

Wellington Regional Land Transport Strategy 2007 - 2016

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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.

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 submissions, the Committee has shifted the strategy's emphasis towards improving sustainability. Prominence has been given to improving the quality of and increasing the use of the passenger transport system and reducing transport related greenhouse gas emissions.

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 a reversal of the long term neglect of rail infrastructure. We are a region full of magnificent villages and local environments that transport should connect.

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.

Project investment needs to be partnered by policy and education to achieve positive change. The RLTS provides strategic direction to support this.

Terry McDavitt

Chairperson of the Wellington Regional Land Transport Committee

Executive summary

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

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

This Regional Land Transport Strategy 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.*

The strategy seeks to improve access throughout the region and to key destinations, increase travel by public transport, reduce severe traffic congestion, improve road safety, increase travel efficiency, and improve walking and cycling infrastructure.

Regional issues and objectives

The RLTS reflects regional issues and objectives. This approach has been taken to ensure integration of national, regional and local transport policy.

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.

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 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 will continue to enhance the prosperity of the Wellington City Central Business District (CBD) 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 hierarchy structure of 'key outcomes' and 'related outcomes' to clearly signal priorities for the strategy over the next ten 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.

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 (RTP) 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
- The construction of the proposed Transmission Gully Motorway (TGM) route within the next ten 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 \$3589 million, and identifies a funding gap of \$416 million.

Monitoring and Review

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

1. Introduction

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 and outlines regional objectives, outcomes and policies covering the period 2007 to 2016 for the region's land transport system.

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 the strategy.

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

Chapter 12 identifies how the strategy will be monitored.

Chapter 13 outlines the proposed review programme for the strategy and its supporting implementation plans.

The appendices provide further context to the strategy.

2. Vision

The strategy's vision is:

'To deliver 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 CBD, regional centres, CentrePort, Wellington International Airport and Newtown 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.

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.

3. Regional transport network - pressures and issues

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 CBD. State Highway One 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.

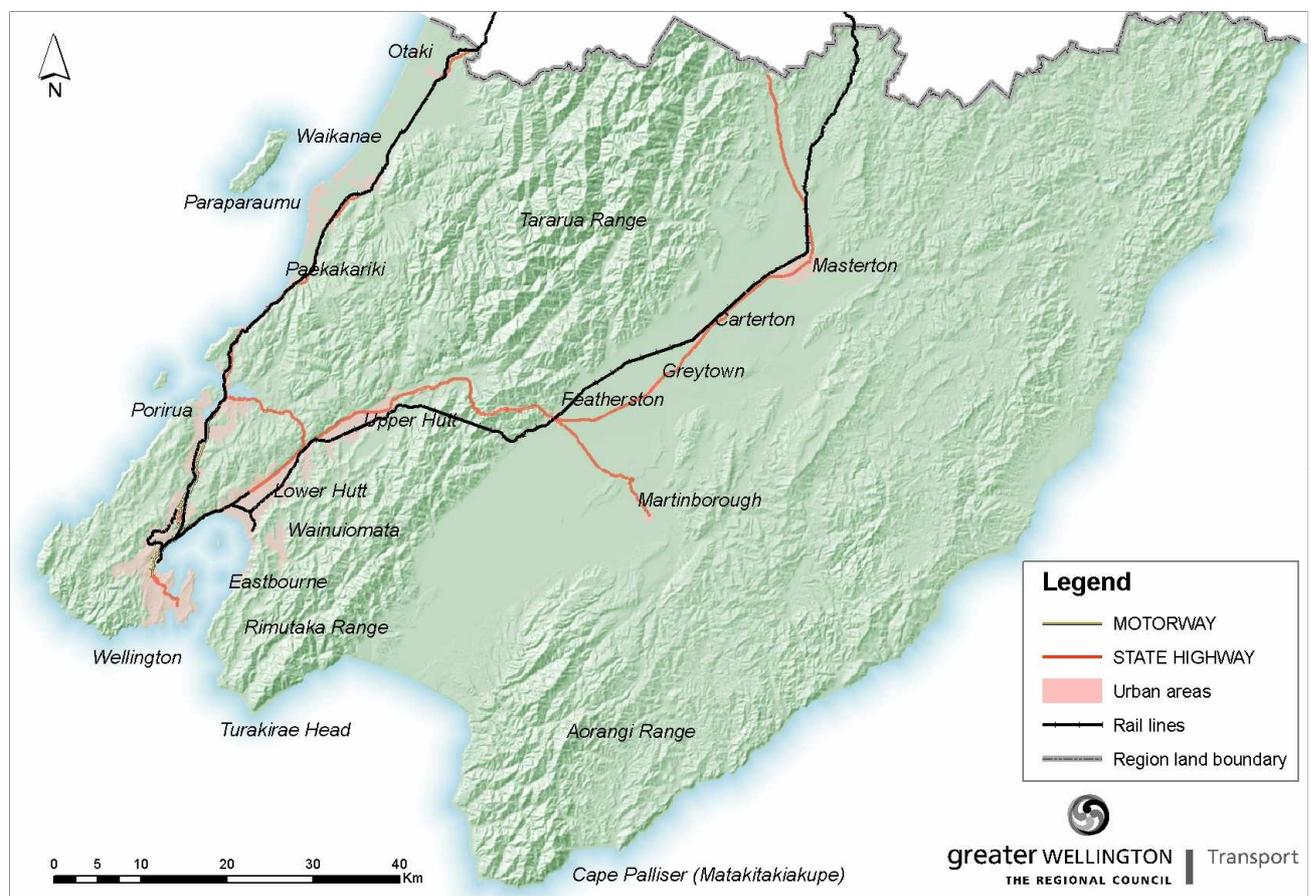


Figure 1: Wellington's regional transport network.

The regional transport network (Appendix 1) provides vital access to key regional destinations including the Wellington City CBD, regional centres, CentrePort 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 effects of pressures and interventions. The most recent AMR¹, 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 figures 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, transport-generated greenhouse gas emissions have also increased.

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).

¹ 2005/2006 Annual Report on the Regional Land Transport Strategy, GWRC, September 2006 (Available on GWRC website).

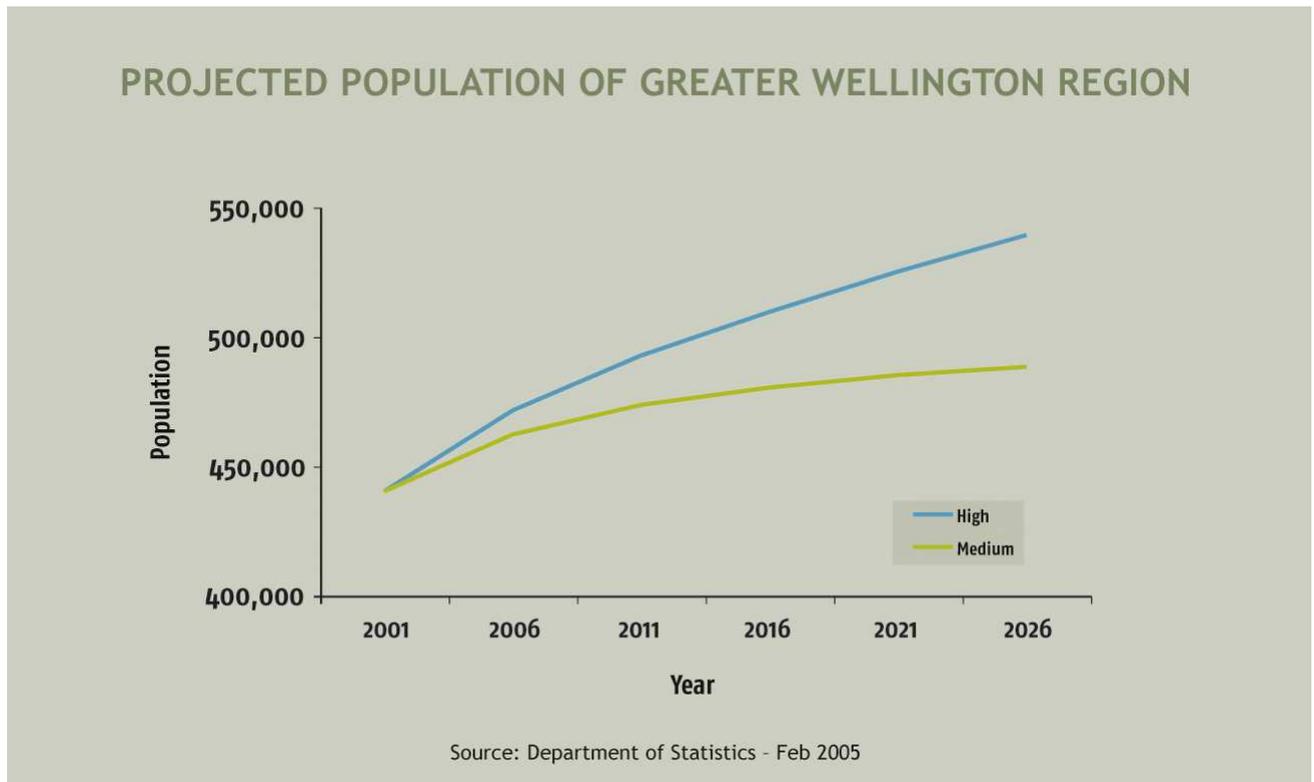


Figure 2: Wellington region's population growth. Source: Wellington Regional Strategy (WRS) Growth Framework, 2005.

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)². 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 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.

² GWRC 2004/2005 Annual Report on the Regional Land Transport Strategy.

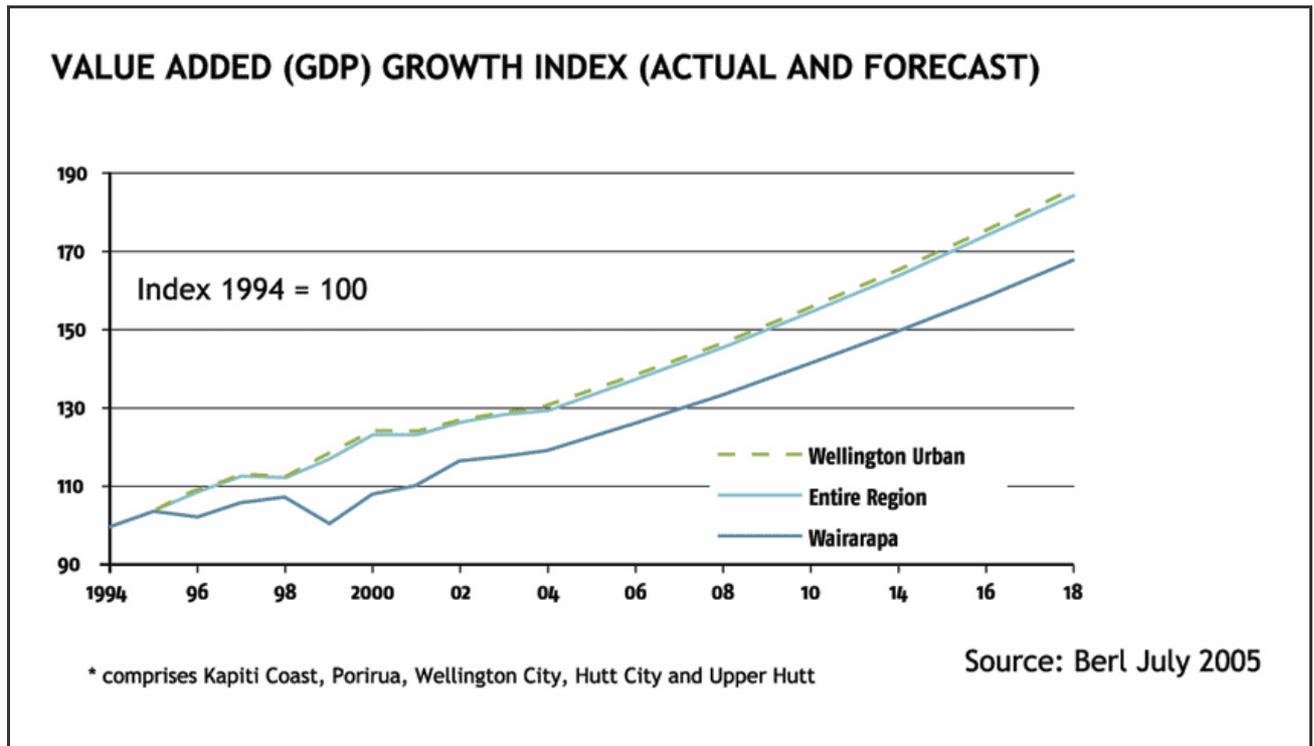


Figure 3: GDP growth index for the Wellington region. Source: WRS Growth Framework, 2005.

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.

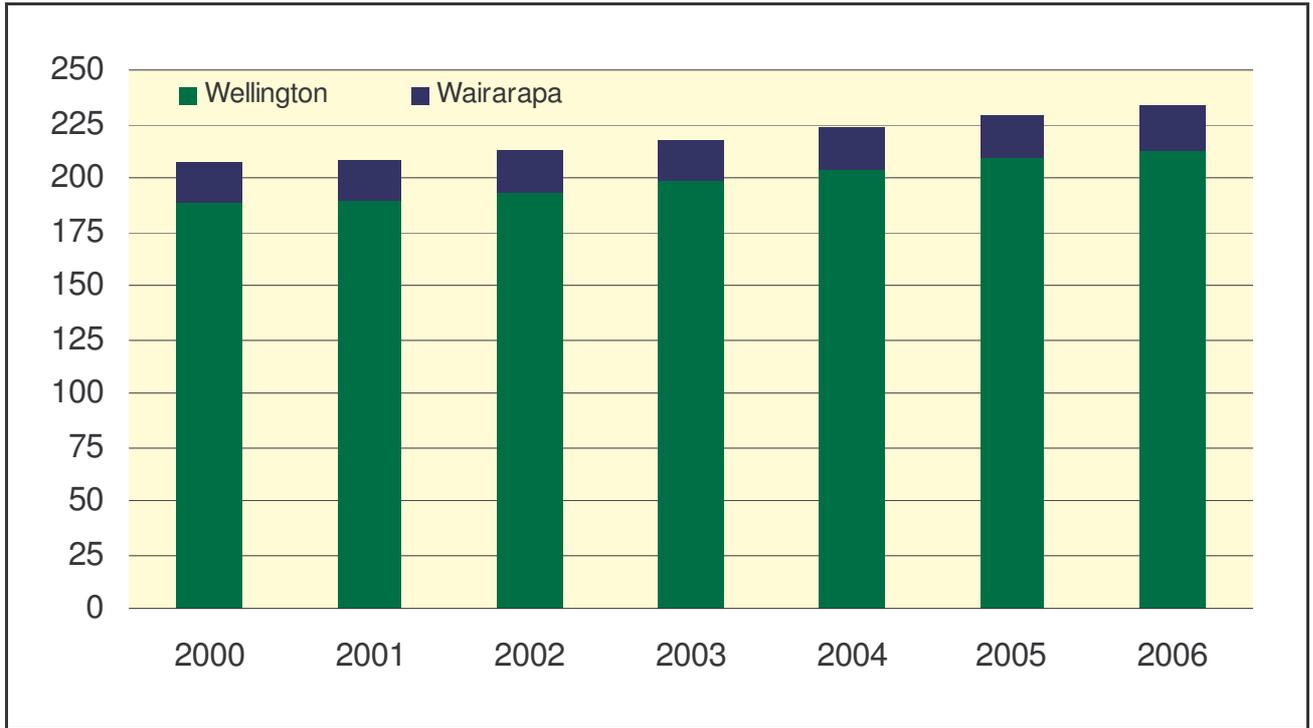


Figure 4: Car registrations (000), Wellington region. Source: Land Transport New Zealand, 2006.

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.

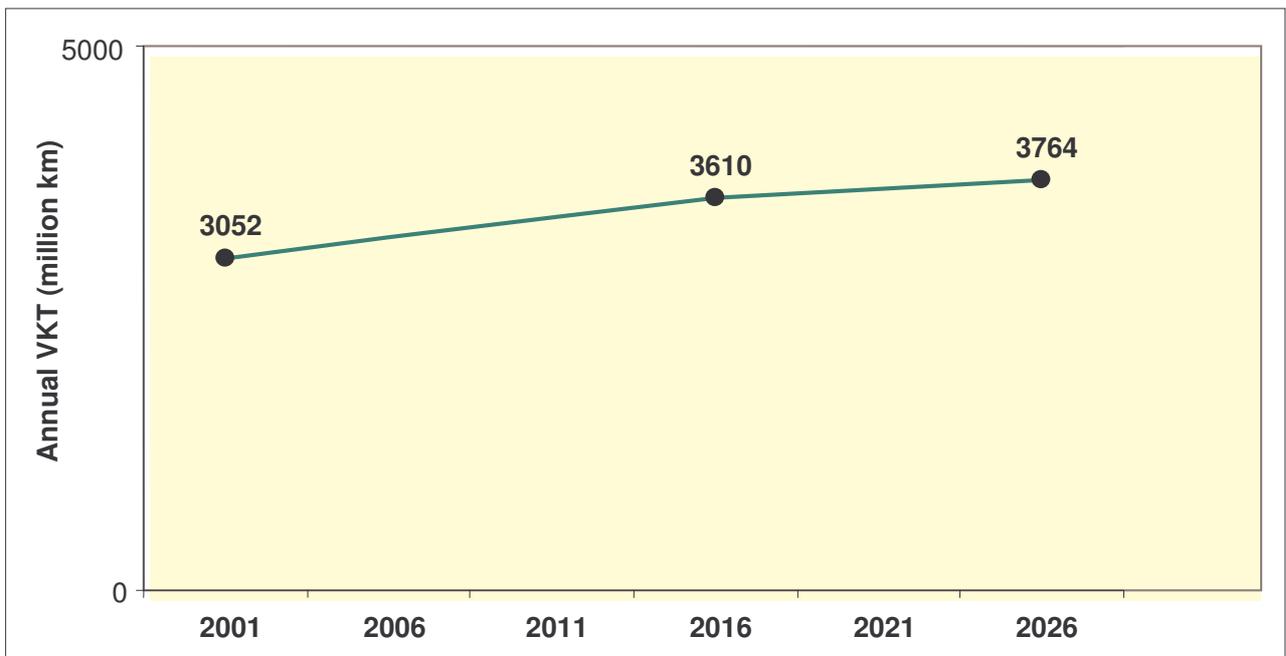


Figure 5: Projected regional vehicle kilometres travelled (VKT) per annum. Source: Wellington Transport Strategic Model.

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.

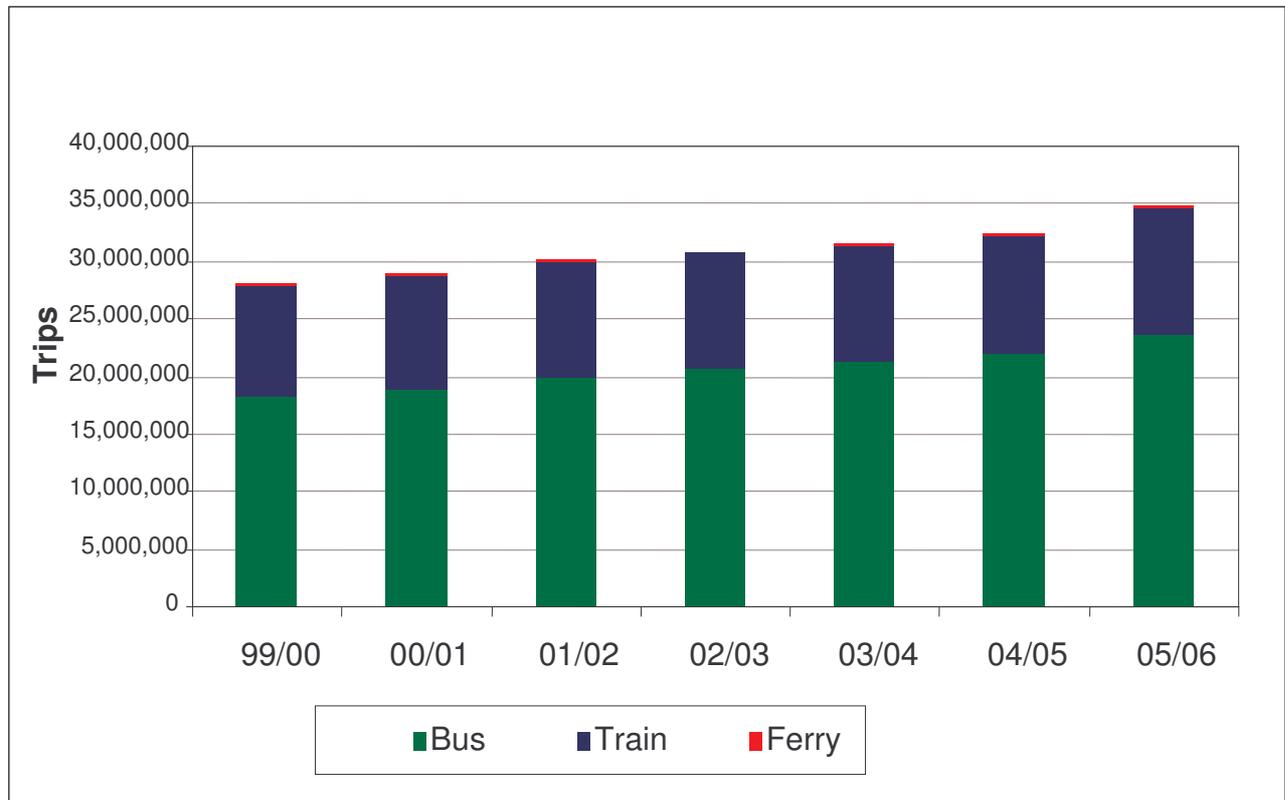


Figure 6: Total annual passenger transport patronage by mode. Source: Greater Wellington Regional Council 2006.

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 forestry³. 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 1,600,00 m³ between 2006 and 2016⁴. We need to recognise and provide for the additional pressure this will place on the region’s strategic transport network between Wairarapa and CentrePort (Wellington’s port) in Wellington City.

³ Source: Masterton Business Enterprise website.

⁴ Source: Masterton Business Enterprise website.

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 place for responses at a local level⁵.

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 to 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 transport⁶.

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

⁵ GWRC, May 2006, 'Our Region, Their Future' RPS Discussion Document.

⁶ From New Zealand Climate Change Office website.

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 above. 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 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 million⁷.

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 GWRC perceptions survey⁸, respondents who resided in Wellington City felt the "safest" while walking (78% felt safe). Other Territorial Authority (TA)

⁷ Land Transport NZ, 2006, Wellington Regional Road Safety report 2001 – 2005.

⁸ NRB GWRC, May/June 2004, Transport Perceptions Survey.

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.

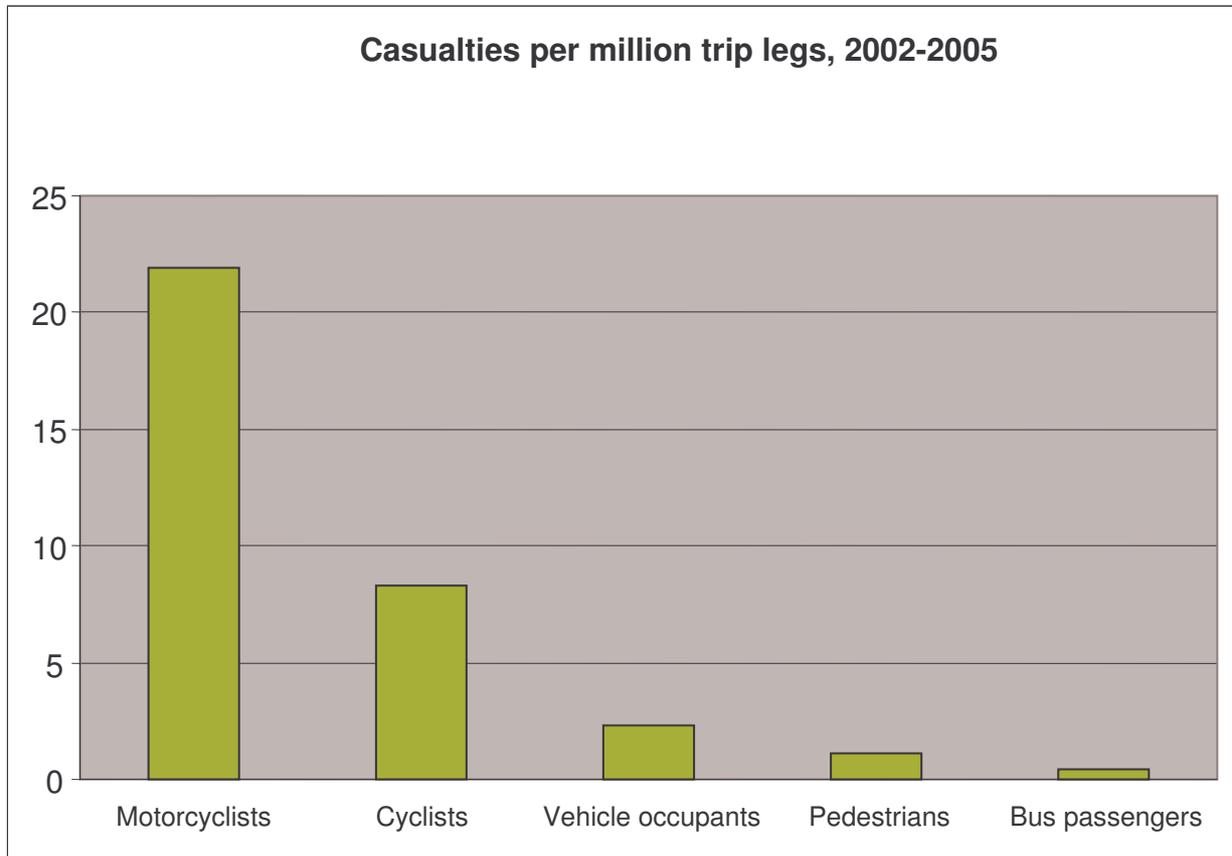


Figure 7: Relative risk by transport mode. Source: Ministry of Transport, reported crashes and NZ Household Travel Survey (2006 - Provisional).

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 illustrates the perception of network reliability.

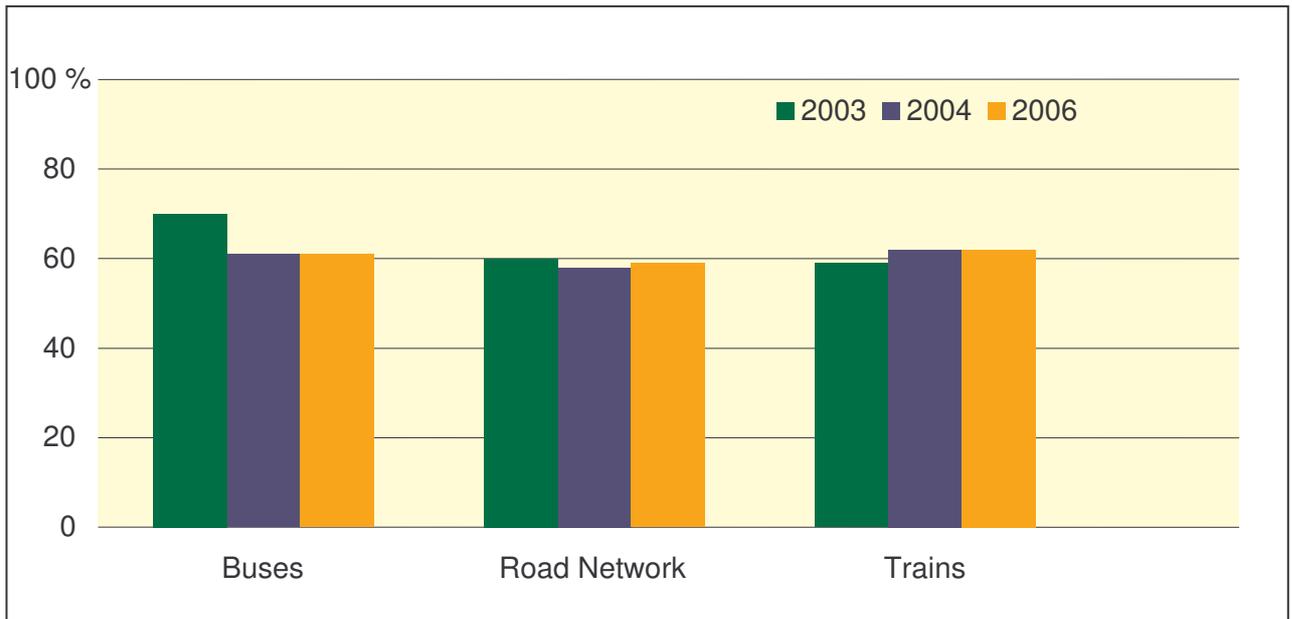


Figure 8: Perceptions of network reliability – Percentage of people who rate the regional transport network as reliable. Source: GWRC perception survey 2003, 2004, 2006.

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%⁹.

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

⁹ GWRC 2005/2006 Annual Report on the Regional Land Transport Strategy.

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 North Island Main Trunk rail 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, earthquakes and tsunamis. A major seismic event is likely to have a significant impact on strategic transport links to Wellington, Hutt Valley and Porirua¹⁰. 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 was developed by the Wellington Lifelines Group¹¹ as part of their submission to the Western Corridor planning process. The source of the information 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.

¹⁰ Wellington Lifelines Group. Nov 2005. Submission to proposed Western Corridor Plan.

¹¹ Wellington Lifelines Group comprises utility and transportation sector organisations working collaboratively to reduce the vulnerability of Wellington's 'lifelines' to regional scale hazard events.

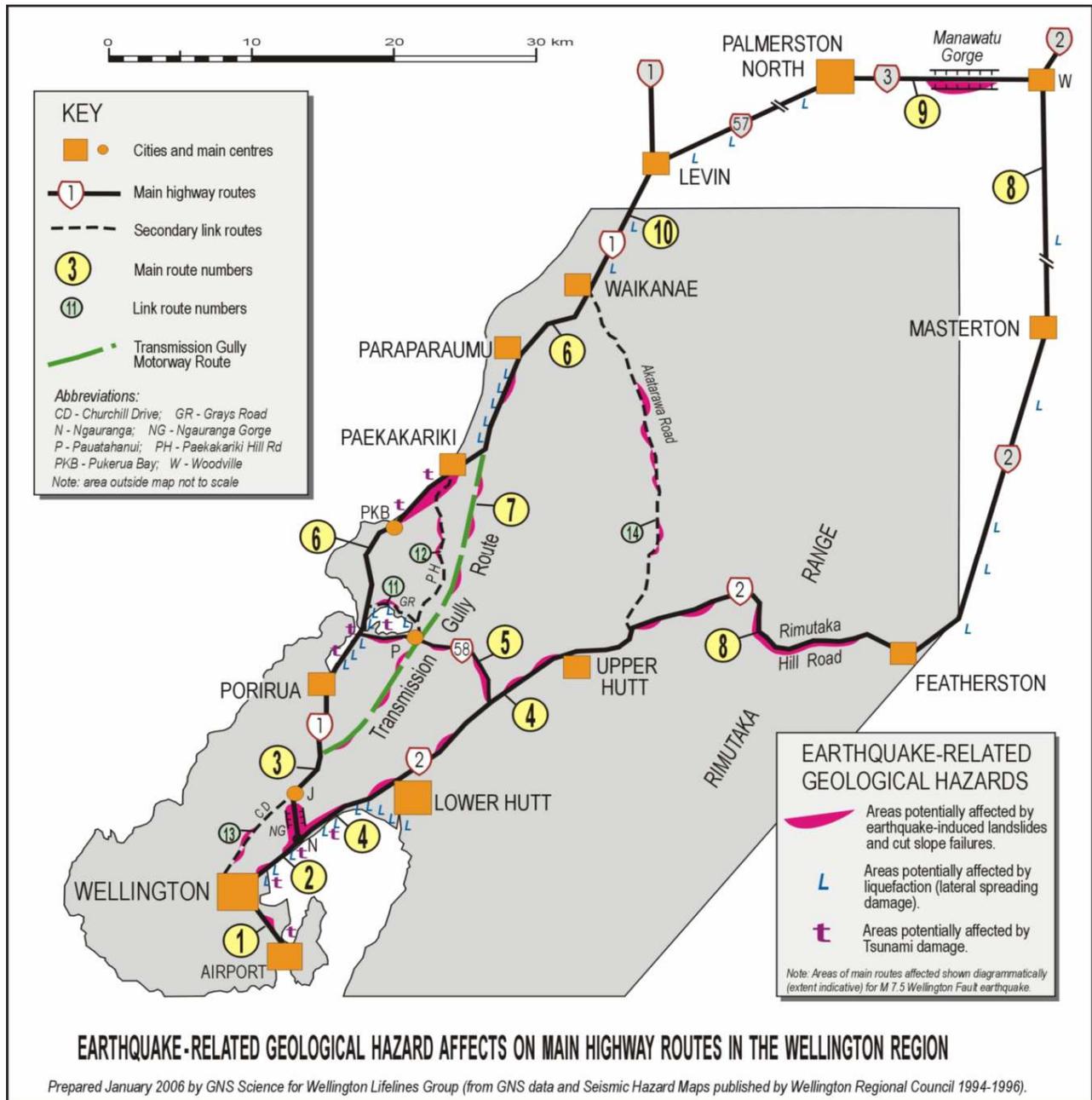


Figure 9: Earthquake-related geological hazard effects on the Wellington region's state highways. Source: Wellington Lifelines Group (2006).

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 the 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 Strategies¹². 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).

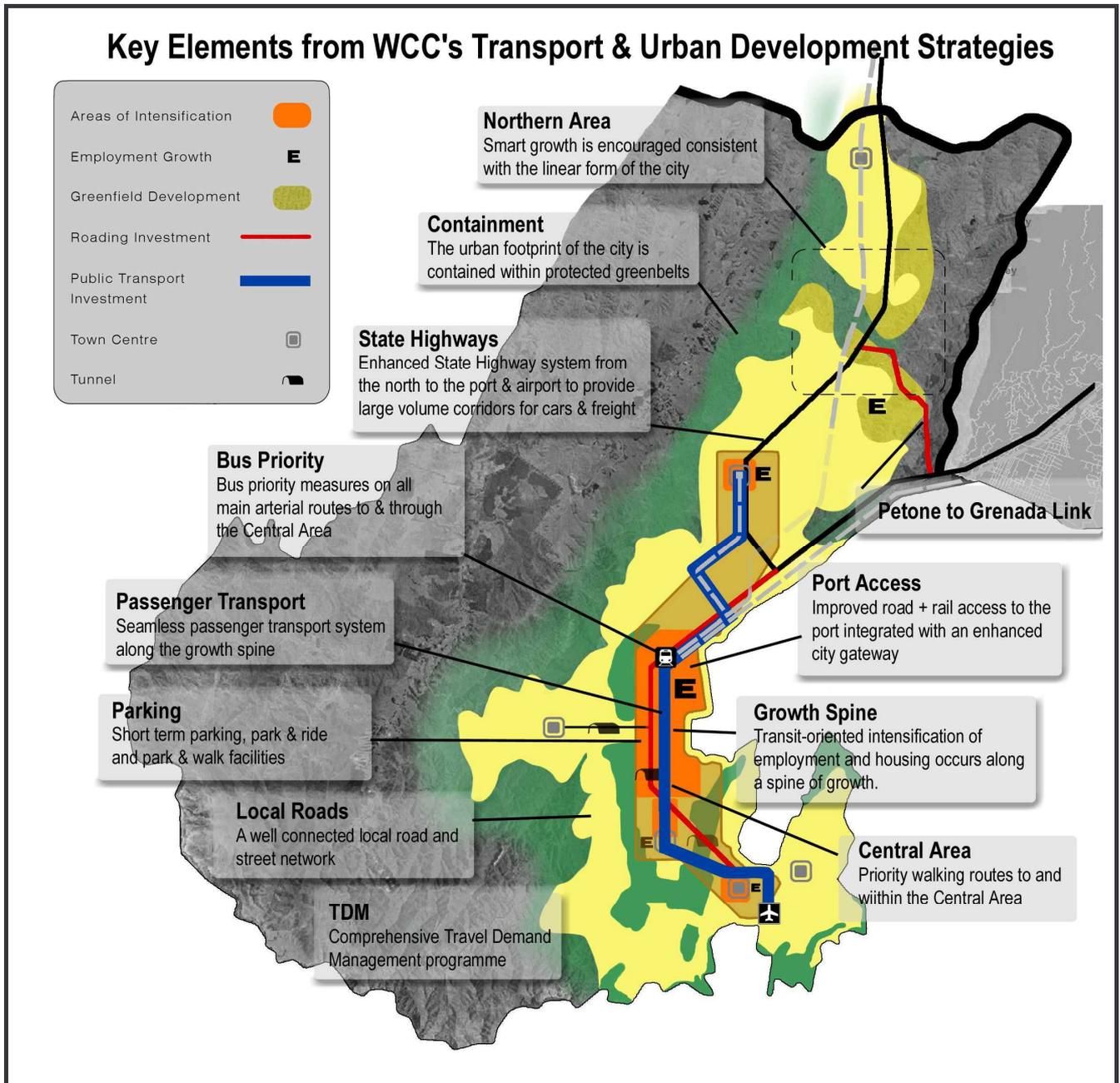


Figure 10: Wellington City's growth spine. Source: Wellington City Council (2006).

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

¹² Wellington City Transport Strategy 2006 & Draft Wellington City Urban Design Strategy 2006.

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 exist 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 3) 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 WRS 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 CBD¹³. The Wellington Regional Strategy 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 study¹⁴ 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 movement has shown a continual decline since 2000¹⁵. Advocating for the removal of rail infrastructure constraints for freight will be an

¹³ GWRC, 2004, CBD Corridor Study. Pressures & Issues.

¹⁴ Transport Engineering Research NZ Ltd, 2006, Prediction of New Zealand's freight growth by 2020.

¹⁵ GWRC, 2004/2005, Annual Monitoring Report.

important role of this strategy to provide opportunities for increasing rail freight efficiency and its share of inter-regional freight movements.

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

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 survey¹⁶ 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 following map identifies the key routes of the regional road network affected by regular traffic congestion during peak periods.

¹⁶ NRB GWRC May/June 2004 Transport Perceptions Survey.

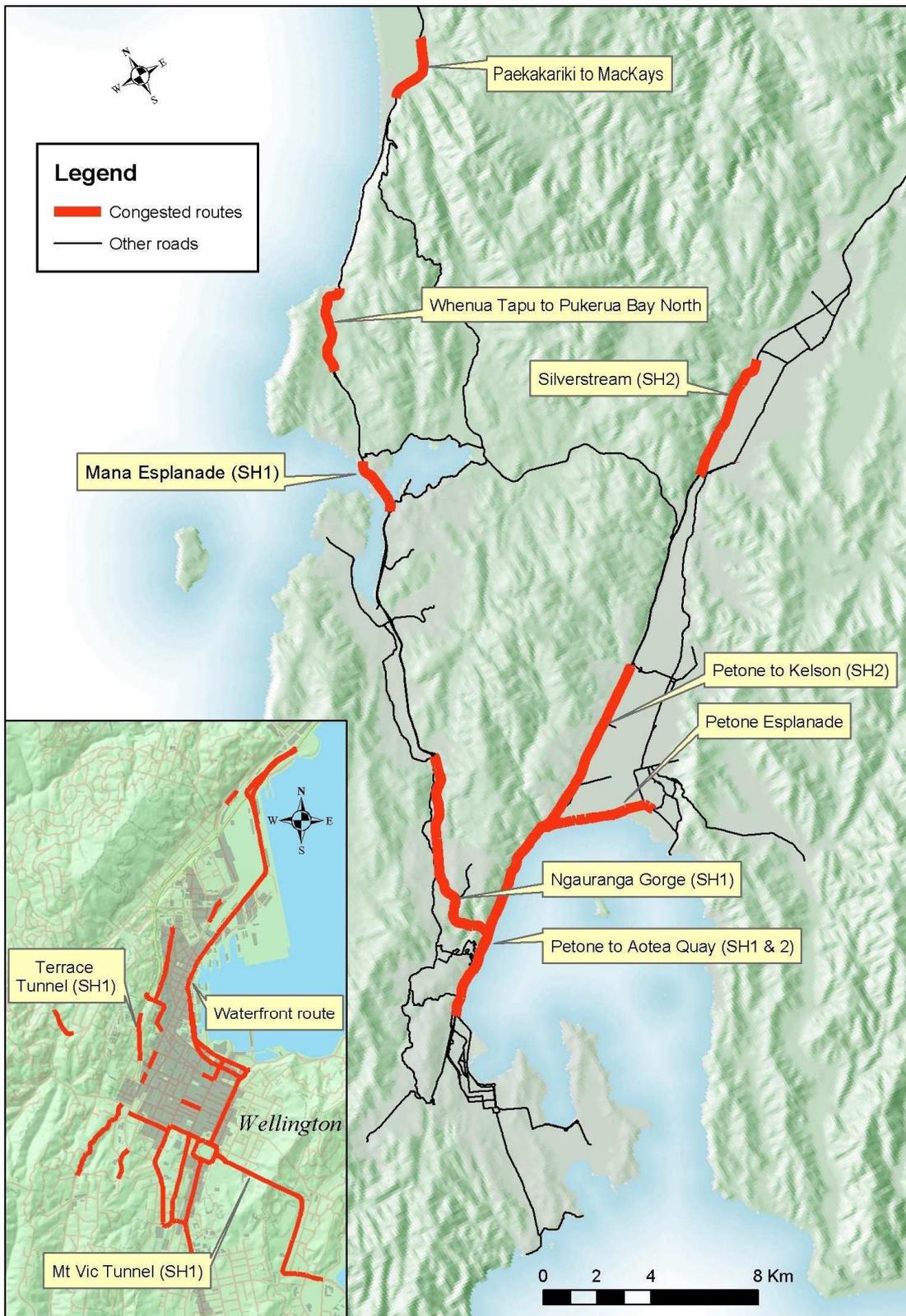


Figure 11: Wellington region's congestion bottlenecks. Source: Wellington Transport Strategic Model (WTSM) and other sources.

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 to the south is required 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.

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 in the identified vulnerable airsheds of our region (Masterton, Upper Hutt and Wainuiomata) but 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) into the region's stormwater system. However, no definitive data is currently available for the Wellington region. 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 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 consenting 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)¹⁷ 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 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.

¹⁷ PHAC, April 2003, 'Impacts Of Transport On Health – An Overview'.

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

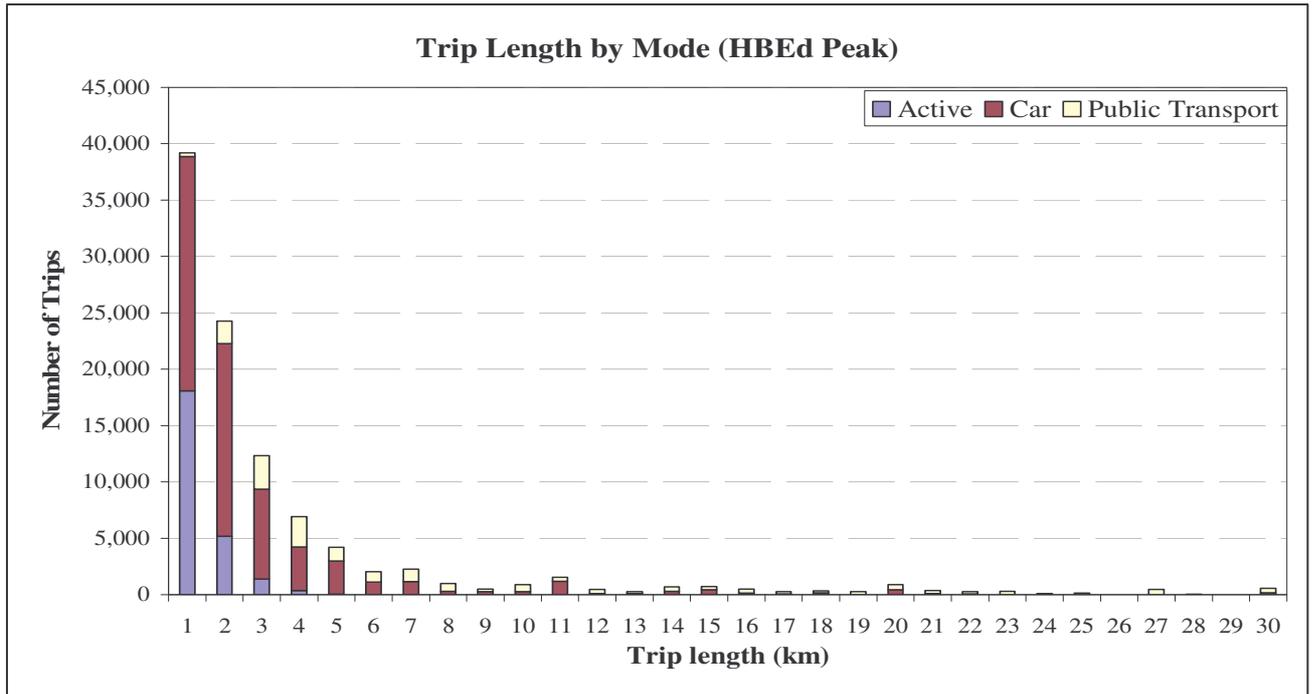
Despite considerable progress made in recent years to improve the accessibility of the public land transport system, many disabled people in New Zealand have severe difficulty using public land transport services and infrastructure (HRC, 2005). New Zealand's ageing population reinforces the need to continually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

The Human Rights Commission report 'The Accessible Journey'¹⁸ 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.

¹⁸ Human Rights Commission, 2005, The Accessible Journey: Report of the Inquiry into Accessible Public Land Transport.



However, a recent perceptions survey¹⁹ 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.

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.

¹⁹ National Research Bureau (NRB), June 2006, Transport Perceptions Survey.

4. Strategy development

The approach for developing the RLTS was evidence-based, collaborative, accountable and forward-looking. It has involved a multi-step process 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.

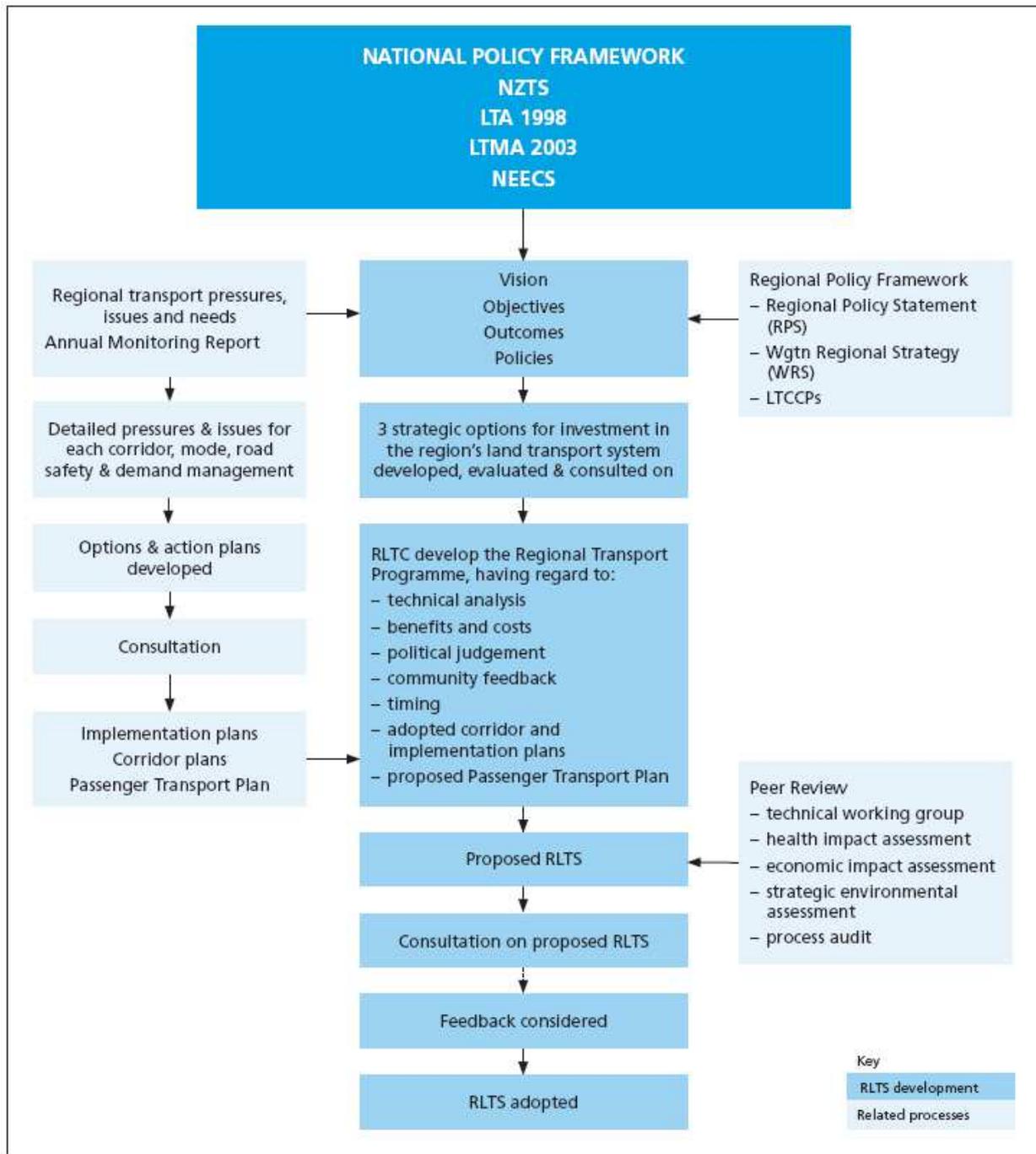


Figure 13: The Wellington RLTS development process.

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.

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 Rooding, 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 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 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.

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 RLTC and resulted in amendments to the strategy where appropriate.

Following consultation on the draft strategy, the vision, objectives, outcomes and policies were revisited to ensure they adequately reflected the feedback received from submitters and any new information available. The draft 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 the direction set out in the final strategy.

5. Objectives

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 WRS, to ensure the strategy contributes to the community outcomes identified by through 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 disadvantaged²⁰. 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; 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.

²⁰ 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 hierarchy structure of 'key outcomes' and 'related outcomes' to clearly signal priorities for the strategy over the next ten 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>	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
Land Transport Outcomes (Key outcomes in bold)						
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.

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. 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.

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 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 at 2016.

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 ten years compared with the previous ten 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.

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 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 NZECS and NZES) 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 ten 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 RPS and in turn District Plans. Progress towards this key outcome target will largely rely on advocacy to local 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 Outcomes Target

Targets have also been set for each related outcome. 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.

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 400m (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 PT 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	Less than 100 pedestrians injured in the region per annum. (150 injured in 2005). Less 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 for less than per year.

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.

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.

8. Policies

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, consenting 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 techniques²¹ 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 passenger rail level of service 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).

²¹ For example, Advanced Traffic Management Systems, Advanced Traveller Information Systems, High Occupancy Vehicle lanes.

- 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 provides 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.
- 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 correct²² 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 private²³ 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.

²² 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.

²³ In this context private motor vehicles includes company cars not being used for commercial purposes.

- 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 allow 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 enhances access, minimises community severance issues and takes 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.

- 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 minimises 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 policy area seeks to ensure adequate funding for transport in the region.

- a Support investigation of mechanisms for addressing funding gaps in the Regional Transport Programme, including but not limited to:

- (i) Advocacy to Government for increased funding
- (ii) Local fuel taxes
- (iii) Tolling of new roads
- (iv) Road pricing of existing roads
- (v) Public/private partnerships
- (vi) Development contributions (under the LGA) and financial contributions (under the RMA)

8.7 Implementation Policies

- 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:
 - Western corridor
 - Hutt Corridor
 - Wairarapa Corridor
 - 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 & Funding Policies

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

- a Ensure the priorities and funding in the Regional Transport Programme (RTP) take account of a project or package's effectiveness, potential risks and contribution towards the achievement of the Regional Land Transport Strategy's objectives and outcomes, ensuring that:

- (i) Projects that contribute to the key outcomes by addressing greatest needs are given priority; and
 - (ii) Priority decisions reflect:
 - Seriousness: The magnitude and significance of the transport problem to which the project or package responds;
 - Urgency: The allowance of consideration of any external factors that influence the timing of project/package implementation;
 - Economic Efficiency: A rating of the economic returns on the funds invested as measured by a benefit cost ratio;
 - Volumes: The numbers of those people affected;
 - Affordability;
 - Perceived safety benefits; and
 - (iii) Western Corridor passenger rail improvements are in place prior to the opening of the Transmission Gully Motorway.
- b Ensure the following applies to the allocation of Crown “C” funds:
- (iv) The use of “C” funds should be used early to maximise buying power as these funds are not indexed against inflation.
 - (v) The highest priority for the use of C funds for assisting local share will be passenger rail improvement projects.
 - (vi) The Kapiti Western Link Road Stage 1 design and construction is the second priority for assistance with the local share.
 - (vii) C1 and C2 funds will be used to achieve an effective FAR of 90% for passenger rail improvement projects.
 - (viii) 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.
 - (ix) 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.

- (x) 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.
- c 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.
- d Annual confirmation of the regional transport programme will be carried out through the application of an agreed prioritisation methodology.

8.9 Links between strategy policies and objectives

The following table 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.

RLTS Objectives	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
RLTS Policies						
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 passenger rail level of service 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.	✓		✓		✓	✓

RLTS Objectives RLTS Policies	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
	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 provides 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.		✓		✓	✓	
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 allow road pricing.	✓		✓		✓	✓
Support start-up funding for viable 'alternative to road' initiatives.	✓		✓		✓	✓

<p style="text-align: center;">RLTS Objectives</p>	<p style="text-align: center;">Assist economic and regional development</p>	<p style="text-align: center;">Assist safety and personal security</p>	<p style="text-align: center;">Improve access, mobility and reliability</p>	<p style="text-align: center;">Protect and promote public health</p>	<p style="text-align: center;">Ensure environmental sustainability</p>	<p style="text-align: center;">Ensure that the RTP is affordable to the regional community</p>
<p>RLTS Policies</p>						
<p>Support beneficial rail freight initiatives where net benefits exceed those of road freight.</p>	✓	✓	✓		✓	✓
<p>Safety</p>						
<p>Ensure continuous improvement of regional road safety based on a firmly established safety culture.</p>	✓	✓	✓	✓		
<p>Support improved safety (perceived and real) of pedestrians from risks posed by traffic, the physical environment and crime.</p>	✓	✓	✓	✓		✓
<p>Support improved safety of cyclists from risks posed by traffic and other hazards.</p>		✓	✓	✓		✓
<p>Support improved safety and personal security (perceived and real) of passenger transport users.</p>		✓	✓	✓		✓
<p>Environment and public health</p>						
<p>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.</p>				✓	✓	
<p>Support continuous improvement in air quality through reduction in and exposure to harmful vehicle emissions.</p>				✓	✓	
<p>Support the reduction of greenhouse gas emissions arising from the operation of the regional transport network.</p>	✓				✓	✓
<p>Support government investigations into alternative fuel options and eco-efficient vehicles.</p>	✓				✓	
<p>Ensure the transport network is developed in a way that minimises the use of non-renewable resources.</p>				✓	✓	✓
<p>Support the use of transport modes that are not dependent on fossil fuels, including active transport modes.</p>	✓			✓	✓	✓
<p>Ensure location and design of new transport infrastructure enhances access, minimises community severance issues and takes account of the special values of the local area including, but not limited to, environmental matters and community concerns.</p>	✓	✓	✓	✓	✓	
<p>Support ongoing installation of stock truck effluent disposal sites at key localities in the region.</p>	✓			✓	✓	
<p>Planning and integration</p>						
<p>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.</p>	✓	✓	✓	✓	✓	✓
<p>Ensure new transport infrastructure is consistent with the region's urban design principles as set out in the Regional Policy Statement.</p>	✓	✓	✓	✓	✓	✓

<p style="text-align: right;">RLTS Objectives</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
	RLTS Policies					
Support land use principles that minimises 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						
<p>Support investigation of mechanisms for addressing funding gaps in the Regional Transport Programme, including but not limited to:</p> <ul style="list-style-type: none"> -Advocacy to Government for increased funding -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) 	✓					✓
Implementation Policies						
<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 -East – West Corridor (including State Highway 58) 	✓	✓	✓	✓	✓	✓
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.	✓	✓	✓	✓	✓	✓
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 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
Programme prioritisation & funding						
<p>Ensure the priorities and funding in the Regional Transport Programme (RTP) take account of a project or package's effectiveness, potential risks and contribution towards the achievement of the Regional Land Transport Strategy's objectives and outcomes, ensuring that:</p> <p>Projects that contribute to the key outcomes are given priority; and</p> <p>Priority decisions reflect:</p> <ul style="list-style-type: none"> -Seriousness: The magnitude and significance of the transport problem to which the project or package responds; -Urgency: The allowance of consideration of any external factors that influence the timing of project/package implementation; -Economic Efficiency: A rating of the economic returns on the funds invested as measured by a benefit cost ratio; -Volumes: The numbers of those people affected; -Affordability; -Perceived safety benefits; and <p>Western Corridor passenger rail improvements are in place prior to the opening of the Transmission Gully Motorway.</p>	✓	✓	✓	✓	✓	✓
<p>Ensure the following applies to the allocation of Crown "C" funds:</p> <p>The use of "C" funds should be used early to maximise buying power as these funds are not indexed against inflation.</p> <p>The highest priority for the use of C funds for assisting local share will be passenger rail improvement projects.</p> <p>The Kapiti Western Link Road Stage 1 design and construction is the second priority for assistance with the local share.</p> <p>C1 and C2 funds will be used to achieve an effective FAR of 90% for passenger rail improvement projects.</p> <p>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.</p> <p>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.</p> <p>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>	✓	✓	✓	✓	✓	✓

RLTS Objectives RLTS Policies	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
	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.	✓				
Annual confirmation of the regional transport programme will be carried out through the application of an agreed prioritisation methodology.	✓	✓	✓	✓	✓	✓

Table 4: Linkages 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 reflect 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 region²⁴. 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 trips 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

²⁴ Source: Wellington Transport Strategic Model (WTSM), total region wide trips per weekday.

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 9](#).

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 affect 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.

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 trips²⁵. 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.

²⁵ Source: Wellington Transport Strategic Model (WTSM)

Passenger rail primarily provides access to the Wellington City CBD by carrying large numbers²⁶ 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 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%)²⁷ 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. However, the regulation of such facilities along with allocation of standing space for taxis is the responsibility of territorial authorities.

²⁶ Around 11,746 people arrive at Wellington Station during the AM peak. Source: GWRC AM Peak Cordon Surveys, March 2004.

²⁷ Derived from the 2001 Household interview survey.

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 Days Bay 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%)²⁸ 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 short²⁹ 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 trips³⁰. 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.

Most people consider walking to be an easy way of getting around³¹. However, we do not walk for as many short trips as we could³² and the use of walking as a mode for trips between 1 km and 2 km could be increased³³. 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.

Chapter 8 of the strategy sets out the policies relating to walking. 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.

²⁸ Derived from 2001 household interview survey.

²⁹ Short trips are defined as being those less than 2 km in length.

³⁰ Source: Wellington Transport Strategic Model (WTSM) region wide trips per weekday.

³¹ Source: GWRC perception survey 2004

³² Source: GWRC perception survey 2004

³³ Source: GWRC active mode survey 2004

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%³⁴ 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 easy³⁵. However, other parts of the region, such as the Kapiti Coast, the 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 unsafe³⁶. 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. 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 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 network³⁷.

³⁴ Source: Wellington Transport Strategic Model (WTSM)

³⁵ GWRC perception survey 2004.

³⁶ GWRC perception survey 2004.

³⁷ Source: Wellington Transport Strategic Model (WTSM).

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 well below the scope of strategic regional transport planning. Therefore, their use and provision of infrastructure for them 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 are 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.

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, 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 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 in order to translate the RLTS vision, objectives, outcomes and policies into specific project interventions.

The implementation and corridor plans form stand alone documents which sit alongside the RLTS. They 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.

Review of the implementation plans and corridor plans will involve all key stakeholders in the region and 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 13](#) of this strategy. Review of the plans will need to be aligned with the new strategic framework provided by the RLTS.

Implementation plans include a comprehensive action programme with responsibilities, targets and timeframes identified. 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 is being developed separately by Greater Wellington's Passenger Transport Committee. Once adopted, this plan will be considered to form part of the RLTS as required by legislation.

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.

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, as set out in this strategy.

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.

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.

Travel Demand Management 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 LTA 1998 to include a demand management strategy that has targets and timetables appropriate for the region. Appropriate system wide targets for demand management are included amongst the outcome targets set out in **chapter 7** of the strategy. The 2016 targets particularly relevant in relation to TDM are:

- 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).
- 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).
- Average congestion on selected roads will remain below 20 seconds delay per km travelled despite traffic growth. (21 seconds in 2006).
- 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).
- All large subdivisions and developments include provision for walking, cycling and public transport.

A key contribution towards achieving these 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.

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.

The Regional Travel Demand Management Plan includes an action programme which sets out proposed actions covering a range of the above methods. A significant component of the plan is a comprehensive travel plan programme for workplaces, schools, and communities to be progressed over a ten year period.

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.

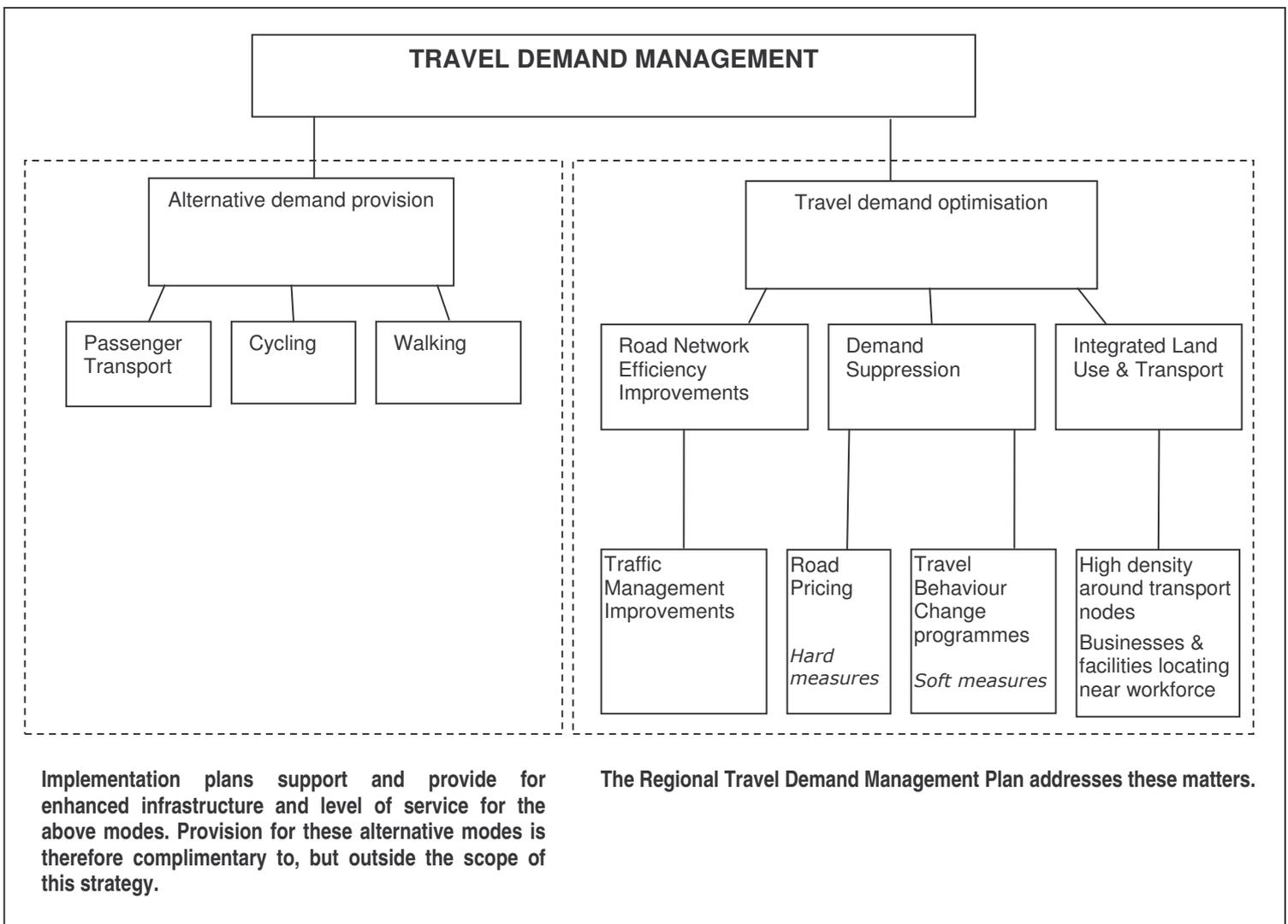


Figure 14: Scope of the Regional Travel Demand Management Plan

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 system wide outcome 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 how the road safety outcomes and targets will be achieved. The successful achievement of the outcomes will depend on a number of agencies working together on key projects.

The types of initiatives covered by the Regional Road Safety Plan include the promotion of safety management systems, road safety coordination, education campaigns, and 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 including a range of interventions including cycle network development, cycle promotion, cycle safety and awareness campaigns.

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 includes a range of interventions including pedestrian network development, ensuring pedestrian accessibility in land use development, walking promotion and safety activities, and advocacy.

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 responsibility, timing, funding sources and specific targets for each action. The types of interventions primarily include upgrading road links between key freight destinations within the region and advocacy to ONTRACK and others for the provision (and retention) of rail freight opportunities and the removal of rail freight infrastructure constraints.

10.2.6 Passenger Transport

Increasing passenger transport use and improving passenger transport accessibility, capacity, reliability, and frequency are important outcomes of this strategy.

A Regional Passenger Transport Plan is being 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 ten 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.

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 Regional Land Transport Strategy (RLTS) and Regional Passenger Transport Plan (RPTP).

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 both passengers and freight travelling both 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
- 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:

- 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 SH53 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 NIMT line and the Wairarapa lines merge and 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 GWRC 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’.

11. Funding

This chapter sets out the likely transport funding that will be available within the greater Wellington region over the next 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. Indeed, the RLTC expects to review the Regional Transport Programme (RTP) over the next year 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 \$915 million³⁸ over 10 years, has been obtained 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. \$585 million of N funding for state highway and local road maintenance has not been considered because it has first call on funding. An additional \$80 million 'N' funding for the investigation and preliminary design work for the TGM to enable construction start by 2011/12 was 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 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 \$234 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.

³⁸ Using the high range estimate. Indexation of fuel taxes and road user charges from April 2006 which applies to N and R funding only has been removed.

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 \$474 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 \$3589³⁹ million.

11.2 Regional Transport Programme

The 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

³⁹ 10 year RTP of \$4120M less TGM and accessibility shortfalls.

‘other’ potential funding sources to be investigated to address the funding gap, including local fuel taxes. The Minister of Finance’s budget speech of 17th May 2007 gave the go ahead for region’s 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. The \$90 million passenger transport accessibility project⁴⁰ 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.

Furthermore, a much greater local share is required for public transport investment, typically 30-40%. 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. Furthermore, local share funding for the Grenada to Gracefield project is only partially identified.

⁴⁰ Access improvements to PT infrastructure in response to Human Rights Commission Review

12. Monitoring

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

Targets are tools adopted 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.

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 LTA 1998, which documents implementation progress, as well as some 100 indicators to measure progress towards achieving the outcomes 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.

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.

13. Strategy review

Section 176(1)(b) of the LTA 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.

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 undertakes a review of the strategy. Amendments to the strategy will then be made to ensure alignment with current legislation and to address current issues, based on latest information and experience to date. 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, 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.

13.1 Review of the Regional Transport Programme

The RTP sets out the region's priorities and expectations for new capital expenditure on strategic roading and passenger transport over a ten year period. It also sets out indicative funding allocations. Annual confirmation of the RTP will be carried out through the application of an agreed prioritisation methodology.

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

13.2 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 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 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 Strategy	Dec 2005	2008 – 09
Road Safety Plan	Sept 2004	2009 – 10

Table 6: 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.

Glossary

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

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.

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.

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 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.

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.

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.

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
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
VKT	Vehicle kilometres travelled
WRS	Wellington Regional Strategy
WTSM	Wellington Transport Strategic Model

Appendix 1 - Schedule of railway lines and roads in the strategic transport network

The strategic transport network is made up of the region's key railway lines, state highways and strategic local roads. A key function of the strategic transport network is linking the region's centres and important destinations, in addition to connecting the greater Wellington region with the rest of New Zealand. When considering strategic transport and land use planning issues it is important to identify, plan and protect the current and future regional transport network.

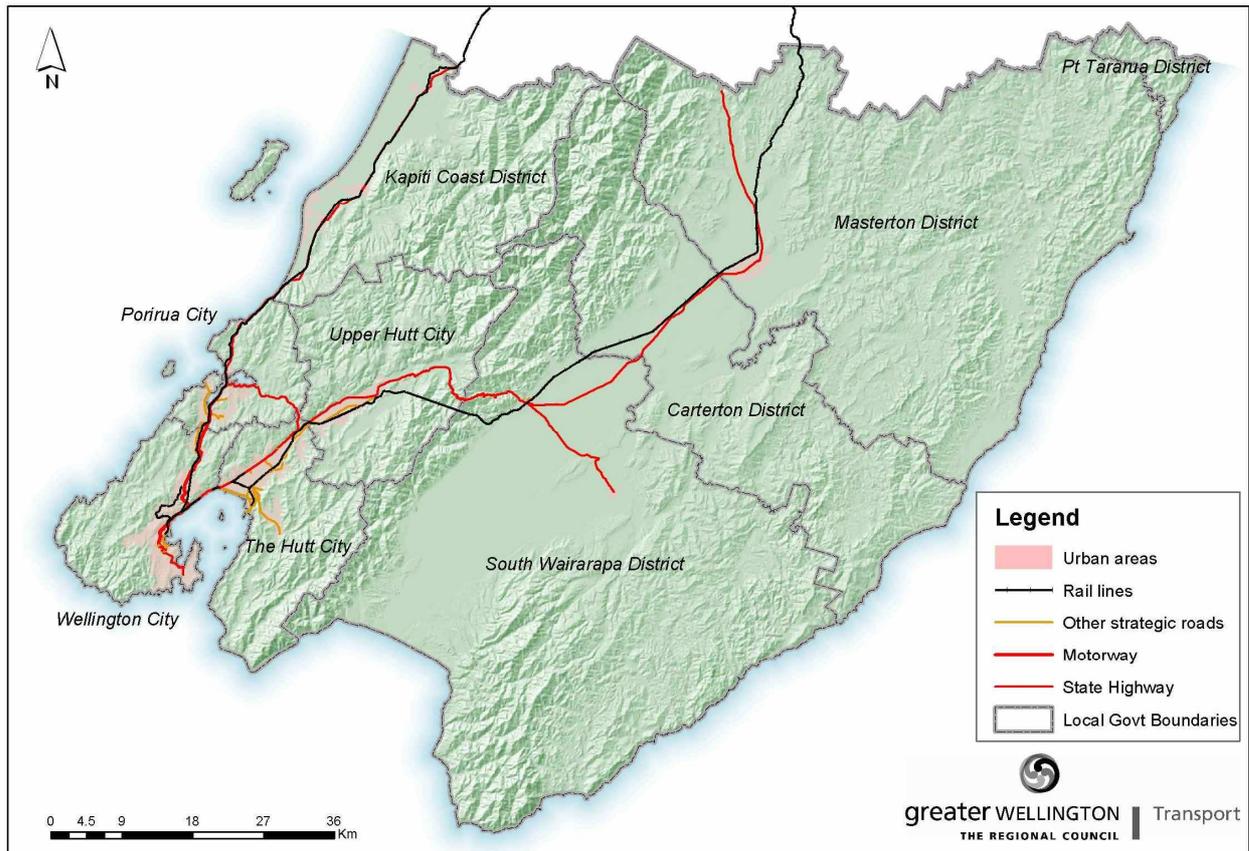


Figure A3.1 Strategic Transport Network.

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)

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

Centre Port
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 Street⁴¹
Buckle Street
Cable Street
Cambridge Terrace
Customhouse Quay (Waterloo Quay to Jervois Quay)
Dufferin Street
Ghuznee Street
Jervois Quay
Kent Terrace
Karo Drive⁴²
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

⁴¹ Part of new Inner City Bypass route which opened January 2007.

⁴² Part of new Inner City Bypass route which opened January 2007.

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)
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

Appendix 2 - Strategy 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. The diagram below and the following sections provide an overview of the national and regional legislative and policy context for the development of the RLTS.

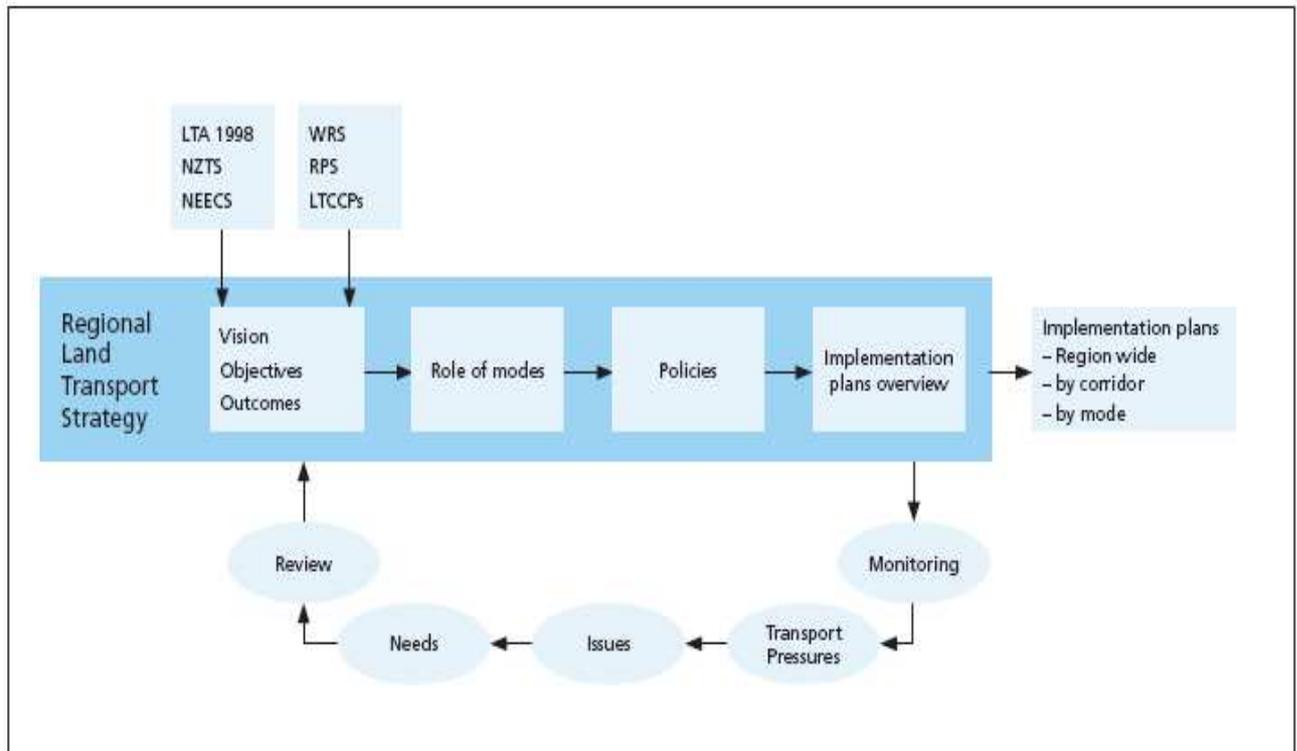


Figure A6.1: RLTS development process.

The vision, objectives and outcomes set out the broad direction of the strategy. They are used to guide development of implementation plans and corridor plans to identify, select, and prioritise particular actions; in programme prioritisation; in monitoring actual network performance, and as the framework for reviews. They must be relatively stable over time to enable real progress.

In giving effect to the strategic direction, the Regional Land Transport Committee has developed action plans that include policy, education and project interventions to respond to needs and issues. These actions are set out in implementation plans for modes and in corridor plans which sit alongside and support the RLTS.

1.1 Legislative requirements

1.1.1 Regional Land Transport Strategy

All regional councils are required by the Land Transport Act 1998⁴³ 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*

⁴³ As amended by the Land Transport Management Act 2003.

- (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.*

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).

1.1.2 Regional Passenger Transport Plan

As set out in section 175(2)(k) of the Land Transport Act 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.

1.2 Statutory policy framework

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

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

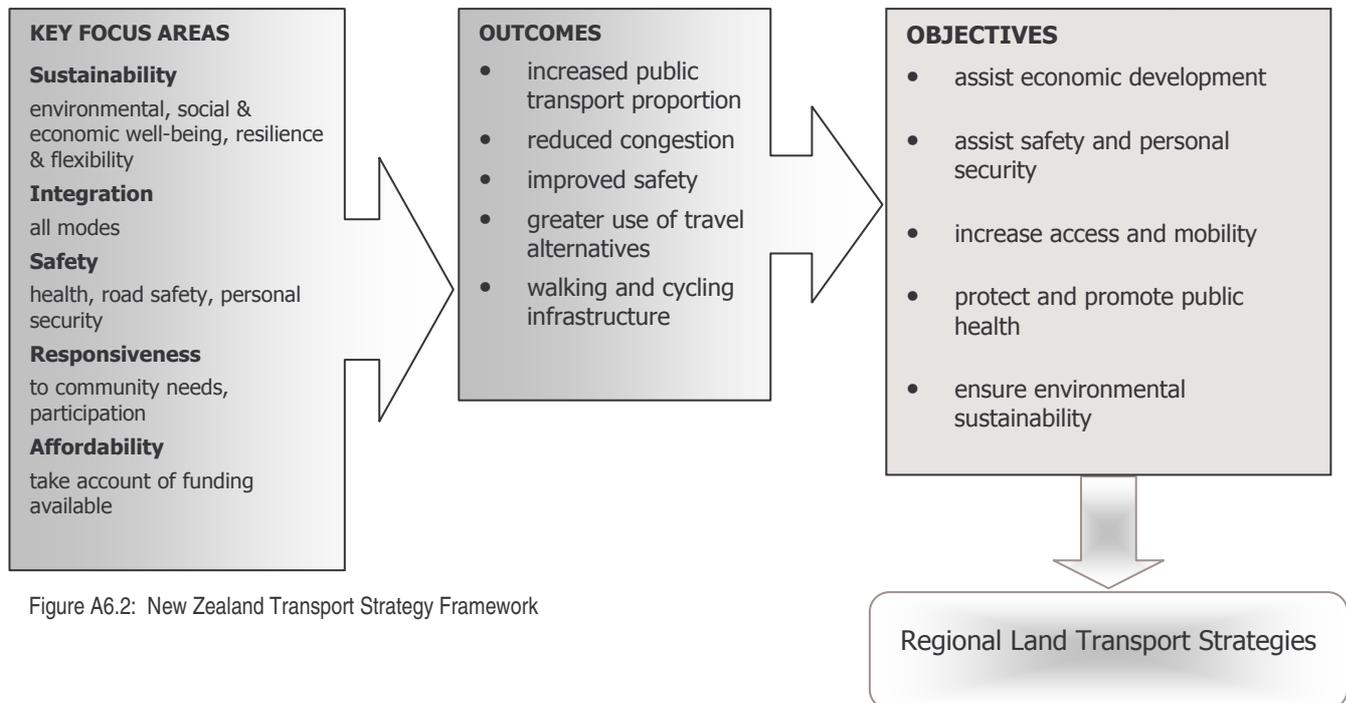


Figure A6.2: New Zealand Transport Strategy Framework

In addition to outlining the framework in Figure A6.2, 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 (GW) 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).

1.2.2 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 way⁴⁴.

⁴⁴ Wellington Regional Council, 1995, page 2. *Regional Policy Statement*.

Wellington's RPS took effect in May 1995, with a full review required 10 years afterwards. GWRC's review process commenced with a State of the Environment Report in December 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 Land Transport Act (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 document⁴⁵ 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.

1.2.3 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 Regional Land Transport Strategy (RLTS) shall take into account the National Energy Efficiency and Conservation Strategy (NEECS).

The National Energy Efficiency and Conservation Strategy 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

⁴⁵ GWRC, December 2005. *Alignment between the RPS and the RLTS review.*

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 document⁴⁶ to this strategy.

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

1.3 Other relevant policy documents

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

1.3.1 GWRC'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 A6.3).

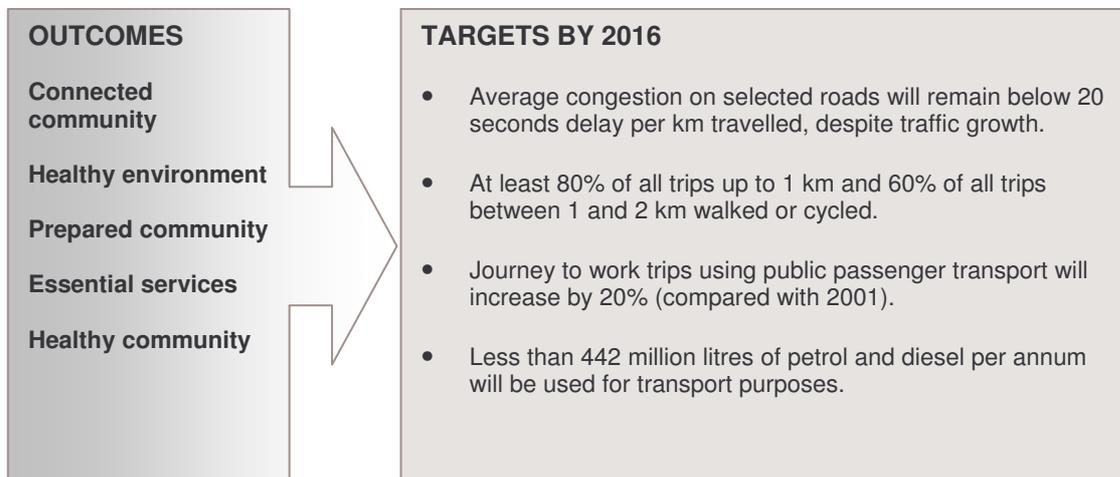


Figure A6.3: GWRC LTCCP framework for transport outcomes.

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.

1.3.2 Wellington Regional Strategy (WRS)

The WRS is a joint project involving Greater Wellington Regional Council 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.

⁴⁶GWRC, September 2005. *Review of RLTS response to NEECS*.

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 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.

1.3.3 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.

1.3.4 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, number of different parallel processes inform and are informed by the RLTS. The RLTS informs agency programmes for future prioritisation rounds and agency reports.

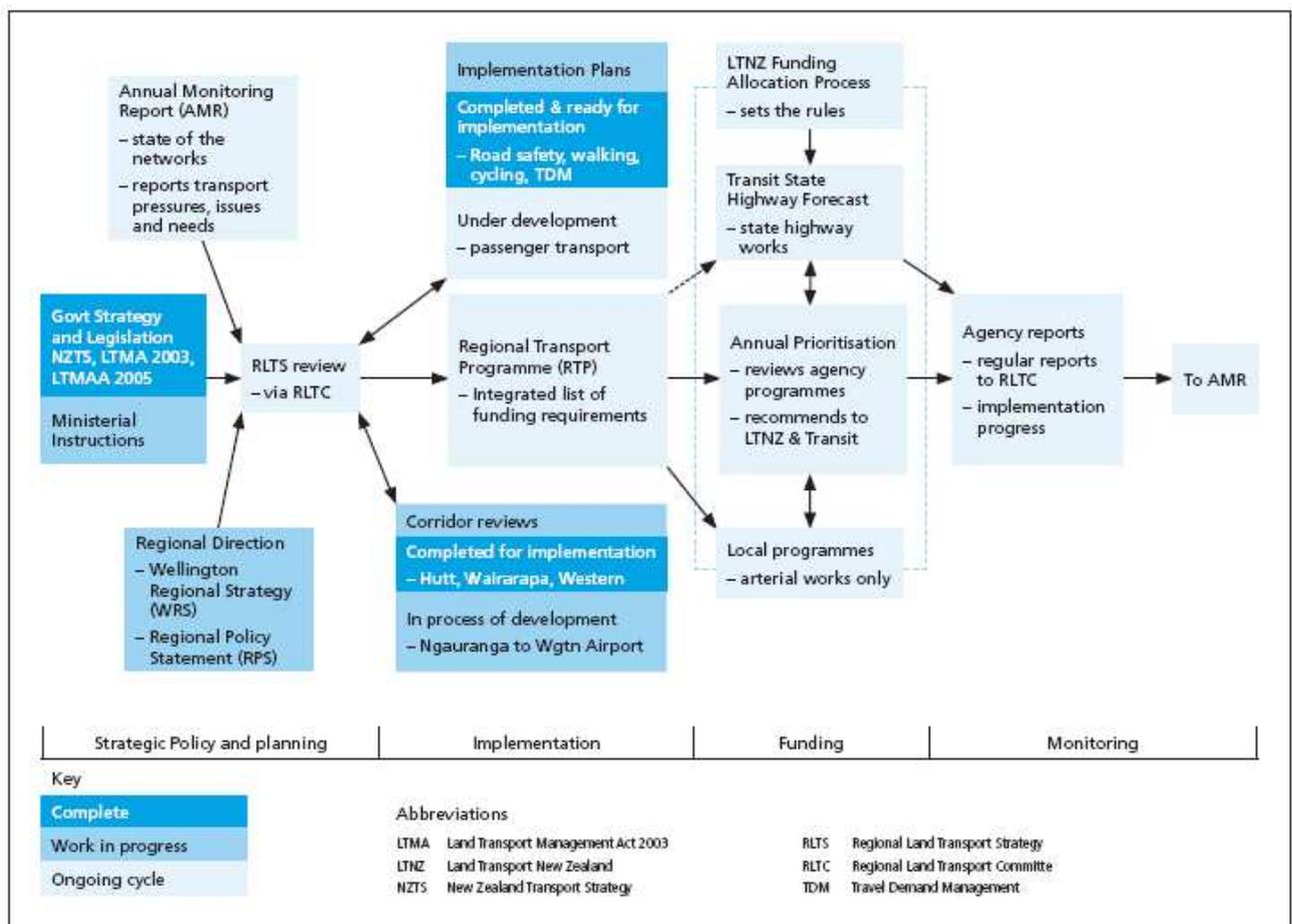


Figure A6.4: Regional Land Transport Strategy Processes.

1.4 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.

1.4.1 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).

1.4.2 Greater Wellington Regional Council (GWRC)

The Land Transport Act 1998 requires GWRC to have a key role in planning and monitoring the regional transport network via the RLTC. GWRC 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. GWRC is also proactively involved in promoting road safety, walking, cycling and travel demand management. GWRC 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.

1.4.3 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 GWRC, 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.

1.4.4 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).

1.4.5 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).

1.4.6 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.

1.4.7 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.

1.4.8 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' provisions⁴⁷.

1.4.9 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.

1.4.10 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.

1.4.11 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.

⁴⁷ 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	Land Transport NZ/GWRC	ONTRACK
	Stations	Land Transport NZ/GWRC	GWRC/ONTRACK/Toll
	Subsidised rolling stock	Land Transport NZ/GWRC	Toll
	Commercial rolling stock	Toll	Toll
Freight train services	Track & signals	User access charges	ONTRACK
	Rolling stock	Toll	Toll
Buses	Trolley overhead infrastructure	Land Transport NZ/GWRC	Cable Car Company
	Bus stops, shelter, information	Land Transport NZ/GWRC	TAs, GWRC
	Subsidised vehicles	Land Transport NZ/GWRC	Bus operators
	Commercial vehicles	Bus operators	Bus operators
	Bus priority measures	Land Transport NZ/GWRC/TAs	TAs
Total mobility	Hoists	Land Transport NZ/GWRC	Taxi Operators
	Vehicles	Land Transport NZ/GWRC	Taxi Operators
Road freight	Local roads	TAs/Land Transport NZ	TAs
	State highways	Land Transport NZ	Transit New Zealand
	Vehicles	Private	Private
Cars	Local roads	Land Transport NZ/TAs	TAs
	State highways	Land Transport NZ	Transit New Zealand
	Vehicles	Private	Private
Harbour ferry	Wharves	TAs	TAs
	Vessels	Land Transport NZ/GWRC	Ferry operator
Pedestrians	Local roads (footpaths)	TAs	TAs
	State highways (footpaths)	Land Transport NZ	Transit New Zealand
	Pedestrian network (off road)	TAs, GWRC, DOC	TAs, GWRC, DOC
Cyclists	Local roads & cycle lanes	Land Transport NZ/TAs	TAs
	State highways & cycle lanes	Land Transport NZ	Transit New Zealand
	Cycle ways (off road)	TAs, GWRC, DOC	TAs, GWRC, DOC
	Bicycles	Private	Private
Road safety	Enforcement	Land Transport NZ	NZ Police
	Advocacy & promotion	ACC, Land Transport NZ, GWRC, TAs	ACC, NZ Police, GWRC, TAs
	Safer routes	Land Transport NZ/TAs	TAs
Demand management	Travel planning coordination	Land Transport NZ/GWRC	GWRC, Land Transport NZ
	Travel planning initiatives	Land Transport NZ/GWRC/TAs	GWRC, TAs, schools, businesses.
	Awareness campaigns	Land Transport NZ/GWRC	GWRC, LTNZ

Table A6.5: Regional Land Transport System - Funders & Providers.

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.

4. Options considered

Section 175(2)(1) of the Land Transport Act 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 Land Transport Act 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 envelope⁴⁸ was estimated to be \$3432 million, including the additional \$660 million government funding announced on 5 July 2005. There are five basic funding components: 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.

Advanced passenger transport would involve 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.

⁴⁸ All private costs are excluded e.g. motor vehicle purchase.

Advanced roading would accelerate identified roading improvements, delivering safety and efficiency improvements sooner. This approach would be paid for by reducing passenger transport and 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 are required as changes to the network are likely to be marginal over the next decade.

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 strategy⁴⁹. 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 (PT) services. The model results show that, while enhancing PT 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 PT 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 is likely to 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.

4. 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

⁴⁹ Technical analysis contained within the reference "GWRC, 2006, Regional Transport Programme – Modelling and Analysis, May 2006".

listed in section 179(1) of the LTA 1998] including network providers, interested parties⁵⁰ and members of the general public⁵¹ 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 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 SH1 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 highway⁵². 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.

⁵⁰ The RLTS Strategic Options consultation document was mailed out with the WRS Growth Framework to a contact list of around 1400 individuals or groups.

⁵¹ Via public notices, media releases and article in *Elements*.

⁵² While the RLTS signals the need to construct TGM, the decision to actually build it now rest with Transit and Land Transport NZ.

- 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.

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 ten 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.

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 Land Transport Act 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 authorities⁵³ 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

⁵³ Manawatu-Wanganui Regional Council (Horizons), Horowhenua District Council and Tararua District Council.

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.

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Regional Land Transport Committee members

May 2007

Representative for:	Appointee	Alternate
Economic Development	Charles Finny (Wellington Chamber of Commerce)	Jeremy Harding
Safety & Personal Security	Howard Royds (AA Wellington District Council)	John Christianson
Public Health	Dr Stephen Palmer (Regional Public Health)	tbc
Access and mobility	John Anderson	Maurie Bognuda
Environmental Sustainability	Mike Mellor (Living Streets Aotearoa)	Paula Warren
Cultural interests	Tom Paku	Jack Rikihana
Kapiti Coast District Council	Mayor Alan Milne	Cr Gordon Strachan
Porirua City Council	Mayor Jenny Brash	Cr Robert Shaw
Wellington City Council	Mayor Kerry Prendergast	Cr Celia Wade-Brown
Hutt City Council	Mayor David Ogden	Cr Joy Baird
Upper Hutt City Council	Mayor Wayne Guppy	Cr Keith Barnard
South Wairarapa District Council	Mayor Adrienne Staples	Cr Viv Napier
Carterton District Council	Cr David Lowes	Cr Michael Blundell
Masterton District Council	Mayor Bob Francis	Cr Roddy McKenzie
Land Transport New Zealand	Ian Hunter	
Transit New Zealand**	Graham Taylor	
ONTRACK**	Mark Gullery	Michael Curran
GWRC	Cr Terry McDavitt (chairperson)	
GWRC	Cr Ian Buchanan	
GWRC	Cr Glen Evans	
GWRC	Cr Margaret Shields	
GWRC	Cr Chris Turver	

GWRC	Cr Fran Wilde (deputy chairperson)	
** speaking but not voting rights		