyclists in our region affects the use of these active modes (Figure 7). In a 2004 Greater Wellington perceptions survey¹⁰, respondents who resided in Wellington City felt the "safest" while walking (78% felt safe). Other Territorial Authority (TA) areas ranged from 70% down to 51% of respondents feeling safe. In the same survey, only 23% of respondents throughout the region felt "safe" when cycling. Providing lighting and open streetscapes and increasing pedestrian and cyclist numbers (eyes on the street) can positively affect the perception of personal security.

⁹ Land Transport NZ, 2006, Wellington Regional Road Safety report 2001 – 2005.

¹⁰ NRB GWRC, May/June 2004, Transport Perceptions Survey.

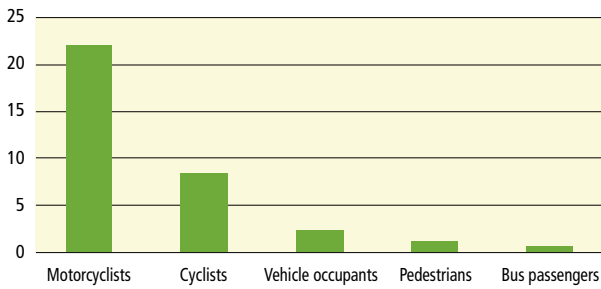


Figure 7: Relative risk by transport mode (casualties per million trip legs, 2002-2005). Source: Ministry of Transport, reported crashes and NZ Household Travel Survey (2006 - Provisional).

3.3.5 Transport network reliability

Reliability of the transport network is a significant issue for the region, affecting passenger transport, private vehicle users and freight movement. The following graph (Figure 8) illustrates the perception of network reliability.

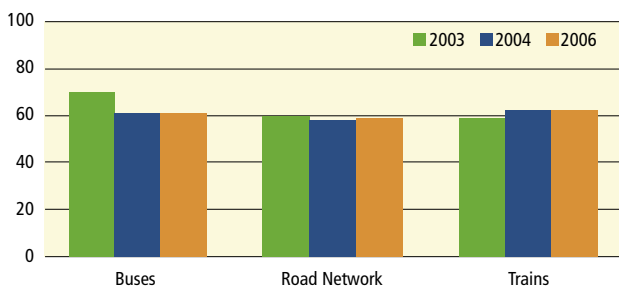


Figure 8: Perceptions of network reliability – Percentage of people who rate the regional transport network as reliable. Source: Greater Wellington perception survey 2003, 2004, 2006.

The key routes into Wellington's CBD by road are subject to relatively high variability in 'expected' travel times, affecting both private vehicles and bus services. This is due to the fact that even a reasonably minor event can cause significant delays due to congestion levels and lack of alternative routes to avoid the trouble spot (BERL, 2004). In March 2006, AM peak travel times on the strategic road network varied by 22% with PM peak variability at 21%¹¹.

Bus service reliability has two components. Firstly, whether the service runs and, secondly, whether it keeps to the scheduled timetable throughout the journey. Service monitoring data shows that scheduled bus services operate at least 99% of the time. Those that don't run are generally a result of operational issues. However, bus journey time delays are often caused by

incidents and congestion on the road network. This is a particular problem in the south end of Wellington City's 'golden mile' and peak congestion bottlenecks around the region. In Wellington City trolley bus reliability is currently poor, primarily because of the age of the system (buses, overhead wires and power supply) which is overdue for replacement.

Rail network service monitoring shows that EMU (electric multiple unit) services run to within three minutes of the timetable about 90% of the time. Wairarapa services run to within three minutes of the timetable about 80% of the time. A major contributor to poor service reliability is the ageing rail infrastructure and rolling stock which leaves the network vulnerable to faults and breakdowns. Significant investment is urgently required to upgrade rolling stock and to improve rail network infrastructure to improve rail reliability.

The role of the north-south route following State Highway 1 and the main trunk railway line is one of national importance. This route, known as the Western Corridor, provides a primary access route into the region and to Wellington City CBD from the north. The route also serves Wellington's CentrePort, the main connector to the South Island and overseas for the southern part of the North Island. Safety and reliability are significant issues for this corridor, with current journey times having a high degree of variability. The highway route is prone to closure following traffic accidents, provides limited access for emergency vehicles and is vulnerable to natural hazards such as landslips and flooding. There are limited alternative routes along this corridor. The single track section of the NIMT railway line north of Pukerua Bay is a significant weak point on the existing rail corridor. Like the highway, the rail corridor is vulnerable to slips.

The extent of any disruption to the region's transport network during a hazard event differs, depending on its location and nature. Potential hazard events include flooding, landslides,

¹¹ GWRC 2005/2006 Annual Report on the Regional Land Transport Strategy.

earthquakes and tsunamis. A major seismic event is likely to have a significant impact on strategic transport links to Wellington, Hutt Valley and Porirua¹². This would affect access for emergency vehicles in the short term after the event and general access over the medium to long term. Disruption caused by a major hazard event would have a significant social and economic impact on the region. The impact of hazards on network reliability is not currently well measured and is an area where more monitoring to obtain information is required. The resilience of the region's transport network in response to

such events and its ability to resume service as quickly as possible will be important in minimising their impact.

The following diagram (Figure 9) was developed by the Wellington Lifelines Group¹³ as part of their submission to the Western Corridor planning process. The source of the information

¹² Wellington Lifelines Group. Nov 2005. Submission to proposed Western Corridor Plan.

¹³ Wellington Lifelines Group comprises utility and transportation sector organisations working collaboratively to reduce the vulnerability of Wellington's 'lifelines' to regional scale hazard events.

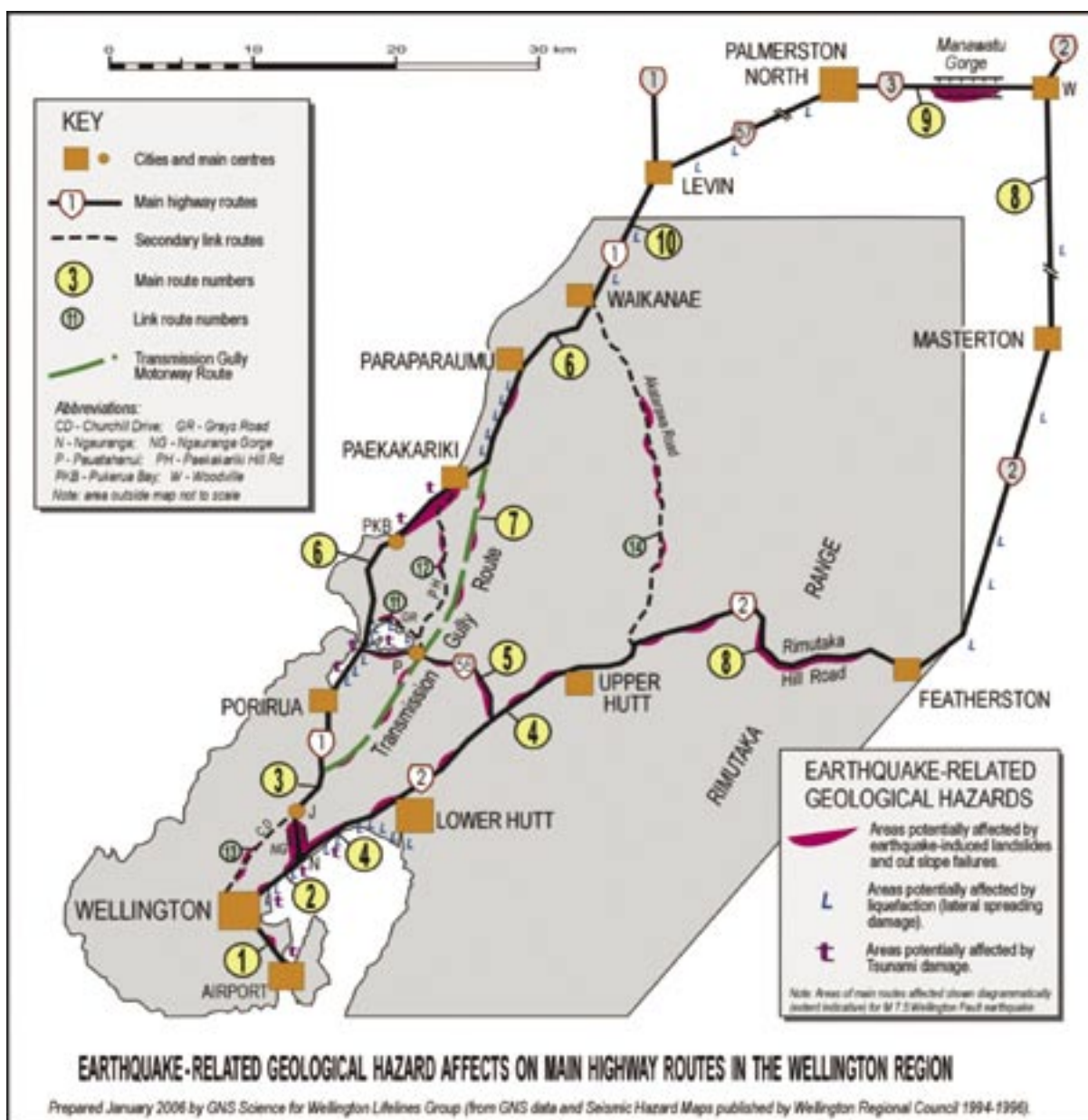


Figure 9: Earthquake-related geological hazard effects on the Wellington region's state highways. Source: Wellington Lifelines Group (2006).

shown on the diagram is based on available earthquake-related geological hazard information for the region from Greater Wellington. It has not involved exhaustive hazard risk analysis, but provides a good indication of the potential risks to the strategic transport network in the case of a major seismic event.

3.3.6 Integration of transportation and land use planning

Ensuring the sustainability of the region's strategic transport network requires an integrated approach to all elements of the network, including integration between land use and transport planning. New land subdivisions and developments which are located at a distance from passenger transport or local facilities can increase people's dependency on cars. Conversely, the need to travel can be reduced by encouraging mixed use development,

encouraging businesses to locate in areas close to the workforce, and by ensuring critical infrastructure and services are located in high density residential areas. The WRS identifies the significance of integrating land use and transport planning. The Regional Policy Statement (RPS) and the RLTS will be key mechanisms for addressing this issue.

A good example of integrated land use and transport planning in the region is set out in Wellington City Council's Transport and Urban Development Strategies¹⁴. The proposed investment in a seamless passenger transport system between Johnsonville and the airport is supported by intensification of employment and housing along the 'growth spine', as demonstrated in the following diagram (Figure 10).

¹⁴ Wellington City Transport Strategy 2006 & Draft Wellington City Urban Design Strategy 2006.

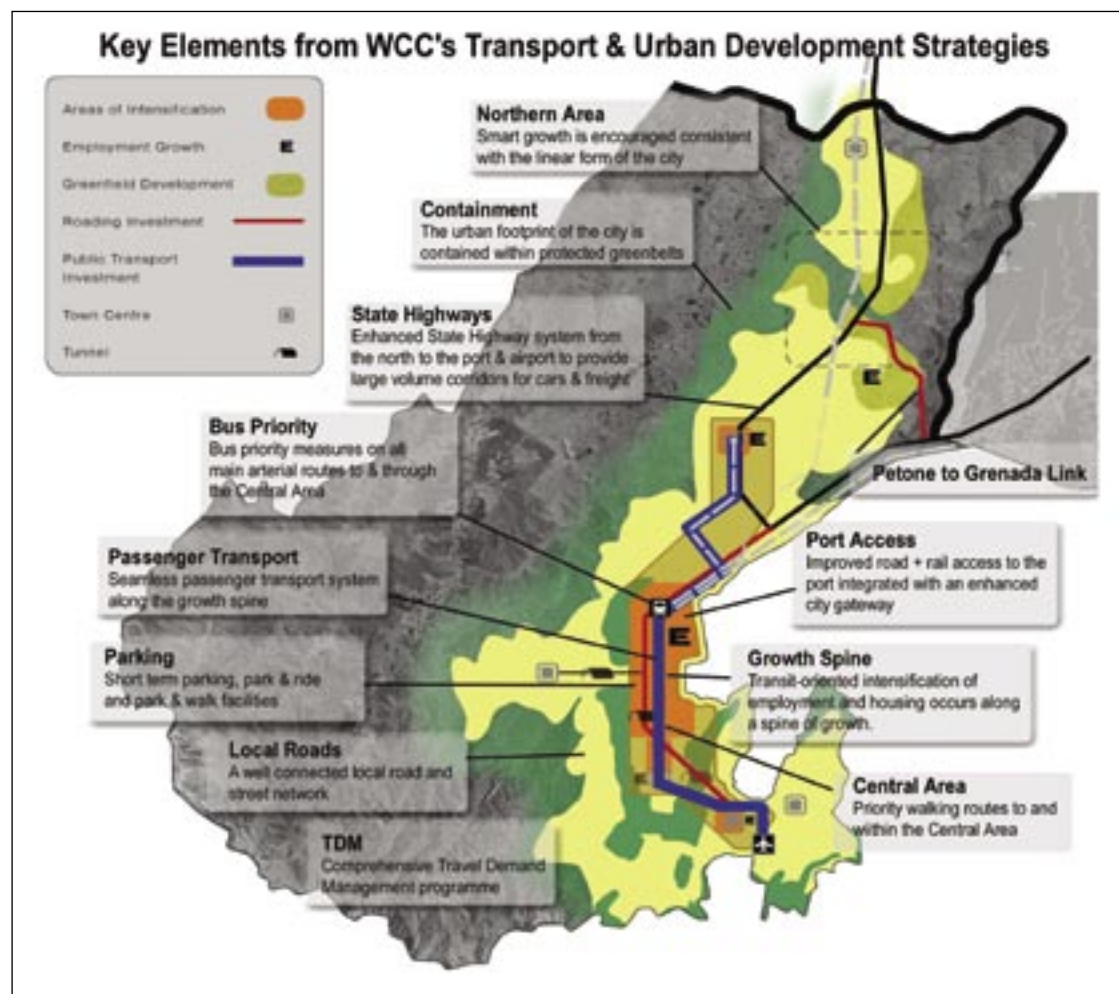


Figure 10: Wellington City's growth spine. Source: Wellington City Council (2006).

Land use intervention is often slow in achieving actual results because it depends greatly on the rate of local development. However, successful results can be spectacular and long term in effect, such as the location of the regional stadium. It is worth noting that, historically, development in this region has been strongly integrated with transport. The development of communities around tramlines and rail services from last century would today be called public transport (transit) oriented development.

It is important to recognise the hierarchy of roads that exists within our region and the different roles played by road types within that hierarchy. Local roads provide for local traffic and access within districts, including access to private property. The region's state highways and other roads that make up the strategic road network (as set out in Appendix 1) are designed to connect regional centres and important regional destinations, including the regional hospital, port and airport. The region's state highways also provide vital linkages between greater Wellington and the rest of New Zealand. Protecting the strategic road network against the adverse effects of inappropriate land use requires careful management through district plans and resource consent processes.

3.3.7 Economic development

Economic growth is occurring at a steady rate, and the development of the Wellington Regional Strategy signals a desire for increased growth. The WRS highlights the need for the region's land transport strategy to support this growth.

Around one third of the region's jobs are located in the Wellington City CBD¹⁵. The WRS recognises the need for a strong central business district and the importance of links to CentrePort and Wellington International Airport. Access to these areas is currently impacted by congestion problems on this part of the network.

3.3.8 Freight

The region's freight network consists of road, rail and sea freight, with air freight playing a fairly minor role at this time. Road and rail freight are

the land transport freight components of that network and provide important connections for the onwards movement of freight by other modes.

There is a direct relationship between economic growth and freight growth. A recent study¹⁶ by Transport Engineering Research Ltd shows that the amount of freight transported in New Zealand will double by 2020, if economic growth trends of the past 10 years continue. The research suggests that at a national level at least 80% of this freight will have to go by road. Rail is likely to play an even lesser role in the Wellington region given that most freight journeys involve distribution within the region, and tend to be relatively short distances (average heavy commercial vehicle trip length is about 11 km).

The expected growth in road freight volumes, together with timing needs associated with freight delivery will mean an increasing contribution of road freight to peak period congestion. Likewise, the effects of congestion on freight movement have been signalled as a problem which is likely to increase with the expected growth in freight volumes. There is a significant volume of log freight by road from Wairarapa to CentrePort. With freight delayed by congestion and anticipated increases in log production, a return to rail freight is being pursued for the movement of logs.

The use of rail for long distance, inter-regional freight has shown a continual decline since 2000¹⁷. Advocating for the removal of rail infrastructure constraints for freight will be an important role of this strategy to provide opportunities for increasing rail freight efficiency and its share of inter-regional freight movement.

Port traffic at Wellington's CentrePort is expected to increase in line with economic growth trends, with most freight arriving at or departing the port by road.

¹⁵ GWRC, 2004, CBD Corridor Study. Pressures & Issues.

¹⁶ Transport Engineering Research NZ Ltd, 2006, Prediction of New Zealand's freight growth by 2020.

¹⁷ GWRC, 2004/2005, Annual Monitoring Report.

3.3.9 Traffic congestion

Traffic congestion has several positive aspects. It often influences trip timing and spreads demand, it affects mode choice and eventually influences land use decisions. However, congestion also has many negative impacts. It causes increased fuel use, increased vehicle emissions and has an economic cost in terms of wasted time and lost productivity caused by delays.

Severe congestion occurs particularly at peak times, on the main routes in and out of Wellington City CBD. 'Bottlenecks' on the strategic network include Mana Esplanade, Paekakariki, Pukerua Bay, State Highway 1 Ngauranga interchange, State Highway 2 Dowse to Ngauranga and around the Terrace and Mt Victoria Tunnels.

Traffic congestion is a significant issue during the peak period due to its impact on trip reliability. A 2006 Greater Wellington transport perception survey¹⁸ indicated that 49% of respondents felt traffic congestion was worse than it was two years previously. Modelling of the network suggests that peak period congestion will continue to increase on many parts of the region's road network, despite the recent anomaly reported in the 2005/06 AMR.

The map on the following page (Figure 11) identifies the key routes of the regional road network affected by regular traffic congestion during peak periods.

3.3.10 Strengthening east-west connections

An important issue for the regional transport network is the need for better east-west connections to improve access, efficiency and reliability for trips made between the Hutt Valley, Wellington and Porirua. Currently, road connections between these commercial centres are limited. While State Highway 58 (via Haywards Hill) and State Highways 1 and 2 (via Ngauranga) connect the Hutt Valley to Porirua, an additional link south of Melling is proposed to enable more direct and efficient transport connections.

Passenger transport and private vehicle trips between the lower Hutt Valley and Porirua City require travel along one corridor towards Wellington City and then a transfer back out via another corridor. The efficiency of these trips would be increased by improved linkages between the existing corridors. Improving freight movement efficiencies between the corridors is necessary to support the economic development goals of the WRS.

3.3.11 Rising oil prices

The scenario commonly referred to as 'peak oil' needs to be acknowledged as a challenge for its potential impact on access and mobility. Peak oil refers to the likely peak in global oil production in the future, followed by a decline. The timing of such a scenario is still widely debated, with predictions ranging anywhere from two years to 50 years. Fuel prices are likely to increase and become more volatile over time as supply struggles to keep up with increasing demand and the regional transport network needs to be resilient to the potential impacts of rising and increasingly volatile oil prices.

Rising oil prices have implications for this strategy as the cost of transportation becomes increasingly higher. While petrol and diesel are recognised as being relatively inelastic commodities, there is anecdotal evidence that public behavior is already being influenced by higher fuel prices. This suggests that more people are willing to consider alternatives to private car travel and this will have flow on effects on the public transport system. Increasing passenger numbers may require new routes and additional capacity, particularly during peak travel times. Short trips may be carried out by active modes more often. Freight transport may move towards more fuel efficient modes, such as rail and coastal shipping, and the demand for commercial or industrial land nearer to markets, ports and rail services may increase.

¹⁸ NRB GWRC May/June 2004 Transport Perceptions Survey.

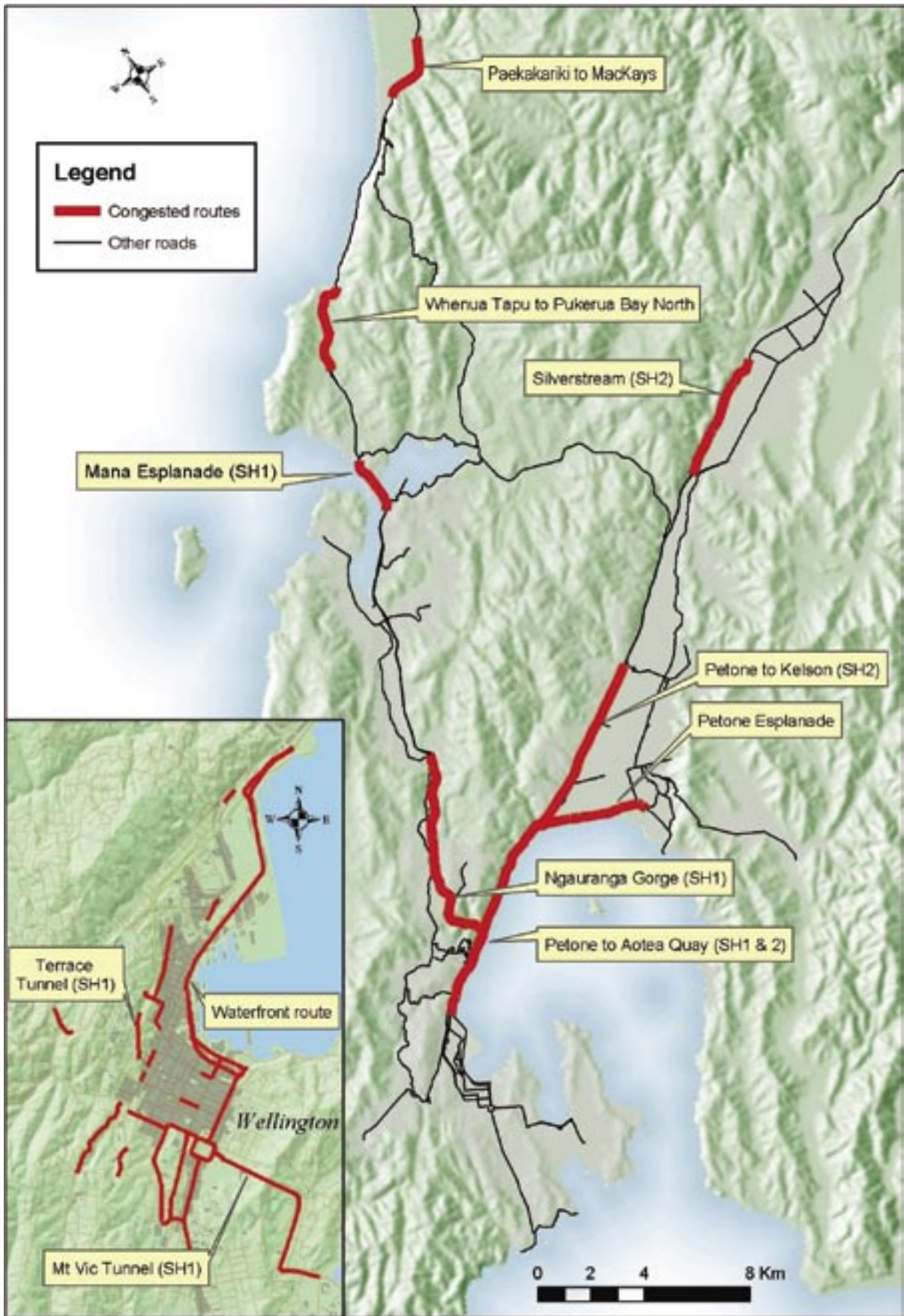


Figure 11: Wellington region's congestion bottlenecks. Source: Wellington Transport Strategic Model (WTSM) and other sources.

Passenger transport network efficiency and capacity, travel demand management, access to walking and cycling, efficient land use and infrastructure planning, and efficient connections between commercial centres are therefore all important considerations for this strategy.

Rising oil prices may also result in increased levels of research into alternative fuels and technologies which have the potential to mitigate the effects of high fossil fuel prices.

3.3.12 Environmental impacts

Both the use of the transport network and the construction of new transport infrastructure can have adverse impacts on the environment. Local impacts include local air quality, water quality, noise levels, disruption to sites of ecological, cultural and heritage significance, and amenity and community cohesion. Global environmental impacts, such as energy use and CO₂ emissions, are discussed earlier in this section.

Transport emissions contribute a number of pollutants that affect our region's air quality. These include CO (carbon monoxide), NO_x (nitrogen oxides), VOC (volatile organic compounds) and particulate matter emissions. Wellington's level of air pollution is currently relatively low compared with Auckland and Canterbury. Air quality data associated with vehicle emissions is collected via three air quality monitoring stations in the region. Two of these are mobile units which will allow different locations to be monitored for 12 months at a time. Transport emissions are not major contributors to high pollution nights recorded during the winter months in Wairarapa, Upper Hutt and Wainuiomata airsheds, however, they may have some effect in built-up areas of Wellington City CBD. While all air quality indicators are experiencing minor increasing trends, modelling suggests that the transport contribution of these pollutants will decrease over time with improving vehicle technologies and increasing uptake of alternative fuels.

Surface water runoff from our roads can carry large amounts of contaminants (by-products of

tyres, brakes and engines and deposition from exhaust gases) into the region's stormwater system. This environmental impact is largely linked to the number of vehicles on the road. Any reduction in vehicle kilometres travelled will help reduce it, as will a high standard of environmental design during construction of new transport infrastructure. We also need to be proactive in relation to transport-channelled stormwater and sediments into sensitive receiving environments such as Porirua Harbour (including Pauatahanui Inlet) and Wellington Harbour.

Increasing traffic volumes on existing roads and the construction of new transport infrastructure has the potential to have a detrimental effect on sites of significant ecological, amenity, cultural and natural heritage depending on its scale and location. It is important that consideration is given to these issues both at a strategic level, where appropriate, and during the detailed project design and consent phase.

3.3.13 Public health

Transport activities can have both positive and negative impacts on health. A report prepared by the Public Health Advisory Committee (PHAC)¹⁹ identified a range of direct and indirect health impacts arising from transport. These are:

- Opportunities for physical activity
- Effects on communities
- Noise
- Road traffic injuries
- Air pollution
- Climate change.

Health impacts resulting from pollutants discharged into air and water are covered under environmental impacts earlier in this section.

Active modes such as walking and cycling have twofold benefits. They contribute to reducing the impacts of motorised transport, such as air

¹⁹ PHAC, April 2003, 'Impacts Of Transport On Health – An Overview'.

pollution, accident rates and noise levels. In addition, active modes provide practical forms of physical activity that people can include as part of their daily routine. Even modest increases in physical activity are shown to have health benefits and are important in addressing New Zealand's current diabetes and obesity epidemics.

Transport networks can contribute positively to people's wellbeing by facilitating social networks and providing access to employment, recreation and community facilities. However, severance issues arise when inappropriately designed or located transport infrastructure cuts through neighbourhoods and communities. This can lead to indirect health impacts, for example, disruption to social networks and reduced social support (PHAC, 2003). It may also reduce people's ability to choose active modes to make shorter local trips, leading to greater reliance on private vehicles.

The ability of people to access health services is another important relationship between the transport system and public health. The region's transport network needs to connect people with health services (ranging from local GP clinics to the regional hospital in Newtown) by providing a range of transport options. It is important that those without access to a private vehicle are not disadvantaged in terms of access to health care.

Noise is a factor in the local environment that can impact on the quality of life of people and communities. Transport activities contribute to environmental noise, particularly road traffic and rail along major transport corridors. Indications from initial noise monitoring alongside the Wellington region's major transportation corridors are that noise levels average from 57 dBA at Vivian Street to 66 dBA at Mana Esplanade. The rail network, particularly rail freight, contributes to adverse noise and vibration effects. These effects are greatest where rail is located close to open areas such as coastal water in close proximity to communities, such as those in the vicinity of Porirua Harbour. The Wellington region's bus fleet consists of electric

trolley buses and diesel buses. Trolley buses have positive noise reduction benefits over diesel buses.

Other health impacts are covered under separate headings within this section of the strategy.

3.3.14 Access for mobility impaired and an ageing population

Despite considerable progress made in recent years to improve the accessibility of the public land transport system, many disabled people in New Zealand have severe difficulty using public land transport services and infrastructure (HRC, 2005). New Zealand's ageing population reinforces the need to continually improve the accessibility of the regional land transport network.

The Human Rights Commission report 'The Accessible Journey'²⁰ noted that disabled people and their advocates identified issues of availability, affordability, accessibility and acceptability in relation to conveyances, service information, premises and infrastructure as barriers to using the public transport system.

3.3.15 Travel to educational facilities

A significant number of the region's peak period trips (24%) take place between homes and educational facilities (Figure 12). Fifty eight percent of these trips are carried out by private car. The majority of trips between home and education facilities are less than three kilometres and there is potential to significantly increase the use of active modes.

However, a recent perceptions survey²¹ showed that only 57% of adults would allow their children to walk to school and only 37% would allow their children to cycle to school. The main reasons for not allowing children to walk or cycle were 'stranger danger' issues and road safety concerns.

²⁰ Human Rights Commission, 2005, The Accessible Journey: Report of the Inquiry into Accessible Public Land Transport.

²¹ National Research Bureau (NRB), June 2006, Transport Perceptions Survey.

Trip Length by Mode (HBEd Peak)

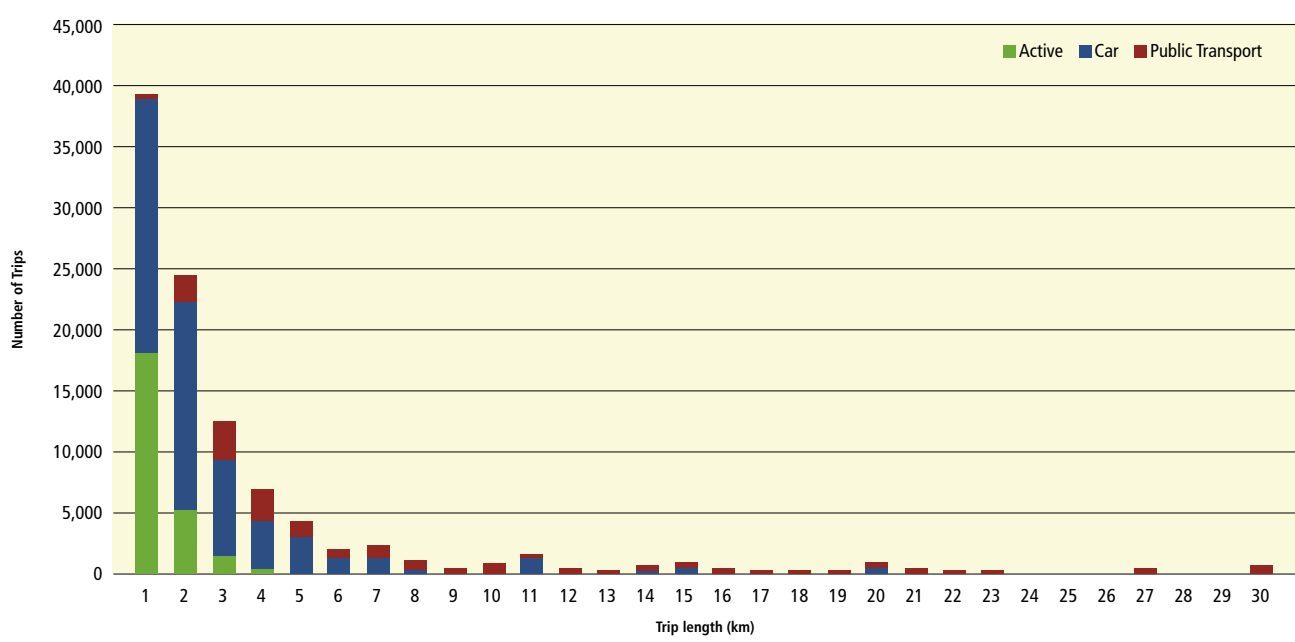


Figure 12: Peak trip length by mode (home to educational facility). Source: Greater Wellington Household Travel Survey 2001.

3.3.16 Cycling

Cycling is a cheap, healthy transport mode which provides an alternative to short to medium length trips by private vehicle. However, in the Wellington region only 1% of all trips are made by cycle. A lack of road space or cycle lanes, steep topography and windy conditions in some parts of the region create barriers to cycling. In other parts of the region, such as Kapiti, Hutt Valley and Wairarapa where conditions are often well suited to cycling, barriers can include perceived safety issues or lack of cycle storage and shower/change facilities.

Strategy development

The approach for developing the Wellington RLTS was evidence-based, collaborative, accountable and forward-looking. It has involved a multi-step process (Figure 13) to identify the region’s transport pressures and issues, to establish a vision, objectives, outcomes and policies, to consider the strategic options, and to

propose interventions through the parallel development of corridor plans and implementation plans (cycling, walking, travel demand management and road safety). The context within which the strategy has been developed is set out in Appendix 2.

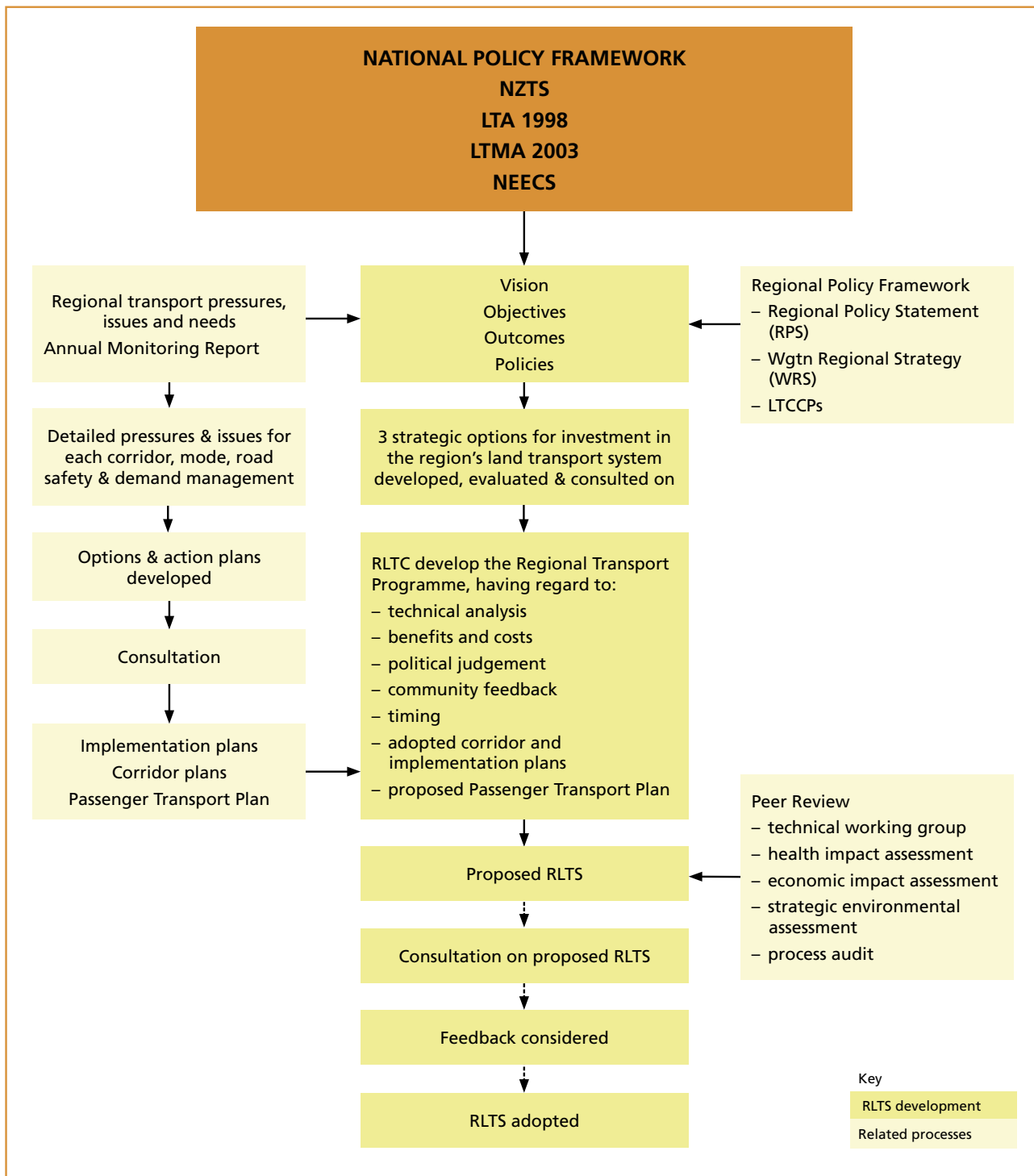


Figure 13: The Wellington RLTS development process.

4.1 Strategic framework

The first step in the strategy development process was to establish a framework consisting of a vision, objectives and outcomes. Policies were then developed to set out the region's policy position and guide resource allocation in relation to the regional transport network.

4.2 Strategic options

Three strategic options for achieving the strategy's outcomes were then developed within the available funding (refer Appendix 3). These three options or scenarios (Advanced Roding, Planned Investment and Advanced Passenger Transport) represented different high level combinations of investment in five key components of the land transport system. The three scenarios were analysed using the region's strategic transport model and assessed using a list of indicators linked to each of the draft objectives and outcomes of the strategy. The analysis of the three scenarios identified a number of trade-offs, depending on how the investment was allocated.

The analysis concluded that the Planned Investment scenario would perform best across all strategy outcomes. Consultation feedback on the RLTS Strategic Options consultation document (15 August 2005) indicated a preference for the Advanced Passenger Transport scenario. Subsequent consultation (November 2006) was then carried out on the draft strategy with a preferred option identified as a combination of investment somewhere between the Planned Investment and Advanced Passenger Transport scenarios.

The final preferred option identified in this strategy (refer Appendix 3, section 5) recognises the need to balance investment across all modes to achieve the strategy outcomes, but gives priority to investment in projects which contribute towards the strategy's key outcomes. This implies greater investment in passenger transport, active modes and travel demand management. This may be achieved by deferring some roading improvements, but preferably through securing additional funding.

A series of new prioritisation policies have been developed to set out how projects are to be prioritised in relation to the available funding to achieve the strategy outcomes. The Regional Transport Programme (RTP) and supporting implementation and corridor plans, which sit alongside the strategy, will need to be reviewed in due course to ensure they align with, and give effect to, the direction set out in the final strategy.

4.3 Impact assessments

Development of the strategy also involved a number of impact assessments being carried out on an early draft, to ensure no significant gaps in relation to health, environment or economic considerations were omitted from the final strategy. The impact assessments were carried out by independent consultants in each of the specialised areas. The conclusions and recommendations of the impact assessments were presented to the Regional Land Transport Committee (RLTC) and resulted in amendments to the strategy, where appropriate.

The strategy's objectives reflect the provisions set out in section 175(2) of the LTA 1998 and the New Zealand Transport Strategy, while also taking account of regional issues and objectives.

The objectives form an important component of the strategic framework (the vision, objectives and outcomes) which is aligned with Greater Wellington's Long Term Council Community Plan (LTCCP) and the Wellington Regional Strategy, to ensure the strategy contributes to the community outcomes identified by these documents.

1. Assist economic and regional development

Aid national and regional economic transformation; and foster the business, housing, employment, education, health and recreation aspirations of the regional community (in line with the WRS).

2. Assist safety and personal security

Achieve a safer community by developing the region's land transport system in a way that leads to a continually declining regional road casualty toll and contributes to a sense of individual and community security when using the transport system.

3. Improve access, mobility and reliability

Provide for the access and mobility needs of our regional community and recognise the wider access needs of adjoining regions. (Improving access and mobility is the primary purpose of a Regional Land Transport Strategy. Improving access enables social participation, inclusion and independence for all, including the transport disadvantaged²². Improving mobility ensures the availability of realistic transport choices for the individual or community, including affordability and equity of cost considerations.)

Improve reliability to improve travel times and reduce trip time variability for strategic networks (both road and rail) in the event of common incidents such as slips or crashes.

4. Protect and promote public health

Provide a transport system that allows for: social participation and interaction; healthy communities via reduced transport impacts on natural resources and communities; and increased uptake of active modes, particularly for short trips.

5. Ensure environmental sustainability

Improve the environmental performance of the transport network, and avoid to the extent reasonable in the circumstances, adverse effects of transport on the environment (in line with the RPS) and communities. This includes, but is not limited to: increased use of passenger transport, cycling and walking; reduced use of private and company cars; increased energy efficiency of the vehicle fleet; reduced greenhouse gas emissions; and a high standard of environmental design of transport infrastructure.

6. Ensure that the Regional Transport Programme is affordable for the regional community

Take account of funding likely to be available, economic efficiency, and the impact of funding options on regional communities when considering transport packages. Consider the affordability of transport options for all members of the community, including low income groups.

²² Transport disadvantaged includes disabled people as defined by the Human Rights Act 1993, section 12(h).

6 Land transport outcomes

The following outcomes are sought for the region's land transport network. No single outcome can be seen in isolation. All must be considered as part of an integrated strategic view of the region's transport system. Outcomes have been given a hierarchical structure of 'key outcomes' and 'related outcomes' to clearly signal priorities for the strategy over the next 10 years.

The land transport outcomes are as follows:

Key outcome:

- 1.1 Increased peak period passenger transport mode share

Related outcomes:

- 1.2 Increased off-peak passenger transport use and community connectedness
- 1.3 Improved passenger transport accessibility for all, including people with disabilities or from low income groups
- 1.4 Reduced passenger transport journey times compared to travel by private car
- 1.5 Increased passenger transport reliability

Key outcome:

- 2.1 Increased mode share for pedestrians and cyclists

Related Outcomes:

- 2.2 Improved level of service for pedestrians and cyclists
- 2.3 Increased safety for pedestrians and cyclists

Key outcome:

- 3.1 Reduced greenhouse gas emissions

Related outcomes:

- 3.2 Reduced private car mode share
- 3.3 Reduced fuel consumption
- 3.4 Increased private vehicle occupancy

Key outcome:

- 4.1 Reduced severe road congestion

Related outcomes:

- 4.2 Maintained vehicle travel times between communities and regional destinations
- 4.3 Improved reliability of the strategic roading network

Key outcome:

- 5.1 Improved regional road safety

Key outcome:

- 6.1 Improved land use and transport integration (in line with the WRS and local authority urban development strategies)

Related outcomes:

- 6.2 Improved integration between transport modes
- 6.3 Sustainable economic development supported (in line with the WRS)
- 6.4 Improved transport efficiency

Key outcome:

- 7.1 Improved regional freight efficiency

Related outcomes:

- 7.2 Improved inter-regional freight efficiency

6.1 Links between strategy objectives and outcomes

The following table shows the positive links between the outcomes sought by the RLTS and its objectives. This illustrates how the outcomes sought respond to the regional community's needs for each objective.

<div style="text-align: right;">RLTS objectives</div> <div style="text-align: left;">Land transport outcomes (key outcomes in bold)</div>	Assist economic and regional development	Assist safety and personal security	Improve access, mobility and reliability	Protect and promote public health	Ensure environmental sustainability	Ensure that the RTP is affordable to the regional community
Increased peak period passenger transport mode share	✓	✓	✓	✓	✓	✓
Increased off-peak passenger transport use and community connectedness	✓	✓	✓	✓	✓	✓
Improved passenger transport accessibility for all, including people with disabilities or from low income groups	✓		✓	✓		✓
Reduced passenger transport journey times compared to travel by private car			✓			✓
Increased passenger transport reliability	✓		✓			✓
Increased mode share for pedestrians and cyclists	✓		✓	✓	✓	✓
Improved level of service for pedestrians and cyclists	✓	✓	✓	✓	✓	✓
Increased safety for pedestrians and cyclists		✓	✓	✓		✓
Reduced greenhouse gas emissions	✓				✓	✓
Reduced private car mode share	✓		✓	✓	✓	✓
Reduced fuel consumption				✓	✓	✓
Increased private vehicle occupancy	✓				✓	✓
Reduced severe road congestion	✓		✓		✓	✓
Maintained vehicle travel times between communities and regional destinations	✓		✓			✓
Improved reliability of the strategic roading network	✓		✓	✓	✓	✓
Improved regional road safety		✓		✓		✓
Improved land use and transport integration (in line with the WRS and local authority urban development strategies)	✓		✓		✓	✓
Improved integration between transport modes	✓	✓	✓		✓	✓
Sustainable economic development supported (in line with the WRS)	✓				✓	✓
Improved transport efficiency	✓		✓		✓	✓
Improved regional freight efficiency	✓		✓		✓	✓
Improved inter regional freight efficiency	✓		✓		✓	✓

Table 1: Links between strategy objectives and outcomes.

7 Strategy targets

7.1 Introduction

A series of targets have been developed in order to signal the magnitude of the changes that the RLTS seeks in relation to each of the strategy outcomes. These targets provide a benchmark against which to measure progress. Targets enable the region to monitor not only whether the strategy is achieving progress in the general direction set by the outcome, but also to measure whether progress has been made to the extent desired and the costs and benefits, both financial and non-financial, of that progress.

7.2 Key outcome targets

The need for a shift in emphasis and greater urgency to progress key outcomes has been taken into account in setting what can be described as ambitious or 'stretch' targets for each of the key outcomes (Table 2). Achieving these targets will be very challenging. However, they have been set at a level so that there is potential to achieve them if they are given adequate emphasis and all potential measures are implemented. Achieving these ambitious targets will depend on all agencies, including central government, taking a strong lead in terms of their respective roles.

The overall passenger transport mode share is the key target for passenger transport trips. The recommended strategy target seeks a 4% increase in passenger transport mode share. This equates to around 6.7 million additional peak period trips per annum (a 37% increase in trips from 2005/06) undertaken by passenger transport. To achieve such a target will mean not only ensuring all currently planned passenger transport improvement projects are funded and implemented, but that additional avenues of increasing passenger transport capacity and use are actively investigated and given high priority.

The target for active mode share (walking and cycling) has been set at a level which will require twice the growth in mode share over the next 10 years compared with the previous 10 years. This target will be challenging but recognises that there are potential gains to be made, primarily in relation to walking trips, where residential development in and around commercial centres and the Wellington City CBD will mean greater opportunities for walking trips to work and for other purposes. It is also anticipated that travel planning programmes will have an influence on the uptake of active modes in future, although the extent of such is largely unknown.

Key outcome	2016 Stretch target
1.1 Increased peak period passenger transport mode share	Passenger transport accounts for at least 25 million peak period trips per annum. (18.3 million in 2005/06) Passenger transport accounts for at least 21% of all region wide journey to work trips. (17% in 2006)
2.1 Increased mode share for pedestrians and cyclists	Active modes account for at least 15% of region wide journey to work trips. (13% in 2006)
3.1 Reduced greenhouse gas emissions	Transport generated CO ₂ emissions will remain below 1,065 kilotonnes per annum. (1,118 in 2005/06)
4.1 Reduced severe road congestion	Average congestion on selected roads will remain below 20 seconds delay per km travelled despite traffic growth. (21 seconds in 2006)
5.1 Improved regional road safety	There are no road crash fatalities attributable to roading network deficiencies.
6.1 Improved land use and transport integration (in line with the WRS and local authority urban development strategies)	All large subdivisions and developments include appropriate provision for walking, cycling and public transport.
7.1 Improved regional freight efficiency	Improved road journey times for freight traffic between key destinations.

Table 2: Key outcome targets for 2016.

The 2016 CO₂ target is also set to the very ambitious 2001 level, which represents a 27% reduction in forecast 2016 CO₂ emissions (or a 5% reduction from current 2006 emissions). This target is not inconsistent with either the Draft New Zealand Energy Strategy (NZES) or Draft New Zealand Energy Efficiency and Conservation Strategy (NZECS), and is likely to be aligned with, if not more ambitious than, any targets that are developed for publication in the final versions of these national level strategies. Clearly the region will not be able to achieve this target on its own. The target is based on the expectation that the government will do the sorts of things indicated (in the Draft NZES and NZECS) to enable significant changes to the transport system that are necessary in order to achieve the desired outcome.

Given that no deaths resulting from use of the transport system should be acceptable, an ambitious target of no deaths in relation to the improved regional road safety outcome is considered appropriate. To recognise the fact that driver error is often a contributing element in road crash fatalities, and is likely to continue to be despite education and awareness campaigns, the target has been qualified to refer to fatalities attributable to road network deficiencies.

A target of 5% decrease in congestion on key routes from the current situation (2006) is considered ambitious and challenging due to the

fact that congestion is forecast to steadily increase over the next 10 years as a result of increasing population, increasing car ownership and use, and increasing economic growth. However, if measures to increase passenger transport and active mode share, reduce severe bottlenecks in the road network and improve travel demand and efficiency, then there is some potential for this target to be realised. This target addresses the most severe congestion, without attempting to eliminate all traffic congestion.

The target in relation to improved regional freight efficiency seeks improved road journey time between key destinations and is closely related to the target seeking a reduction of severe congestion, particularly on strategic routes linking the key freight destinations of Gracefield, Porirua and CentrePort.

The target in relation to improved land use and transport integration is for all new large subdivisions and developments to include provision for walking, cycling and public transport. To meet this target, clear guidance will be needed in the Regional Policy Statement and, in turn, District Plans. Progress towards this key outcome target will largely rely on advocacy to local authority reviews of their District Plans under the Resource Management Act and it may be some time before adequate provisions are incorporated into all planning documents.

7.3 Related outcome targets

Targets have also been set for each related outcome (Table 3). These targets are set at a level which signals the need for good progress in these areas. In some cases it was considered appropriate to have more than one target to reflect the various components of a particular outcome.

Measures aimed at progress towards the related outcome “reduced private car mode share” will recognise that some types of private vehicle trips (eg. light commercial vehicles used by couriers or

tradesmen) are unable to easily transfer to an alternative mode due to the nature of the job and need to carry equipment. Measures will therefore focus on commuter and other trips by car for which viable alternatives are available, particularly where those vehicles are single occupancy.

In addition to the targets shown above, many more indicators will measure progress towards achieving the strategy outcomes. In the order of 100 indicators will be reported on annually through the Annual Monitoring Report.

Related outcome	2016 Target
1.2 Increased off-peak passenger transport use and community connectedness	Passenger transport accounts for at least 25 million off peak period trips per annum. (16.7 million trips in 2005/06)
1.3 Improved passenger transport accessibility for all, including disabled people or from low income groups	80% of passenger transport services are guaranteed to be wheelchair accessible. (11.8% in 2005/06) Most of the region’s residents live within 400 metres (5 minutes walk) of a bus stop or train station with a service frequency of at least 30 minutes. Passenger transport services in the highest deprivation areas are more affordable.
1.4 Reduced passenger transport journey times compared to travel by private car	Peak period passenger transport journey times are equal to or better than a similar journey undertaken by a private car for key selected corridors.
1.5 Increased passenger transport reliability	Nearly all bus and train services run on time.
2.2 Improved level of service for pedestrians and cyclists	All of the strategic cycle network provides an acceptable level of service. Nearly all urban road frontages are served by a footpath.
2.3 Increased safety for pedestrians and cyclists	Fewer than 100 pedestrians injured in the region per annum. (150 injured in 2005) Fewer than 75 cyclists injured in the region per annum. (112 injured in 2005)
3.2 Reduced private car mode share	Private vehicles account for no more than 62% of region wide journey to work trips. (68% in 2006)
3.3 Reduced fuel consumption	No more than 442 mega litres of petrol and diesel per annum will be used for transport purposes. (464 mega litres in 2005)
3.4 Increased private vehicle occupancy	Vehicles entering the Wellington CBD during the 2 hour AM peak contain on average at least 1.5 people per vehicle. (1.37 people in 2006)
4.2 Maintained vehicle travel times between communities and regional destinations	No decrease in average vehicle journey “speeds” shown in travel time surveys for selected key routes. (55km/h in 2006)
4.3 Improved reliability of the strategic roading network	Key routes are very rarely affected by closure.
6.2 Improved integration between transport modes	The majority of passenger transport services covered by integrated ticketing.
6.3 Sustainable economic development supported (in line with the WRS)	Reduced vehicle kilometres travelled per GDP.
6.4 Improved transport efficiency	Reduced passenger transport expenditure per passenger. Reduced roading expenditure per GDP.
7.2 Improved inter-regional freight efficiency	All infrastructure constraints to rail freight movements are removed.

Table 3: Related outcome targets at 2016.

The RLTS policies have been developed in direct response to the pressures and issues facing the region's land transport network as outlined in chapter 3 of this strategy. Policies are expressed using a consistent hierarchy of terms. These are 'ensure', 'support', 'encourage', or 'advocate', depending on what is appropriate in each case. Where the responsibility for implementing a particular policy position lies outside the control of the RLTC, the policy will need to be progressed through advocacy.

Policies respond to ongoing issues and guide agency resource allocation and practice. Policies are also important references in programme prioritisation, implementation and corridor plans, monitoring and reviews. All are subject to various constraints including funding, legislative provisions, consent and planning processes outside the scope of this strategy.

8.1 Network management

This group of policies seeks optimal use and improvement of the transport network.

- a** Ensure the critical role of the regional transport network in providing national and regional accessibility is protected.
- b** Ensure the regional transport network provides effective connections to Wellington's Port and International Airport.
- c** Ensure that the level of service of the regional transport network is continuously monitored and, where necessary, improved.
- d** Ensure best use is made of network management techniques²³ to optimise the performance of the transport network.
- e** Ensure continuous identification and mitigation of network security risks including, where appropriate, the development of alternative routes for use in emergencies.
- f** Ensure the role of the urban passenger rail network is maintained as the key long to medium distance and high volume service.
- g** Increase rail capacity and coverage in line with current and future demand, and complement rail services with bus services.

- h** Ensure a high level of service for passenger rail with regard to rolling stock and rail infrastructure reliability.
- i** Support enhanced accessibility to rail services including, where appropriate, new stations and extending electrification of commuter rail lines (in particular north of Paraparaumu and Upper Hutt).
- j** Support the ongoing development of new and existing park and ride facilities.
- k** Ensure the continuous review and improvement of bus services.
- l** Support the use of bus priority measures in congested areas.
- m** Support trolley buses in Wellington City and their ongoing upgrade.
- n** Ensure the provision of public transport services and concessions that recognise the needs of the transport disadvantaged (e.g., people on low incomes and people with disabilities) to enhance equity.
- o** Support continuous development of the cycling network and integration with other modes.
- p** Support continuous development of the pedestrian network and integration with other modes.
- q** Support road and rail maintenance expenditure to achieve appropriate service levels.
- r** Ensure the proposed Transmission Gully Motorway is developed as the long term solution to address access reliability for State Highway 1 between Kapiti and Wellington.
- s** Ensure the existing State Highway 1, between MacKays Crossing in the north and Mungavin Interchange in the south, is managed in a way that is consistent with its long term purpose of a scenic access route once Transmission Gully Motorway is built.
- t** Support improved east-west transport links between the Western and Hutt Corridors.
- u** Encourage the separation of arterial and local road traffic where practicable.

²³ For example, Advanced Traffic Management Systems, Advanced Traveller Information Systems, High Occupancy Vehicle lanes.

- v Ensure the transport network provides for freight and commercial needs.

8.2 Travel demand management

This group of policies seeks to manage the demand for travel and move toward correct²⁴ pricing of the transport network.

- a Ensure the availability of reliable information on the transport system and the choices available.
- b Support reduced reliance on private²⁵ motor vehicles, particularly single occupancy vehicle use (excluding motorcycles) and use for short trips.
- c Support the increased use of passenger transport.
- d Support the uptake of cycling and pedestrian travel, particularly for short trips.
- e Encourage appropriately located land development and ensure integration with transport infrastructure.
- f Encourage the development of travel plans.
- g Advocate for government policy to enable road pricing.
- h Support start-up funding for viable 'alternative to road' initiatives.
- i Support beneficial rail freight initiatives where net benefits exceed those of road freight.

8.3 Safety

This group of policies seeks to improve safety and personal security when using transport.

- a Ensure continuous improvement of regional road safety based on a firmly established safety culture.
- b Support improved safety (perceived and real) of pedestrians from risks posed by traffic, the physical environment and crime.
- c Support improved safety of cyclists from risks posed by traffic and other hazards.
- d Support improved safety and personal security (perceived and real) of passenger transport users.

8.4 Environment and public health

This group of policies seeks to avoid, to the extent reasonable in the circumstances, the adverse effects of transport on the environment and public health.

- a Support best practice in design, construction and maintenance of transport projects to avoid, to the extent reasonable in the circumstances, adverse impacts on the environment.
- b Support continuous improvement in air quality through reduction in harmful vehicle emissions.
- c Support the reduction of greenhouse gas emissions arising from the operation of the regional transport network.
- d Support government investigations into alternative fuel options and eco-efficient vehicles.
- e Ensure the transport network is developed in a way that minimises the use of non-renewable resources.
- f Support the use of transport modes that are not dependent on fossil fuels, including active transport modes.
- g Ensure location and design of new transport infrastructure enhance access, minimise community severance issues and take account of the special values of the local area including, but not limited to, environmental matters and community concerns.
- h Support ongoing installation of stock truck effluent disposal sites at key localities in the region.

8.5 Planning and integration

This group of policies seeks to ensure full integration of the RLTS with other relevant local government planning processes and strategies.

²⁴ Road pricing is where drivers pay the true cost of using roads. This includes the social, economic, and environmental costs such as accidents, pollution and time delays, which are currently borne by the community or economy.

²⁵ In this context private motor vehicles includes company cars not being used for commercial purposes.

- a Support the growth and land use aspirations of the Wellington Regional Strategy and the Regional Policy Statement, particularly in relation to compact regional form, supporting a strong Wellington City CBD and regional centres, and densification around passenger transport nodes.
- b Ensure new transport infrastructure is consistent with the region's urban design principles as set out in the Regional Policy Statement.
- c Support land use principles that minimise dependence on the private car.
- d Ensure the current and future regional transport network is identified and protected in territorial authority planning documents.
- e Support better integration of transport and land use planning by identifying roading hierarchies and advocating for appropriate access controls in district plans.
- f Ensure that land use and transport decisions take into account the diverse transport needs and views of the region's community.
- g Ensure major recreational and tourist traffic flows are taken into account during planning processes.
- h Ensure investment in national transport routes is coordinated with other regions.

8.6 Securing transport funds

This group of policies seek to ensure adequate funding for transport in the region.

- a Advocate to government for increased funding and appropriate funding instruments;
- b Support investigation of mechanisms for addressing funding gaps in the Regional Transport Programme, including but not limited to:
 - (i) Local fuel taxes
 - (ii) Tolling of new roads
 - (iii) Road pricing of existing roads
 - (iv) Public/private partnerships
 - (v) Development contributions (under the LGA) and financial contributions (under the RMA).

8.7 Implementation policies

This group of policies seek the development and review of detailed plans to implement this strategy.

- a To prepare and review corridor plans for each of the following, in accordance with the regional framework provided by this strategy, that identify the needs and proposed actions specific to each corridor:
 - (i) Western corridor
 - (ii) Hutt Corridor
 - (iii) Wairarapa Corridor
 - (iv) Ngauranga to Airport Corridor.
- b To prepare and review implementation plans for pedestrians, cycling, road safety, travel demand management, passenger transport and freight, in accordance with the regional framework provided by this strategy, that identify the needs and proposed actions specific to each mode.
- c To prepare a Regional Rail Plan that identifies the needs and proposed actions for development of the rail network over the next 30 years.

8.8 Programme prioritisation and funding policies

This group of policies guides the regional transport programme prioritisation process.

- a Develop an agreed prioritisation process and methodology to be applied when carrying out review of the Regional Transport Programme.
- b Ensure that priority is given to projects or packages that contribute significantly to key national or regional outcomes in each planning period²⁶.
- c Ensure that prioritisation decisions in the Regional Transport Programme take account of a project or package's effectiveness, including its potential risks and its

²⁶ Short term 0-3 years; medium term 4-10 years; long term beyond 10 years.

contribution towards the achievement of the Regional Land Transport Strategy's objectives and outcomes.

- d** Ensure that prioritisation decisions for each project or package includes consideration of:
- (i) Seriousness: the relative magnitude and significance of the transport problem to which the project or package responds
 - (ii) Urgency: consideration of the need to hasten project/ package implementation
 - (iii) Economic efficiency: a rating of the economic returns on the funds invested as measured by a benefit cost ratio
 - (iv) Volumes: the number of people affected
 - (v) Affordability
 - (vi) Practicality and readiness: consideration of factors that may influence timely implementation and staging
 - (vii) Perceived safety benefits.
- e** Ensure that once a project or package is committed, and construction or implementation has been approved, then that project or package's funding is deemed to be committed and will not be reallocated to another purpose unless significant new information comes to light.
- f** Ensure that Western Corridor passenger rail infrastructure and other improvements are in place prior to the opening of the Transmission Gully Motorway.
- g** Ensure the following applies to the allocation of Crown "C" funds:
- (i) The use of "C" funds should be used early to maximise buying power as these funds are not indexed against inflation.
 - (ii) The highest priority for the use of C funds for assisting local share will be passenger rail improvement projects.
 - (iii) The Kapiti Western Link Road Stage 1 design and construction is the second priority for assistance with the local share.
 - (iv) C1 and C2 funds will be used to achieve an effective FAR (Financial Assistance Rate) of 90% for passenger rail improvement projects.
 - (v) C1 funds will be used to achieve an effective FAR of 90% for Stage 1 of the Western Link Road, but will not be available to assist the local share of Stages 2 and 3 of this project.
 - (vi) Up to \$45 million of C1 funds are available to assist the local share of the Grenada to Gracefield Stage 1 project (assistance to the level of half the local share), noting that this project is still subject to further investigations.
 - (vii) All C3 funds will be used to develop the proposed Transmission Gully Motorway as the long term solution to address access reliability for State Highway 1 between Kapiti and Wellington.
- h** Ensure the following applies to the allocation of Regional "R" funds:
- (i) To accelerate otherwise unfunded projects or packages that bring an identified regional benefit.
 - (ii) May be used to offset local financial assistance rates.
 - (iii) May be used for either passenger transport or roading projects or packages.

8.9 Links between strategy policies and objectives

The following table (Table 4) shows the contribution of policies set out in the previous section to the strategy's objectives. It illustrates how the strategy responds to community needs for each objective.

<p style="text-align: center;">RLTS objectives</p> <p>RLTS policies</p>	Assist economic and regional development	Assist safety and personal security	Improve access, mobility and reliability	Protect and promote public health	Ensure environmental sustainability	Ensure that the RTP is affordable to the regional community
Network management						
Ensure the critical role of the regional transport network in providing national and regional accessibility is protected.	✓		✓			
Ensure the regional transport network provides effective connections to Wellington's Port and International Airport.	✓		✓			
Ensure that the level of service of the regional transport network is continuously monitored and, where necessary, improved.	✓	✓	✓	✓	✓	✓
Ensure best use is made of network management techniques to optimise the performance of the transport network.	✓		✓		✓	✓
Ensure continuous identification and mitigation of network security risks including, where appropriate, the development of alternative routes for use in emergencies.	✓	✓	✓			
Ensure the role of the urban passenger rail network is maintained as the key long to medium distance and high volume service.	✓	✓	✓	✓	✓	✓
Increase rail capacity and coverage in line with current and future demand, and complement rail services with bus services.	✓	✓	✓	✓	✓	✓
Ensure a high level of service for passenger rail with regard to rolling stock and rail infrastructure reliability.	✓	✓	✓	✓	✓	✓
Support enhanced accessibility to rail services including, where appropriate, new stations and extending electrification of commuter rail lines (in particular north of Paraparaumu and Upper Hutt).	✓	✓	✓	✓	✓	✓
Support the ongoing development of new and existing park and ride facilities.	✓		✓		✓	✓
Ensure the continuous review and improvement of bus services.	✓	✓	✓	✓	✓	✓
Support the use of bus priority measures in congested areas.	✓	✓	✓	✓	✓	✓
Support trolley buses in Wellington City and their ongoing upgrade.			✓	✓	✓	
Ensure the provision of public transport services and concessions that recognise the needs of the transport disadvantaged (e.g., people on low incomes and people with disabilities) to enhance equity.		✓	✓	✓		✓
Support continuous development of the cycling network and integration with other modes.			✓	✓	✓	✓
Support continuous development of the pedestrian network and integration with other modes.	✓	✓	✓	✓	✓	✓
Support road and rail maintenance expenditure to achieve appropriate service levels.	✓	✓	✓	✓	✓	✓
Ensure the proposed Transmission Gully Motorway is developed as the long term solution to address access reliability for State Highway 1 between Kapiti and Wellington.	✓	✓	✓	✓	✓	
Ensure the existing State Highway 1, between MacKays Crossing in the north and Mungavin Interchange in the south, is managed in a way that is consistent with its long term purpose of a scenic access route once TGM is built.		✓		✓	✓	

<div style="text-align: right;">RLTS objectives</div> <div style="text-align: left;">RLTS policies</div>	Assist economic and regional development	Assist safety and personal security	Improve access, mobility and reliability	Protect and promote public health	Ensure environmental sustainability	Ensure that the RTP is affordable to the regional community
Support improved east-west transport links between the Western and Hutt Corridors.	✓	✓	✓	✓	✓	✓
Encourage the separation of arterial and local road traffic where practicable.	✓	✓	✓	✓	✓	
Ensure the transport network provides for freight and commercial needs.	✓		✓		✓	✓
Travel demand management						
Ensure the availability of reliable information on the transport system and the choices available.	✓	✓	✓	✓	✓	✓
Support reduced reliance on private motor vehicles, particularly single occupancy vehicle use (excluding motorcycles) and use for short trips.	✓	✓	✓	✓	✓	✓
Support the increased use of passenger transport.	✓	✓	✓	✓	✓	✓
Support the uptake of cycling and pedestrian travel, particularly for short trips.	✓	✓	✓	✓	✓	✓
Encourage appropriately located land development and ensure integration with transport infrastructure.	✓	✓	✓	✓	✓	✓
Encourage the development of travel plans.	✓	✓	✓	✓	✓	✓
Advocate for government policy to enable road pricing.	✓		✓		✓	✓
Support start-up funding for viable 'alternative to road' initiatives.	✓		✓		✓	✓
Support beneficial rail freight initiatives where net benefits exceed those of road freight.	✓	✓	✓		✓	✓
Safety						
Ensure continuous improvement of regional road safety based on a firmly established safety culture.	✓	✓	✓	✓		
Support improved safety (perceived and real) of pedestrians from risks posed by traffic, the physical environment and crime.	✓	✓	✓	✓		✓
Support improved safety of cyclists from risks posed by traffic and other hazards.		✓	✓	✓		✓
Support improved safety and personal security (perceived and real) of passenger transport users.		✓	✓	✓		✓
Environment and public health						
Support best practice in design, construction and maintenance of transport projects to avoid, to the extent reasonable in the circumstances, adverse impacts on the environment.				✓	✓	
Support continuous improvement in air quality through reduction in and exposure to harmful vehicle emissions.				✓	✓	
Support the reduction of greenhouse gas emissions arising from the operation of the regional transport network.	✓				✓	✓
Support government investigations into alternative fuel options and eco-efficient vehicles.	✓				✓	
Ensure the transport network is developed in a way that minimises the use of non-renewable resources.				✓	✓	✓

<p style="text-align: right;">RLTS objectives</p> <p>RLTS policies</p>	Assist economic and regional development	Assist safety and personal security	Improve access, mobility and reliability	Protect and promote public health	Ensure environmental sustainability	Ensure that the RTP is affordable to the regional community
Support the use of transport modes that are not dependent on fossil fuels, including active transport modes.	✓			✓	✓	✓
Ensure location and design of new transport infrastructure enhance access, minimise community severance issues and take account of the special values of the local area including, but not limited to, environmental matters and community concerns.	✓	✓	✓	✓	✓	
Support ongoing installation of stock truck effluent disposal sites at key localities in the region.	✓			✓	✓	
Planning and integration						
Support the growth and land use aspirations of the Wellington Regional Strategy and the Regional Policy Statement, particularly in relation to compact regional form, supporting a strong Wellington City CBD and regional centres, and densification around passenger transport nodes.	✓	✓	✓	✓	✓	✓
Ensure new transport infrastructure is consistent with the region's urban design principles as set out in the Regional Policy Statement.	✓	✓	✓	✓	✓	✓
Support land use principles that minimise dependence on the private car.	✓	✓	✓	✓	✓	✓
Ensure the current and future regional transport network is identified and protected in TA planning documents.	✓	✓	✓	✓	✓	✓
Support better integration of transport and land use planning by identifying roading hierarchies and advocating for appropriate access controls in district plans.	✓	✓	✓	✓	✓	✓
Ensure that land use and transport decisions take into account the diverse transport needs and views of the region's community.	✓	✓	✓	✓	✓	✓
Ensure major recreational and tourist traffic flows are taken into account during planning processes.	✓		✓			
Ensure investment in national transport routes is coordinated with other regions.	✓		✓		✓	✓
Securing transport funds						
Advocate to government for increased funding and appropriate funding instruments.	✓					✓
Support investigation of mechanisms for addressing funding gaps in the Regional Transport Programme, including but not limited to: <ul style="list-style-type: none"> -Local fuel taxes -Tolling of new roads -Road pricing of existing roads -Public/private partnerships -Development contributions (under the LGA) and financial contributions (under the RMA). 	✓					✓

<p style="text-align: center;">RLTS objectives</p> <p>RLTS policies</p>	Assist economic and regional development	Assist safety and personal security	Improve access, mobility and reliability	Protect and promote public health	Ensure environmental sustainability	Ensure that the RTP is affordable to the regional community
Implementation						
<p>To prepare and review corridor plans for each of the following, in accordance with the regional framework provided by this strategy, that identify the needs and proposed actions specific to each corridor:</p> <ul style="list-style-type: none"> -Western Corridor -Hutt Corridor -Wairarapa Corridor -Ngauranga to Airport Corridor. 	✓	✓	✓	✓	✓	✓
<p>To prepare and review implementation plans for pedestrians, cycling, road safety, travel demand management, passenger transport and freight, in accordance with the regional framework provided by this strategy, that identify the needs and proposed actions specific to each mode.</p>	✓	✓	✓	✓	✓	✓
<p>To prepare a Regional Rail Plan that identifies the needs and proposed actions for development of the rail network over the next 30 years.</p>	✓	✓	✓	✓	✓	✓
Programme prioritisation & funding						
<p>Develop an agreed prioritisation process and methodology to be applied when carrying out review of the Regional Transport Programme.</p>	✓	✓	✓	✓	✓	✓
<p>Ensure that priority is given to projects or packages that contribute significantly to key national or regional outcomes in each planning period.</p>	✓	✓	✓	✓	✓	✓
<p>Ensure that prioritisation decisions in the Regional Transport Programme take account of a project or package's effectiveness, including its potential risks and its contribution towards the achievement of the Regional Land Transport Strategy's objectives and outcomes.</p>	✓	✓	✓	✓	✓	✓
<p>Ensure that prioritisation decisions for each project or package includes consideration of: seriousness; urgency; economic efficiency; volumes; affordability; practicality and readiness; and perceived safety benefits.</p>	✓	✓	✓	✓	✓	✓
<p>Ensure that, once a project or package is committed, and construction or implementation has been approved, then that project or package's funding is deemed to be committed and will not be reallocated to another purpose unless significant new information comes to light.</p>	✓					✓
<p>Ensure that Western Corridor passenger rail infrastructure and other improvements are in place prior to the opening of the Transmission Gully Motorway.</p>			✓		✓	

<p style="text-align: right;">RLTS objectives</p> <p>RLTS policies</p>	Assist economic and regional development	Assist safety and personal security	Improve access, mobility and reliability	Protect and promote public health	Ensure environmental sustainability	Ensure that the RTP is affordable to the regional community
<p>Ensure the following applies to the allocation of Crown “C” funds:</p> <ul style="list-style-type: none"> - The use of “C” funds should be used early to maximise buying power as these funds are not indexed against inflation. - The highest priority for the use of C funds for assisting local share will be passenger rail improvement projects. - The Kapiti Western Link Road Stage 1 design and construction is the second priority for assistance with the local share. - C1 and C2 funds will be used to achieve an effective FAR of 90% for passenger rail improvement projects. - C1 funds will be used to achieve an effective FAR of 90% for Stage 1 of the Western Link Road, but will not be available to assist the local share of Stages 2 and 3 of this project. - Up to \$45 million of C1 funds are available to assist the local share of the Grenada to Gracefield Stage 1 project (assistance to the level of half the local share), noting that this project is still subject to further investigations. - All C3 funds will be used to develop the proposed Transmission Gully Motorway as the long term solution to address access reliability for State Highway 1 between Kapiti and Wellington. 	✓	✓	✓	✓	✓	✓
<p>Ensure the following applies to the allocation of Regional “R” funds:</p> <ul style="list-style-type: none"> - To accelerate otherwise unfunded projects or packages that bring an identified regional benefit. - May be used to offset local financial assistance rates. - May be used for either passenger transport or roading projects or packages. 	✓	✓	✓	✓	✓	✓

Table 4: Links between strategy objectives and policies.

9 The role of transport modes

9.1 Introduction

The land transport system is made up of various modes with separate characteristics and roles. These include private vehicles, passenger transport, walking, cycling and freight. This chapter describes the appropriate role for each land transport mode within the greater Wellington region and meets the requirement of section 175(2)(j) of the Land Transport Act 1998 and reflects the objectives, outcomes and policies outlined above.

In the greater Wellington region, travel by private car is currently the dominant mode choice comprising nearly three quarters of all trips during the peak period and accounting for almost two thirds of journeys to work. However, both bus and rail passenger transport modes are vital to the operation of the region's transport network, comprising around 30% of peak period trips to and from the Wellington City CBD. This is a high mode share compared with many other cities in New Zealand and internationally. The RLTS recognises the importance of improving the provision and uptake of alternatives to private cars in achieving a sustainable land transport system.

9.2 Private vehicles

The appropriate role for private vehicles is the safe and efficient movement of people between many origins and many destinations, at diverse times. It is appropriate over distances that cannot be easily walked or cycled, where there is a need to carry luggage, and/or where the trip cannot be conveniently provided for by passenger transport services. Private vehicles can also provide for the needs of the mobility impaired.

Trips by private car are currently the dominant mode choice and account for around 76% of all weekday trips undertaken in the greater Wellington region²⁷. Even with rising fuel prices, it is anticipated that private cars will continue to be the dominant mode choice and this is appropriate for the period of the strategy.

The flexibility and convenience a car provides in terms of trip origin and destination, time of

travel, and trip distance means it is often the most attractive mode choice. Even with a passenger transport system which serves the strategic network relatively well, a proportion of car trips can not easily be transferred to other modes.

Some businesses and individuals rely on private vehicles for trips during the working day which by their nature cannot be as efficiently served by passenger transport or other modes. Private vehicles are often relied on to access a range of economic, social, cultural and recreational opportunities, particularly off peak and at the weekends. Modern society places increasing demands on people's time and we frequently carry out trip chaining (linking a number of trip 'legs' to undertake a number of trip purposes). In such cases, private cars often provide the most convenient and time efficient option.

However, while overall demand for travel by private car is forecast to continue to grow, interventions in the strategy aimed at reducing the need to travel, increasing vehicle occupancy and improving transport alternatives to the private car, seek to reduce the current mode share of private cars. This is reflected in the strategy targets set out in chapter 7.

The targets recognise a growing demand for travel by private vehicle in our region is contributing to adverse effect on environmental quality, public health and economic efficiency. Current trends of increasing petrol and diesel consumption are having an adverse impact on CO₂ levels and regional air quality. An increasing reliance on private car use is also having a detrimental effect on people's health and fitness levels. It also results in worsening congestion and level of service on our roads which can adversely affect the efficiency of our regional economy. Peak period congestion is dominated by journeys to and from work, particularly on the strategic network to and from the Wellington City CBD.

²⁷ Source: Wellington Transport Strategic Model (WTSM), total region wide trips per weekday.

9.3 Passenger transport

The appropriate role for passenger transport is to provide an alternative to private cars, particularly for longer journeys where active modes are less attractive. It also has a vital role in providing for people who do not own a private vehicle, are unable to drive or cannot use active modes to access the goods or services they need.

Passenger transport covers both scheduled public transport services and other passenger services. This mode includes the region's trains, buses, ferries and taxis which all form important components of a sustainable land transport system. Journeys on public transport services currently account for around 7% of the region's weekday trips²⁸. Passenger transport mode share on the critical strategic corridors is around 30% in the morning peak. This is the highest passenger transport mode share in any region of the country.

Compared to single occupant private car journeys, passenger transport trips are generally more energy efficient, generate fewer emissions and result in less congestion, particularly where those trips are well patronised and the vehicles are well maintained and tuned. Passenger transport also has safety benefits over private cars.

There is an important relationship between urban form and the passenger transport network. The intensification of development around passenger transport nodes is recognised in the WRS as an important element in allowing people to lead a lifestyle that is not dependent on private cars.

Different passenger transport modes have different characteristics and roles to play in the provision of an efficient and effective passenger transport network. Descriptions of these follow.

9.3.1 Passenger rail

The appropriate role for passenger rail is the safe and efficient movement of many people at a time over medium to long distances. It has a key role in providing for access between regional centres

and for commuter trips to and from the Wellington CBD.

Passenger rail provides key services along two main arterial corridors to and from the Wellington City CBD. Commuter services are provided from as far as Palmerston North and Masterton, with more frequent electrified services from Paraparaumu, Upper Hutt, Johnsonville and Melling. Passenger rail primarily provides access to the Wellington City CBD by carrying large numbers²⁹ of people along these critical corridors, particularly during peak periods when the roads along these routes are severely congested. In the Wellington region, the average trip length by rail is around 25 km, compared with 7 km by bus. Hence, while rail accounts for a smaller proportion of trip numbers than buses, it accounts for 70% of passenger kilometres travelled in peak periods.

The RLTS seeks to continue to grow rail patronage and improve peak period mode share, through implementation of the Regional Passenger Transport Plan and Regional Rail Plan. This includes improving the capacity, reliability, frequency and accessibility of rail services.

9.3.2 Buses

The appropriate role for buses is the provision of a safe and efficient network of services that allows the connection of many people between many different origins and destinations, including a short walk at either end of the journey. Buses also have an important role in providing connector services to rail stations.

Buses currently account for almost two thirds of passenger transport trips during peak periods. Buses provide a comprehensive network of routes to and from the Wellington City CBD from the south, east and western Wellington city suburbs, along with direct services along the strategic corridors from northern suburbs such as

²⁸ Source: Wellington Transport Strategic Model (WTSM)

²⁹ Around 11,746 people arrive at Wellington Station during the AM peak. Source: GWRC AM Peak Cordon Surveys, March 2004.

Churton Park, Newlands and Khandallah. Elsewhere in the region buses play an important supporting role for rail as a local connector service and for connecting local communities with services and facilities.

The RLTS seeks to continue to grow bus patronage and improve peak period bus mode share, through implementation of the Regional Passenger Transport Plan. This includes improving the capacity, service frequency and accessibility of bus services and encouraging the ongoing development of bus priority measures to ensure bus journeys are an attractive alternative to private vehicles.

9.3.3 Taxis

The appropriate role for taxis is similar to that of private vehicles. Taxis also provide a transport alternative for those without access to a private vehicle where scheduled services or routes do not provide adequately for a particular trip. Taxis also provide a door to door service for those with limited mobility. The region's Total Mobility scheme utilises taxis for this purpose. The current role of taxis in the Wellington region will continue to be appropriate for the period of this strategy.

Passenger trips by taxi account for a very minor (less than 1%)³⁰ mode share of all weekday trips. Because taxis essentially provide their customers with the same level of mobility as private cars, there is not considered to be a case for taxis to use or benefit from public transport priority schemes such as bus lanes. There may be cases where taxis would qualify for high occupancy vehicle lanes or transit lanes. The regulation of such facilities along with allocation of standing space for taxis is the responsibility of territorial authorities.

9.3.4 Harbour ferries

The appropriate role for harbour ferries is the safe and efficient movement of many people between limited locations, particularly where they provide a quicker and more direct trip than other modes.

The existing Wellington Harbour ferry provides direct access from Eastbourne across the harbour to the Wellington City CBD with good time savings compared to the same trip by bus or car. Other ferry options may become available over time.

Harbour ferries' share of passenger transport trips in the region is very minor (well below 1%)³¹ and this is not expected to change significantly over the next 10 years. The current role of harbour ferries in the region's land transport network is appropriate and will continue.

9.4 Walking

Walking is the appropriate mode for short³² local trips and for connections between modes and at either end of longer journeys by other modes. Walking is safe and efficient, and has important health, fitness, social and environmental benefits. It is also often the most energy and time efficient means of transport for short trips.

Walking is an essential element of a sustainable transport system and comprises around 17% of the region's daily trips³³. For the purpose of this strategy 'pedestrians' are defined as any person on foot on a road, and include any person in or on any contrivance equipped with wheels or revolving runners which is not a vehicle (Land Transport Act 1998).

Walking is a significant mode for journeys to work to and from the Wellington City CBD. It is largely influenced by Wellington City's compact form and the intensification of residential development in and around the Wellington City CBD, meaning more people live within easy walking distance of the city centre. The relatively high use of passenger transport to and from the Wellington City CBD also has a high associated walking component.

³⁰ Derived from the 2001 household interview survey.

³¹ Derived from 2001 household interview survey.

³² Short trips are defined as being those less than 2 km in length.

³³ Source: Wellington Transport Strategic Model (WTSM) region wide trips per weekday.

Most people consider walking to be an easy way of getting around³⁴. However, we do not walk for as many short trips as we could³⁵ and the use of walking as a mode for trips between 1 km and 2 km could be increased³⁶. The RLTS supports walking as a transport mode through the provision of a safe and convenient pedestrian environment and by increasing people's awareness of the benefits of walking. This includes advocating for land use development and urban design that support walking as a transport mode. In addition, the close link between walking and passenger transport for longer journeys is recognised and this strategy proposes interventions to ensure pedestrian access to passenger transport nodes is easy, safe and pleasant.

The Regional Pedestrian Plan, which sits alongside this strategy, sets out the proposed actions for pedestrian improvements within the region, including the proposed funding and responsibilities for actions.

9.5 Cycling

The appropriate role for cycling is the safe and efficient movement of people between many origins and many destinations, over short to medium distances, as an alternative to private cars.

While comprising a relatively minor 1%³⁷ of the region's trips over an average weekday, cycling contributes positively towards a sustainable transport system as it is energy efficient, has minimal environmental impacts, is affordable, and has associated health and fitness benefits. Cycling also contributes to reduced congestion as cycles require less road space and parking space than cars.

A hilly terrain and windy climate in parts of the region may contribute to the perception of many greater Wellington residents that getting around the region by cycle is not easy³⁸. However, other

parts of the region, such as the Kapiti Coast, Hutt Valley and Wairarapa, have topography and climatic conditions more suited to cycling and a growth in this mode should be achievable in these areas.

However, most residents also believe that cycling in the region is unsafe³⁹. Therefore perceptions of cycling safety, along with the provision and quality of cycling facilities have an important part to play if cycling is to increase. The RLTS seeks to improve the level of service for cycling throughout the region to enable cycling to perform its appropriate role.

The Regional Cycling Plan, which sits alongside this strategy, includes an action programme and targets and performance measures for this mode. A principle feature is the development and communication of a regional cycling network. It is also important to ensure that new land use development and urban design support cycling as a viable transport mode, particularly for shorter journeys. Cycling as part of a longer journey combined with passenger transport also needs to be recognised and adequately provided for within our region.

9.6 Freight

The appropriate role for land transport freight traffic is the safe and efficient movement of goods within, to and through the region. Freight includes anything transported as part of a commercial arrangement from a small couriered document to the movement of logs, containers and heavy machinery.

The two primary freight modes are road and rail. Road freight is most appropriate for the movement of goods between many origins and many destinations. Rail freight is most appropriate for the movement of high volumes

³⁴ Source: GWRC perception survey 2004

³⁵ Source: GWRC perception survey 2004

³⁶ Source: GWRC active mode survey 2004

³⁷ Source: Wellington Transport Strategic Model (WTSM)

³⁸ GWRC perception survey 2004.

³⁹ GWRC perception survey 2004.

of goods over longer distances between key production and distribution nodes. To provide for these modes the strategy aims to improve road network efficiency and to support rail freight initiatives where the benefits exceed those of road freight.

Most freight journeys within the greater Wellington region tend to be relatively short (less than 20 km) and not easily transferred to rail (BERL, 2004). The region's key road freight destinations are Seaview/Gracefield, Petone, Porirua/Tawa and CentrePort. Freight trips by heavy commercial vehicles (HCV) comprise around 9% of weekday vehicle trips on our region's road network⁴⁰.

State Highways 1 and 2 and the North Island Main Trunk and Wairarapa railway lines provide access to CentrePort for road and rail freight from the north. CentrePort is adjacent to the Wellington City CBD and is a key link for freight between the North and South Islands. It is also the only major port in New Zealand with direct access to westward routes from New Zealand. CentrePort has seen increasing freight volumes each year since 1997 (WRS, 2005). Logs and containers are core components of the port's freight traffic. State Highway 58 provides a vital connection for freight movements between the Western Corridor and the Hutt Valley.

Freight movement via the airport is a relatively minor component of the region's freight traffic, largely due to the restriction in aircraft size that can be accommodated by Wellington airport. A future increase in freight movement via the airport is expected as a result of improvements to accommodate containerised airfreight and, potentially, through the introduction of the new Boeing 787. However, it is unknown how significant such growth is likely to be. The importance of access to and from Wellington airport will increase with any future increase in air freight volumes.

A Regional Freight Movements Study was completed in 2006. A Regional Freight Plan, which sits alongside this strategy covers road,

rail and sea freight and identifies priorities to improve the efficiency of freight movement to support economic development goals for the region.

9.7 Other modes

Modes such as mobility scooters, skateboards and Segways are generally confined to using the existing pedestrian network. While these modes are often important to the user, they are below the scope of strategic regional transport planning. Regulation of use and provision of infrastructure for these are best dealt with at a local community level.

9.8 Integration of modes

The provision of an integrated, safe, responsive and sustainable land transport system relies on integration between all modes which make up the regional transport network. Many journeys are multi-modal and, to ensure such journeys are as quick, safe and convenient as possible, a good level of integration between the different transport modes is sought by the RLTS.

Within the passenger transport network the ease of connecting between modes such as buses and trains, and within the modes themselves, will contribute to faster, more reliable journeys. This is likely to make the passenger transport network more attractive for a greater range of journey purposes and destinations.

Walking often forms a component of longer trips by passenger transport and private cars, so the provision of safe, direct and pleasant pedestrian access to stations, bus stops and park and ride facilities is important. Cycling trips have the potential to be combined with other modes for longer journeys, especially in those areas where public transport cannot be accessed easily by walking. In particular, safe cycling routes and cycle storage provision will be crucial to achieving good integration between cycling and other modes.

⁴⁰ Source: Wellington Transport Strategic Model (WTSM).

There are few opportunities for the integration of rail and road freight due to fundamental differences between these modes. However, opportunities to achieve such coordination should continue to be pursued, for example, the Wairarapa - CentrePort log freight proposal which seeks to move logs from a depot near

Masterton via rail, thereby significantly reducing heavy vehicle traffic on State Highway 2.

The following table sets out opportunities to improve the integration between and within modes.

	Rail	Bus	Ferry	Walking	Cycling
Private car	Maintain and develop park & ride facilities	Investigate park & ride facilities where appropriate	Investigate park & ride facilities where appropriate	Direct and safe pedestrian access to parking areas	N/A
Rail	Integrated ticketing, timetable alignment and pedestrian connections	Integrated ticketing, timetable alignment and pedestrian connections	Integrated ticketing, timetable alignment and pedestrian connections	Direct and safe pedestrian connections to railway stations	Safe cycling links to train stations, cycle storage and/or bike carriage facilities
Bus		Integrated ticketing, timetable alignment and pedestrian connections	Integrated ticketing, timetable alignment and pedestrian connections	Direct and safe pedestrian connections to bus stations and stops	Safe cycling routes to bus stations, cycle storage
Ferry			Integrated ticketing, safe and easy access to ferry terminals	Direct walking connections to and from ferry terminals	Safe cycling routes to ferry terminals, cycle carriage on ferries
Walking				Direct and safe pedestrian links	Cycle storage adjacent key facilities
Cycling					Develop the regional cycling network

Table 5: Opportunities to improve integration of transport modes.

10 Implementing the RLTS

10.1 Introduction

A number of implementation plans and corridor plans have been developed to provide specific project interventions to give effect to the RLTS vision, objectives, outcomes and policies. The implementation and corridor plans form stand alone documents which sit alongside the RLTS. Until changed, they represent the policy position for implementing the RLTS.

Implementation plans enable the RLTC to gain a region wide perspective for each mode or interest area and therefore to assess the relative priority of interventions specific to each mode. Implementation plans include comprehensive action programmes with project specific targets and timeframes identified. The plans also identify the agency responsible for each activity in the action programmes.

Implementation plans have been developed for the following:

- Travel Demand Management
- Road safety
- Cycling
- Pedestrian
- Freight.

A new implementation plan to be developed is a Regional Rail Plan. This will identify the needs and proposed actions for the rail network over the next 30 years.

A Regional Passenger Transport Plan has been developed separately by Greater Wellington's Passenger Transport Committee. This plan forms part of the RLTS, as required by legislation.

Corridor plans are multimodal and enable the RLTC to gain a perspective of interventions proposed in each corridor, and to assess how proposed interventions interact with each other and with the existing regional and local network. A transport corridor is the alignment of transport infrastructure that links activity centres. Corridor plans aim to provide affordable, efficient, reliable, safe and sustainable connections which can accommodate reasonable capacity and

ensure regional and inter-regional accessibility. Corridor plans identify the needs and desired outcomes specific to each of the major transport corridors and provide comprehensive action programmes with responsibilities, targets and timeframes identified.

The following corridor plans have been developed and adopted by the RLTC to date:

- Western Corridor – Otaki to Ngauranga Merge
- Hutt Corridor – Upper Hutt to Ngauranga Merge
- Wairarapa Corridor – Masterton to Upper Hutt

The Ngauranga to Wellington Airport Corridor Plan is currently under development.

The implementation and corridor plans will have an important role in implementing the strategic direction and desired outcomes of the RLTS in relation to each mode or transport corridor. However, not having these detailed plans sit within the strategy itself will enable them to be updated and reviewed on a more regular basis to reflect new information, projects and funding.

Development of implementation and corridor plans involve extensive stakeholder consultation and enable early and focused public consultation on particular transport issues, options and proposed interventions. For many in the wider public, corridor plan consultation will provide the main opportunity for participation in the range of issues surrounding a proposed transport project. Consultation on the RLTS concentrates on the strategic framework and how everything fits together.

Review of the implementation plans and corridor plans will need to ensure alignment of the plans with the new strategic framework provided by the RLTS. The review programme for these plans is set out in chapter 12 of this strategy. Review of the plans will need to be aligned with, and give effect to, the new strategic framework provided by the RLTS.

10.2 Implementation plan summaries

10.2.1 Travel Demand Management

Travel Demand Management (TDM) is a term used for a range of interventions that reduce the need to travel, increase the efficiency of the transport system and influence travel choices, thereby contributing to a more sustainable community. Managing the demand for travel, particularly travel by private motor vehicle, is recognised as playing an important part in meeting the desired outcomes of the RLTS.

TDM interventions have wide ranging potential benefits relating to efficiency, environmental sustainability, reduced traffic congestion, network reliability, economic development, travel choices, public health, road safety and many more.

This section of the strategy is consistent with the requirement of section 175(2)(o) of the Land Transport Act (LTA) 1998 to include a demand management strategy that has targets and timetables appropriate for the region. Strategic outcomes and targets for demand management are included in chapter 7 of the strategy.

The strategy outcomes of particular relevance to demand management are:

- Improved transport efficiency
- Improved land use and transport integration
- Improved integration between transport modes
- Increased peak period passenger transport mode share
- Increased mode share for pedestrians and cyclists
- Reduced private car mode share
- Increased private vehicle occupancy
- Reduced greenhouse gas emissions
- Reduced fuel consumption
- Reduced severe road congestion

- Maintained vehicle travel times between communities and regional destinations
- Sustainable economic development supported.

The 2016 strategy targets of particular relevance to demand management are:

- All large subdivisions and developments include appropriate provision for walking, cycling and public transport.
- Passenger transport accounts for at least 21% of all region wide journey to work trips. (17% in 2006)
- Active modes account for at least 15% of region wide journey to work trips. (13% in 2006)
- Private vehicles account for no more than 62% of region wide journey to work trips. (68% in 2006)
- Vehicles entering the Wellington CBD during the 2 hour AM peak contain on average at least 1.5 people per vehicle. (1.37 people in 2006)
- Transport generated CO₂ emissions remain below 1,065 kilotonnes per annum. (1,118 in 2005/06)
- No more than 442 mega litres of petrol and diesel per annum will be used for transport purposes. (464 mega litres in 2005)
- Average congestion on selected roads will remain below 20 seconds delay per km travelled despite traffic growth. (21 seconds in 2006)

The Regional Travel Demand Management Plan was developed to signal the key regional intentions for travel demand management and sets out a blueprint for improving regional travel efficiency. It seeks to address a number of regionally significant demand management issues including excessive and growing demand for travel (particularly during peak periods), low car occupancy, inefficient trips and increasing vehicle emissions.

A wide range of methods exist to achieve travel demand management outcomes. Travel behaviour change programmes (such as travel plans, awareness campaigns, and rideshare) are often known as “soft” methods. Road pricing tools (such as congestion pricing, cordon pricing, tolls, parking charges) are often known as “hard” methods. Other methods seek to improve travel efficiency through the use of traffic management tools or integrated land use development.

A key contribution towards achieving the strategy targets will be implementation of the detailed Regional Travel Demand Management Plan, which sits alongside this strategy, and

includes an action programme identifying responsibility, timing, funding sources and specific targets for each action.

Table 6 outlines key action areas, project targets and associated timetables.

The provision of good travel choices and viable alternatives to the private car are important in supporting any TDM strategy and this is addressed through the other modal implementation plans which support this strategy.

Action area	Project Target	Timetable
A comprehensive Travel Plan Programme for workplaces, schools and communities in the region	Short term: At least 12 workplace travel plans and 16 school travel plans	By end of 2008/09
	Long term: At least 37 workplace travel plans and 90 school travel plans	By 2016
Development and implementation of network management tools, including a network management plan for the state highway network	Regional plan in place	Developed and implemented by end of 2007/08
Support and advocacy for integrated land use and transport planning	Improved planning documents which facilitate integration	Ongoing
Investigation of and advocacy for road pricing	Short term: road pricing study completed	By end of 2006/07
	Medium to long term: road pricing legislation introduced	Ongoing

Table 6: Travel demand management action areas, targets and timetables

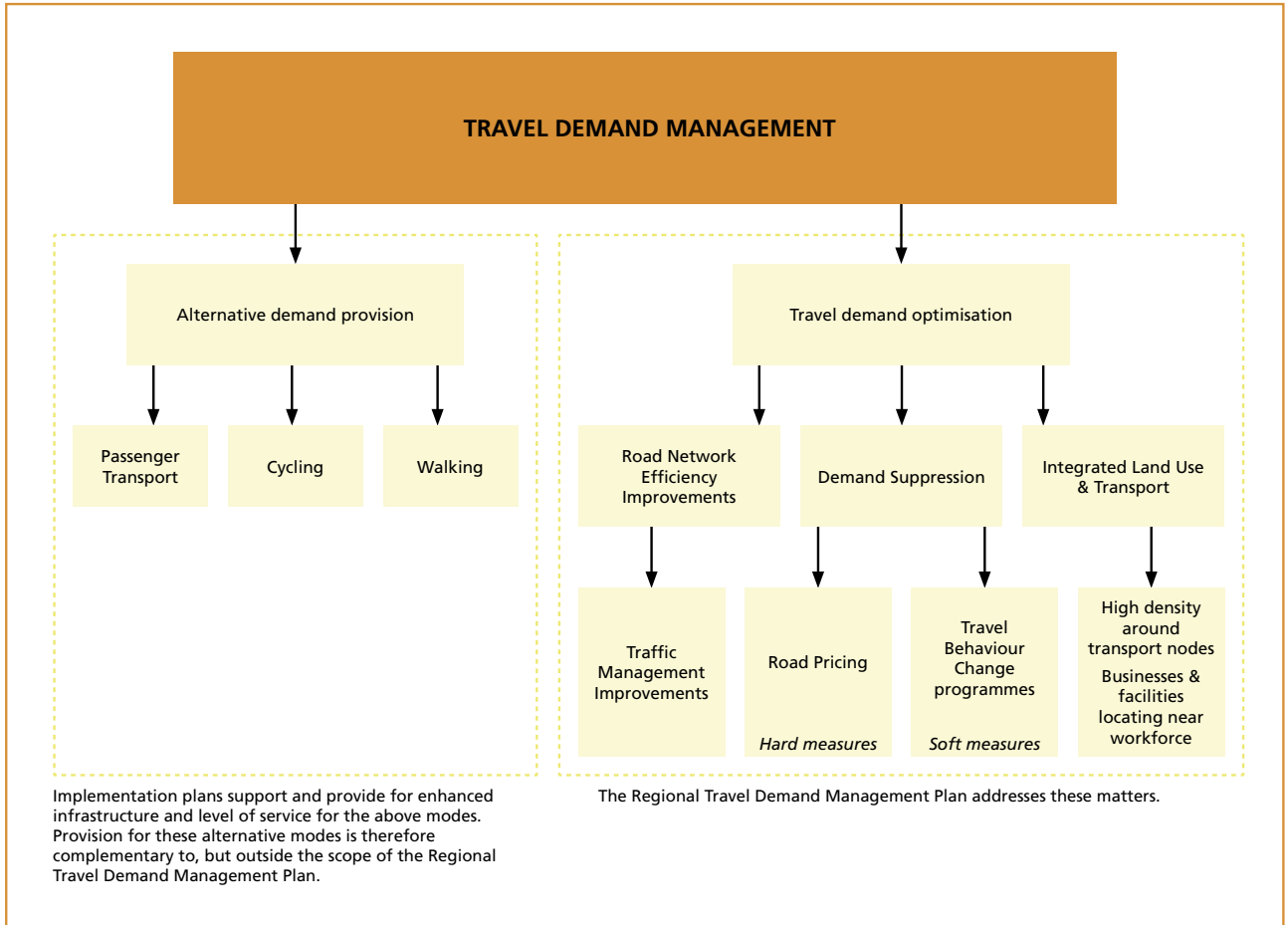


Figure 14: Scope of the Regional Travel Demand Management Plan

Review of the Regional Travel Demand Management Plan will involve all relevant stakeholders in the region and will need to be aligned with the new strategic framework provided by the RLTS, particularly the new strategy outcomes and targets.

10.2.2 Road safety

Continuously improving regional road safety is an important outcome of the RLTS. Chapter 3 of this strategy identifies the significant road safety issues for the region.

The Regional Road Safety Plan sets out proposed actions and identifies associated targets, timeframes and responsibilities. These actions contribute towards achievement of the strategy's

road safety outcomes and targets. The successful achievement of the outcomes will depend on a number of agencies working together on key projects.

Key action areas in the plan include:

- Safety Management Systems and Road Safety Action Plans
- Road safety coordination and education campaigns
- Advocacy for road safety funding.

10.2.3 Cycling

Improving the level of service for cycling, increased use of cycling as a transport mode, and improving cycling safety in the region are important outcomes of the RLTS.

The Regional Cycling Plan provides an action programme which sets out proposed actions and identifies associated targets, timeframes and responsibilities.

Key action areas in the plan include:

- Regional cycling coordination
- Cycle advocacy and promotion
- Cycle safety campaigns and programmes
- Cycle network development
- Cycling information and integration.

10.2.4 Pedestrians

Improving the level of service for pedestrians, increased use of walking as a transport mode for short trips, and improving pedestrian safety and security in the region are important outcomes of the RLTS.

The Regional Pedestrian Plan provides an action programme which sets out proposed actions and identifies associated targets, timeframes and responsibilities.

Key action areas in the plan include:

- Pedestrian network review and development
- Pedestrian advocacy, promotion and safety activities
- Pedestrian accessibility in land use development.

10.2.5 Freight

Improving the efficiency of road and rail freight (regional and inter-regional) are important outcomes of the RLTS. Efficient freight transport is vital to support a prosperous and sustainable region.

The Regional Freight Plan recognises the different needs of short and long haul freight, road and rail freight, important links to other transport networks such as the port and airport for sea and air freight, existing network constraints and the need for improved linkages.

The freight plan includes an action programme setting out actions which are not already covered by corridor plan action programmes, with associated targets, timing, responsibility, timing, and funding sources for each action.

Key action areas in the plan include:

- Upgrading road links between key freight destinations
- Advocacy for the provision (and retention) of rail freight opportunities
- Advocacy for the removal of rail freight infrastructure constraints.

10.2.6 Passenger transport

Increasing passenger transport use and mode share and improving passenger transport accessibility, capacity, reliability, and frequency are important outcomes of this strategy. A Regional Passenger Transport Plan has been developed separately by Greater Wellington's Passenger Transport Committee and sets out Greater Wellington's intentions for the regional passenger transport system over the next 10 years.

The Regional Passenger Transport Plan forms part of the RLTS and sets out how the passenger transport system will help deliver on its strategic outcomes.

Key policy areas in the plan are:

- Network standards
- Vehicle and infrastructure standards
- Fares, ticketing and information
- Funding and procurement.

Many of the major passenger transport projects planned over the next 10 years are identified through corridor plans (refer to summaries in chapter 10.3). Other passenger transport activities to be progressed include new trains and improved rail infrastructure, new trolley buses and more bus priority measures, and improved passenger transport information and ticketing systems.

10.2.7 Rail

A Regional Rail Plan (RRP) will be developed with stakeholders including Land Transport NZ, ONTRACK and Toll NZ.

The proposed scope of the plan will cover planning and implementation of commuter rail network developments for the next 30 years, building on the Wellington Commuter Rail Network Business Case (2004). The plan will be developed so that it is consistent with and delivers on the objectives and outcomes of the RLTS and Regional Passenger Transport Plan.

10.3 Corridor Plan summaries

10.3.1 Western Corridor

This corridor generally follows the line of State Highway 1 and the North Island Main Trunk railway from Otaki to Ngauranga.

The long term vision for this corridor is described below:

Along the Western Corridor from Ngauranga to Otaki, State Highway 1 and the North Island Main Trunk railway line will provide a high level of access and reliability for passengers and freight travelling within and through the region in a way which recognises the important strategic regional and national role of this corridor. These primary networks will be supported effectively by local and regional connector routes. A high quality rail service will accommodate the majority of people using passenger transport to commute along this corridor during the peak period. Comprehensive bus services and adequate park and ride facilities will provide additional access for the community. Traffic congestion on State Highway 1 will be managed at levels that balance the need for access against the ability to fully provide for peak demands due to community impacts and cost constraints. Maximum use of the existing network will be achieved by removal of key bottlenecks on the road and rail networks. Effective safety measures on the road and rail networks will ensure that no one is killed or injured as a result of network deficiencies when travelling in this corridor. East-west connections between this corridor and other corridors and regional centres will be efficient, reliable and safe.

The Western Corridor Plan, which sits alongside this strategy, identifies the needs and proposed actions specific to this corridor. The action programmes within this corridor plan are multi-modal and include consideration of land use integration. Key features of the existing Western Corridor Plan include:

- Rail improvements, including the extension of rail services north and increased service frequencies
- Construction of Transmission Gully Motorway within ten years
- Construction of Kapiti Western Link Road in the short term
- Upgrading east-west connections between State Highways 1 and 2.

10.3.2 Hutt Corridor

The Hutt Corridor follows State Highway 2 and the Wairarapa railway line from Ngauranga through to Upper Hutt.

The long term vision for this corridor is described below:

Along the Hutt Corridor from Ngauranga to Upper Hutt, State Highway 2 and the Wairarapa railway line will provide a high level of access and reliability for both passengers and freight. These primary networks will be supported effectively by local and regional connector routes. High quality rail and bus services will accommodate the majority of people using passenger transport to commute along this corridor during the peak period. Maximum use of the existing road network will be achieved through measures giving priority to buses and addressing severe traffic congestion. Comprehensive bus services and adequate park and ride facilities will provide additional access for the community. Effective safety measures on the road and rail networks will ensure that no one is killed or injured when travelling in this corridor. East-west connections between this corridor and other corridors and regional centres will be efficient, reliable and safe.

The Hutt Corridor Plan, which sits alongside this strategy, identifies the needs and proposed multi-modal actions specific to this corridor. Key features of the existing Hutt Corridor Plan include:

- Safety and capacity improvements to State Highway 58
- A proposed new east-west link road between Grenada and Gracefield
- Safety and capacity improvements along State Highway 2.

10.3.3 Wairarapa Corridor

The Wairarapa Corridor follows State Highway 2 from Upper Hutt over the Kaitoke and Rimutaka Hills through to Masterton and on to Mt Bruce; and the Wairarapa railway line from Upper Hutt through to Wairarapa. It also includes State Highway 53 between Featherston and Martinborough.

The long term vision for this corridor is described below:

The local road network will provide local access to the State Highways and the rail network, which in turn will connect these areas with the Wellington City CBD and other regional centres. Basic, but reliable, local passenger transport (and Total Mobility) services will be easily accessible.

The Wairarapa Corridor Plan, which sits alongside this strategy, identifies the needs and proposed actions specific to this corridor. The action programmes within this corridor plan are multi-modal and include consideration of land use integration. Key features of the existing Wairarapa Corridor Plan include:

- Construction of Muldoon's Corner upgrade
- Continuous upgrade of the Rimutaka Hill Road
- Improvement of Wairarapa passenger transport services (bus and rail).

10.3.4 Ngauranga to Wellington Airport Corridor

This corridor follows State Highway 1 from the Ngauranga Merge through the Wellington City CBD to Wellington International Airport. It includes the railway line where the North Island Main Trunk line and the Wairarapa line merge, through to Wellington City rail terminals.

The long term vision for this corridor is described below:

Along the Ngauranga to Wellington Airport Corridor, access to key destinations such as CentrePort, Wellington City CBD, Newtown Hospital and the International Airport will be efficient, reliable, quick and easy. Priority will be given to passenger transport through this corridor, particularly during the peak period. Passenger transport will provide a very high quality, reliable and safe service along the Wellington City growth spine and other key commuter routes. The road network will provide well for those trips which can not be made by alternative modes and will allow freight to move freely through the corridor. Traffic congestion through the corridor will be managed at levels that balance the need for access against the ability to fully provide for peak demands due to community impacts and cost constraints. Maximum use of the existing network will be achieved by removal of key bottlenecks on the road and rail networks.

Transit, Wellington City Council (WCC) and Greater Wellington are currently undertaking a strategic study to address the major transport issues along this corridor. Once adopted, this corridor plan will sit alongside this strategy, identifying the needs and proposed actions specific to this corridor. The action programmes within this corridor plan will be multi-modal and include consideration of land use integration, particularly in relation to the Wellington City growth spine.

This chapter sets out the likely transport funding that will be available within the greater Wellington region over the 10 years 2006/07 to 2015/16. The Regional Land Transport Committee (RLTC) has taken this funding into account when developing the RLTS, as required by section 175(2)(d) of the Land Transport Act 1998. Forecasts are indicative only as priorities, projects, scope, timing and costs will change over time. The RLTC expects to review the Regional Transport Programme (RTP) over the next year to give effect to this strategy and to take account of significant new information that will result from current studies, particularly the Transmission Gully Motorway (TGM) Scoping Study and the Ngauranga to Airport Corridor Study.

11.1 Types of available funding

There are principally four types of funding currently available to the region:

- Nationally distributed funds (N) are allocated on the basis of national priority by Land Transport NZ from the National Land Transport Fund in accordance with its allocation process. Funding is mainly derived from road user charges, fuel excise and motor vehicle registrations. Wellington region's share of N will vary from year to year. A forecast of likely N funding, totalling \$926 million over 10 years, is estimated from the 2005/06 National Land Transport Programme. This includes all passenger transport funding plus state highway and local road development funding. Some local road funding is allowed for projects below the scope of the RLTS, but an estimate of this has not been able to be assessed. This includes an additional \$80 million 'N' funding for the investigation and preliminary design work for the TGM to enable construction start by 2011/12, as announced on 18 May 2006.
- Regionally distributed funds (R) are allocated by Land Transport NZ to activities that are not judged to be of sufficient national priority to be fully funded from N. Regional priorities are taken into account. Funding is derived from road user charges and fuel excise. A forecast of likely R funding, totalling \$235 million over 10 years, has been obtained from the 2005/06 National Land Transport Programme.
- Crown appropriations (C) are special regional funds which are allocated by Land Transport NZ. This funding resulted from the Wellington Transport Project which identified increased funding requirements for Wellington region's transport needs. Total C funding over the next 10 years is \$885 million and it is not indexed, meaning its buying power reduces over time due to inflation. Crown funding has been made available to support specific activities as set out below.

C1 (announced 27 January 2005)

- \$225 million for increased transport investment as follows:
- \$65 million for existing passenger transport infrastructure and services
- About \$30 million for transport demand management
- About \$30 million for enhancing passenger transport services
- About \$100 million for strategic roading.

C2 (announced 5 July 2005)

- \$255 million for Western Corridor transport investment to address the following:
- Enhanced passenger transport
- Better traffic demand management
- Intersection safety and bottleneck improvements
- New roads from Petone to Grenada and the Kapiti Western Link Road.

C3 (announced 5 July 2005)

- \$405 million for Western Corridor strategic roading, contingent on regional agreement on the preferred option.

- Local funds (L) are allocated by individual local authorities and are mainly provided through Long Term Council Community Plans via rates, user charges and debt. The regional council funds passenger transport whereas territorial authorities fund roads (including footpaths, etc). Total L funding for the activities covered by this plan over the next 10 years is approximately \$480 million.
- Other funding sources include tolls, regional fuel taxes, development levies and contributions and road pricing. While road pricing is not expected to be available over the next 10 years, the strategy calls for further investigation of all realistic funding sources.

Background work undertaken for the Wellington Transport Project, Greater Wellington's LTCCP and the Western Corridor Transportation Study has enabled an estimate to be made of Wellington's 10 year total strategic transport funding, some \$2649 million excluding road maintenance.

11.2 Regional Transport Programme

The Regional Transport Programme (RTP) sets out the region's expectations for new capital expenditure on strategic roading and expenditure on passenger transport over the next 10 years. Proposed projects originate in the strategy's supporting implementation and corridor plans in response to an identified need. The RTP knits together major project interventions into one region wide document to provide a reference for strategic prioritising, sequencing and funding allocation decisions.

The RTP is confirmed on an annual basis using an agreed prioritisation methodology. The annual review of project priorities requires both technical and political assessment. Priorities are likely to remain relatively constant from year to year, though new projects may be introduced as a result of implementation and corridor plan reviews. Cost, timing and funding availability estimates are variable from year to year.

11.3 Funding gaps

In accordance with the Western Corridor Plan, construction of the TGM is included in the draft 10 year programme. However, this results in the need for further funding of \$300 million (on current designs and estimates) to be found in the next 10 years. The RLTC has signalled this should come from a new loan and identified that a further \$26 million per annum (over 35 years) for debt servicing will also need to be found. If servicing this debt were assigned to regional resources there would be affordability issues for the region. Policy 8.6 (a) in the strategy identifies a number of 'other' potential funding sources to be investigated to address the funding gap, including local fuel taxes. The Minister of Finance's budget speech of 17 May 2007 gave the go ahead for regions to apply to central government to utilise regional fuel taxes to fund new transport projects.

Under normal funding rules, local share presents affordability issues for a number of projects and activities:

- Affected roading projects include Grenada to Gracefield Stages 1 (WCC) and 2 (HCC). In these cases, the RLTC will consider recommending that Land Transport NZ raise the subsidy rate for particular projects to reflect their high regional priority. Local share funding for the Grenada to Gracefield project is only partially identified.
- The \$90 million passenger transport accessibility project⁴¹ will only proceed if new funding is found for this activity. These expectations require ongoing dialogue with various Crown agents if they are to be realised.

⁴¹ Access improvements to PT infrastructure in response to Human Rights Commission Review

- A much greater local share is required for public transport investment, typically 30-40% (although a recent decision by Land Transport NZ has reduced the local share of passenger rail improvement projects to 10% where C1 and C2 funding is available). Greater Wellington's Long Term Council Community Plan adopted in 2006 undertook to steadily increase regional transport rates (around 8% p.a.) and increase contributions from fare payers to provide increased local share. This is likely to increase further if additional investment is to be made in passenger transport in line with the new direction of the strategy.

In total the 2006/07 RTP currently has an identified 10 year funding gap of at least \$416 million, largely associated with TGM. Projects will not proceed until full funding is allocated. Should key projects in the programme not proceed, less progress will be made towards achieving the strategy's outcomes. However, the adverse effects of projects not proceeding can only be quantified on a project by project basis.

The following table (Table 7) sets out a summary of funding assumed in the 2006/07 RTP.

Funding	Amount (\$ million)	Status	Allocation agency
National (N)	926	Partially committed, mostly indicative in the National Land Transport Programme	Land Transport NZ
Regional (R)	235	None committed, indicative in the National Land Transport Programme	Land Transport NZ
Crown (C)	882	Fully available, some currently committed for rail projects	Land Transport NZ
Local (L)	480	Partly committed, mostly indicative in the various LTCCPs	GWRC and TA's
Toll funded loan	115	Potential only	To be confirmed
Crown rail loan	11	Committed	GWRC
Total likely funding	2649		
Planned expenditure (RTP 2006/07)	3065		Various agencies - refer providers in Appendix 2.
Funding Gap	416	326 relates to TGM, 90 to the passenger transport accessibility project	
Other potential funding			
Regional fuel tax	Up to 440 ⁴²	Potential only	To be confirmed
Rail top up	100 - 200	Indicated in 17 May 2007 budget speech	To be confirmed

Table 7: Funding Summary 2006/07

⁴² Based on 10c per litre and annual regional fuel sales of approximately 440 million litres for 10 years.

12 Monitoring, evaluation and review

12.1 Monitoring and evaluation

This section discusses how Greater Wellington proposes to measure the performance of the RLTS in achieving its desired outcomes.

Evaluation of the effectiveness and appropriateness of the RLTS is an ongoing process that starts as soon as the RLTS is adopted. While monitoring and evaluation are important inputs to the RLTS review process, there are many evaluation tools used to report back regularly in the interim.

Embedded in the RLTS are the principal evaluation tools of measurable outcome indicators and targets. Targets are used to provide a benchmark against which to measure whether policy and project interventions are acting effectively. Monitoring reports may suggest more, faster or wider interventions where performance continues to trend below target. As a result of the submission process, the RLTS adopts “stretch” targets which provide guidance towards greater advocacy or faster action in relation to key priorities identified for the next 10 years.

The monitoring programme involves the following:

- A quarterly report to the RLTC focusing on agency progress towards implementing the projects, activities and actions set out in the supporting implementation plans, as reported by each lead agency.
- An Annual Monitoring Report, required by section 182(1) of the Land Transport Act 1998, which documents implementation progress, as well as some 100 indicators to measure progress towards achieving the outcomes and related targets sought by the strategy. The Annual Monitoring Report will be completed by 30 September each year, reported to the RLTC and made publicly available.

The monitoring programme involves extensive reporting on road and passenger transport network performance, and on measures of regional growth, accessibility, economic efficiency, affordability, safety, public health and environmental sustainability. This will provide a detailed picture of regional performance, sustainability and trends. Insights from the monitoring programme will be used to help identify pressures and issues, thereby informing reviews of the strategy and its components.

To ensure that any significant new pressures not covered by the monitoring programme are identified, and to pick up on changing public perceptions over time, the evaluation process includes regular public surveys.

A regional perception survey is carried out every two years by Greater Wellington and offers an understanding of public perceptions of transport related issues. This survey allows some benchmarking against data provided by Auckland Regional Council (ARC), which carries out a similar survey on a biennial basis.

12.2 Strategy review

Section 176(1)(b) of the Land Transport Act 1998 states that every regional land transport strategy must be renewed at least once every three years, but provides no guidance as to the scope of the renewal process.

The following diagram (Figure 15) illustrates how the evaluation and monitoring process assists in identifying the pressures, issues and needs in relation to the region’s transport network and how these feed into review of the strategy and follow through to the various implementation plans.

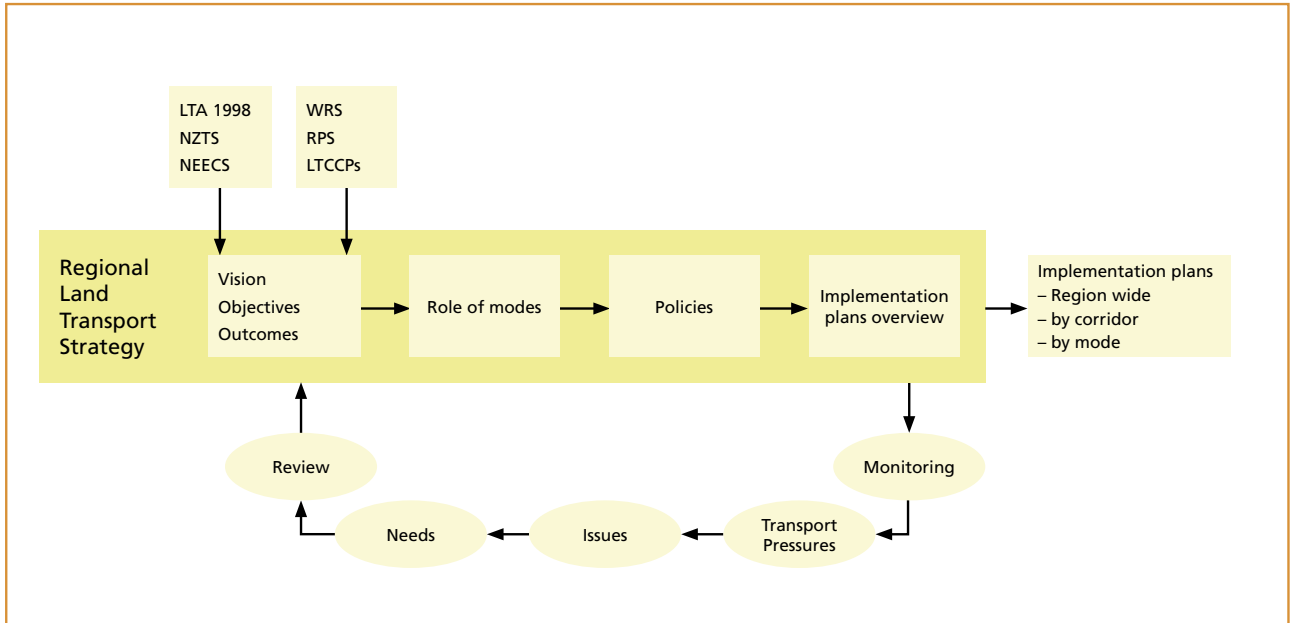


Figure 15: RLTS development and review flow chart.

This RLTS will need to be renewed by 2010. There is currently no legislative or other guidance setting out the process that should be followed for this. It is therefore proposed that in 2009 the RLTC commences review of the strategy. It is proposed that the 2010 renewal of the policy framework of the RLTS should be a less onerous and expensive process than this one has been and the next major review of the RLTS policy framework would occur in 2013.

Review of the RLTS will involve assessment of the legislative and policy context, feedback on progress from monitoring results and survey-based pressures and issues, technical and stakeholder consultation, and a submission process to the RLTC. Stakeholder consultation includes consultation with and through the RLTC's community and interest group representatives. Schedule 2 of LTA 1998 aligns RLTS consultation processes with relevant Local Government Act processes.

12.3 Implementation and corridor plan reviews

The implementation plans and corridor plans, which sit alongside and support the strategy, should be viewed as living documents as they set out projects and activities considered appropriate at the time they were developed and approved, based on the best information available at that time. The plans require ongoing updates and review to ensure they give effect to the RLTS and reflect new information as it becomes available.

The detailed components of these plans are too complex to review at one time. In order to allow the regional community to focus on particular elements of the region's transport network, it is proposed to continue the practice of having a series of rolling reviews of the implementation plans and corridor plans. Corridor plans typically take some 18 months to review and implementation plans take around 12 months to review. The following table (Table 8) sets out the proposed next cycle of the review programme for the implementation documents which support the strategy.

Document	Last approved	Next review
Regional Passenger Transport Plan	1999	Underway – late 2007
Ngauranga to Wellington Airport Corridor Plan	1999	Underway – early 2008
Regional Rail Plan	n/a	Developed 2007-08
Wairarapa Corridor Plan	Dec 2004	2009 – 10
Hutt Corridor Plan	Dec 2004	2008 – 09
Pedestrian Plan	May 2004	2007 – 08
Cycling Plan	May 2004	2007 – 08
Western Corridor Plan	April 2006	2008 – 09
Travel Demand Management Plan	Dec 2005	2008 – 09
Road Safety Plan	Sept 2004	2009 – 10

Table 8: Proposed review programme for implementation documents.

The scope of implementation and corridor plan reviews will be at the discretion of future RLTCs, with a view to avoiding any unnecessarily long, onerous and costly studies or processes. Where comprehensive reviews are needed, they will involve studies and sector assessments, and one or more stages of public consultation, depending on whether options are involved.

12.4 Review of the Regional Transport Programme

The Regional Transport Programme (RTP) sets out the region's priorities and expectations for new capital expenditure on strategic roading and

passenger transport over a 10 year period. It also sets out indicative funding allocations. Review of the RTP will need to be carried out to ensure it gives effect to this strategy. Annual confirmation of the RTP will be carried out through the application of an agreed prioritisation methodology in accordance with policies 8.8.

The RLTC expects to review the RTP over the next year to take account of significant new information that will result from current studies, particularly the revision of the RTP to better align with the direction of the strategy, the Transmission Gully Motorway Scoping Study and the Ngauranga to Airport Corridor Study.

Glossary

Access: the ability to obtain desired goods, services and activities.

Accessibility: the ability to reach a destination by a mode. Another meaning often used more narrowly in relation to public transport is “the ease with which all categories of passenger can use public transport” (as defined by the Human Rights Commission “The Accessible Journey” 2005).

Active modes (also known as non-motorised transportation): include walking, bicycling, small-wheeled transport (skates, skateboards, push scooters and hand carts) and wheelchair travel.

Advanced Traffic Management System (ATMS): an array of institutional, human, hardware and software components designed to monitor, control and manage traffic on streets and highways.

Advanced Traveller Information System (ATIS): ATIS provides drivers with real time information about traffic conditions, accident delays, roadwork and route guidance from origin to destination. Some of the methods used for providing drivers with this information include traffic information broadcasting, pre-trip electronic route planning, on-board navigation systems and electronic route guidance systems.

Benefit Cost Ratio (BCR): an economic assessment tool that expresses benefits and costs as monetary values. A BCR greater than 1 is considered to be an economic investment as the value of benefits exceeds its cost.

Carbon dioxide (CO₂): a significant greenhouse gas produced by the combustion of motor vehicle fuels.

Central business district (CBD): a city’s central commercial area as defined in district plans.

CO₂e: Carbon Dioxide equivalent.

Congestion pricing: road pricing that varies with the level of traffic on a congested roadway. Congestion pricing is intended to allocate roadway space efficiently.

Financial Assistance Rate (FAR): the Land Transport New Zealand subsidy of a projects total cost.

Heavy commercial vehicle (HCV): trucks and buses.

High-Occupancy Toll (HOT) lane: a traffic lane where a toll is charged unless the vehicle is carrying more than a specified minimum number of passengers.

High-Occupancy Vehicle (HOV): a passenger vehicle carrying more than a specified minimum number of occupants. HOVs include carpools, vanpools, and buses. HOV requirements are often indicated as 2+ (two or more passengers required).

HOV lane: a traffic lane limited to carrying high occupancy vehicles (HOVs) and certain other qualified vehicles.

Indicator: a tool to define and measure progress towards achieving strategy objectives and outcomes.


Intelligent Transport System (ITS): an umbrella term for advanced automation in mobile vehicles.

Land transport: Transport on land by any means and the infrastructure facilitating such transport. Includes rail, surface-effect vehicles and harbour ferries.

Long Term Council Community Plan (LTCCP): a local authority’s strategic planning document developed under the Local Government Act 2002.

LoS (Level of Service): a qualitative concept to describe travel conditions experienced by users.

Mobility: the ability for people and goods to move from one place to another.



Mode share: the proportion of total transport users using a particular transport mode.

National Land Transport Programme (NLTP): the mechanism through which Land Transport NZ allocates funds to approved organisations.

Outcome: a qualitative description of what the strategy seeks to achieve over the long term.

Outlook: a quantitative forecast to 2016 derived from the region's Strategic Transport Model which uses 2001 base data (as this is the most up to date, comprehensive information available).

Passenger transport (PT): includes bus, train, ferry, taxi and total mobility services.

Passenger Transport Plan (PT Plan): a regional passenger transport plan as defined by section 47(1) and (2) of the Transport Services Licensing Act 1989.

Private vehicle: any motor vehicle not used for fare paying, passenger transport purposes. This includes privately owned motor vehicles, vehicles belonging to a company or organisation, and light commercial vehicles (eg. couriers, tradesmen).

Ramp metering: the use of a traffic control signal on a motorway on-ramp to control the rate at which vehicles enter the motorway network.

Regional Land Transport Committee (RLTC): a standing committee of Greater Wellington Regional Council established under section 178 of the Land Transport Act 1998. The committee is responsible for the preparation of the Regional Land Transport Strategy.

Regional Land Transport Strategy (RLTS): a statutory document that Greater Wellington Regional Council must produce. It is a key tool for setting transport policy and investment priorities by providing the blueprint for regional land transport investment over the next 10 years. It must contribute to an overall aim of achieving an integrated, safe, responsive and sustainable land transport system.

Regional Land Transport Strategy Annual Monitoring Report (RLTS AMR): the annual report produced by Greater Wellington Regional Council to monitor progress towards achieving the objectives set out in the RLTS.

Regional Policy Statement (RPS): a statutory document that Greater Wellington must produce under the Resource Management Act 1991 to provide a framework for managing the resources of the region in a sustainable way. The RPS is the most important mechanism at the regional level for directing land use planning and has an important role in ensuring good integration of transport and land use planning.

Reliability: The likelihood of reaching a destination within a projected time. Reliability is adversely affected primarily by congestion, closures, cancellations, natural hazards, or incidents such as crashes or breakdowns.


Road pricing: the framework within which drivers pay the true cost of using roads. This includes social, economic and environmental costs, such as accidents, pollution, time delays, normally borne by the community. Examples of road pricing tools include cordon charges, congestion pricing, tolls roads and distance based pricing.

Single Occupancy Vehicle (SOV): a vehicle that only has one person in it.

Target: a qualitative or quantitative benchmark against which to measure whether policy and project interventions are effectively achieving the strategy objectives and outcomes.

Traffic Level of Service (LoS): a qualitative concept used to describe operational conditions within a traffic stream, and their perception by motorists and/or passengers (including congestion and other factors such as travel time, speed, freedom to change lanes, convenience, comfort and safety).

Transport Disadvantaged: Those who for reasons of age, income or disability have limited access to essential service and amenities.



Travel Demand Management (TDM): various measures that seek to change travel behaviour including the time or form of travel, and increase transport system efficiency to achieve specific objectives, such as reduced traffic congestion, road and parking cost savings, increased safety, improved mobility for non-drivers, energy conservation and pollution emission reductions. Also known as Mobility Management.

Travel plan: Travel plans provide options to encourage the use of sustainable forms of transport such as walking, cycling, public transport and car sharing within workplaces, schools and communities.

Technical Working Group: A group who advise the Regional Land Transport Committee on technical matters, made up of officers representing Greater Wellington, Road Controlling Authorities, Land Transport New Zealand and other representatives where appropriate.

Vehicle Kilometres Travelled (VKT): a term to describe the combined vehicle kilometres over specified section of road.

Walking school buses: an initiative which involves groups of up to 30 children walking together to school accompanied by 2+ adult volunteers. Volunteers are usually teachers or caregivers who would have been driving children to school anyway.

Wellington Regional Strategy (WRS): a cooperative undertaking of the region's local authorities to define an economic growth framework.

Wellington Transport Strategic Model (WTSM): the Greater Wellington Regional Council strategic transport EMME2 computer model.

Abbreviations

AMR	Annual Monitoring Report
ATMS	Advanced Traffic Management System
ATIS	Advanced Traveller Information System
BCR	Benefit Cost Ratio
CBD	Central Business District
CO ₂	Carbon Dioxide
EECA	Energy Efficiency & Conservation Authority
FAR	Financial Assistance Rate
GWRC	Greater Wellington Regional Council
HCV	Heavy Commercial Vehicle
HOT lane	High-Occupancy Toll lane
HOV	High-Occupancy Vehicle
LTA	Land Transport Act
LTCCP	Long Term Council Community Plan
LTMA	Land Transport Management Act
Land Transport NZ	Land Transport New Zealand (previously LTSA and Transfund)
LoS	Level of Service
LTSA	Land Transport Safety Authority
MoT	Ministry of Transport
NEECS	National Energy Efficiency & Conservation Strategy
NZES	Draft New Zealand Energy Strategy
NZEECS	Draft New Zealand Energy Efficiency & Conservation Strategy
NLTP	National Land Transport Programme
NZTS	New Zealand Transport Strategy
PT Plan	Passenger Transport Plan
RCAs	Road Controlling Authorities
RLTC	Regional Land Transport Committee
RLTS	Regional Land Transport Strategy
RMA	Resource Management Act
RPS	Regional Policy Statement
RTP	Regional Transport Programme
SH	State Highway
SOV	Single Occupancy Vehicle
TAs	Territorial authorities
TDM	Travel demand management
Transit	Transit New Zealand
TWG	Technical Working Group
VKT	Vehicle kilometres travelled
WRS	Wellington Regional Strategy
WTSM	Wellington Transport Strategic Model

Appendix 1 - Strategic transport network

A1

The strategic transport network is made up of the region's key railway lines, state highways and those major local roads serving an arterial purpose, as listed and mapped below. This schedule may be amended from time to time by application to the Regional Land Transport Committee.

When considering strategic transport and land use planning issues it is important to identify, plan and protect the current and future regional

transport network (policy 8.5d) "Protect" means "protect strategic (arterial) accessibility". A key function of the strategic transport network is linking the region's centres and important destinations such as the Wellington City CBD, regional centres, CentrePort and Wellington International Airport and Wellington's regional hospital in Newtown, in addition to connecting the greater Wellington region with the rest of New Zealand.

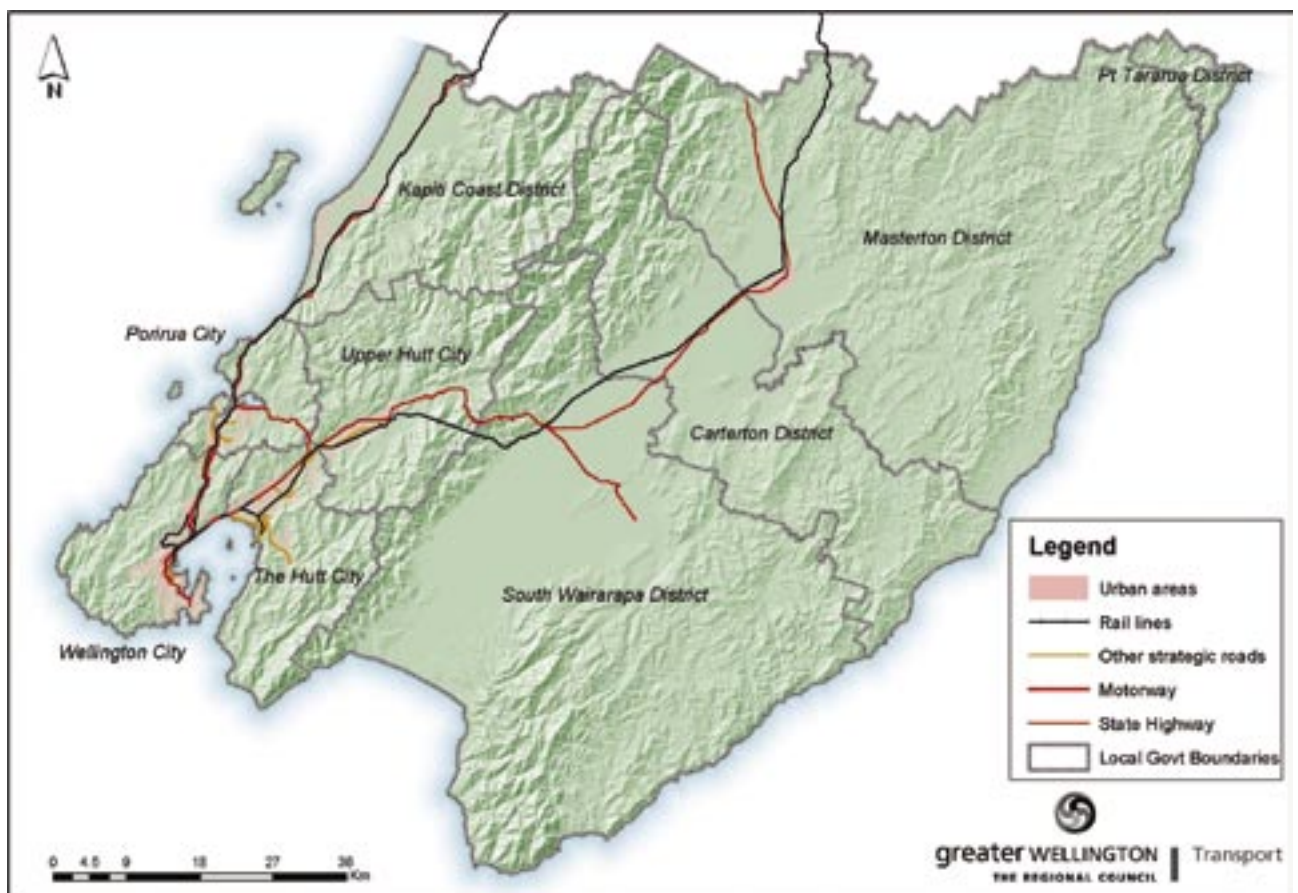


Figure A1.1 Strategic Transport Network.

Railway lines

- North Island Main Trunk Railway
- Wairarapa Line
- Melling Line
- Gracefield Branch Railway
- Johnsonville Line

State highways

- State Highway 1
- State Highway 2
- State Highway 53
- State Highway 58
- Transmission Gully Motorway (designated future route)

A1

Key terminals providing links to other transport networks (air and sea)

CentrePort

Wellington International Airport

Point Howard Wharf

Strategic local roads (by district)

Wellington City

In addition to identifying the strategic importance of State Highways 1 and 2 and the Wellington Urban Motorway, the Wellington City Council District Plan (July 2000 - Volume 3, pages 33 and 34), lists the following as 'Arterial Roads':

Aotea Quay

Arthur Street⁴³

Buckle Street

Cable Street

Cambridge Terrace

Customhouse Quay (Waterloo Quay to Jervois Quay)

Dufferin Street

Ghuznee Street

Jervois Quay

Kent Terrace

Karo Drive⁴⁴

Patterson Street

Rugby Street

Sussex Street

Vivian Street

Wakefield Street (Cambridge Terrace to Jervois Quay)

Waterloo Quay

Hutt City

The Hutt City Council District Plan (June 2003) identifies State Highways 2 and 58 as 'Primary Distributors' and lists the following roads as 'Major District Distributors':

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

Wainuiomata Hill Road

Waione Street

Whites Line East (Randwick Road to Wainui Road)

Porirua

The Porirua City Council District Plan (1999) identifies the following roads as 'Major Arterials':

Major Urban Arterials

Kenepuru Drive (Titahi Bay Road to City boundary)

Mungavin Avenue (Mungavin Interchange to Champion Street)

Paremata Road State Highway 58 (Paremata Roundabout to Browns Bay)

⁴³ Part of new Inner City Bypass route which opened January 2007.

⁴⁴ Part of new Inner City Bypass route which opened January 2007.

State Highway 1 Mana Esplanade (Paremata Roundabout to Plimmerton)

State Highway 1 Pukerua Bay (Grays Street to Pa Road)

Te Whaka Whitianga O Ngatitōa (Parumoana Street to State Highway 1)

Titahi Bay Road

Whitford Brown Avenue (State Highway 1 to Warspite Avenue)

Major Rural Arterials

State Highway 1 (Plimmerton to Pukerua Bay) and State Highway 58 (Pauatahanui to Haywards)

Upper Hutt

The Upper Hutt City Council District Plan (2004) identifies Fergusson Drive, Main Road North and State Highway 2 (River Road) as 'National Routes'. The following roads are listed as 'Primary (Regional) Arterials':

Eastern Hutt Road

Fergusson Drive

Kapiti

The Kapiti Coast District Council identifies the following roads as 'National/Major District Arterials' in its District Plan:

State Highway 1

Kapiti Western Link Road

A2 Appendix 2 - Statutory Context

The Wellington Regional Land Transport Strategy (RLTS) is evidence-based, with clear linkages between issues and interventions. However, in responding to regional issues the RLTS must also be firmly integrated with the national framework.

1. Legislative requirements

1.1 Regional Land Transport Strategy

All regional councils are required by the Land Transport Act (LTA) 1998⁴⁵ to produce a Regional Land Transport Strategy for the council. Under section 175 of the Act:

- (1) *Every regional council must prepare a land transport strategy for its region.*
- (2) *Every regional land transport strategy must—*
 - (a) *contribute to the overall aim of achieving an integrated, safe, responsive, and sustainable land transport system; and*
 - (b) *take into account how the strategy -*
 - (i) *assists economic development; and*
 - (ii) *assists safety and personal security; and*
 - (iii) *improves access and mobility; and*
 - (iv) *protects and promotes public health; and*
 - (v) *ensures environmental sustainability; and*
 - (c) *take into account any national land transport strategy and National Energy Efficiency and Conservation Strategy; and*
 - (d) *take into account the land transport funding likely to be available within the region during the period covered by the strategy; and*
 - (e) *avoid, to the extent reasonable in the circumstances, adverse effects on the environment; and*
 - (f) *take into account the views of affected communities; and*
 - (g) *take into account the views of land transport network providers; and*
 - (h) *take into account the need for persons and organisations preparing regional land transport strategies to give early and full consideration to land transport options and alternatives in a way that contributes to the objectives referred to in paragraphs (e) and (f) when preparing a regional land transport strategy; and*
 - (i) *take into account the need to encourage persons and organisations preparing regional land transport strategies to provide early and full opportunities for persons and organisations listed in section 179(1) to contribute to the development of those regional land transport strategies; and*
 - (j) *identify an appropriate role for each land transport mode in the region, including freight traffic, public passenger transport, cycling, and pedestrian traffic; and*
 - (k) *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; and*
 - (l) *identify land transport outcomes sought by the region and the strategic options for achieving those outcomes; and*
 - (m) *identify any strategic options for which co-operation is required with other regions; and*
 - (n) *identify persons or organisations who should be involved in the further development of strategic options; and*
 - (o) *include a demand management strategy that has targets and timetables appropriate for the region; and*
 - (p) *provide for the strategy to be independently audited; and*
 - (q) *take into account any guidelines issued by the Minister for the purposes of this section.*
- (3) *A regional land transport strategy may not be inconsistent with any regional policy statement or plan that is for the time being in force under the Resource Management Act 1991.*
- (4) *A regional land transport strategy may not be inconsistent with any national land transport strategy that is for the time being in force at the time of preparation of the regional land transport strategy.*

⁴⁵ As amended by the Land Transport Management Act 2003.

The RLTS must be kept current for at least three years, but not more than 10, and must be renewed every three years (section 176(i) of the LTA 1998).

1.2 Regional Passenger Transport Plan

As set out in section 175(2)(k) of the LTA 1998, every regional land transport strategy must include any regional passenger transport plan (as defined in section 47 of the Transport Services Licensing Act 1989).

In addition, section 176 (2) of the LTA 1998 states that a regional land transport strategy may be amended at any time to include any regional passenger transport plan prepared since the strategy was prepared.

The meaning of a regional passenger transport plan and what it may include is set out in section 47 of the Transport Services Licensing Act 1989:

- 1) *“Regional passenger transport plan” means a plan (identified as a regional passenger transport plan) –*
 - a) *Prepared by a regional council or a territorial authority that has the functions, powers, and duties of a regional council under this Act; and*
 - b) *Prepared in consultation with the public and constituent authorities (if any) in the region concerned; and*
 - c) *Made available to the public; and*
 - d) *Specifying the passenger services the regional council or territorial authority proposes to be provided in its region or district, both generally and in respect of the transport disadvantaged.*
- 2) *In addition to the matters described in paragraph (d) of the definition (in subsection (1) of this section) of the term ‘regional passenger transport plan’, such a plan -*
 - a) *May specify the conditions of the services the regional council or territorial authority concerned proposes to be provided in its region; and*
 - b) *Without limiting the generality of paragraph (a) of this subsection, may specify all or any of the following matters:*
 - (i) *Routes, capacity, frequency of service, and fare structure;*
 - (ii) *Any special provisions for users of a specified class or description of the services or any of them; and*
 - c) *May specify any other matters the regional council or territorial authority thinks fit.*

The Regional Passenger Transport Plan (PT Plan) has been developed separately by the Passenger Transport (PT) Committee. The PT Plan will sit alongside the RLTS document and is considered to form a part of the strategy.

1.3 Statutory policy framework

The following section describes the statutory policy framework that must be considered in developing the RLTS.

1.3.1 National framework

The New Zealand Transport Strategy (NZTS) was released in December 2002. The Minister of Transport’s foreword in the NZTS states that it is about “creating a sustainable transport system that is also affordable, integrated, safe and responsive to our needs”. The five objectives of the NZTS have been built into the Land Transport Management Act (LTMA) 2003 and resulting amendments to other pieces of legislation, including a number of amendments to the LTA 1998 and its requirements for producing a RLTS (s175(2) of the LTA 1998). The requirements for producing a RLTS were amended to better reflect the vision, principles and objectives of the NZTS, to ensure vertical integration of national, regional and local transport policy.

The NZTS identifies several overarching key focus areas for the transport system, through its vision and principles. These translate to achieving the outcomes of an increased proportion of travel by public transport, reduced

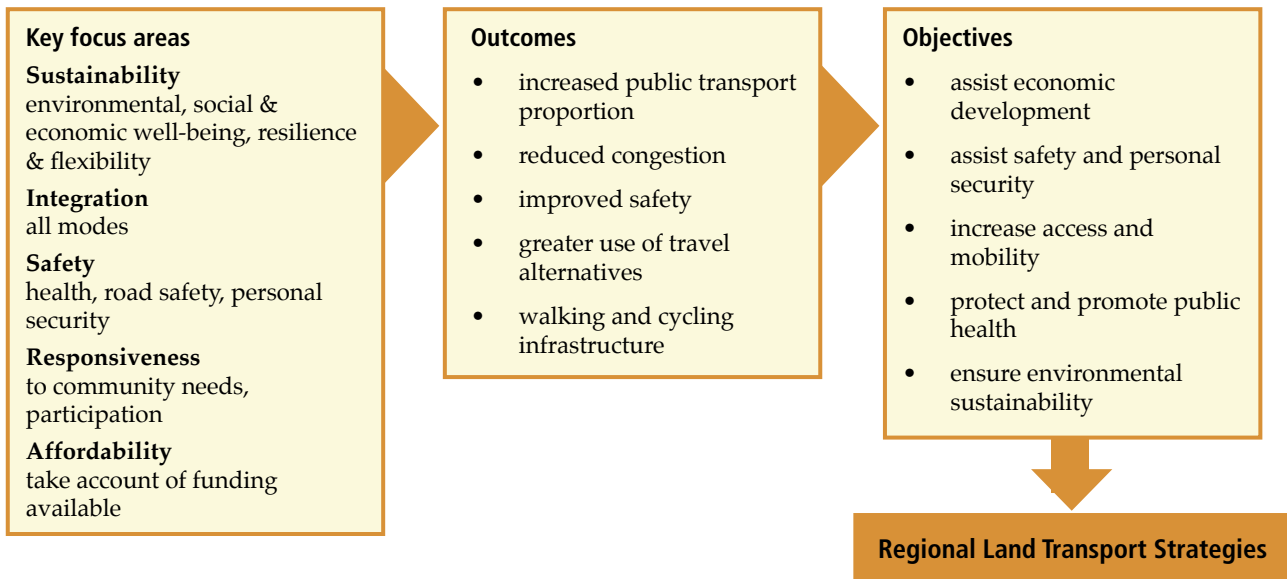


Figure A2.1: New Zealand Transport Strategy Framework

congestion, improved road safety, greater use of travel alternatives such as telecommuting, and the provision of walking and cycling infrastructure.

In addition to outlining the framework in Figure A2.1, the NZTS is clear in describing transport as a service and not an end in itself. Transport systems serve to facilitate access to economic and social opportunities. This point is important in determining outcomes for transport, and thus recognising that these outcomes are there to aid delivery of greater community outcomes. This becomes significant at a regional level when adapting the national framework to deliver our transport and, hence, community needs. Linking the RLTS with the Regional Policy Statement (RPS), Wellington Regional Strategy (WRS) and the Greater Wellington Long Term Council Community Plan (LTCCP) is therefore necessary.

Integration with the national framework, as required by the LTA 1998, has in a sense predetermined the RLTS objectives as being, at least, the five established by the NZTS.

However, analysis was necessary to ensure consideration of regionally specific objectives in addition to those of the national framework.

The need for compatibility with the national requirements is also reinforced by changes to the Land Transport NZ allocation process. Regional

land transport strategies that are not integrated with the national framework, or proposals that do not stem from such a strategy, are unlikely to be included in the National Land Transport Programme (NLTP).

1.3.2 Regional Policy Statement (RPS)

The Resource Management Act 1991 (RMA) requires each regional council to produce a Regional Policy Statement (RPS) in order to promote sustainable management of the region's resources. The RPS is the most important mechanism at the regional level for directing land use planning in a way that supports sustainable community outcomes. The purpose of a RPS is to achieve "sustainable management" by providing an overview of the resource management issues of the region, and policies and methods to achieve the integrated management of the natural and physical resources of the whole region. It is an overview document that provides the framework for managing the resources of the region in a sustainable way⁴⁶.

Wellington's RPS took effect in May 1995, with a full review required 10 years afterwards. Greater Wellington's review process commenced with a State of the Environment Report in December

⁴⁶ Wellington Regional Council, 1995, page 2. Regional Policy Statement.

2005. A proposed new policy statement is expected to be available in September 2007. The policy guidelines set out in the current RPS relate primarily to managing the effects of transport on the environment, the use of transport infrastructure to capacity before new infrastructure is built, and integration between the provision of transport infrastructure consistent with regional growth plans. In particular, the RPS recognises the need for a sustainable land transport system which uses energy efficiently and reduces emissions wherever possible.

In accordance with section 175(3) of the LTA 1998, consistency between this RLTS and the relevant policies and methods set out in the current RPS has been analysed to check that they are not inconsistent. This analysis forms a background document⁴⁷ to this strategy.

A number of regional plans (e.g. Regional Freshwater Plan, Regional Coastal Plan, Regional Air Quality Management Plan) have been developed under the strategic framework of the RPS. These plans contain objectives, policies and methods (including regional rules) that are consistent with the RPS. Consequently, the RLTS is not considered to be inconsistent with any relevant regional plan. It should also be noted that the detailed issues covered by the rules in these plans are likely to apply to RLTS projects during the resource consent process.

1.3.3 National Energy Efficiency & Conservation Strategy (NEECS)

The Land Transport Management Act 2003 introduced amendments to the LTA 1998, including the new requirement under the amended Section 175 (2)(c) that every RLTS shall take into account the National Energy Efficiency and Conservation Strategy.

The NEECS was released by the Minister of Energy in September 2001. The strategy's purpose is 'to promote energy efficiency, energy conservation and renewable energy and move New Zealand towards a sustainable energy future' (EECA, 2004).

The NEECS sets two specific energy efficiency targets for the national economy:

- A 20% improvement in energy efficiency by 2012
- An additional 30 Petajoules (PJ) of consumer energy from renewable sources by 2012.

Transport is our country's single largest energy consumer and transport energy use continues to grow. Within New Zealand, transport accounts for over 43% of all consumer energy use and 46% of the country's carbon dioxide emissions (NZCCO, 2005).

The key strategic objectives of the NEECS as they relate to the transport sector are as follows:

- Reduce energy use by reducing the need to travel
- Progressively improve energy performance of the transport fleet
- Greater provision and use of low energy transport options.

The vision, objectives and land transport outcomes sought under this strategy take into account the NEECS and contribute to its objectives through the travel demand management strategy, cycling and pedestrian plans, and through implementation of the Regional Passenger Transport Plan. A detailed analysis of the alignment between this strategy and the NEECS has been carried out and forms a background document⁴⁸ to this strategy.

A review of NEECS is currently underway with a draft New Zealand Energy Efficiency & Conservation Strategy (NZECCS) released for consultation between December 2006 and March 2007. While this new NZECCS and any associated targets will not be finalised until late 2007, the alignment between this strategy and the draft NZECCS has been checked and no inconsistencies identified at this stage.

⁴⁷ GWRC, December 2005. Alignment between the RPS and the RLTS review.

⁴⁸ GWRC, September 2005. Review of RLTS response to NEECS.

1.4 Other relevant policy documents

The following section describes a number of other important policy documents which inform the development of the RLTS.

1.4.1 Greater Wellington’s Long Term Council Community Plan

In addition to meeting national framework requirements, the revised RLTS needs to be consistent with the Long Term Council Community Plan (LTCCP) outcomes for the greater Wellington region. The LTCCP 2006 - 2016 outlines 10 community outcomes and seven activity groups that collectively contribute to achieving the community outcomes. Transport is one of the activity groups and the key transport related outcome is a ‘Connected community’. However, several other outcomes have key implications for transport. These are ‘Healthy environment’, ‘Prepared community’, ‘Essential services’ and ‘Healthy community’ (Figure A2.2).

The LTCCP outcomes align well with the national framework. The RLTS will play a role in achieving regional outcomes, while also contributing to national objectives. In addition, the LTCCP should reflect the direction and priorities identified in the RLTS in relation to transport matters.

1.4.2 Wellington Regional Strategy (WRS)

The WRS is a joint project involving Greater Wellington and the nine territorial authorities of the region, working together to build an internationally competitive Wellington. It is primarily an economic growth strategy with an outlook to 2025.

The WRS is firmly based on the proposition that economic growth for the region is necessary and desirable. It is aimed at sustainable economic and population growth which will protect the region’s sense of place, build competitiveness, increase our quality of life and protect the values and communities that contribute to making the

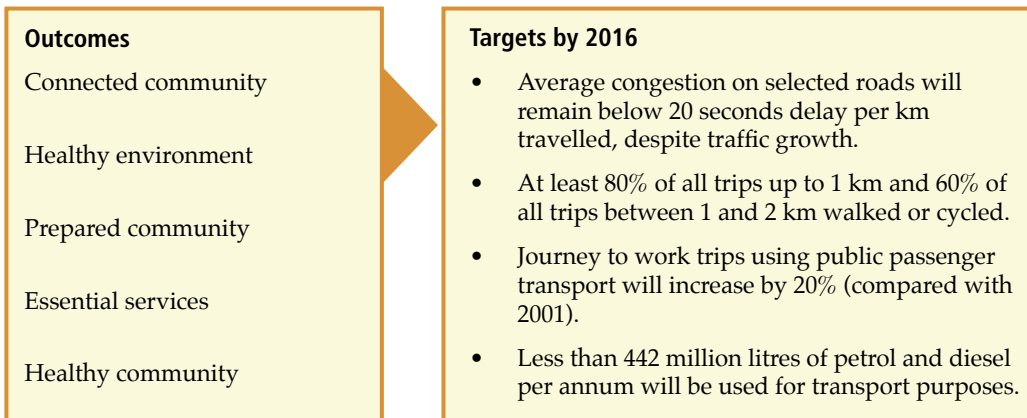


Figure A2.2: GWRC LTCCP framework for transport outcomes.

Wellington region different from anywhere else. Transport outcomes identified in this strategy will play a significant part in facilitating the growth sought by the WRS. For example, new transport corridors, such as the Grenada to Gracefield link road and Johnsonville to Airport growth spine, will be key drivers for economic growth by improving connectivity between economic centres.

1.4.3 National Rail Strategy (NRS)

The National Rail Strategy to 2015 (NRS) was developed by the Ministry of Transport (MoT) under the umbrella of the New Zealand Transport Strategy (NZTS). The NRS provides a framework for the development of the rail network in a way that recognises the government's focus on shifting passenger and freight traffic from road onto rail, wherever appropriate. This is expected to contribute to reducing congestion, providing environmental benefits, and improving safety, personal security and health.

The objectives of the NRS are to enhance rail's contribution to sustainable economic development, to improve rail safety and personal security, to maintain and develop access to rail passenger services, to promote positive health outcomes through enhanced use of rail, and to enhance rail's contribution to an energy efficient and environmentally sustainable land transport system.

While it is not a statutory requirement for a RLTS to take account of this strategy, it provides a relevant national framework for the consideration of rail issues at a regional level.

1.4.4 Transit New Zealand's strategic planning framework

Transit's Strategic Plan 2004 responds to new requirements under the LTMA and the New Zealand Transport Strategy which emphasise the

need for a sustainable land transport system. A number of other Transit planning documents sit below the strategic plan. These include the National State Highway Strategy, key issue plans (e.g., Transit NZ Environmental Plan 2004) and the 10-Year State Highway Forecast.

While there is no statutory requirement for a RLTS to take account of these strategic planning documents, they do provide a framework for understanding Transit's planning and decision making processes. The RLTS has been developed taking account of Transit's latest State Highway Forecast. The primary external drivers for Transit's decisions include the LTMA 2003 which provides its objective "to operate the state highway system in a way that contributes to an integrated, safe, responsive and sustainable land transport system" together with the NZTS, regional land transport strategies and available funding.

A number of other policy documents provide relevant references for the development of a RLTS. These include, but are not limited to:

- New Zealand Health Strategy (2000) (Ministry of Health)
- New Zealand Tourism Strategy (2001) (Ministry of Tourism)
- New Zealand Disability Strategy (2001) (Office of Disability Issues)
- Getting there – on foot, by cycle (2005) (Ministry of Transport)
- Road Safety to 2010 (2003) (Land Transport New Zealand)

The following diagram illustrates several different RLTS processes. As illustrated, a number of different parallel processes inform and are informed by the RLTS. The RLTS informs agency programmes for future prioritisation rounds and agency reports.

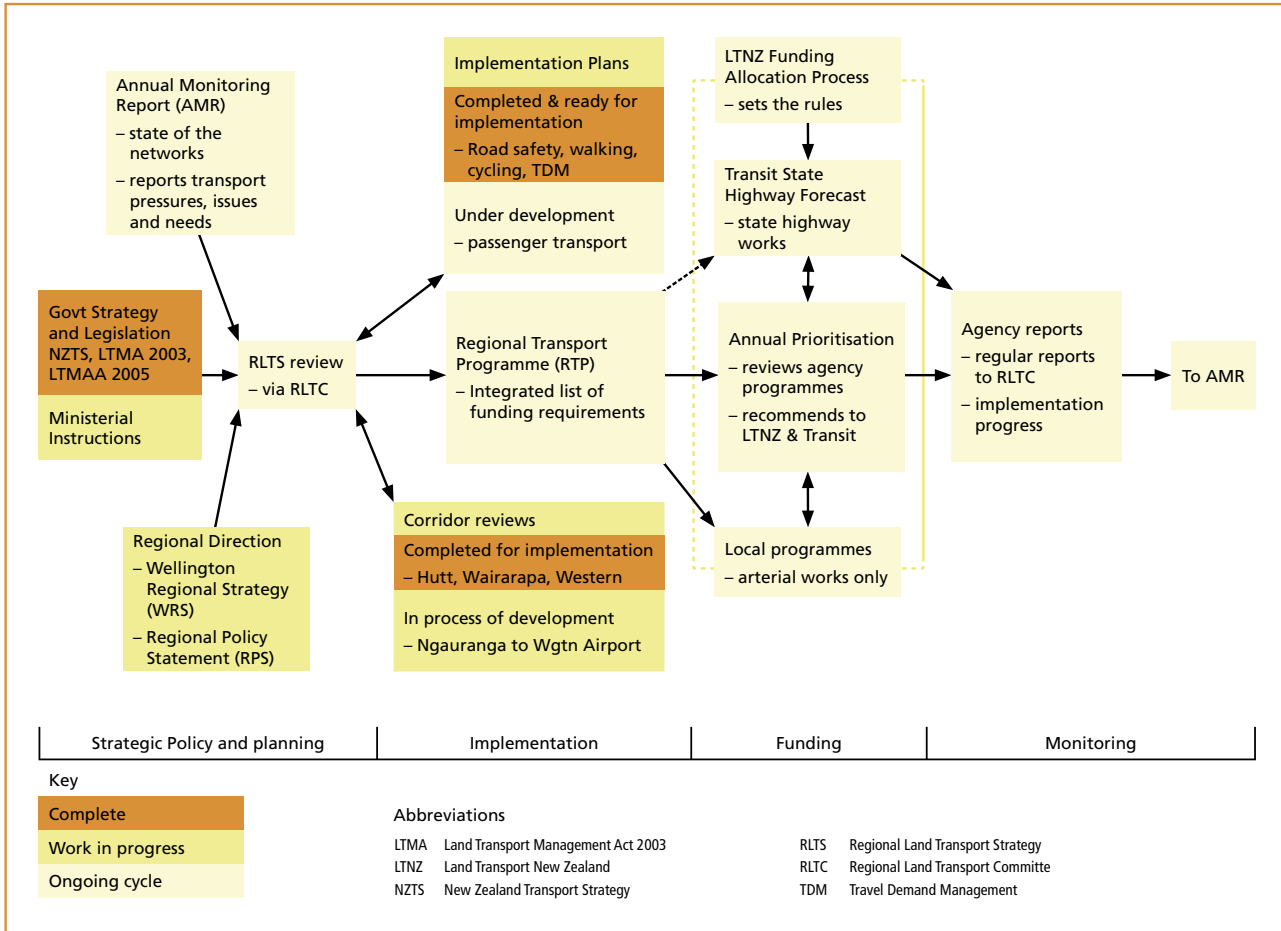


Figure A2.3: Regional Land Transport Strategy Processes.

1.5 Roles and responsibilities

The following section provides a description of those organisations and stakeholders who should be involved in the further development of strategic options (refer section 175 2 (n) of the LTA 1998) and implementation of the strategy.

1.5.1 Ministry of Transport (MoT)

As the government’s principal transport policy adviser the MoT both leads and generates policy, including the New Zealand Transport Strategy (NZTS), which provides the framework for the development of New Zealand transport policy.

The MoT acts as the Minister of Transport’s agent for managing the interface with government transport agencies to give effect to the government’s vision of an affordable, integrated, safe, responsive and sustainable transport

system. This vision is outlined in the NZTS released in December 2002 (MoT, 2002).

1.5.2 Greater Wellington Regional Council (Greater Wellington)

The Land Transport Act 1998 requires Greater Wellington to have a key role in planning and monitoring the regional transport network via the RLTC. Greater Wellington is the key agency for implementing passenger transport activities and is responsible for developing a regional passenger transport plan under the Transport Services Licensing Act 1989. Greater Wellington is also proactively involved in promoting road safety, walking, cycling and travel demand management. Greater Wellington also has an important role in integration of land use and transport infrastructure through the preparation of a Regional Policy Statement under the Resource Management Act 1991.

1.5.3 Regional Land Transport Committee (RLTC)

The Land Transport Act 1998 requires every regional council to establish a Regional Land Transport Committee comprised of representatives as stated in s178(2) of the Act. The Committee includes representatives from Greater Wellington, all local councils in the region, Land Transport NZ, Transit NZ, ONTRACK and persons representing access and mobility, economic development, public health, safety and personal security, environmental sustainability and cultural interests. Special interest representatives report RLTC issues back to their sector and provide feedback to the RLTC from that sector.

The key role of the Committee is to prepare the Regional Land Transport Strategy and to facilitate and monitor its implementation.

1.5.4 Land Transport New Zealand (Land Transport NZ)

Land Transport NZ was formed on 1 December 2004 from the merger of Transfund New Zealand and the Land Transport Safety Authority. Land Transport NZ is the central government agency responsible for land transport funding and safety matters.

Land Transport NZ is responsible for allocating N, R and C funds. Nationally distributed funds (N) are allocated on the basis of national priority from the National Land Transport Fund. Regionally distributed funds (R) are allocated to activities that are not judged to be of sufficient national priority to be funded from N. Regional priorities are taken into account. Crown appropriations (C) are special regional funds. This funding category resulted from the Wellington Transport Project which identified increased funding requirements for Wellington region's transport needs.

Land Transport NZ's objective is to contribute to an integrated, safe, responsive and sustainable land transport system. It has signalled that it

will work in partnership with central, regional and local government and other stakeholders to help develop land transport solutions, with a focus on optimal use and development of New Zealand's land transport system (Land Transport NZ, 2005). Land Transport NZ has a statutory responsibility to take into account any regional land transport strategy (Section 19(4) of the LTMA 2003).

1.5.5 Road Controlling Authorities (RCAs)

RCAs are responsible for identifying transport needs and carrying out maintenance and improvement works on their respective networks. RCAs include Transit New Zealand and territorial authorities.

Transit New Zealand (Transit)

Transit is responsible for managing the state highway network and, in a similar manner to territorial authorities, must take into account the current RLTS (Section 12(5) LTMA 2003). Travel demand management is an essential component of Transit's National State Highway Strategy. Transit recognises that its design and implementation of a nationally integrated travel demand management strategy will contribute towards sustainable management of the state highway network (Transit, 2005).

Territorial Authorities (TAs)

Territorial authorities (i.e. district and city councils) have a number of regulatory, road safety and planning roles, and ownership interests in transport, largely set out in the Local Government Act 1974. The Local Government Act 2002 also sets out their role in providing for sustainable development in local communities. District and city councils own and operate the local road network which includes the provision of infrastructure that facilitates walking and cycling. Their land transport decisions are required to take into account the RLTS relevant to their area (Section 12(5) LTMA 2003). They are also responsible for developing Road Safety Action Plans (RSAPs).

1.5.6 Regional Public Health Service (RPH)

Regional Public Health promotes positive health outcomes by supporting healthy public policy, community action, healthy environments and the development of individual skills for wellbeing.

1.5.7 ONTRACK

ONTRACK is responsible for managing and operating the national rail network on behalf of the Crown following the Crown's purchase of the network from Toll Holdings in September 2004. ONTRACK controls network operations, provides rail operators with access to the tracks, provides advice to the Crown, manages land and leases on the rail corridor, and implements, co-ordinates, and maintains an approved safety system for the network. No document currently provides a strategic regional framework for the management of the region's rail network. ONTRACK should be involved in the development of a regional rail plan to provide such a framework.

1.5.8 Toll NZ Ltd

Toll NZ is the network operator with exclusive rights until 2070 for freight, existing long-distance passenger services and the Wellington urban rail passenger service. Toll NZ freight and passenger rights are subject to 'use it or lose it' provisions⁴⁹.

1.5.9 NZ Police

From a transport perspective, the NZ Police are responsible for reducing traffic offending, particularly offences that promote crashes and

injuries. Enforcement is the main intervention available to Police to achieve reductions in offending as they work in partnership with engineers and educators to make the greater Wellington region's roads safer. They are responsible for developing Risk Targeted Patrol Plans (RTPPs) to ensure more effective and efficient use of enforcement resources. Police also have a key role investigating crashes, managing events and attending emergencies on the roads.

1.5.10 Accident Compensation Corporation (ACC)

ACC aims to reduce road crashes and their resultant injuries by working with key road safety partners. ACC has a lead role in the implementation of the New Zealand Injury Prevention Strategy's implementation plan, of which road safety forms a significant part. ACC also aims to provide effective and timely treatment and rehabilitation when injury occurs.

1.5.11 Other Organisations

Numerous other organisations and agencies play a role in facilitating the actions set out within this strategy. However, our approach has been to list the agencies in the region that have been identified as having a key role in implementing the strategy. It is our expectation that these key agencies will collaborate with other organisations, as appropriate, in the course of implementation.

The following table shows the funders and providers involved in delivering various components of the region's land transport system.

49 Ministry Of Transport, 2005a. National Rail Strategy to 2015.

Regional land transport system funders and providers			
	Component	Funder	Provider
Passenger train services	Track, signals & platforms Stations Subsidised rolling stock Commercial rolling stock	Land Transport NZ/GWRC Land Transport NZ/GWRC Land Transport NZ/GWRC Toll	ONTRACK GWRC/ONTRACK/Toll Toll Toll
Freight train services	Track & signals Rolling stock	User access charges Toll	ONTRACK Toll
Buses	Trolley overhead infrastructure Bus stops, shelter, information Subsidised vehicles Commercial vehicles Bus priority measures	Land Transport NZ/GWRC Land Transport NZ/GWRC Land Transport NZ/GWRC Bus operators Land Transport NZ/GWRC/TAs	Cable Car Company TAs, GWRC Bus operators Bus operators TAs
Total mobility	Hoists Vehicles	Land Transport NZ/GWRC Land Transport NZ/GWRC	Taxi Operators Taxi Operators
Road freight	Local roads State highways Vehicles	TAs/Land Transport NZ Land Transport NZ Private	TAs Transit New Zealand Private
Cars	Local roads State highways Vehicles	Land Transport NZ/TAs Land Transport NZ Private	TAs Transit New Zealand Private
Harbour ferry	Wharves Vessels	TAs Land Transport NZ/GWRC	TAs Ferry operator
Pedestrians	Local roads (footpaths) State highways (footpaths) Pedestrian network (off road)	TAs Land Transport NZ TAs, GWRC, DOC	TAs Transit New Zealand TAs, GWRC, DOC
Cyclists	Local roads & cycle lanes State highways & cycle lanes Cycle ways (off road) Bicycles	Land Transport NZ/TAs Land Transport NZ TAs, GWRC, DOC Private	TAs Transit New Zealand TAs, GWRC, DOC Private
Road safety	Enforcement Advocacy & promotion Safer routes	Land Transport NZ ACC, Land Transport NZ, GWRC, TAs Land Transport NZ/TAs	NZ Police ACC, NZ Police, GWRC, TAs TAs, Transit
Demand management	Travel planning coordination Travel planning initiatives Awareness campaigns	Land Transport NZ/GWRC Land Transport NZ/GWRC/TAs Land Transport NZ/GWRC	GWRC, Land Transport NZ GWRC, TAs, schools, businesses. GWRC, LTNZ

Table A2.4: Regional land transport system - funders and providers.

A3 Appendix 3 - Strategic options

The RLTS vision, objectives and outcomes set out the broad direction of the strategy. They are the basis for the identification, selection, and prioritisations of particular actions in implementation and corridor plans; in programme prioritisation; in monitoring actual network performance; and as the framework for reviews.

Having set the broad direction of the strategy, the Regional Land Transport Committee considered three strategic options for achieving the strategy's outcomes. The following section describes the strategic options process.

1. Options considered

Section 175(2)(l) of the Land Transport Act (LTA) requires every RLTS to 'identify land transport outcomes sought by the region and the strategic options for achieving those outcomes'. The land transport outcomes sought for the Wellington region are set out in chapter 6 of this strategy.

The LTA also requires a RLTS to 'take into account the land transport funding likely to be available within the region during the period covered by the strategy'. Therefore, an important element in the development of the strategic options was consideration of the Wellington region's estimated available funding. The Wellington region's 10 year total strategic transport investment envelope⁵⁰ was estimated to be \$3432 million, including the additional \$660 million government funding announced on 5 July 2005. There are five components required to be funded: roading maintenance, roading improvements, passenger rail, bus services and travel demand management.

Three strategic options (scenarios) were developed for achieving the region's land transport outcomes within this funding. These were termed 'Planned Investment', 'Advanced Passenger Transport' and 'Advanced Roding'. These strategic options represented different high level combinations of investment in the five components of the land transport system

previously identified. All three scenarios included business as usual road maintenance investment.

The 'Planned Investment' scenario included safety and efficiency improvements to the strategic roading network, including major investment to address Western Corridor issues. Under this scenario, current passenger rail service was maintained and capacity was increased through additional rolling stock to accommodate a 1.7% annual patronage growth rate. The mode share held by bus services was maintained, with enhanced customer service through innovations such as integrated ticketing and real time information. A moderate level of travel demand management investment (\$30 million) was expected to include enhancements to walking and cycling infrastructure, improved traffic management and travel planning initiatives.

The 'Advanced Passenger Transport' scenario involved increasing passenger transport service frequency, coverage and service; and the introduction of a light rail service between Johnsonville and Courtenay Place. It would see a greater investment (\$50 million) in travel demand management, including walking and cycling facilities. Such a change would be paid for by reducing road improvements.

The 'Advanced Roding' scenario accelerated the identified roading improvements, delivering safety and efficiency improvements sooner. This approach would be paid for by reducing passenger transport and travel demand management (TDM) investments. The reduced passenger transport investment would accommodate current patronage levels but mode share would decline. It is assumed that no significant changes to the highway network maintenance regime would be required as changes to the network are likely to be marginal over the next decade.

⁵⁰ All private costs are excluded e.g. motor vehicle purchase.

2. Evaluation of the options

The three strategic options were analysed using the region's strategic transport model and assessed using a list of indicators linked to each of the draft objectives and outcomes of the strategy⁵¹. The *Regional Land Transport Strategy Strategic Options - consultation document* (15 August 2005) provides full details and forms a background document to this strategy. The analysis of the three scenarios identified a number of trade-offs, depending on how the investment was allocated.

The Planned Investment scenario resulted in reduced traffic congestion, retained passenger transport mode share and improved passenger transport services. It improved most indicators with the exception of fuel use and consequential greenhouse gas emissions.

The Advanced Passenger Transport scenario saw an increase in passenger transport mode share, and was likely to have a number of public health and safety benefits. However, this scenario also resulted in significantly worse road congestion as it involved shifting investment away from road capacity improvements into enhancing passenger transport services. The model results show that, while enhancing passenger transport services may result in some shift to that mode, it does not fully overcome people's preference for private vehicle use and, consequently, the reduced level of roading investment under this scenario results in worsening congestion.

The Advanced Roding scenario did not perform as well as the Planned Investment scenario. Analysis showed that it would result in significant degradation of passenger transport services and mode share without making any decongestion improvement above the Planned Investment scenario.

All three scenarios failed to reduce greenhouse gas emissions and related indicators, compared with 2001 levels, due to continued growth in private vehicle use. It is unlikely that any strategic option developed at a regional level would have any significant positive contribution

to the reduction of vehicle related greenhouse gas emissions, given the current funding and legislative environment.

The analysis concluded that the "Planned Investment" scenario would provide the best solution to the region's transport needs and issues, without having a detrimental impact on the region's passenger transport system.

3. Strategic options consultation

The strategic options consultation document was widely publicised and distributed to both statutory stakeholders and an extensive list of interested parties in the region, in conjunction with the Wellington Regional Strategy document. This first stage of consultation in the RLTS review process was undertaken to ensure early and full opportunity for key stakeholders [persons and organisations listed in section 179(1) of the LTA 1998] including network providers, interested parties⁵² and members of the general public⁵³ to contribute to the development of this strategy.

Given the high level description of the strategic options no specific affected communities were identified, however, it was considered that the wide scope of the consultation process would enable any potentially affected groups to provide feedback and to be identified for future consultation purposes. Submitters were given the opportunity to appear in support of their submission at hearings in November 2005 and during the public participation part of the RLTC meeting in December 2005.

Feedback from the strategic options consultation process identified a number of key issues to be addressed during development of the strategy and, overall, indicated strong support for increased investment in passenger transport. The

⁵¹ Technical analysis contained within the reference "GWRC, 2006, Regional Transport Programme – Modelling and Analysis, May 2006".

⁵² The RLTS Strategic Options consultation document was mailed out with the WRS Growth Framework to a contact list of around 1400 individuals or groups.

⁵³ Via public notices, media releases and article in Elements.

feedback was considered by the RLTC and has been taken account of as one input to the development of the strategy.

4. Western Corridor consultation

Consultation on a proposed Western Corridor Plan was carried out as a separate process alongside consultation on the strategic options. This process looked at issues specific to the Western Corridor (from the Ngauranga merge in Wellington City, following State Highway 1 and the NIMT railway line north to Otaki) and options for addressing those.

Following an extensive technical and consultative process, including consideration of around 6,000 submissions, the RLTC adopted a Western Corridor Plan. This plan includes a package of passenger transport, roading, travel demand management, walking and cycling initiatives. A key outcome of the consultation process was the need to construct the new Transmission Gully Motorway rather than upgrading the existing coastal highway⁵⁴. The outcome of this process has been incorporated in the strategy.

5. Preferred strategic option

The preferred strategic option identified in the draft RLTS was one based largely on the Planned Investment scenario but with components of the 'Advanced Passenger Transport' scenario and modifications consistent with the outcome of the Western Corridor Plan process (e.g., Transmission Gully Motorway, 15 minute Western Corridor rail frequency and new rail stations at Raumati and Lindale).

The reasons identified for the preferred strategic option were:

- Support for increased investment in passenger transport services in the region (through Strategic Options consultation feedback).
- Strong support for building Transmission Gully Motorway (through the Western Corridor Plan feedback).

- The need to address previous under-investment in the region's rail network to ensure improved reliability and to accommodate growing passenger transport patronage.
- The need to complete a number of key roading projects to address key safety, reliability, capacity and access needs in the region.
- The need to address issues specific to the region's four key transport corridors.
- A medium level of travel demand management (TDM) investment - to achieve a 5% net reduction in trips - is appropriate at this early stage, to allow for monitoring the effectiveness and risks of TDM investment over the short to medium term.

It is noted that the three original scenarios evaluated were based on a total available funding of \$3432 million. However, the consultation on the draft RLTS included a draft Regional Transport Programme which proposed a total 10 year investment of \$4120 million. This was largely driven by the proposed completion of Transmission Gully Motorway in the 10 year Strategic Roding Programme, whereas the strategic options scenarios only allowed for a start to upgrading the existing coastal highway.

The draft Passenger Transport Programme investment was slightly larger than that identified in the 'Planned Investment' scenario, and allowed for several new Western Corridor rail improvements. Although around 66% of the total available funding was allocated to roading, it was not considered equivalent to the 'Advanced Roding' scenario, given that the increased investment was not at the expense of passenger transport projects. The draft funding allocation took account of the strong community support for Transmission Gully Motorway and responded to community severance and environmental concerns associated with upgrading the existing coastal highway route.

⁵⁴ While the RLTS signals the need to construct TGM, the decision to actually build it now rests with Transit and Land Transport NZ.

Consultation was subsequently undertaken on the draft strategy, including the draft Regional Transport Programme. In addition to generally confirming the elements of the preferred strategic option identified in the draft (as outlined above), the following strong themes were consistently raised through feedback:

- The need to reduce transport related greenhouse gas emissions.
- The need to significantly improved the passenger transport system, particularly the commuter rail system.
- The need to progress the proposed Transmission Gully Motorway route to provide safe and reliable road access through the Western Corridor to/from the Wellington City CBD.

The strategy was revisited with this feedback in mind and the strategy outcomes restructured into key and related outcomes to clearly signal priorities for the strategy over the next 10 years.

The final preferred strategic option recognises the need to invest across all modes to achieve the desired strategy outcomes. This includes giving priority to projects which contribute most towards achieving the key outcomes. A series of new prioritisation policies set out how projects are to be prioritised in relation to the available funding to achieve the strategy outcomes. The draft Regional Transport Programme will need to be reviewed under the new prioritisation policies and methodology, to ensure it better aligns with the new direction of strategy.

It is noted that the likely funding described in chapter 11 (\$2649 million) differs somewhat to the figure used during analysis of and consultation on strategic options in August 2005. The three scenarios evaluated as part of the strategic options process were based on a total available funding of \$3432 million, which was the best estimate of likely available funding at that time. This figure included some \$1000 million for highway and local road maintenance, which has not been included in the funding summary table in chapter 11 (Table 7) because

road maintenance funding is largely fixed. The figure used for strategic options was also estimated prior to the outcome of the Western Corridor Plan process and therefore did not include the proposed loans for Transmission Gully Motorway. Furthermore, the figure identified in chapter 11 includes a new funding source from rail fare increases and programme and funding adjustments made during the year since the strategic options estimate was published.

6. Adverse effects on the environment

A number of adverse effects on the environment as a result of transport activity have been identified in chapter 3.3 of this strategy. These range from local environmental impacts (e.g., local air quality) to global environmental issues (e.g., greenhouse gas emissions).

Section 175(2)(h) of the LTA 1998 requires the RLTS to give early and full consideration to land transport options and alternatives in a way that avoids, to the extent reasonable in the circumstances, adverse effects on the environment.

A number of indicators were used in the strategic options analysis to measure the likely environmental impacts of the different scenarios. These indicators included:

- decreased CO₂ emissions
- reduced air pollution
- reduced traffic noise
- reduced contaminants in surface water runoff
- reduced fuel consumption
- supports efficient land use.

All of the options scored positively in relation to air pollution, due to a forecast reduction in pollutants resulting from improved vehicle technology. All scenarios scored neutrally in relation to traffic noise and efficient land use. All scored negatively for reduced CO₂ emissions and

fuel consumption. Likewise, all scenarios scored negatively in relation to contaminants in surface water runoff, based on the forecast increase in total car trips.

It is clear that having any significant positive impact on some environmental indicators (CO₂ and fuel use in particular) will be very challenging under the current funding and legislative environment. Appropriate changes are required by central government to enable regional authorities to respond effectively to these issues. This strategy includes policies which support such advocacy to central government.

The strategy seeks to minimise these adverse environmental effects, primarily through its travel demand management initiatives, influencing efficient land use and urban form, supporting an increased use of walking and cycling, and improving the use and quality of region's passenger transport network.

7. Cooperation with adjoining regions

Section 175(2)(m) of the Land Transport Act states that regional councils must identify any strategic options for which co-operation is required with other regions. As part of consultation on the strategic options, adjoining regional and territorial authorities⁵⁵ were asked to identify any inter-regional transport issues or opportunities for policy cooperation.

Feedback was received from Horizons (Manawatu-Wanganui regional council) and Horowhenua District Council. Issues raised primarily related to the importance of State Highway 1 and the NIMT line in providing vital access from the north to Wellington City, CentrePort, Wellington International Airport and the South Island. Improvements to both road and rail networks along this route were seen as necessary to ensure the efficient, safe and reliable movement of people and freight.

Cooperation between regions is particularly important in relation to the Western Corridor. Policy 8.5 h in chapter 8 of the strategy seeks to ensure that investment in arterial routes is coordinated with investment made in other regions in those same routes. Therefore, continued consultation with adjoining regions during implementation of the Western and Wairarapa Corridor Plans is crucial.

There may also be opportunities for cooperation between regions in relation to wider transport issues. For example, advocating to central government on issues such as road pricing legislation, vehicle efficiency, alternative fuels and passenger transport funding could be strengthened by a coordinated approach and will be pursued whenever appropriate. This strategy also advocates for improvements to rail infrastructure outside the region, and will be pursued through the Regional Freight Plan, which sits alongside this strategy.

⁵⁵ Manawatu-Wanganui Regional Council (Horizons), Horowhenua District Council and Tararua District Council.

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