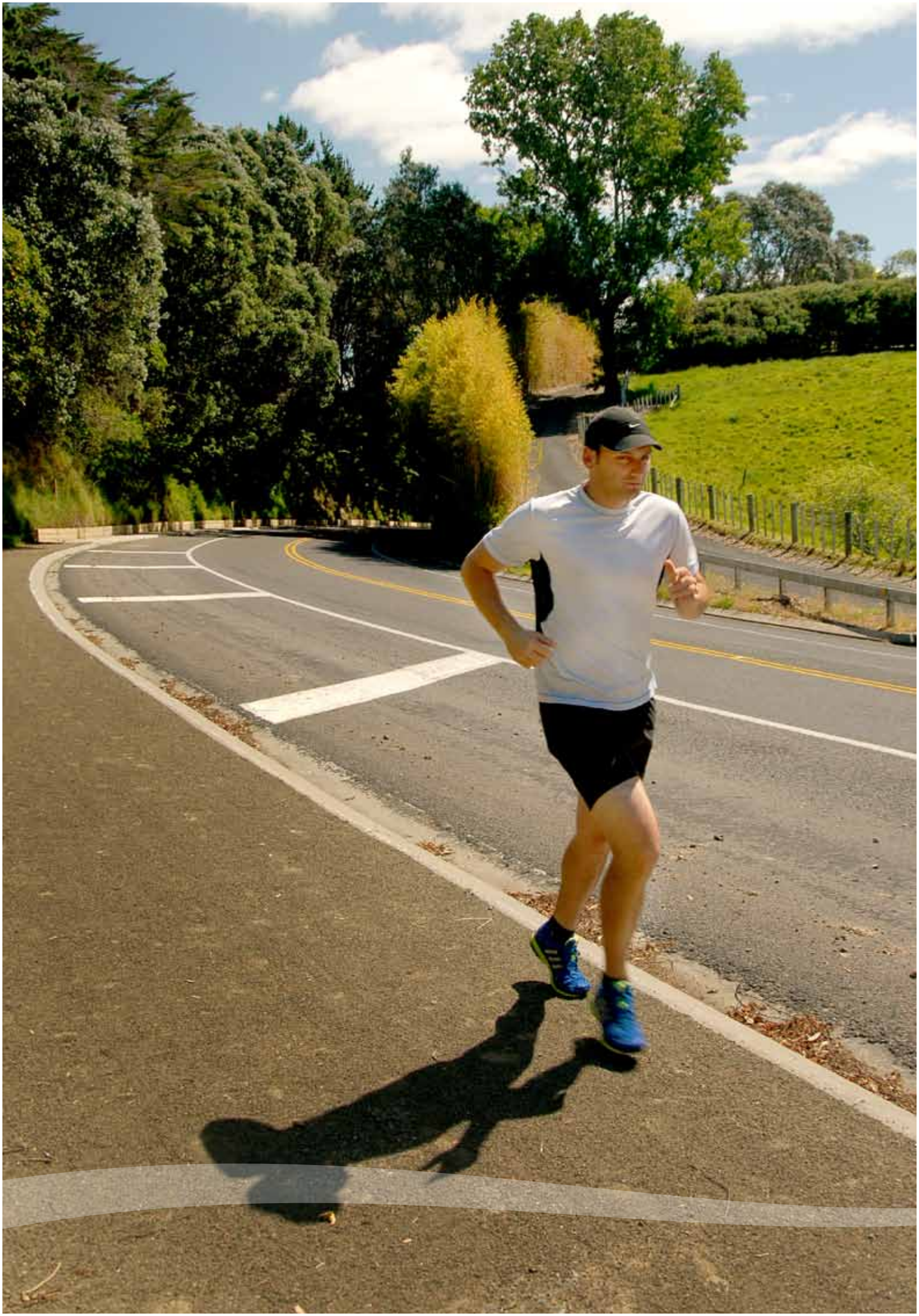
BAY OF PLENTY REGIONAL COUNCIL
TOI MOANA

Bay of Plenty Regional Land Transport Plan 2015-2045

Prepared by the Bay of Plenty Regional Transport Committee



Contents

Foreword 5

Executive Summary 6

Part I: Strategic Direction 6
Strategic Context 6
Issues and Objectives 8
Strategic Response 9
Part II: Delivery 9
Regional Programme 10
Monitoring and Review 10

Part I: Strategic Direction 11

Chapter 1: **Introduction** 13
1.1 Document structure 13

Chapter 2: **Strategic Context** 15
2.1 International connections 15
2.2 The Upper North Island 15
2.3 The Bay of Plenty region 16
2.4 Strategic drivers 17
2.5 The Bay of Plenty transport system 21
2.6 Sea 21
2.7 Air 22
2.8 Land 22

Chapter 3: **Issues** 31
3.1 Freight growth 32
3.2 Land use and transport integration 33
3.3 Urban congestion 33
3.4 Safety 34
3.5 Network resilience 35
3.6 Asset affordability 35
3.7 Ageing population 36
3.9 Social and environmental effects 37

Chapter 4: **Objectives** 39
4.1 Vision 39
4.2 Economic performance 39
4.3 Land use and transport integration 40
4.4 Safety 40
4.5 Access and resilience 40
4.6 Affordability 41
4.7 Energy efficiency 41
4.8 Environmental sustainability 41

Chapter 5: **Strategic Response** 43
5.1 Optimised Transport System 43
5.2 Investment 43
5.3 Integrated planning 44
5.4 Demand management 46
5.5 Network optimisation 48
5.6 New and improved infrastructure 51

Part II: Delivery 53

Chapter 6: **Policies** 55
6.1 Economic performance 55
6.2 Safety 55
6.3 Access and resilience 55
6.4 Land use and transport integration 55
6.5 Affordability 56
6.6 Environmental sustainability 56
6.7 Energy efficiency 56

Chapter 7: **Bay of Plenty Corridors and Networks** 57
7.1 Piarere – Tauranga 58
7.2 Waihī – Tauranga 60
7.3 Tauranga Urban Network 63
7.4 Tauranga – Paengaroa 66
7.5 Tauranga – Ngongotahā 68
7.6 Paengaroa – Rotorua 70
7.7 Tirau – Rotorua 72
7.8 Rotorua Urban Network 73
7.9 Rotorua – Taupō 76
7.10 Paengaroa – Whakatāne 78
7.11 Rotorua – Awakeri 80
7.12 Kawerau – Murupara 82
7.13 Ōpōtiki – Gisborne 83
7.14 Whakatāne – East Cape 85

Chapter 8: **Regional Programme** 87
8.1 Overview 87
8.2 Development of the regional programme 88
8.3 Prioritised activities 89
8.4 Committed activities 95
8.5 Significant expenditure on activities not funded from the NLTF 96
8.6 Activities of inter-regional significance 97
8.7 Department of Conservation activities 98
8.8 Māori roadways 98

Chapter 9: **Funding** 99
9.1 How transport is funded 99
9.2 Ten year financial forecast 102

Chapter 10: **Monitoring and Review** 105
10.1 Monitoring 105
10.2 Review 105
10.3 Variations 105
10.4 Significance policy 105

Glossary and Appendices 107

Glossary of Terms and Acronyms 108
Appendix 1: Statutory and Policy Context 111
Appendix 2: Investment Logic Map 116
Appendix 3: Regional Programme 117
Appendix 4: Assessment of Compliance 130
Appendix 5: Evidence Base 132

Foreword

As Chair of the Bay of Plenty Regional Transport Committee, I am delighted to present this regional land transport plan to you.

This is the first plan prepared under changes to the legislation, replacing the previous regional land transport strategy and programme. This new plan combines the 30-year long term view of the previous strategy, with a strong case for national investment in the short to medium term, commencing with the National Land Transport Programme 2015/18.

In preparing the plan, the Regional Transport Committee has been careful to balance consideration of longer term population, economic, environmental and technological trends, with the more immediate priorities of ensuring the efficient movement of people and freight, improving road safety and ensuring the network is more resilient to unplanned events.

The region is united in its view that continued investment in the Bay of Plenty transport system is vital to supporting the future economic prosperity of the region and the nation. Of central importance is the Port of Tauranga and its role in the national economy as a major connection between New Zealand producers and international markets. Consequently, this plan places a great deal of emphasis on ensuring the landside infrastructure (road and rail connections) are in place to support the continued growth of the Port.

This plan demonstrates the region's financial commitment to investing in the right infrastructure, in the right place, at the right time. We believe this provides a strong case for the same commitment from central government.

The movement of people and goods does not stop at the regional boundaries and in developing this plan we have worked collaboratively with our colleagues in neighbouring regions and across the upper North Island to make sure we have taken a joined up approach to the wider transport system.

This plan would also not have been possible without the considerable effort that has gone into developing it – from the members of the Regional Advisory Group to the governance members on the Regional Transport Committee. It is with much pleasure that I acknowledge that effort.

We are all users of transport in its many forms. Therefore I would particularly like to thank those who provided feedback through the submission process to help us achieve our vision of the best transport systems for a growing economy and a safe and vibrant Bay lifestyle.

Jane Nees
Chair, Bay of Plenty Regional Transport Committee

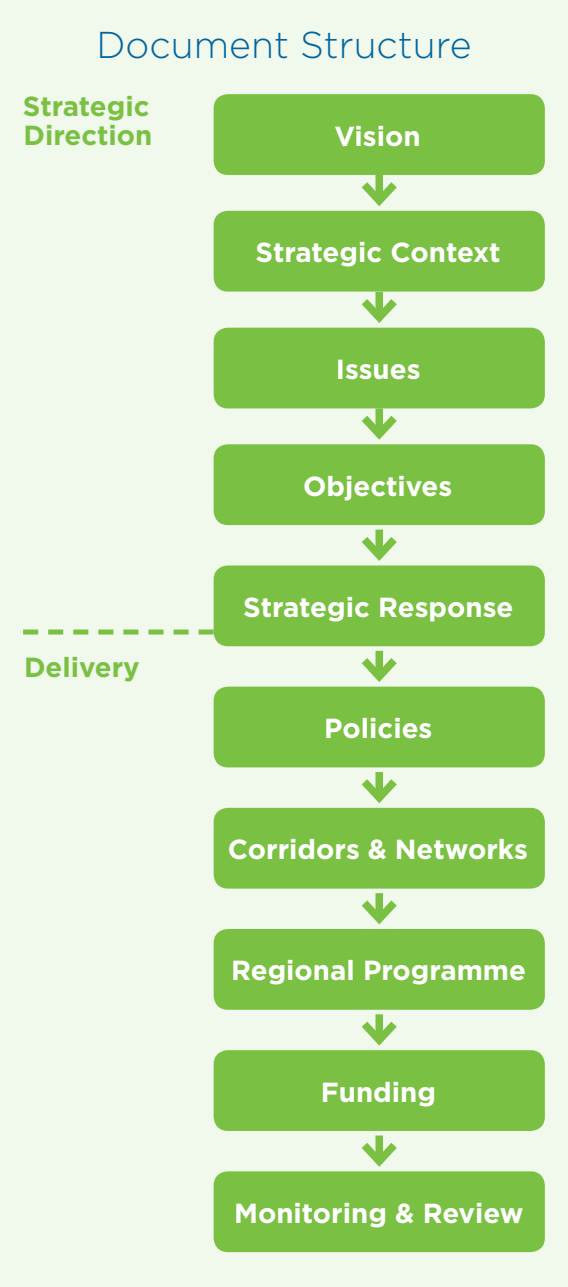
Executive Summary

Part I: Strategic Direction

The Bay of Plenty Regional Land Transport Plan (RLTP) sets the direction for the region's land transport system for the next 30 years. It is a statutory requirement of the Land Transport Management Act 2003 (LTMA) and has been prepared in a manner consistent with the LTMA.

The Bay of Plenty region's transport ***vision*** is:

Best transport systems for a growing economy and a safe and vibrant Bay lifestyle



Strategic Context

- The Bay of Plenty is part of New Zealand's 'Golden Triangle' where much of the nation's economic and population growth is occurring and home to the Port of Tauranga, New Zealand's largest export port.
- Investing in the Bay of Plenty transport system is critical to enhancing the performance of the regional and national economy, and extracting the best value for money from transport investment. It is also critical to enhancing the quality of life of people who choose to live in the region.

International connections

- The Port of Tauranga is one of New Zealand's major international gateways to the global economy.
- Rotorua is an internationally renowned tourism destination and one of New Zealand's top five tourist attractions.

The Upper North Island

- The Upper North Island is vital to New Zealand's social and economic success, being home to over half of the country's population and accounting for around 50% of the total freight volume and movement.
- An efficient, effective and safe transport system will be needed to support forecast increases in the movement of people and goods.

Strategic drivers

- Population growth and change - structural population ageing will have major implications for the future labour force and access requirements, including to essential social and health care services.

- Economic growth and productivity – growing and adding value to the region's export generating industries while capturing the benefits of agglomeration economies.
- Environmental change – responding to the challenges of natural hazards and climate change.
- Technological change – rapidly evolving technologies are capable of delivering significant improvements in transport safety and efficiency.

The Bay of Plenty transport system

Sea

- The Port of Tauranga contributes to the flow of 8.6% of national GDP and is positioning itself to be a future hub port capable of hosting larger ships
- Smaller facilities in Ōpōtiki and Whakatāne are likely to become commercial entities as aquaculture develops in the Eastern Bay of Plenty.

Air

- Commercial airports operate in Rotorua, Tauranga and Whakatāne.
- Rotorua has made a strategic decision to focus on important domestic tourism routes.
- Tauranga's continuing focus will be connections to key domestic locations.
- A recent economic impact assessment identified that the flight route between Whakatane and Auckland provides approximately $17 million worth of trade per annum to the Eastern Bay of Plenty economy.

Land

Road

- The road network is currently and will continue to function as the primary means of transport within the region into the foreseeable future.
- The Bay of Plenty has the highest heavy vehicle weight intensity on roads in the country (214.8 thousand tonnes per km compared with the New Zealand average of 106.5).
- The proportion of travel on two star state highway routes (effectively the lowest safety rating) is significantly higher in the Bay of Plenty region (51%) than at the national level (33%) and the neighbouring Waikato region (38%).
- The One Network Road Classification has been applied to the Bay of Plenty's strategic road network.

Rail

- The Bay of Plenty section of the East Coast Main Trunk line carries over a third of New Zealand's rail traffic and is the most densely utilised sector of the national network.
- The Bay of Plenty and Waikato regions are taking an integrated approach to the SH1/29 road corridor and East Coast Main Trunk (ECMT) rail corridor through the joint SH1/29-ECMT Working Group.

Public transport

- Public transport services in the main urban centres of Rotorua and Tauranga are becoming increasingly important as a transport option for commuting and other daily travel needs.

Cycling

- Recent increases in cycling support the case for investment to complete the region's strategic urban cycle networks.

Investing in the Bay of Plenty transport system is critical to enhancing the performance of the regional and national economy

Proportion of state highway network by annual VKT within each KiwiRAP star band

Region	VKT ($x10^6$VKT/year)	Proportion in each star rating				
		1-star	2-stars	3-stars	4-stars	5-stars
Waikato	25.19	0%	38%	55%	7%	0%
Bay of Plenty	10.91	0%	51%	45%	5%	0%
New Zealand	**154.76**	**0%**	**33%**	**40%**	**28%**	**0%**

Issues and Objectives

The region has identified the following strategic transport issues and objectives:

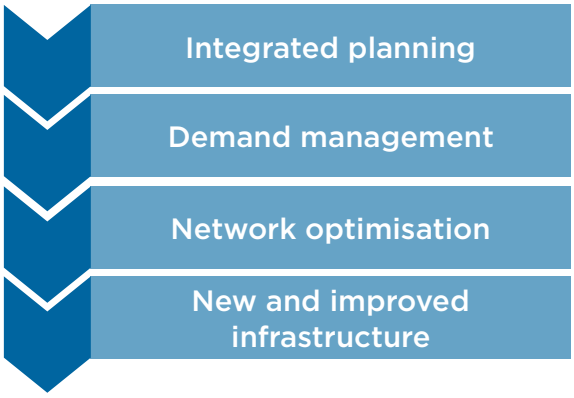
Issues	
Freight growth	Further development of freight intensive industries within the region and forecast freight growth (inter and intra-regional) will increase demand on the region's transport system and intensify peak freight flows.
Land use and transport integration	Ineffective integration between land use and the region's transport network can result in development patterns that increase the need for travel and reliance on motor vehicles. This in turn, increases road congestion, emissions and energy use and limits opportunities for more sustainable modes.
Urban congestion	Traffic growth in parts of the region is increasing congestion, inhibiting the efficient movement of people and goods, and the realisation of economic benefits.
Safety	An unforgiving transport environment and poor user behaviour is resulting in avoidable death and serious injury.
Network resilience	Transport in the region is reliant on a few key routes, making access to key destinations difficult or impossible in the event of unplanned disruption. The risk of network failure is likely to increase as higher intensity weather events become more frequent.
Asset affordability	Unmanaged deterioration of assets is impacting quality of life and increasing lifecycle costs.
Ageing population	An ageing population will mean increasing future demand for accessible travel amongst those with few mobility options.
Fuel reliance	The region's transport system is reliant on imported fuel sources, exposing the economy to disruption in international supplies and volatile oil prices.
Social and environmental effects	Increasing use of the transport system generates social and environmental effects that impact on adjacent communities and land uses.

Objectives	
Economic performance	The transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region.
Land use and transport integration	Long term planning ensures regional growth patterns and urban form reduce travel demand, support public transport and encourage walking and cycling.
Safety	Deaths and serious injuries on the region's transport system are reduced.
Access and resilience	Communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs.
Affordability	Investment in the transport system maximises use of available resources and achieves value for money.
Energy efficiency	People choose the best way to travel to improve energy efficiency and reduce reliance on non-renewable resources.
Environmental sustainability	The social and environmental effects arising from use of the transport system are minimised.

Strategic Response

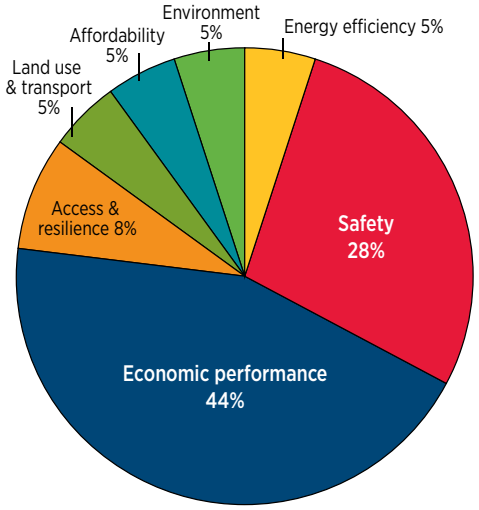
The region's strategic response to the identified issues and objectives is the Optimised Transport System, which means considering a hierarchy of interventions to optimise the performance of the region's land transport system.

Intervention hierarchy for the Optimised Transport System



The region has identified the following investment priorities to support delivery of the Optimised Transport System. These will be applied in a manner that is consistent with the Government Policy Statement (GPS).

Bay of Plenty investment priorities



Part II: Delivery

Delivery of the RLTP will be through the region-wide implementation of policies and delivery of a range of activities within each significant corridor and network.

Bay of Plenty corridors and networks

Regional Programme

The region has developed a comprehensive programme of proposed land transport activities for the 6 year period 2015/16-20/21 across all of the GPS activity classes.

The region has forecast a total expenditure of $1.3 billion on land transport activities for which funding is being sought from the National Land Transport Fund (NLTF). Various organisations within the region will invest additional significant expenditure of approximately $160 million that is not eligible for funding support from the NLTF.

For the purposes of seeking funding from the NLTF, the region has prioritised 46 significant new improvement activities for the 6 year programme (2015-21). The following table lists the region's top ten prioritised activities.

The Bay of Plenty's ten highest priority improvement activities

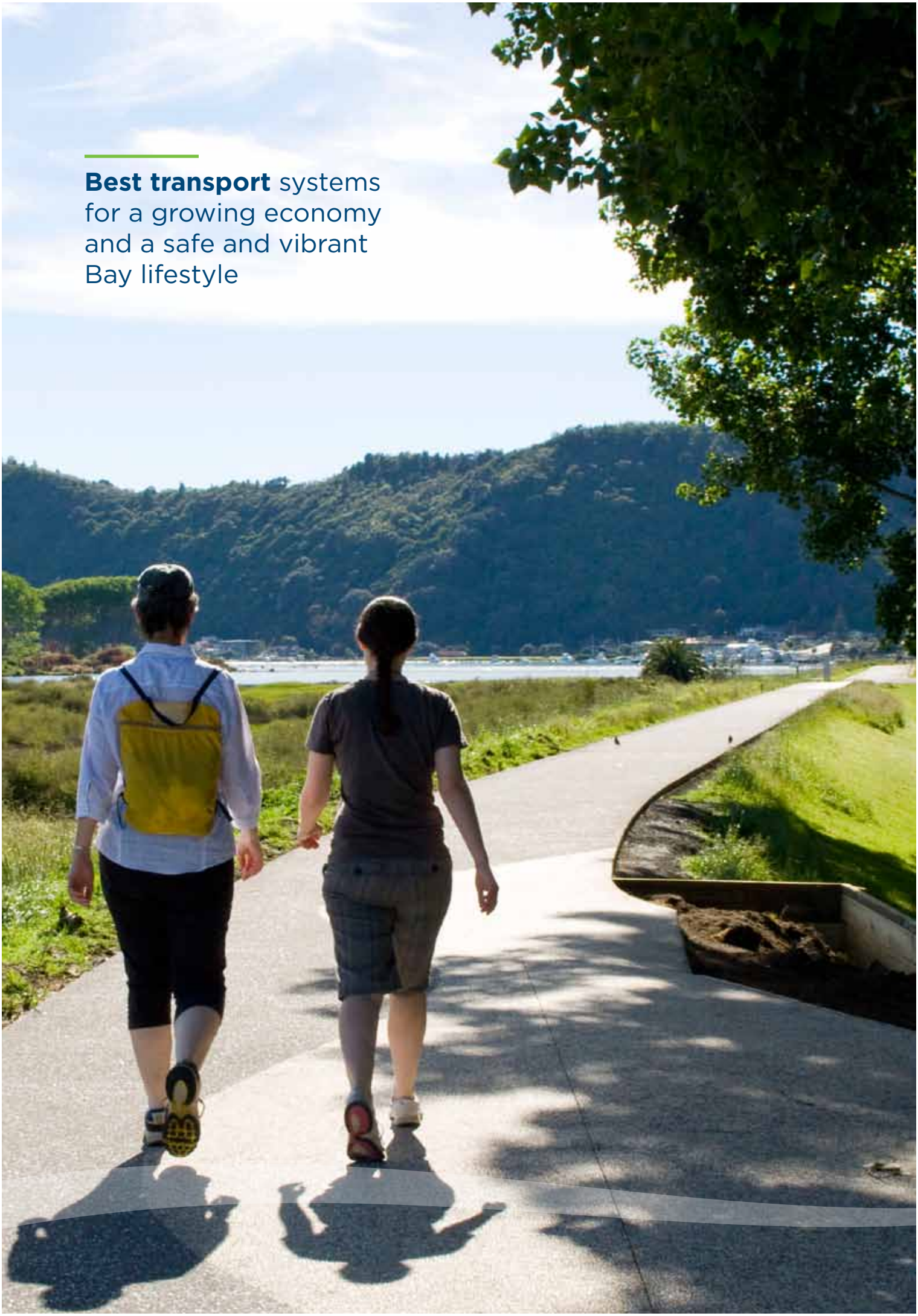
Regional Priority	Activity	Organisation	Activity class
1	*SH2/SH29 Baypark to Bayfair link upgrade*[1]	HNO	State highway improvements
2	Totara Street Upgrade	TCC	Local road improvements
3	SH29 Tauriko to Waikato Boundary, NSRRP	HNO	State highway improvements
4	Tauriko Upgrade	HNO	State highway improvements
5	SH 2 Northern Corridor Safe System Programme	HNO	State highway improvements
6	SH5/SH30 Safety Improvements	HNO	State highway improvements
7	Tauranga urban cycle network construction	TCC	Walking and cycling
8	Rotorua Urban Cycleways	RLC	Walking and cycling
9	Tauranga Northern Link	HNO	State highway improvements
10	Rotorua Eastern Arterial	HNO	State highway improvements

1 Funding was approved for the SH2/SH29 Baypark to Bayfair link upgrade as the RLTP was being finalised.

Monitoring and Review

- Monitoring will be undertaken to assess implementation of the RLTP.
- The Regional Transport Committee will complete a review of the RLTP during the 6-month period immediately before the expiry of the third year of the plan.

Part I: **Strategic Direction**



Best transport systems for a growing economy and a safe and vibrant Bay lifestyle

Chapter 1: **Introduction**

This Bay of Plenty Regional Land Transport Plan 2015 (RLTP) has been prepared by the Bay of Plenty Regional Transport Committee (RTC). It is a statutory requirement of the Land Transport Management Act (LTMA) and has been prepared in a manner consistent with the LTMA. The statutory and policy context within which the Plan has been prepared is outlined in Appendix 1.

The Bay of Plenty region's transport ***vision*** is:

> **Best transport** systems for a growing economy and a safe and vibrant Bay lifestyle

To help achieve this vision, the RLTP sets the direction for the Bay of Plenty's transport system for the next 30 years. Consequently, this plan:

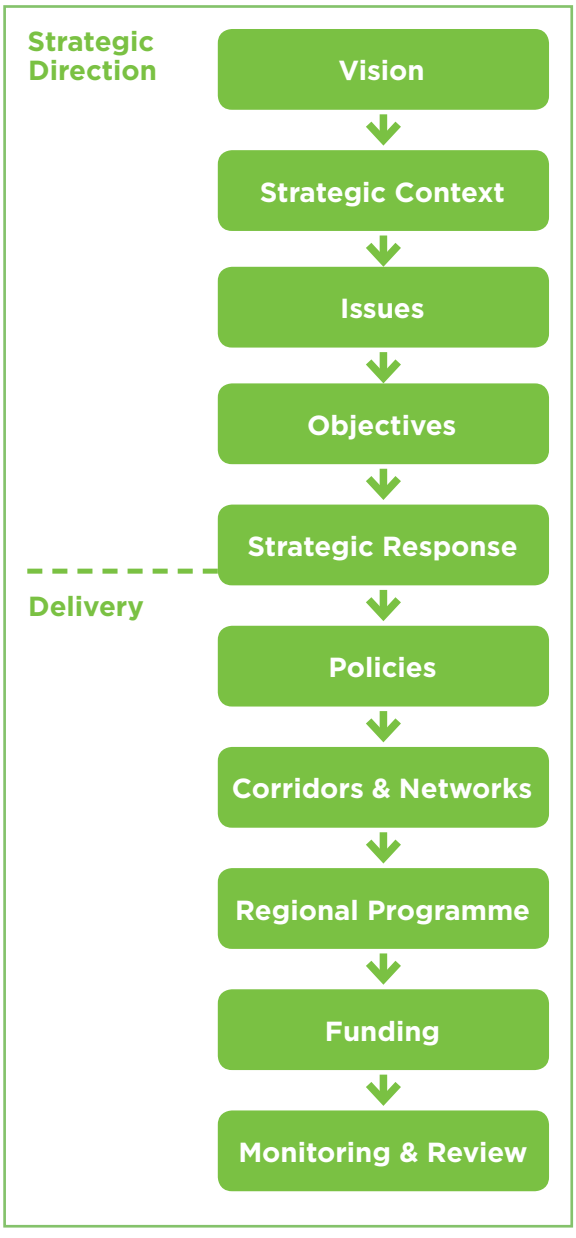
- outlines the economic, social and spatial context within which the regional transport system operates;
- identifies regional transport issues, and objectives to support the vision;
- describes a strategic response to achieve the vision and objectives, including the region's investment priorities for land transport;
- includes a regional programme of proposed land transport activities for the next 6 years (2015/16 – 2020/21) and prioritises significant new improvement activities; and
- provides a ten year financial forecast of anticipated investment and revenue for the region's land transport activities.

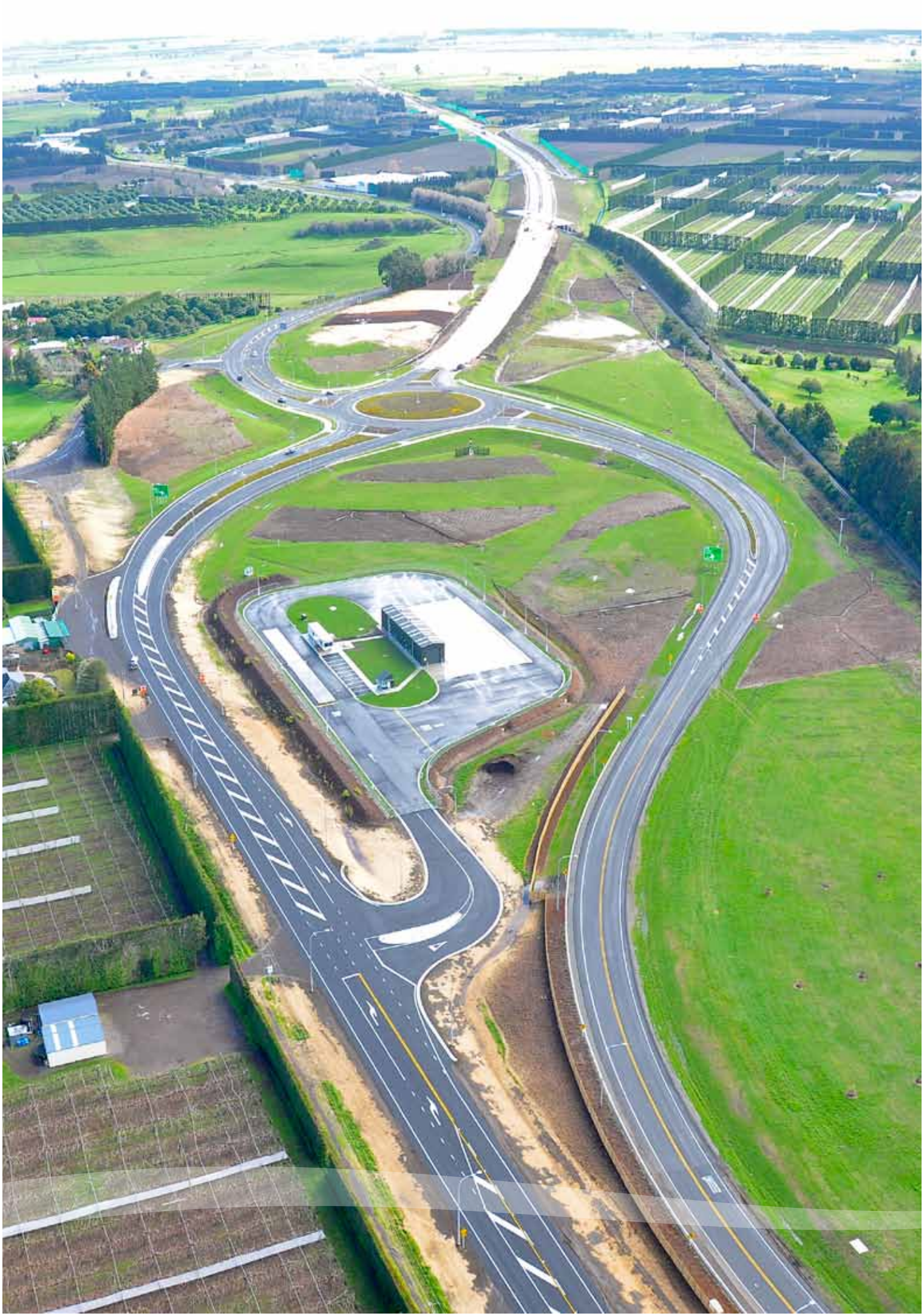
This RLTP will enable the Bay of Plenty to determine and secure investment for the region's transport system, and contribute to the LTMA purpose of an effective, efficient, and safe land transport system in the public interest.

What is the Regional Transport Committee?

The Regional Transport Committee is a regional governance body made up of representatives from the Bay of Plenty Regional Council, the region's district and city councils, and the New Zealand Transport Agency.

1.1 Document structure





Chapter 2: Strategic Context

The Bay of Plenty is part of New Zealand's 'Golden Triangle'[1] where much of the nation's economic and population growth is occurring and home to the Port of Tauranga, New Zealand's largest export port.

This means that investing in the Bay of Plenty transport system is critical to enhancing the performance of the regional and national economy, and extracting the best value for money from transport investment.

2.1 International connections

2.1.1 Port of Tauranga

The Port of Tauranga is New Zealand's largest export port by volume (12.14 million tonnes in 2013/14) and the second largest container port (760,000 TEUs in 2013/14), contributing to the flow of 8.6% of national GDP. This makes the Port one of New Zealand's major international gateways to the global economy, playing a central role in both national and international supply chains (Figure 1).

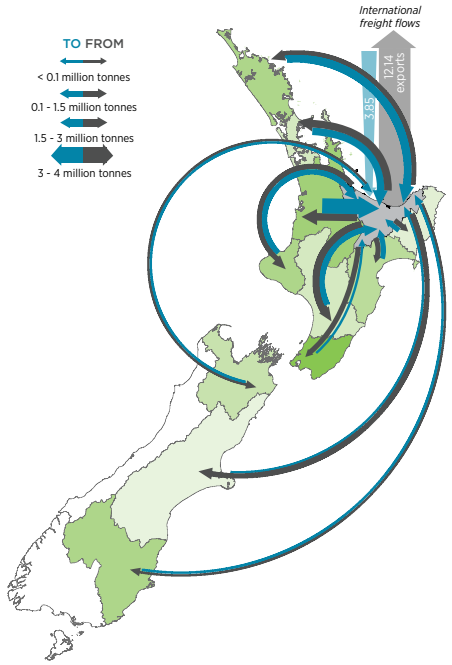
The Port currently performs well on most measures of port efficiency and productivity and is at least comparable with, and in some cases better than, Australian and other international ports[3]. The Port's competitiveness depends on its continuing ability to provide cost effective and efficient services that are attractive to international shipping lines.

2.1.2 Tourism

Tourism is a significant contributor to the regional economy. Rotorua is an internationally renowned tourism destination and one of New Zealand's top five tourist attractions. The tourism spend in Rotorua was estimated to be $501 million in 2013[4]. The high proportion of domestic and international tourists originating from Auckland and Waikato means that safe and efficient road links are required with these areas, and to tourist attractions and infrastructure within the region.

The cruise ship industry is also a rapidly growing source of international visitors. A total of 80 ships brought approximately 240,000 passengers and crew to the region during the 2013/14 season, consolidating Tauranga's place as one of the top three ports of call in Australasia. Tourism Bay of Plenty estimates that the visitors spent up to $50 million throughout the region.

Figure 1: National and international freight flows



2.2 The Upper North Island[5]

The Upper North Island (UNI) is vital to New Zealand's social and economic success. The area is home to over half of New Zealand's population, employment and GDP and accounts for around 50% of the total freight volume and movement – and is forecast to keep growing. An efficient, effective and safe transport system will be needed to support this forecast increase in the movement of people and goods.

There are opportunities to work together at an UNI scale to better plan and manage the impacts of future change of UNI significance and to communicate shared views with a united voice on these matters. This will help enable UNI performance by improving certainty for communities and investors, decision making and the quality of life for local communities.

2 Alongside Auckland and the Waikato.
3 NZ Transport Agency on behalf of Invest Bay of Plenty. Infrastructure Analysis (2014).
4 Ministry for Business, Innovation & Employment. Regional Tourism Estimates (2014).

5 Auckland Council, Auckland Transport, and the Northland, Auckland, Waikato and Bay of Plenty Regional Transport Committees have worked together to identify high level upper North Island priorities and have agreed the following statement.

Upper North Island Strategic Alliance

Local authorities are actively planning to improve inter-regional connections through the Upper North Island Strategic Alliance (UNISA), which established a long-term collaboration between Auckland Council, Bay of Plenty Regional Council, Northland Regional Council, Waikato Regional Council, Hamilton City Council, Tauranga City Council and Whangarei District Council to respond to and manage a range of inter-regional and inter-metropolitan issues.

The strategic direction of UNISA at this stage is focused on a number of priority issues which include economic development linkages, transport (road, rail, freight), ports, population and settlement patterns, commercial and industrial land development and international connectivity. These are all key matters for the Bay of Plenty region.

UNISA is working with partner agencies: the NZ Transport Agency, KiwiRail and Auckland Transport to develop a UNI Freight Accord and better target future investment in these critical inter-regional connections.

The current high level land transport investment priorities from central and local governments include measures to reduce urban congestion, reduce costs for business, manage population change, improve connectivity (intra and inter-regionally), improve efficiency and road safety outcomes.

The UNI is currently benefiting from significant transport system investment to achieve these central and local government priorities. Examples of this include the investment in improving the UNI inter-regional corridors and on reducing congestion in the main urban centres, particularly Auckland. This investment will have benefits at a local, regional and national level as often transport system improvements deliver benefits to people beyond the location of a project or local government boundary. Going forward, an improved understanding of those UNI scale issues and responses to deliver desired transport and wider economic and social outcomes is necessary.

At this stage, at an UNI scale, interregional road and rail strategic corridor network improvements are critical to enabling improved productivity outcomes through improving connectivity and the efficient and safe movement of people and goods. System improvements to how UNI urban centres function are also critical. A resilient transport network that maintains links between communities remains important.

It is essential to continue to develop and commit to collaborative stakeholder approaches at an UNI level to enable issues and opportunities to be identified and solutions agreed to resolve multi-faceted problems. The collaborative work undertaken to date has delivered significant benefits and as it develops further can continue to enable a broader understanding of the UNI inter-relationships and priorities.

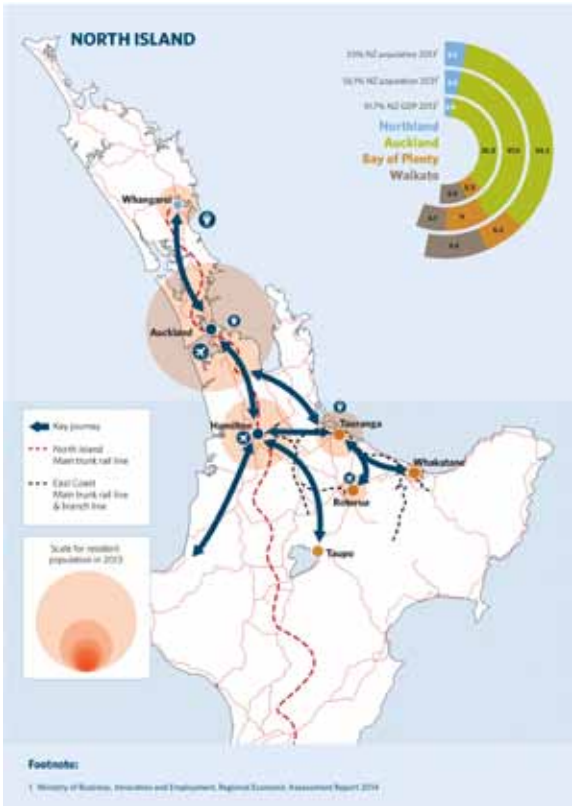
2.3 The Bay of Plenty region

The Bay of Plenty region is located on the north-eastern coast of the North Island. It stretches from Cape Runaway in the east, to Waihī Beach in the west. For the purposes of this plan, the Bay of Plenty encompasses the following local authorities:

- Western Bay of Plenty District Council;
- Tauranga City Council;
- Rotorua Lakes Council;
- Whakatāne District Council;
- Kawerau District Council; and
- Ōpōtiki District Council.

The Bay of Plenty Regional Council is the relevant regional authority. The region shares its regional boundaries with the Waikato and Hawke's Bay regions and Gisborne District (a unitary authority) (Figure 3).

Figure 2: The Upper North Island



2.4 Strategic drivers

The Bay of Plenty is an important growth centre in the UNI, both as a producer of primary and value-added products and services, and an international 'gateway' for exports and imports through the Port of Tauranga.

Within this context, there are a number of trends that will, or have the potential to, affect the region in the future. Grouped under the broad themes of population, economy, environment and technology, each of these 'megatrends' influences and shapes the strategic transport issues for the region.

2.4.1 Population growth and change

Population growth is a key driver of economic activity in the region. In general terms, it boosts the size of the workforce and increases the size of local markets.

The Bay of Plenty currently has a population of 271,000, growing by 4% between 2006 and 2013. However, this increase has been uneven, with growth concentrated in the western part of the region and population decreases in the east.

These spatial changes are consistent with the national picture, which sees growth being increasingly concentrated in large urban areas. Recent trends are forecast to continue, with the region's overall population projected to increase by about 20% to 334,000 in 2033, driven by population growth in the west.

Currently 18% of the region's population is aged 65 or over, placing the Bay of Plenty mid-range in terms of age structure when compared to New Zealand's other regions. However, in the next few decades, the Bay of Plenty will face demographic challenges in common with other New Zealand regions and many subnational areas in other countries, including population ageing and the end of natural population growth[6].

> **"The Bay of Plenty** has a rich resource-based economy, a strong export orientation, and a growing population. A sound growth path will capitalise on these strengths, and ensure that the right level of investment and connectivity occurs in the right place at the right time" – BERL, 2013

New Zealand's population is ageing numerically, as more people live longer, and structurally, as declining birth rates cause the increased numbers of elderly to also increase as a proportion of the total population. Between 2011 and 2031, these trends will see the majority of growth in 84% of New Zealand's territorial local authority areas occur in the 65 and over age brackets. At a regional level, only Auckland is projected to see an increase in the number of people aged less than 39 years.

The ageing trends for the Bay of Plenty are entirely consistent with the national picture and indicate that there will be little departure from it. All parts of the region will experience a shift from a natural rate of increase to natural decline at different times in the future. However, in some cases this is likely to be offset by positive net migration[7].

Demographic trends have major implications for the future labour force. According to projections, New Zealand's prime working age population (15-64) has recently peaked at 66% of the population and will to shrink to 60% by 2031[8]. For regions such as the Bay of Plenty slower workforce growth or even contractions will exacerbate skill and labour shortages. In effect, the region will be competing with others throughout the country to maintain and attract a youth population, both in terms of skilled workers and reproductive potential[9].

As structural population ageing unfolds, the Bay of Plenty will have some advantages over many other regions because of its relatively high proportion of Māori[10]. Māori aged 15-24 years now account for nearly 40% of all Bay of Plenty labour markets and with a younger age profile, will grow to be more significant over time.

Transport challenges and opportunities

The future transport challenges and opportunities arising from the identified demographic trends include:

- A changing settlement pattern resulting from an ageing population, urbanisation and an overall increase in the region's population will place pressure on the type of transport infrastructure that is required and where it is located.
- With an increasing proportion of the population on a fixed income, areas with the oldest populations are more likely to be the first to face challenges in maintaining, repairing, and replacing transport infrastructure.

6 National Institute of Demographic and Economic Analysis. 2014 Review of Demographic and Labour Force Projections for the Bay of Plenty Region for the Period 2013 – 2063.

7 *Ibid.*
8 *Ibid.*
9 Invest Bay of Plenty. Population projections. NIDEA May 2014 - Technical Report Summary 4.
10 CG Consulting. Ageing Trends and Transitions: Population Ageing in the Bay of Plenty. A report prepared for Invest Bay of Plenty (2014).

- Transport and mobility is a key social and economic determinant of health for an ageing population.
- Transport enables the continued participation of mature and older people in the workforce, both paid and voluntary.
- Access to alternative transport modes and neighbourhood access to essential services reduces transport dependency. Conversely, a lack of mobility options causes social isolation and increased dependency.
- A younger Māori labour contribution will, given higher education and skills, become vital in a social, economic and productivity context. Transport will play a key role in linking this potential future workforce with education and employment opportunities.

2.4.2 Economic growth and productivity

The Bay of Plenty region currently produces 5.3% of national GDP and provides 6% of national employment. From 2007–2013, the region's GDP increased 25%, slightly more than the national average[11].

The Bay of Plenty economy has traditionally been centred on export industries with an estimated 30% of employment deriving from export based activity. Key national and regional industries located in the region include horticulture, agriculture, forestry and manufacturing (see Regional Economic Summary).

In recent years, there has also been a significant shift to the service sector. In 2012, the Bay of Plenty's top sectors by value added output were social services ($1.77bn), manufacturing ($1.77bn) and business services ($1.72bn)[12]. This can partly be attributed to the region's attractiveness as a retirement location, which has contributed to high employment growth in administrative and support

11 Ministry of Business, Innovation & Employment. Regional Economic Activity Report 2014.

12 CG Consulting. Ageing Trends and Transitions: Population Ageing in the Bay of Plenty. A report prepared for Invest Bay of Plenty (2014).

Figure 3: Bay of Plenty Region

services, and the health care and social assistance sectors[13].

There is a growing understanding of the relative benefits able to achieved by agglomeration economies, which is typically used to describe the benefits that flow to firms and economies from locating in areas that have a higher density of economic activity.

BERL (2014) identifies two settlements in the Bay of Plenty – Tauranga and Rotorua – that have the potential to realise agglomeration benefits, which in an ideal situation, would filter down across the region. However, to realise such benefits, the region needs to take action to address the down-side risk that skilled workers will relocate to urban economies, accelerating population loss in smaller centres, and eventually leading to the scaling back of public service delivery in those towns[14].

BERL subsequently identifies three strategies the region can employ to ensure the whole region can benefit from agglomeration:

1) ensure that labour and skills shortages do no hold back the growth of the economically buoyant areas; and that less economically buoyant or struggling areas are supported to perform more strongly or to transform their economies;
2) work to ensure that social cohesion is not reduced; and
3) work on a trans-regional and national basis.

In practice, this would include ensuring that training supports the growth of new and higher productivity jobs in sectors where the Bay of Plenty has a comparative advantage, for example, agricultural and forestry research, innovation and development services, marine services, aquaculture development, use of geothermal resources and specialised manufacturing.

Transport challenges and opportunities

The future transport challenges and opportunities arising from the identified economic trends include:

- The growth and the changing makeup of the economy will place pressure on key transport infrastructure networks and change the mix of services required from them.
- Transport will be significant in enabling future access between the main centres and the secondary and smaller centres within the region.

13 Ministry of Business, Innovation & Employment . Regional Economic Activity Report 2014.
14 BERL. Bay of Plenty: Settlement and Agglomeration Impacts. August 2014.

Regional Economic Summary

- Regional GDP was **$11.17b** in 2013.
- The Bay of Plenty has the 5th largest population of New Zealand's 16 regions (Tauranga is the 6th largest urban area and Rotorua the 10th).
- The **Port of Tauranga** is New Zealand's largest export port, handling 32% of the nation's exports by volume and value in 2014.
- The Bay of Plenty has the **highest heavy vehicle weight intensity** on roads in the country (214.8 thousand tonnes per km compared with the New Zealand average of 106.5).
- The Bay of Plenty's **East Coast Main Trunk** line carries over a 3rd of New Zealand's rail traffic and is the most densely utilised sector of the national network.
- 80% of the country's largest horticultural export value product – **kiwifruit** – ($920m in sales), 68% of the avocado crop ($97m) and 30% of the national citrus crop ($7m) are grown in the Bay of Plenty.
- The Bay of Plenty and Rotorua in particular, is the 3rd most-important **tourism** destination in New Zealand (8.3% of the country's total visitor nights). Cruise ship visits add up to $50m per annum to the regional economy.
- The Central North Island (including the Bay of Plenty) accounts for 30% of New Zealand's exotic plantation **forest resources** (545,000 hectares), contributing to the $3.5b New Zealand earns from forestry exports each year.
- 60% of New Zealand's **forestry products** are exported from the Port of Tauranga.
- The value produced by the Bay of Plenty's **dairy industry** was estimated at $993 million in 2013/14 (7% of the national total).
- 3,900 hectares of consented water space is being developed for high yield, high quality **marine aquaculture** in the eastern Bay of Plenty.

- Providing access to work opportunities will become increasingly important as younger sectors of the population transition to work. This may require providing transport opportunities to allow people to move between living and working environments in different parts of the region.
- For the larger urban centres of Tauranga and Rotorua, good linkages with other upper North Island centres such as Auckland and Hamilton will ensure that higher level services located in these areas can be accessed, and that labour can also be accessed from these areas.
- For Rotorua, improved transport linkages also has implications for attracting tourists, increasing tourism and related demand, and generating economic growth.

2.4.3 Environmental change

The potential impacts of natural hazard events and the expected effects of climate change need to be considered in any strategic analysis of the region's transport system. Experiences in Canterbury in recent years have demonstrated the severe disruption that can be caused when infrastructure is damaged or destroyed[15].

The Bay of Plenty is exposed to a wide variety of natural hazards, including volcanic eruptions, earthquakes, coastal erosion and inundation, tsunami and flooding. Parts of the region are particularly vulnerable to flooding, with severe floods occurring in 2004 and 2005, and again in 2011 and 2012. The 2004 floods affected several thousand people in the eastern Bay of Plenty.

The region is bisected by the Taupō Volcanic Zone, an area of significant volcanic, seismic and geothermal activity, meaning it has the potential to be affected by earthquakes and volcanic eruptions in surrounding areas, including submarine and island volcanoes to the northeast of White Island.

New Zealand is also vulnerable to a range of climate conditions with the potential to create weather hazards due to its mid-ocean geographical position. Weather events having the greatest potential impact on the region are ex-tropical cyclones originating to the north of the country, bringing heavy rainfall and high winds[16]. Similarly, the region's coastline is exposed to coastal hazards. Severe weather events may result in storm surge, and tsunami may be generated from a number of local or distant sources[17].

As this century unfolds, the Bay of Plenty climate will change. As temperatures rise, scientists expect New Zealand's wind patterns to shift, which will also affect future rainfall[18]. Heavy rainfall events, flooding, and droughts may occur more frequently, and the impacts of tropical storms might be greater. While sea levels are projected to rise, the rate at which they will rise is uncertain.

Transport challenges and opportunities

The future transport challenges and opportunities arising from the identified environmental trends include:

- Parts of the transport network within the Bay of Plenty are particularly susceptible to natural hazard events which affect the resiliency and availability of the network.
- The long-term risks of flooding and inundation need to be factored into the development of transport infrastructure and appropriate management strategies adopted, including retreat, adaption or defend. Interventions such as the Regional Council's River Scheme Sustainability project have a major role to play in encouraging environmentally and economically sustainable land-use practices, raising awareness, and changing attitudes and behaviour in communities.
- Climate change is likely to have an impact on the transport network, with increased frequency of high intensity events creating increased resilience issues, particularly in coastal areas and in the eastern Bay of Plenty.

2.4.4 Technological change

Modern transport systems are becoming increasingly reliant on technology, with rising levels of automation capable of delivering significant improvements in transport safety and efficiency.

The term Intelligent Transport Systems (ITS) is used to describe the application of new technologies to the transport system. ITS can be defined as systems in which information, data processing, communication, and sensor technologies are applied to vehicles, infrastructure, operating and management systems, to provide benefits for transport users[19]. ITS technologies are already widely used across all modes of transport and are developing at a rapid pace. Consequently, the transport system will need to be flexible and responsive to new technologies.

15 NZ Transport Agency on behalf of Invest Bay of Plenty. Infrastructure Analysis (2014).
16 *Ibid.*
17 Bay of Plenty Civil Defence Emergency Management Group, 2008.
18 NZ Transport Agency on behalf of Invest Bay of Plenty. Infrastructure Analysis (2014).
19 Ministry of Transport. Intelligent Transport Systems Technology Action Plan 2014-18 (2014).

The use of ITS is likely to evolve considerably over the life of this plan. We are already seeing a trend towards a more autonomous transport system, with vehicles increasingly taking over tasks from the driver. In the long term, this could involve a move to fully autonomous vehicles, capable of travelling safely at higher speeds with less separation between them, significantly increasing the capacity of the roading network[20].

Transport challenges and opportunities

The future transport challenges and opportunities arising from the identified technological trends include:

- Application of intelligent traffic management systems to help alleviate congestion by better managing traffic flows, delaying the need for investment in new roading infrastructure.
- New safety features in cars significantly reducing deaths and serious injuries on the network.
- Road users could be charged electronically based on how far they travel, where they travel and when they travel.
- Use of technology to make freight delivery more efficient through a combination of better logistics, better vehicle technologies, and better route planning.

2.5 The Bay of Plenty transport system

A resilient, effective, efficient and co-ordinated transport system is vital to a well-running economy. It enables businesses to get their goods to markets, employees to get to work, students to get to school, visitors to reach destinations, and people to access goods and services[21].

Key features of the Bay of Plenty transport system include:

- the Port of Tauranga;
- regional airports at Rotorua, Tauranga and Whakatāne;
- a network of state highways totalling 747 kilometres providing inter-regional connections to the Waikato, Auckland (via the Waikato), and Gisborne and intra-regional connections to urban settlements within the region and the Port of Tauranga;
- the East Coast Main Trunk rail line providing a link between Auckland, Hamilton and Tauranga and further east to Kawerau and Murupara;
- a local road network totalling 3,846 kilometres that connects with the state highway network;
- an off-highway network of forestry routes connecting to rail hubs at Kawerau and Murupara;
- urban bus networks in Tauranga, Rotorua and Whakatāne and a number of local connections from smaller centres; and
- local walking and cycling networks.

The Bay of Plenty has a clear policy framework in place setting out the strategic vision and direction for the region's transport system. This Plan provides the regional direction for land transport modes. Other key regional and local strategies and plans which provide strategic planning direction include:

- Invest Bay of Plenty, the regional spatial plan (under development). The evidence base developed for Invest Bay of Plenty underpins the strategic drivers identified in this Plan.
- sub-regional spatial plans e.g. SmartGrowth Strategy (in place) and the Rotorua and Eastern Bay of Plenty Spatial Plans (under development);
- the Regional Policy Statement and district plans;
- long term and annual plans;
- Tauranga Transport Strategy and the Rotorua Integrated Network Strategy
- Bay of Connections and the Bay of Plenty Freight Logistics Strategy; and
- asset and activity management plans.

(for more information on the statutory and policy context see Appendix 1).

2.6 Sea

Ports serve as significant pieces of economic infrastructure and allow producers to reach larger markets, and national/regional or local consumers to access goods produced elsewhere. Ports also make a significant economic contribution to the region they are located in in their own right, anchoring or attracting additional economic activity[22].

As New Zealand's largest export port, the Port of Tauranga is the natural focus for a strategic analysis of the region's sea connections. Maritime based economic opportunities in the Eastern Bay of Plenty are currently constrained by a lack of safe and reliable harbour access. However, smaller facilities in Ōpōtiki and Whakatāne are likely to become commercial entities as aquaculture develops in the

20 Ministry of Transport. Briefing to the Incoming Minister (2014).
21 *NZ Transport Agency on behalf of Invest Bay of Plenty. Infrastructure Analysis (2014).*
22 *Ibid.*

Eastern Bay of Plenty. The Whakatāne facility also currently provides sea access for a range of tourism ventures.

2.6.1 Port of Tauranga

The Port of Tauranga is New Zealand's largest export port by volume (12.14 million tonnes in 2013/14) and the second largest container port (760,000 TEUs in 2013/14). The Port is regionally and nationally significant for economic wellbeing, contributing to the flow of 8.6% of national GDP. The Port's location is central to key export commodity sources. Through inland freight hubs such as MetroPort in South Auckland, the Port also has direct and dedicated access to New Zealand's largest import market.

There is an international trend towards using larger ships for cost efficiencies and larger ships are likely to deployed on New Zealand routes in the medium term future. In response, New Zealand's ports appear to be moving towards a hub and spoke model and the Port Tauranga is positioning itself well to be the hub port for the North Island.

The Port has secured resource consent to dredge the harbour, making it the first port in New Zealand capable of hosting larger container ships with a capacity of 5,000 to 6,000 TEUs. These new ships will enhance the competitiveness of New Zealand exporters and importers by lowering freight costs[23].

2.7 Air

Air services are vital to New Zealand's economy with almost all tourist arrivals, and 14% of exports by value being carried by air. Within the Bay of Plenty, commercial airports operate in Rotorua, Tauranga and Whakatāne. Taupō also has an airport of relevance to the Bay of Plenty, being just eight kilometres beyond the regional boundary.

The sustainable growth of aviation in the region will be closely linked to economic development, population growth and tourism. Rotorua is the only airport in the region that is capable of hosting international services and jet services. These capabilities will be maintained to support the region's future growth and economic development potential. Recent strategic decisions have also been made to further develop domestic tourism routes (e.g. Rotorua-Queenstown) to capitalise on Rotorua's attractiveness as a tourism destination.

Tauranga is the third busiest general aviation airport in New Zealand, but a strategic decision has been made by the airport and its owners not to provide for international services. The population growth in Tauranga and the western Bay of Plenty sub-region is likely to sustain Tauranga as a regional airport servicing domestic routes, primarily between Tauranga and Auckland, Wellington and Christchurch[24].

A recent economic impact assessment identified that the flight route between Whakatane and Auckland provides approximately $17 million worth of trade per annum to the Eastern Bay of Plenty economy.

Currently the region's airports tend to operate as individual business units with limited obvious consideration of other airports or transport modes[25]. However, There are opportunities to improve synergies through increased collaboration, possibly through joint regional tourism initiatives in the first instance.

2.8 Land

2.8.1 Road

The road network is currently and will continue to function as the primary means of transport within the region into the foreseeable future. It performs vital social and economic functions, enabling social accessibility, providing lifelines and contributing to quality of life. The road network also provides for economic opportunities by providing a means for people and goods to access business opportunities including employment and markets[26].

The Bay of Plenty road network forms part of a wider North Island and national land transport network. Within the region there is a hierarchy of roads which link the key population and business centres, as well as urban networks within the larger urban centres of Rotorua and Tauranga.

The region's road network is well established and generally functions well from a network capacity perspective. However, there are a number of issues which will need careful management into the future. These include limited traffic congestion in Tauranga and Rotorua during peak times, projected population changes intensifying current affordability challenges, and forecast freight growth in the upper North Island impacting on the region's road network.

Parts of the network are also susceptible to events (i.e. emergency or natural hazards) which can cause significant disruption to social and business activities. Resilience will continue to be a problem, particularly in coastal locations as climate change leads to more high intensity rainfall events[27].

23 *Ibid.*

24 *Ibid.*

25 AECOM. Bay of Plenty Aviation Stocktake – Background and Discussion Paper (2013).

26 NZ Transport Agency on behalf of Invest Bay of Plenty. Infrastructure Analysis (2014).

27 *Ibid.*

2.8.2 One Network Road Classification

The One Network Road Classification (ONRC) is an integrated national road classification for New Zealand. The ONRC aims to provide a nationally consistent framework that is at the same time guided and informed by the local and regional context.

The ONRC involves categorising roads based on the main function(s) each category of road performs. Examples include the movement of freight, for tourism, for everyday travel, or to provide appropriate access to particular locations. The ONRC incorporates safety performance measures based on the risk assessment framework developed in the New Zealand Road Assessment Programme (KiwiRAP).

Figure 5 shows the ONRC applied to the Bay of Plenty's strategic road network. Key inter-regional state highway links to other regions include State Highway 29 to the Waikato. This is a high volume freight route which links the central North Island and Auckland to the Bay of Plenty and particularly the Port of Tauranga. State Highway 2 links the region to the Waikato (in the north), Gisborne in the east, and joins with the Tauranga Eastern Link and State Highways 33 and 5 to link to Taupō (in the Waikato region) in the south.

Key arterial corridors within the larger urban centres of Tauranga, Rotorua and Whakatāne that move the majority of people and goods represent the other regionally significant parts of the road network[28].

*Further information on ONRC implementation in the Bay of Plenty is contained in the network optimisation section of **Chapter 5** (Strategic Response).*

2.8.3 Rail

Rail is a facilitator of economic growth and a critical economic lifeline. The East Coast Main Trunk (ECMT) rail line (National Strategic) provides a major link for freight movement between Auckland, Hamilton and Tauranga and further east to Kawerau and Murupara (Figure 6).

The Bay of Plenty section of the ECMT carries over a third of New Zealand's rail traffic and is the most densely utilised sector of the national network. The main commodity movements between regions are:

- logs and timber products from the Waikato to the Bay of Plenty for export;
- dairy products from the upper North Island to the Bay of Plenty for export; and
- import and export goods moving between the Bay of Plenty and Auckland (particularly through MetroPort inland port).

The ECMT is critical to inter and intra-regional movements between major industries and the Port of Tauranga. Forty percent of the freight moving to and from the Port of Tauranga moves by rail and volumes are forecast to increase significantly. Port consolidation will lead to greater reliance on the rail network as a primary mover of the increased volumes associated with larger ships.

There are currently no plans to introduce passenger rail services in the region in the short to medium term. The longer term viability of passenger rail depends on the development of higher density residential areas around rail corridors. However, recent reviews of the Bay of Plenty Regional Public Transport Plan Plan (RPTP) have found that the necessary pre-conditions for passenger rail do not currently exist. The viability of passenger rail will be reviewed on an ongoing basis as future RPTPs are developed.

In general, the rail assets in the region have adequate capacity to deal with current demand. Major issues for the region include the historical under-investment in rail infrastructure which has led to a poor underlying quality of the network asset, with KiwiRail having limited funding available to address this issue[29]. The region notes that there is a public good aspect to continuing investment in the rail freight network, and supports an investment framework that allows the optimisation of both road and rail.

Also of concern is the relative costs of moving freight by road and rail. The rail network transports approximately 115,000 tonnes of freight per week in the Bay of Plenty, and there is a risk of major freight generating industries moving an increasing proportion of freight by road if rail does not provide a competitive pricing structure.

There are also resilience issues on the rail network that will need to be addressed to reduce the risk of unplanned line closures, including degradation of the Kaimai Tunnel floor. Given the volume of inter-regional freight carried on the ECMT (3.8 million tonnes in 2012/13), there are significant implications for the road freight task on major road links between Auckland, Waikato and the Bay of Plenty if the Kaimai Tunnel is out of action for an extended period of time.

The Tauranga Central Rail Corridor (Tauranga CBD to the Port) is also identified as a strategic rail link, with constraints related to amenity and reverse sensitivity conflicts as train movements increase and CBD development continues.[30]

28 *Ibid.*

29 *Ibid.*

30 Upper North Island Strategic Alliance. Upper North Island Freight Story (2013).

2.8.4 State Highway 1/29 – East Coast Main Trunk corridor

State Highway 1/29 is classified as a National High Volume route in the ONRC. Together with the ECMT (National Strategic rail line), this forms an important inter-regional corridor between the Bay of Plenty and the rest of the upper North Island.

Freight volumes in the corridor are forecast to increase significantly over the life of the Plan, particularly when the Waikato Expressway (SH1) provides a more efficient link between Auckland and Hamilton. Therefore, the continued upgrading of transport infrastructure in the corridor is critical for the efficient movement of people and goods in the UNI, and a key priority for both the Bay of Plenty and Waikato regions.

The two regions are taking an integrated approach to the SH1/29 road corridor and ECMT rail corridor through the joint SH1/29-ECMT Working Group. The Working Group has identified the following objectives for the future management of the corridor:

- To develop and protect the corridor's role as the strategic, long term, transport corridor connecting Auckland and the Waikato with the Bay of Plenty.
- To support a reduction of deaths and serious injuries.
- Land use and land transport infrastructure (road and rail) is integrated and coordinated through planning, investment and programming mechanisms.
- Supports the development of a nationally significant freight efficient transport corridor that enables economic growth in the regions and upper North Island.
- Support improved resilience, and the complementary function of both the road and rail networks.

2.8.5 Public transport

Public transport provides a number of benefits and is important to the continued development of the region, including increasing the capacity of the road transport system, supporting economic development and social wellbeing, providing access to services, and improving liveability and amenity[31].

Public transport serves two main functions in the region. Services in the main urban centres of Rotorua and Tauranga are becoming increasingly important as a transport option for commuting and other daily travel needs, and have an important role to play in improving urban accessibility and enabling more efficient use of existing road capacity.

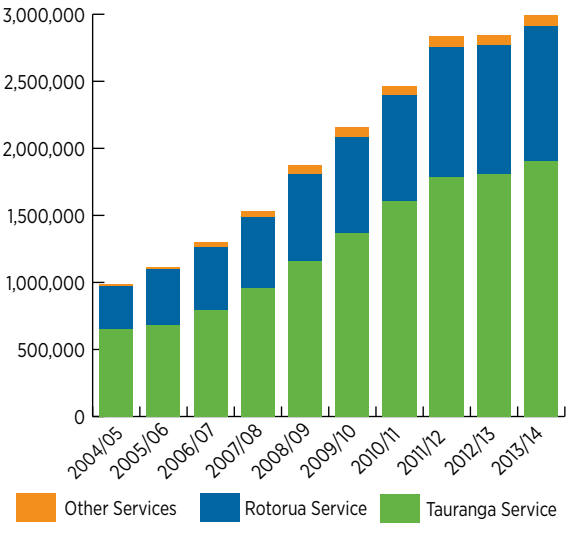
Public transport patronage growth in Tauranga and Rotorua represents an opportunity to further develop public transport in the region and manage congestion (Figure 4). There is likely to be significant additional patronage growth on the Tauranga urban network with the withdrawal of Ministry of Education funding for urban school bus services and their transition to the public transport network.

Public transport routes linking smaller settlements to the major urban centres also play an important social role by providing connectivity to goods and services.

The region's strategic public transport network is shown in Figure 7. Public transport corridors and routes within the region are classified according to their function:

- Regional Strategic corridors – are priority corridors for increasing service frequency and reliability.
- Urban Connector routes – carry urban services and support Regional Strategic corridors.
- Rural Connector routes - provide access to essential community goods and services and connections to Regional Strategic corridors and Urban Connector routes.

Figure 4: Bay of Plenty public transport patronage 2004-14



31 NZ Transport Agency on behalf of Invest Bay of Plenty. *Infrastructure Analysis* (2014).

2.8.6 **Cycling and walking**

Cycling and walking are viable transport options for short to medium length commuter and other utility journeys in urban areas. These modes also serve recreational and tourism functions, and can contribute to a healthier workforce, resulting in positive economic and public health outcomes for the Bay of Plenty.

According to Census 2013 figures the two modes made up 4.9% (walking) and 2.8% (cycling) of all journey to work trips in the Bay of Plenty. While the proportion of walking trips declined 0.2% from the previous Census, the share of cycling trips increased by 0.4%, reversing a twenty year trend of declines.

The Bay of Plenty requires investment to complete its strategic urban cycle networks and to provide high quality connections to new urban growth areas (Figure 8). There is also increasing recognition of the value of connecting communities through medium to long distance walking and cycling routes for social connectivity, recreation and tourism purposes. Opportunities to develop new longer distance routes are being actively pursued throughout the region.

Investment in pedestrian environments is also required to support key activity centres, such as town centres, complement increases in public transport, or integrate with new urban growth areas. Improved safety is a high priority for both modes, and for cycling in particular, the lack of perceived safety is a barrier to increased use. The Bay of Plenty supports the findings and recommendations in the Cycling Safety Panel report (2014).

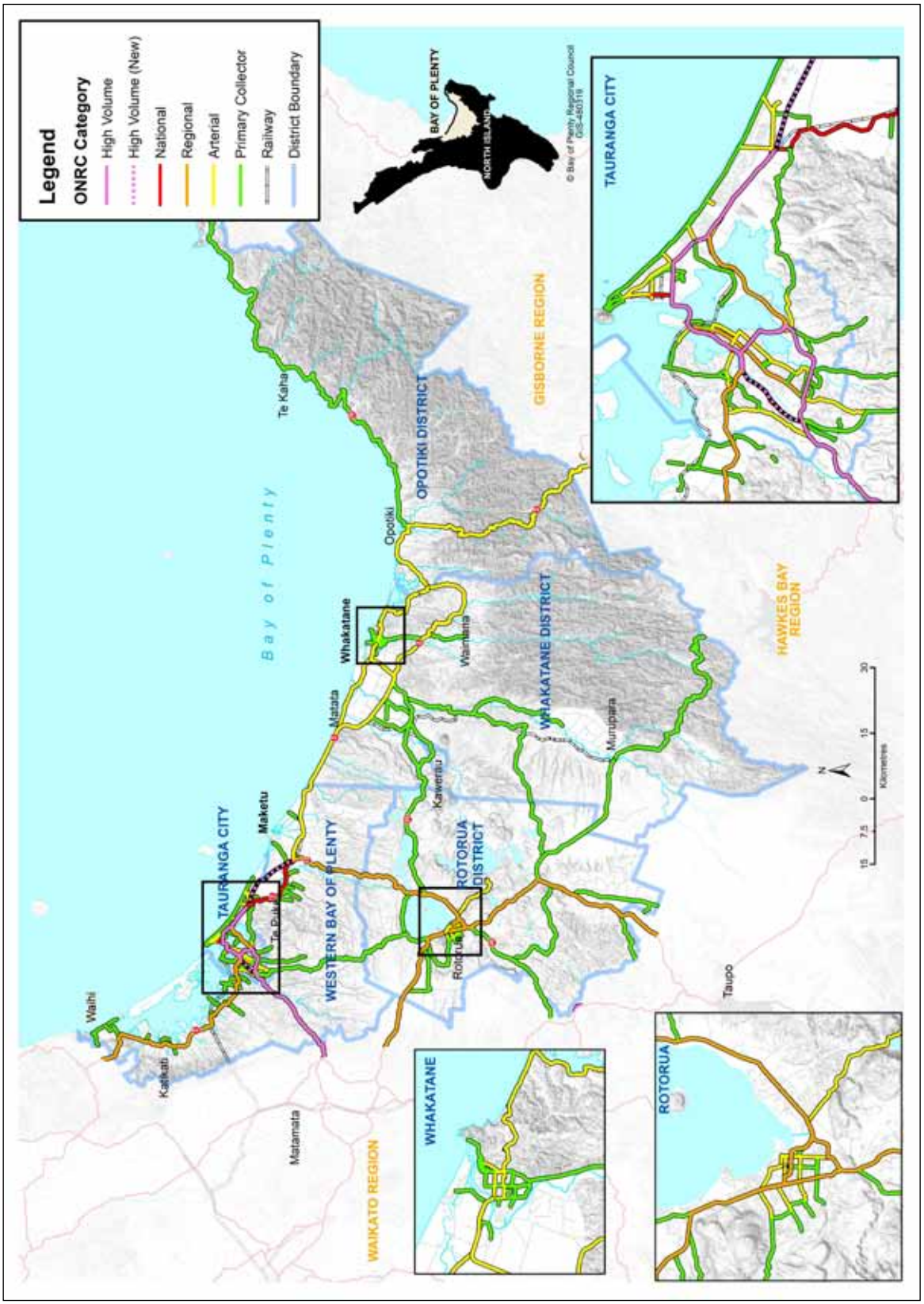
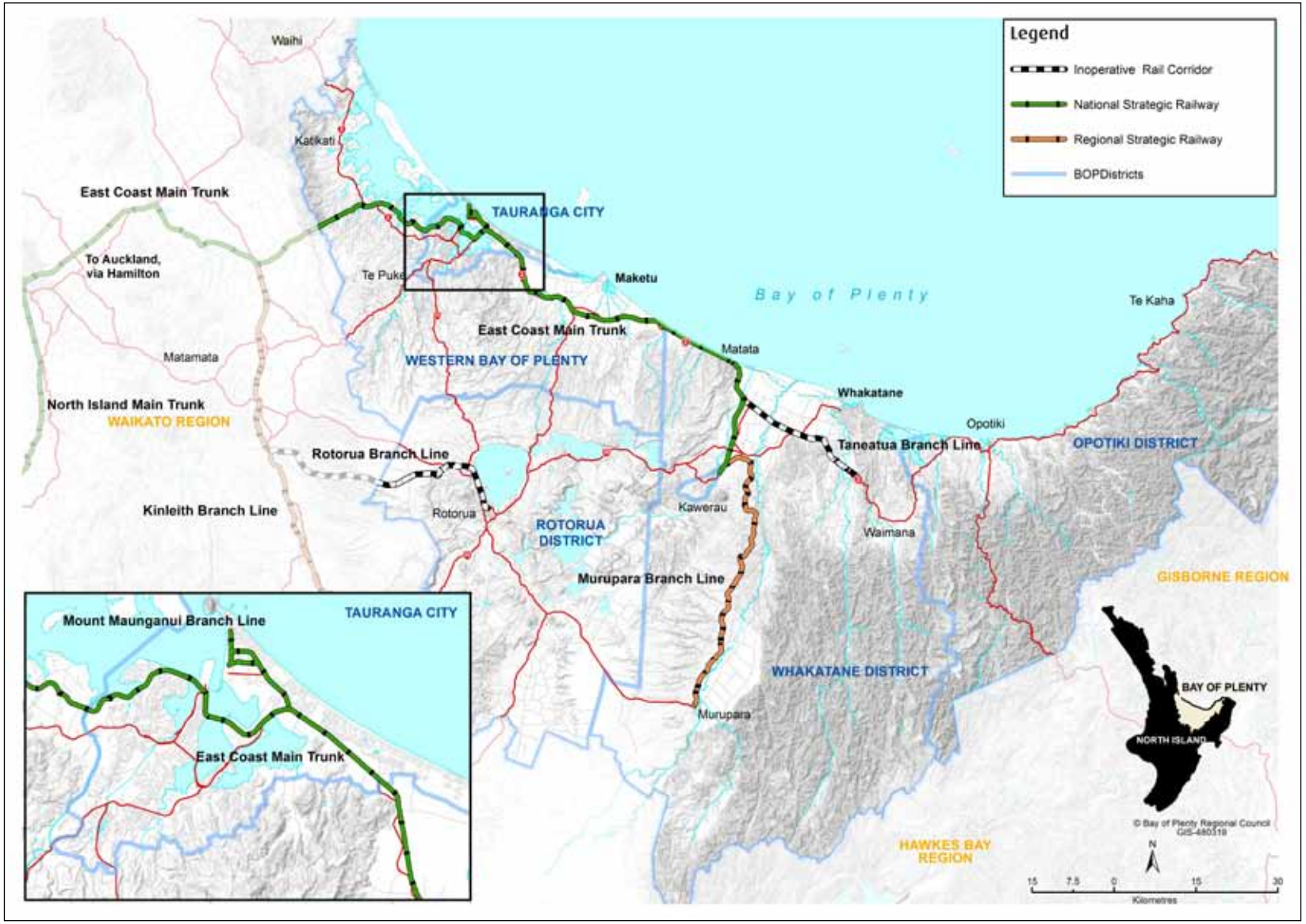


Figure 5: One Network Road Classification – Bay of Plenty

Figure 6: Bay of Plenty rail network



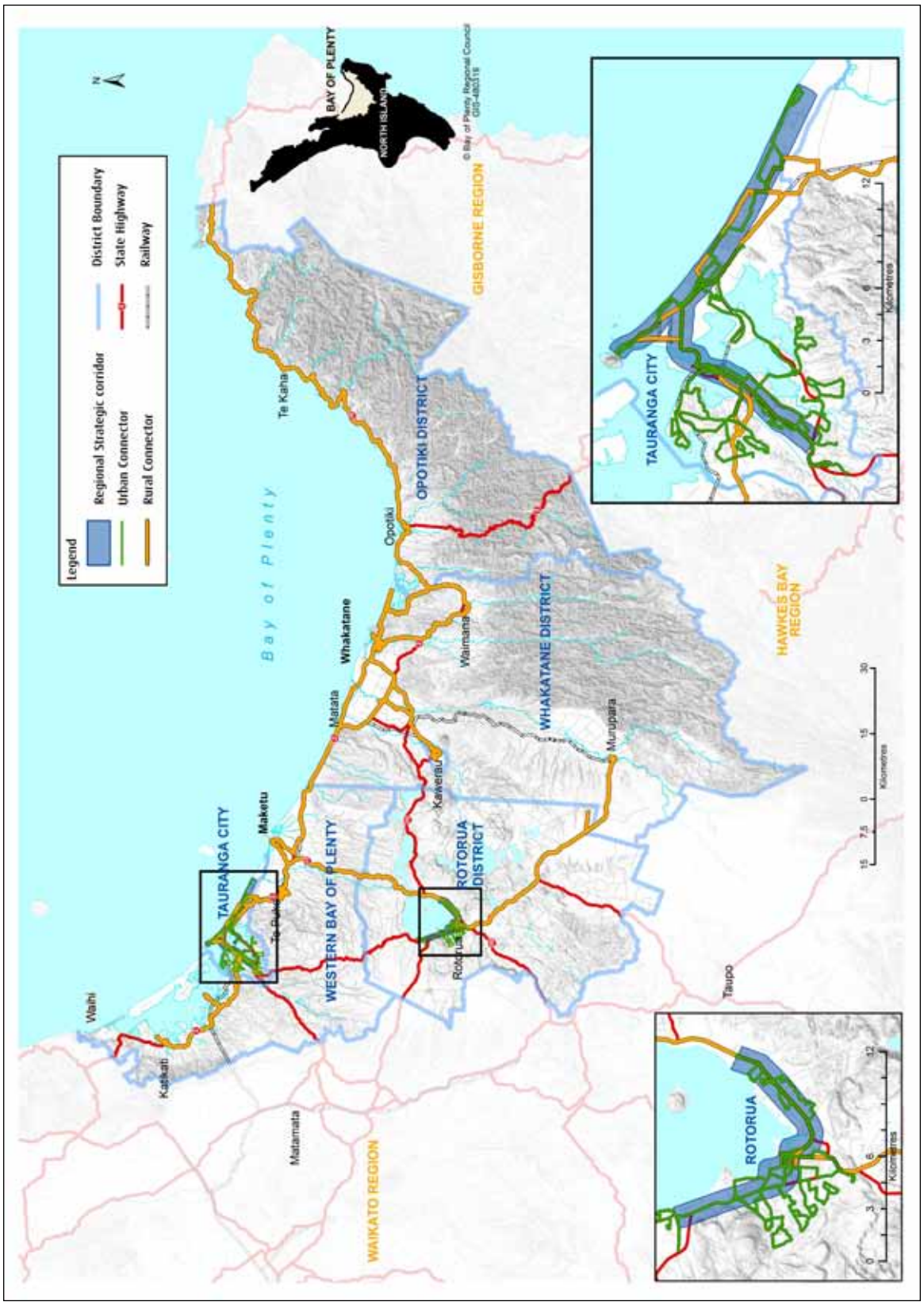


Figure 7: Bay of Plenty public transport network

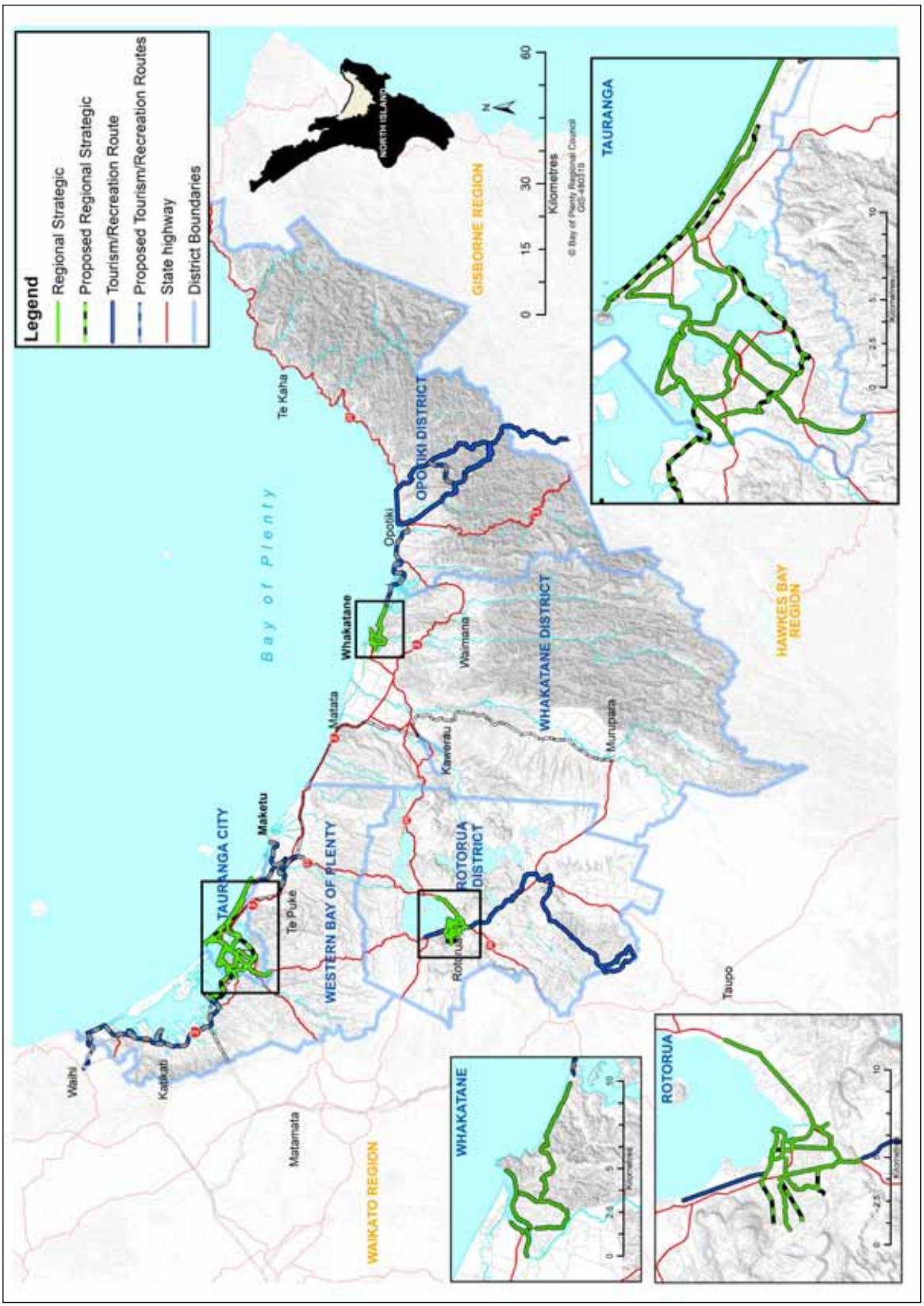


Figure 8: Bay of Plenty cycling networks


D
Rotorua 21
Coach Stop
InterCity
express
nakedbus.com
OPTARE
FZG841
41

Chapter 3: **Issues**

The region has identified a number of strategic transport issues that must be addressed to enable the region to realise its desired outcomes. Resolving these issues in the Bay of Plenty will support the delivery of a transport network that is increasingly effective, efficient, safe and resilient. The strategic transport issues are summarised in Figure 9.

Figure 9: Bay of Plenty strategic transport issues

Freight growth	Further development of freight intensive industries within the region and forecast freight growth (inter and intra-regional) will increase demand on the region's transport system and intensify peak freight flows.
Land use and transport integration	Ineffective integration between land use and the region's transport network can result in development patterns that increase the need for travel and reliance on motor vehicles. This in turn, increases road congestion, emissions and energy use and limits opportunities for more sustainable modes.
Urban congestion	Traffic growth in parts of the region is increasing congestion, inhibiting the efficient movement of people and goods, and the realisation of economic benefits.
Safety	An unforgiving transport environment and poor user behaviour is resulting in avoidable death and serious injury.
Network resilience	Transport in the region is reliant on a few key routes, making access to key destinations difficult or impossible in the event of unplanned disruption. The risk of network failure is likely to increase as higher intensity weather events become more frequent.
Asset affordability	Unmanaged deterioration of assets is impacting quality of life and increasing lifecycle costs.
Ageing population	An ageing population will mean increasing future demand for accessible travel amongst those with few mobility options.
Fuel reliance	The region's transport system is reliant on imported fuel sources, exposing the economy to disruption in international supplies and volatile oil prices.
Social and environmental effects	Increasing use of the transport system generates social and environmental effects that impact on adjacent communities and land uses.

The following sections describe the strategic transport issues and provide a high level summary of their supporting evidence base.

3.1 Freight growth

Further development of freight intensive industries within the region and forecast freight growth (inter and intra-regional) will increase demand on the region's transport system and intensify peak freight flows.

A significant proportion of the freight in the UNI moves through the Bay of Plenty (Figure 10). The current modal split for domestic freight moving through the Bay of Plenty is road (78.3%), rail (19.0%) and coastal shipping (2.7%), with total volumes forecast to increase 35-42% by 2042 (Figure 11)[32].

There are substantial freight flows in both directions between the Bay of Plenty, the Waikato and Auckland, reflecting the significant role of the ports in serving wider markets. These freight flows are important to New Zealand as well as the Bay of Plenty region. The heavy use of the road and rail network in the region does have funding and affordability implications.

The Port of Tauranga is a key connection between the UNI and international markets, and is nationally important both as a major export hub for primary commodities and for importing a range of bulk products and containerised goods. Container throughput at the Port is predicted to grow by between 2.5% and 3.1% per annum over the next 30 years. Bulk good throughput will also grow at between 1.7% and 2.3% each year[33].

The Port is implementing developments to accommodate larger ships, which has the potential to alter freight distribution patterns. At present there is sufficient storage to cope with the expected increased volumes of bulk goods at Mount Maunganui and of containers at Sulphur Point over the next 30 years[34]. However, the move to larger ships may create network issues with more defined peaks when these ships are in port. Service rationalisation by shipping companies may also result in international services being diverted to Tauranga from other ports.

The Bay of Plenty serves as the hub for the central North Island wood supply region, New Zealand's largest wood producing region, containing around 30% of the country's exotic forest area. Logs and processed forest products represent 66% of the total tonnes handled by the Port of Tauranga. A significant proportion of logs are transported to the Port by rail, but there are also large forestry areas without a rail link.

Other major freight flows within the region include aggregates, and export commodities such as milk and milk products, kiwifruit and other horticultural products (avocadoes, citrus crops).

Given the Bay of Plenty's role as a primary producer and export hub, High Productivity Motor Vehicles are making a fundamental contribution towards increased freight efficiency and productivity in the region.

Figure 10: Total freight flows between the Bay of Plenty and other regions

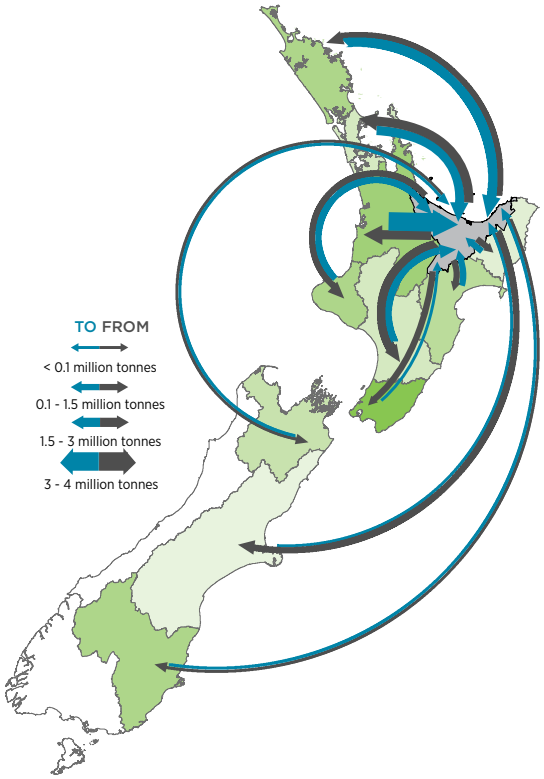
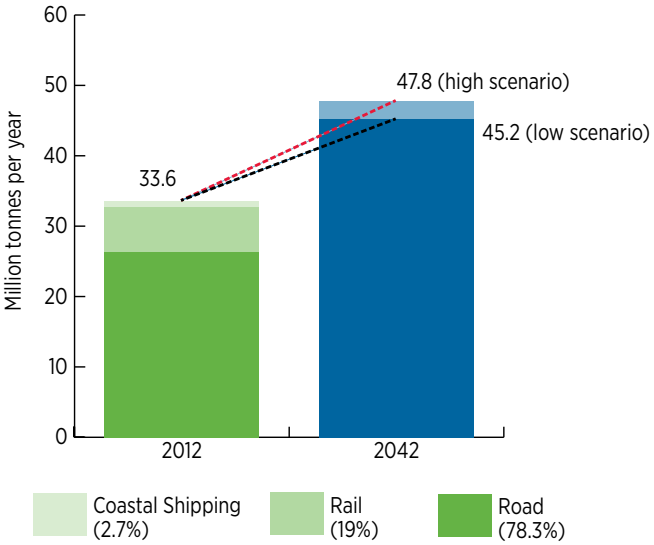


Figure 11: Regional freight movements by mode and 2042 forecast



32 National Freight Demand Study (2014).
33 Price Waterhouse Coopers. *How can we meet increasing demand for ports in the Upper North Island?* A report for the Upper North Island Strategic Alliance (2012).
34 NZ Transport Agency on behalf of Invest Bay of Plenty. *Infrastructure Analysis* (2014).

3.2 Land use and transport integration

Ineffective integration between land use and the region's transport network can result in development patterns that increase the need for travel and reliance on motor vehicles. This in turn, increases road congestion, emissions and energy use and limits opportunities for more sustainable modes[35].

The car is currently the dominant individual travel mode in the Bay of Plenty, and use of public transport, walking and cycling is low at present. Figures from the latest Census show that the motor vehicle mode share of travel to work dropped slightly from 89.8% of all journeys in 2006 to 88.6% in 2013. While encouraging, these figures show that the region is still heavily reliant on travel by private vehicles.

The reliance on private vehicles for transport is compounded by the development of lifestyle blocks, out of town retail centres and residential developments with no local services. Low densities mean these types of developments cannot reasonably be accessed by any means other than the private vehicle. Trip lengths also increase as these developments locate further from education facilities, core services and employment.

In some parts of the region, housing affordability in more accessible locations may be influencing decisions to live further from workplaces. The consequences are additional, longer distance trips that create congestion on routes into major urban centres and generate demand for expensive road construction to add capacity.

3.3 Urban congestion

Traffic growth in parts of the region is increasing congestion, inhibiting the efficient movement of people and goods, and the realisation of economic benefits.

Congestion on the urban road network has the potential to limit the productivity gains that can be achieved in the economy by restricting the efficient movement of people and goods. Investment in the region's roading system has alleviated congestion on key parts of the network. However, transport demand will need to be carefully managed in the longer term to ensure that traffic congestion does not place a constraint on the functioning of the wider economy.

The traffic demand on the Tauranga network is expected to increase particularly due to increased urbanisation and freight movements. The withdrawal of funding for school bus services in Tauranga will also increase peak time congestion on the city's road network unless this additional demand is accommodated on the public transport network.

The key issue for the sub-region is balancing the local trip demands, the increased urban growth and commuter movements, against maintaining efficient freight access to the Port of Tauranga[36]. Serious congestion could result if there is a failure to balance growth across the sub-region, and not provide people with viable travel choices.

Existing congestion in Rotorua mainly relates to peak periods and the eastern and western approaches, restricting the movement of local and inter-regional freight and creating delays for people travelling in and through the Rotorua urban area[37].

35 This issue re-states an Energy and Infrastructure issue from the Bay of Plenty Regional Policy Statement.

36 Tauranga Transport Strategy 2012-2042.

37 Rotorua Integrated Network Strategy 2012-2042.

3.4 Safety

An unforgiving transport environment and poor user behaviour is resulting in avoidable death and serious injury.

Road crashes impose high social and economic costs on the Bay of Plenty. While Bay of Plenty casualty figures have shown some improvement over the past few years (Figure 12), the social cost of deaths and serious injuries still amounted to $197 million in 2013.

Crashes in the Bay of Plenty are caused by deficiencies in all four components of a safe system: safe roads and roadsides[38], safe speeds, safe road use and safe vehicles. These deficiencies are reflected in the Bay of Plenty's poor performance in the following areas when compared to other regions[39]:

- Alcohol and drugs (11/13)
- Speed (12/13)
- Distraction (12/13)
- Young drivers (12/13)
- Older road users (12/13)
- Rural intersections (11/13)
- Rural roads (12/13).

38 This includes at-grade railway crossings.
39 Communities at Risk Register (2013). Regional ranking in brackets.

The Bay of Plenty contains a number of rural state highways with open road speed limits and which carry significant volumes of traffic in both directions across difficult terrain. KiwiRap (the New Zealand road assessment programme) has investigated and assessed the safety of the state highway network in New Zealand. Roads have been rated from one to five stars, with one star being the least safe and five stars representing the safest routes.

Figure 13 also shows that overall, the proportion of travel on two star routes (effectively the lowest safety rating) is significantly higher in the Bay of Plenty region (51%) than at the national level (33%) and the neighbouring Waikato region (38%).

Several sections of state highway in the region are also ranked nationally for high collective risk, including:

- SH2 from Mount Maunganui (SH29) to Paengaroa (SH33) (4th);
- SH29 from Kaimai Ranges to Tauranga (7th); and
- SH2 from Katikati to Tauranga (14th).

There are ongoing concerns in the region with safety on rail corridors, particularly at level crossings. In the past five years there have been four collisions between motor vehicles and trains in the region. There have also been a significant number of reported near misses at level crossings (49) and incidences of trespass (13) on the rail network.

Figure 12: Bay of Plenty road fatalities and serious injuries (2005– 2013)

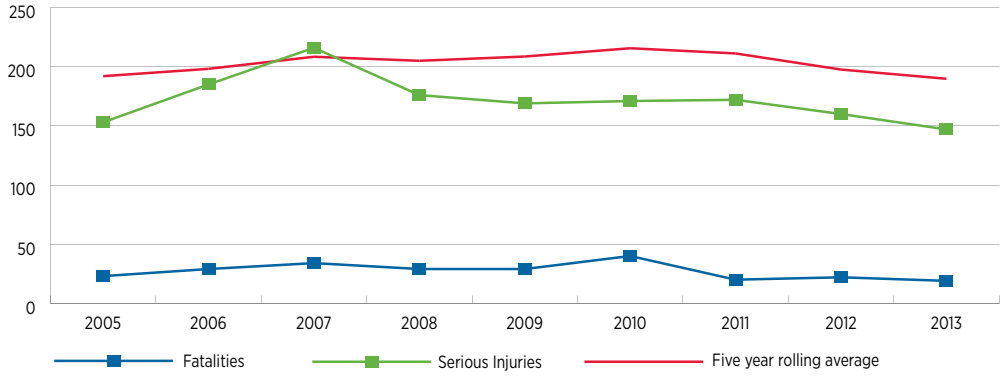


Figure 13: Proportion of state highway network by annual VKT within each KiwiRAP star band

Region	VKT (x10^{3}VKT/year)	Proportion in each star rating				
		1-star	2-stars	3-stars	4-stars	5-stars
Waikato	25.19	0%	38%	55%	7%	0%
Bay of Plenty	10.91	0%	51%	45%	5%	0%
New Zealand	**154.76**	**0%**	**33%**	**40%**	**28%**	**0%**

3.5 Network resilience

Transport in the region is reliant on a few key routes, making access to key destinations difficult or impossible in the event of unplanned disruption. The risk of network failure is likely to increase as higher intensity weather events become more frequent.

The development of the region's inter and intra-regional road and rail network has been heavily constrained by topographical features such as the Kaimai Ranges, large harbours, rivers, lakes and narrow coastal strips, making the region reliant on a few key social and economic lifelines.

Parts of the network within the Bay of Plenty are susceptible to unplanned events, particularly road crashes and natural hazards. The region's susceptibility to natural hazards has resulted in approximately 330 hours of state highway closures per year over the past four years. In some cases, the alternative route is significant, meaning network outages can cause major disruption and cost to businesses, or isolate people and communities from key services and facilities[40].

Network resilience is a particular issue facing the road and rail networks in the eastern Bay of Plenty, and the ECMT and some major state highway connections in the western Bay of Plenty.

40 NZ Transport Agency on behalf of Invest Bay of Plenty. *Infrastructure Analysis* (2014).

3.6 Asset affordability

Unmanaged deterioration of assets is impacting quality of life and increasing lifecycle costs.

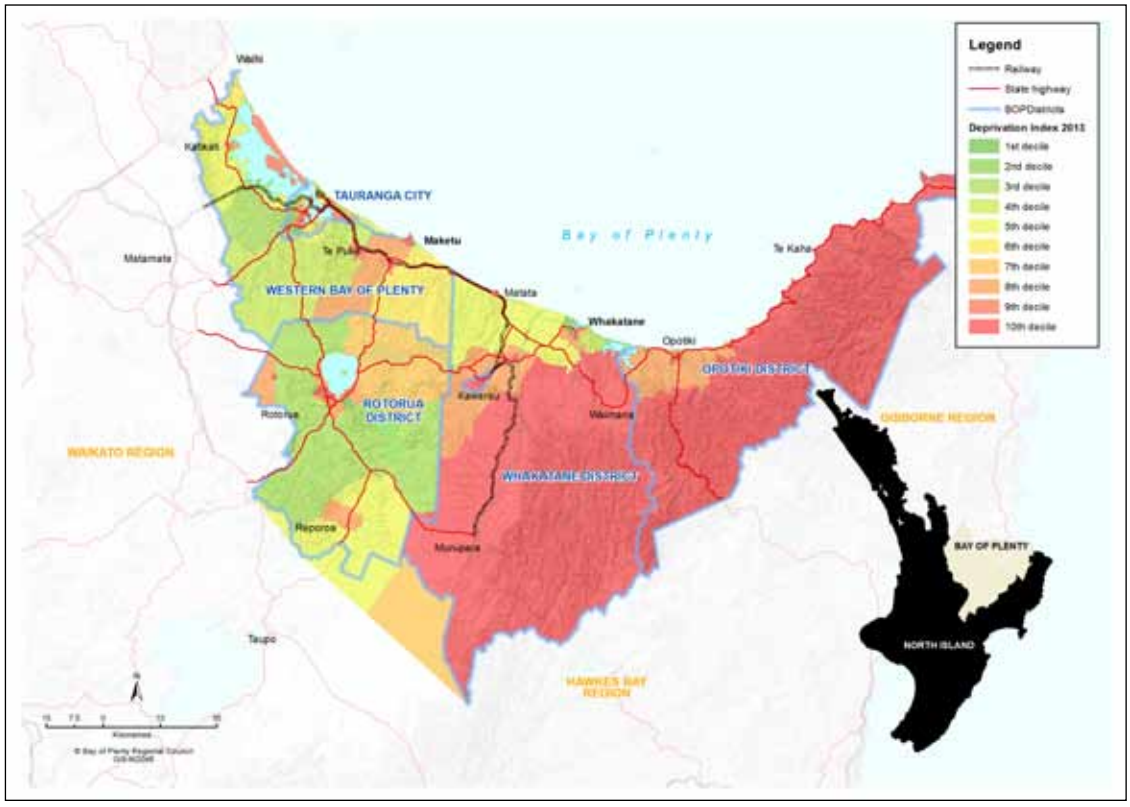
There is a limited level of funding available to local government and network operators such as KiwiRail to invest in transport initiatives. A number of factors contribute to affordability issues including constrained funding levels delivered through the NLTP, the pressures of urbanisation, an ageing population, debt loads, rates control and a lack of alternative local government funding sources.

The heavy freight task in the Bay of Plenty region also has asset affordability and funding implications. Sections of the Bay of Plenty road and rail network carry some of the highest freight volumes and weight intensities in the country. Ageing infrastructure on those parts of the network will generate increased life cycle costs if assets are allowed to deteriorate below acceptable levels of service.

Communities in the east of the region also face affordability challenges due to static or declining populations in some areas and comparatively high levels of deprivation[41] (Figure 14). These factors impact on the ratings base available to maintain assets to an acceptable level of service.

41 The New Zealand deprivation index measures a combination of variables including lack of income, communication, employment, transport, qualifications, support, living space and an owned home.

Figure 14: Degrees of deprivation in the Bay of Plenty



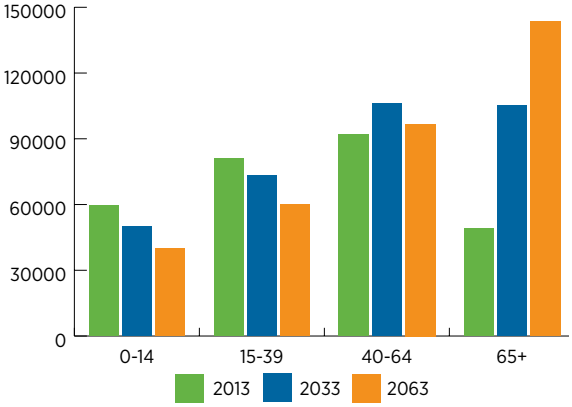
The issue is compounded by the fact that these communities are at greatest risk of access disruptions caused by natural hazards. On occasions natural hazard events have led to the deferral of maintenance in the interests of more urgent remediation activities.

3.7 Ageing population

An ageing population will mean increasing future demand for accessible travel amongst those with few mobility options.

The region's ageing population will be a key driver of increased demand for accessible travel[42]. Population forecasts indicate there will be a substantial increase in the region's population along an ageing continuum of mature (50-64 and 65-74 years), older (75-84 years) and older-old (85-90+) people (Figure 15).

Figure 15: Projected changes in age structure in the Bay of Plenty 2013-2063



Living longer does not mean overwhelming numbers of frail and needy people. Many people are expected to continue to extend their work life, and lead active, healthy and participative existences[43].

People aged 65 to 80 years are likely to continue to be active, mobile and are increasingly likely to be in some form of employment. They are likely to travel less often and not as far as people under 65. However, they are expected to continue to travel independently; more commonly outside the peak commuting hours, by private car, walking, using mobility devices, cycling, or catching the bus.

People aged 80+ years are likely to be less mobile. They are more likely to rely on informal transport providers such as community groups, or retirement village transport for travel.

The implications for the transport system are increases in demand for off peak public transport, taxis and total mobility services, accessible pedestrian networks and informal transport options such as ridesharing with friends, family and community groups.

3.8 Fuel reliance

The region's transport system is reliant on imported fuel sources, exposing the economy to disruption in international supplies and volatile oil prices.

Energy use in New Zealand is dominated by transport and the country is reliant on imported oil for half of our energy needs, making us vulnerable to disruptions in international supplies and volatile oil prices. New Zealand's oil self-sufficiency was just 31% in 2012[44]. The real price of oil has been subject to significant fluctuations in the past decade (Figure 16)[45]. Future supplies are not expected to suddenly run out but oil is likely to become more expensive as demand grows and production costs continue to rise. There are opportunities to support the development of alternative fuel sources such as biofuels to reduce the current reliance on fossil fuels.

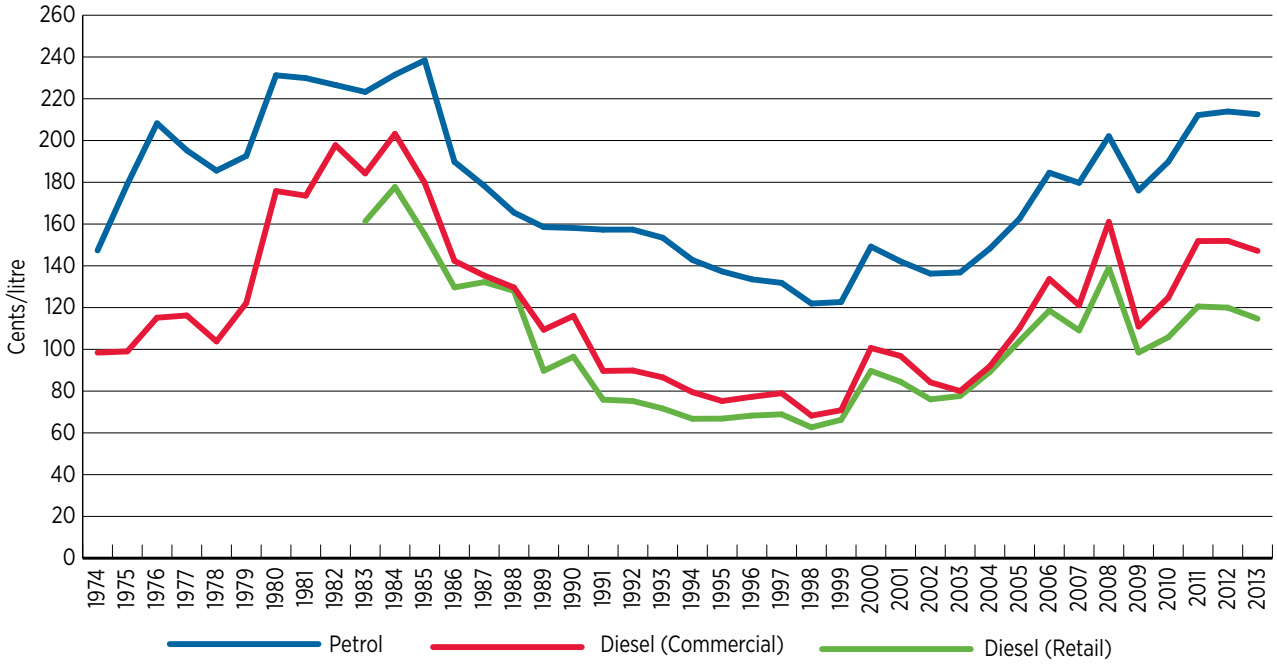
42 In the Bay of Plenty, 27% of the population identify as having some form of disability. Not all of these individuals fall within the ageing population category, which means that providing accessible travel options is important not just as a means of catering for an ageing population.

43 CG Consulting. Ageing Trends and Transitions: Population Ageing in the Bay of Plenty. A report prepared for Invest Bay of Plenty (2014).

44 The indigenous production share of primary energy supply. Ministry of Business, Innovation and Employment. Energy in New Zealand 2013.

45 Ibid.

Figure 16: New Zealand average annual fuel prices (real 2013 prices)



3.9 Social and environmental effects

Increasing use of the transport system generates social and environmental effects that impact on adjacent communities and land uses.

Major transport routes cutting through urban areas can create issues such as community severance, noise, vibration, pollution, and impact on the safety and quality of life of residents.

There are clear links between vehicle emissions and adverse health effects, with a national study estimating that exposure to emissions of particulate matter contributes to the premature mortality of approximately 500 people per year in New Zealand. The risks are most pronounced in the urban environment where the potential for vehicle congestion and high concentrations of pollutants is greatest.

The regional council monitors background levels of carbon monoxide (CO) and particulate matter (PM10) at fixed residential sites in Tauranga and Rotorua. Results indicate that background levels of carbon monoxide are not a significant issue in either of the region's two largest urban centres.

PM10 emissions, which are associated with diesel combustion amongst other sources, appear to be more of an issue, particularly in Rotorua. Transport sources account for 17% of PM10 emissions in the Rotorua urban area, with emissions concentrated around the major road corridors[46]. Population growth and the increased transport demand expected in the region's urban areas means there will be an increasing need to manage the associated health impacts from motor vehicles.

Significant traffic volumes, particularly where speeds are high and there are a high percentage of heavy vehicles, can also sever communities and create the perception that transport corridors are unsafe and unpleasant for walking and cycling. People perceive that it is easier and, in some cases, safer to drive to make short trips that could easily be made by an active mode. Encouraging greater use of active modes would have a significant positive impact on the health of all sectors of the population[47].

Some adverse effects can be avoided by preventing activities sensitive to the effects of the transport network from locating close to transport routes, or by requiring mitigation measures such as acoustic insulation to be installed.

46 Bay of Plenty Regional Council (2005) *Rotorua Air Emissions Inventory.*

47 NZTA Research Report 359 (2008) *Valuing the Health Benefits of Active Transport Modes.*

The transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region.

Chapter 4: **Objectives**

4.1 Vision

Our transport ***vision*** is:

Best transport systems for a growing economy and a safe and vibrant Bay lifestyle

The vision is supported by the following objectives:

Economic performance	The transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region.
Land use and transport integration	Long term planning ensures regional growth patterns and urban form reduce travel demand, support public transport and encourage walking and cycling.
Safety	Deaths and serious injuries on the region's transport system are reduced.
Access and resilience	Communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs.
Affordability	Investment in the transport system maximises use of available resources and achieves value for money.
Energy efficiency	People choose the best way to travel to improve energy efficiency and reduce reliance on non-renewable resources.
Environmental sustainability	The social and environmental effects arising from use of the transport system are minimised.

We have developed key performance indicators for the objectives so we can measure whether their anticipated benefits are being realised. While the key performance indicators have been arranged according to the primary objective they measure, many of them address one or more objectives.

4.2 Economic performance

The transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region.

Responds to the following strategic transport issues:

- Freight growth
- Land use and transport integration
- Urban congestion

Achieving this objective will mean ensuring development occurs in the most efficient and accessible locations to minimise transport costs and impacts on the functioning of the transport system. The design and operation of major transport corridors will maximise the throughput of people and goods using the most efficient means available.

Key performance indicators

- Increase in regional Gross Domestic Product above 2014 levels.
- Increase in regional contribution to national Gross Domestic Product above 2014 levels.
- Reduce delay per kilometre on key routes to the Port of Tauranga from 2014 levels.
- Increase the volume of freight on the East Coast Main Trunk line above 2014 levels.

4.3 Land use and transport integration

Long term planning ensures regional growth patterns and urban form reduce travel demand, support public transport and encourage walking and cycling.

Responds to the following strategic transport issues:

- Land use and transport integration
- Fuel reliance
- Social and environmental effects

Land use patterns influence transport factors such as trip lengths and the viability of different modes, while the provision of transport infrastructure influences the type of land use patterns that emerge. Achieving this objective will involve integrated planning to ensure the right mix of transport provision and land use development occurs to achieve sustainable outcomes.

Key performance indicators

- Reduce total person kilometres travelled in the region below 2010-14 levels (four year rolling average).
- Increase annual trips per person on public transport above 2013-14 levels.
- Increase the annual distance each person in the region cycles above 2010-14 levels (four year rolling average).
- Increase the annual time each person in the region spends walking above 2010-14 levels (four year rolling average).

4.4 Safety

Deaths and serious injuries on the region's transport system are reduced.

Responds to the following strategic transport issues:

- Safety
- Social and environmental effects.

The Bay of Plenty has adopted a 'safe system' approach to improving safety on the region's transport system. This approach encapsulates all land transport modes, including motor vehicles, rail, walking, cycling and mobility devices. Achieving this objective will mean:

- the transport system is more accommodating of human error;
- the level of unsafe user behaviour is minimised; and
- where applicable, the forces that injure people in a crash are managed to a level the human body can tolerate without serious injury.

Key performance indicators

- Reduce deaths and serious injuries on the region's road network below 2014 levels (five year rolling average).
- Reduce deaths and serious injuries with alcohol as a contributing factor below 2014 levels (five year rolling average).
- Reduce deaths and serious injuries with speed as a contributing factor below 2014 levels (five year rolling average).
- Reduce deaths and serious injuries on the region's rail network below 2014 levels (five year rolling average).

4.5 Access and resilience

Communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs.

Responds to the following strategic transport issues:

- Ageing population
- Network resilience
- Land use and transport integration

Access refers to an individual's ability to obtain the goods, services, and activities that society considers essential to their wellbeing. Being responsive to diverse user needs is a key consideration when providing for access.

Access can also be impeded by other factors including:

- network disruptions caused by natural hazard events or road crashes; or
- development patterns that increase the severance effects on communities and reduce the travel choices available to them.

Achieving this objective will mean developing a transport system that is responsive to the full range of factors that impact on an individual's ability to access essential goods, services and activities.

Key performance indicators

- Reduce the number of hours that sections of National or Regional strategic routes are closed due to unplanned access disruptions below 2014 levels.
- Increase the percentage of buses on Urban Connector services arriving at their destination on time above 2014 levels.

- Increase total trip legs travelled by walking, cycling and public transport in the region above 2014 levels (three year rolling average).

4.6 Affordability

Investment in the transport system maximises use of available resources and achieves value for money.

Responds to the following strategic transport issue:

- Asset affordability.

Achieving this objective will mean transport infrastructure assets are maintained to fit for purpose levels of service. Future sources of revenue and whole of life costs will be taken into account to ensure that current decisions do not compromise the region's ability to maintain its assets in the future.

Key performance indicators

- No decline in local road network condition/cost indices from 2014 levels.
- No decline in State Highway condition/cost indices from 2014 levels.
- No decline in the rail network Track Quality Index on National Strategic Routes from 2014 levels.

4.7 Energy efficiency

People choose the best way to travel to improve energy efficiency and reduce reliance on non-renewable resources.

Responds to the following strategic transport issues:

- Fuel reliance
- Urban congestion
- Land use and transport integration

There are both environmental and economic risks associated with being reliant on a imported non-renewable transport energy source. Transport emissions have significant effects on the environment, including on public health and climate change. More efficient energy use and a more diverse mix of energy sources can also greatly reduce our exposure to international oil prices.

Achieving this objective will mean optimising the amount of travel that is achieved from existing transport energy sources (e.g. increased fuel efficiency, increased vehicle occupancy) and encouraging greater use of more energy efficient modes.

Key performance indicators

- Increase the number of person kilometres travelled in the region per litre of fuel purchased above 2010-14 levels (four year rolling average).
- Reduce distance per capita travelled in single occupancy vehicles in major urban areas on weekdays below 2010-14 levels (four year rolling average).

4.8 Environmental sustainability

The social and environmental effects arising from use of the transport system are minimised.

Responds to the following strategic transport issues:

- Social and environmental effects
- Fuel reliance
- Land use and transport integration

Environmental sustainability is about developing the region's transport system in a way that meets the needs of the present without compromising the ability of future generations to meet their own needs. Achieving this objective will mean adopting measures to mitigate or avoid the local, national and global environmental effects arising from use of the region's transport system.

Key performance indicators

- Reduce the levels of transport-related particulate matter (PM10) in Tauranga and Rotorua below 2014 levels.
- Reduce nitrogen dioxide (NO2) concentrations at sites in Tauranga and Rotorua below 2014 levels.
- Reduce vehicle kilometres travelled on unsealed roads in the region below 2014 levels.

Chapter 5: **Strategic Response**

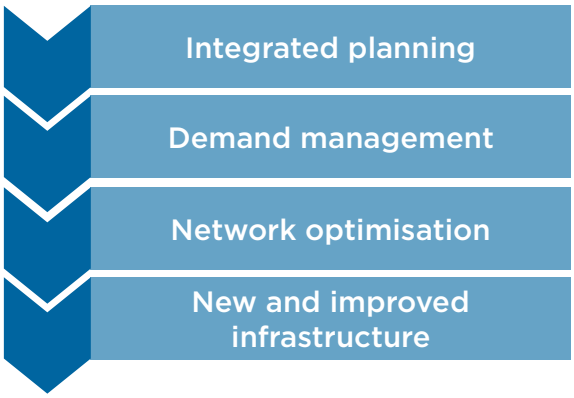
This chapter describes the Bay of Plenty's strategic response for the long-term management of the transport system to address the issues identified in **Chapter 3** and achieve the objectives in **Chapter 4**. The strategic response was previously selected from a range of alternatives and options developed and evaluated using a multi-criteria framework[48].

5.1 Optimised Transport System

The Bay of Plenty's strategic response is an Optimised Transport System. Analysis of future regional travel demands found a 'business as usual' approach would result in levels of private vehicle use that would present significant challenges, especially in urban areas at peak times. This would have detrimental effects on the regional economy.

The Optimised Transport System means considering a hierarchy of interventions to optimise the performance of the region's land transport system (Figure 17)[49].

Figure 17: Intervention hierarchy for the Optimised Transport System



5.2 Investment

The Bay of Plenty has followed an Investment Logic Mapping (ILM) process to identify its short-medium term priorities for investment in the region's land transport system. The ILM process involves key stakeholders[50] working together to develop an investment logic map that tracks the relationship between identified problems, the benefits of resolving them and the region's strategic approach (Appendix 2).

The region has determined that an investment approach centred on the ILM priorities of improved economic performance, increased safety, and improved access and resilience, balanced by the remaining four RLTP objectives, is the preferred option to support delivery of the vision and objectives in the short to medium term, commencing with investment in the NLTP 2015/18 (Figure 18). The region will undertake a three yearly review of these investment priorities to determine whether they are still fit for purpose prior to development of the NLTP 2018/21.

Investment Logic Mapping

ILM is a technique to ensure intelligent discussion and thinking is done up-front, before solutions are identified and before any investment decision is made. It is a technique to ensure the 'story' about any proposed investment makes sense (the 'logic' part of ILM) and test and confirm that the rationale for a proposed investment is evidence-based and sufficiently compelling to commit to further investigation and planning.

The Investment Logic Map is a simple flowchart that tells the story of an investment and exposes its underpinning logic.

48 The analysis underpinning this chapter is further detailed in the Bay of Plenty Transport Futures Study.

49 As recommended in the New Zealand Transport Agency's Planning and Investment Knowledge Base.

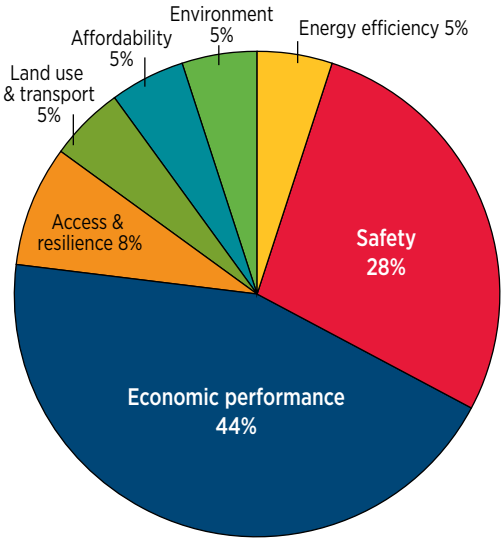
50 Participants included: the regional council, city and district councils, police, freight, rail and public health representatives. Evidence considered in the process included: safety statistics and risk factors; social costs of deaths and serious injuries; traffic counts; travel delay indicators; freight projections; mode share; network resilience studies; road and rail maintenance levels of service.

The region's investment priorities align with the **Government Policy Statement** priorities of:

- **Economic growth and productivity**;
- **Road safety**; and
- **Value for money**.

They are also mode neutral and support the balanced investment approach required for delivery of the Optimised Transport System. However, it is important to note that the region's investment priorities are one input into investment decision-making at the national level. Each activity is also subject to the NZTA's national Investment Assessment Framework which is applied in the development of the NLTP.

Figure 18: Bay of Plenty investment priorities



5.3 Integrated planning

Integrated planning sits at the top of the intervention hierarchy and involves taking a co-ordinated, forward thinking and holistic approach to enhance the relationship between the transport system and the activities it serves. Integrated planning involves co-ordination between the agencies responsible for transport, land use and infrastructure planning, including the co-ordination of public and private sector planning and funding.

A core function of integrated planning within the transport sector is developing land use and transport strategies that serve to reduce overall travel demand and the costs associated with infrastructure provision. This typically includes staging growth to coincide with available capacity on the network.

Integrated planning is taking place at several different scales in the Bay of Plenty. Figure 19 lists some examples of recent and ongoing processes which support integrated planning outcomes in the region.

Figure 19: Integrated planning in the Bay of Plenty

Scale	Examples	Theme
National	Safer Journeys / Safe System approach	Road safety
Pan-regional	UNISA Freight Story	Freight
Regional	Regional Land Transport Plan	Transport and land use
	Invest Bay of Plenty	Spatial
Sub-regional	SmartGrowth	Spatial
	Rotorua Spatial Plan	Spatial
	Eastern Bay of Plenty Spatial Plan	Spatial
	Road Safety Committees	Road safety
	Eastern Bay of Plenty Road Safety Signature Project	Road safety
	Eastern Bay of Plenty Route Security Strategy	Network resilience
Corridor/network	Tauranga Transport Strategy	Transport and land use
	Rotorua Integrated Network Strategy	Transport and land use
	State Highway 1/29 – East Coast Main Trunk Line Working Group	Transport and land use

5.3.1 Integrated road safety planning

Road safety is a key principle that underpins all activities that are delivered as part of the Optimised Transport System. Safer Journeys 2010-2020, the New Zealand road safety strategy, provides the direction for integrated road safety implementation in the Bay of Plenty.

Safer Journeys takes a 'safe system' approach to road safety. The four pillars of the 'safe system' are safe roads, safe speeds, safe vehicles and safe road use. The goal is to ultimately achieve:

- Safe roads – that are predictable and forgiving of mistakes. They are self-explaining in that their design encourages safe travel speeds.
- Safe speeds – travel speeds suit the function and level of safety of the road. People understand and comply with the speed limits and drive to the conditions.
- Safe vehicles – that prevent crashes and protect road users, including pedestrians and cyclists, in the event of a crash.
- Safe road use – road users that are skilled and competent, alert and unimpaired. They comply with road rules, take steps to improve safety, and demand and expect safety improvements.

The Safer Journeys 2013-15 Action Plan outlines a number of programmes designed to implement the Safer Journeys strategy. These include the Safe System Signature Programme, which comprises projects that are advanced in partnership with a range of stakeholders to give effect to Safe System principles with the goal of reducing road casualties.

The rural road safety signature project in the Eastern Bay of Plenty is one of just three Safe System Signature Projects that are being implemented. The agreed focus for this project is: disengagement from the system (licensing, compliance), restraints, impairment, speed, and road and roadsides.

5.3.2 The regional safe system approach

To give effect to the national framework in the Bay of Plenty there is a need to establish road safety priorities that will help to address the region specific causes of crashes. Road safety in the Bay of Plenty is primarily managed through the Road Safety Action Plans developed by three sub-regional Road Safety Committees. The Road Safety Committees have adopted the safe system approach and will target priority local issues using this approach.

Local government in the region also has an ongoing responsibility in the following areas:

- planning, developing and maintaining safe local roads and roadsides;
- informing and educating the public about road safety issues;
- providing effective road safety regulation at the local level;
- adequately funding road safety activities; and
- integrating safety considerations for all modes into land use planning.

5.3.3 Police activities

Police activities are an integral part of the region's safe system approach. Police enforcement and prevention-based activities in the Bay of Plenty will continue to target the 'fatal five' contributing factors to fatal and serious crashes:

- **Speed** – targeting excess speeds and inappropriate speed for road conditions while working with road controlling authorities on appropriate speed zoning.
- **Alcohol and drug driving** – using a general deterrence approach to remove affected drivers from the network and dissuade others from driving impaired before they start.
- **Restraints** – through targeted enforcement and co-operative education initiatives, improve the wearing rate and decrease the injury rate arising from not using vehicle restraints.
- **Dangerous and careless driving** – targeted enforcement of high risk behaviours with a timely and effective response.
- **High-risk drivers** – through both enforcement and education reduce the impact of high risk drivers on the network.

These activities will be targeted to high risk locations at high risk times. In particular, police will focus on:

- SH2 (Katikati – Bethlehem) – targeting the recent increases in deaths and serious injuries on this corridor.
- SH29 (Kaimai Ranges) – working with Waikato road policing staff and the NZTA to address the high crash rate during inclement weather on this strategic route.
- Eastern Bay of Plenty – supporting the development of the Eastern Bay of Plenty rural road safety signature project.
- SH5 – promoting safe driving on this key freight and tourism route.

The policies in **Chapter 6** provide regional guidance on interventions to support integrated planning outcomes.

Integrated planning processes at the sub-regional scale and below are recognised in the applicable corridors and networks in **Chapter 7**.

5.4 Demand management

Demand management is the term used for policies and programmes that enable and encourage people to manage their travel behaviour. Demand management addresses the primary drivers of travel demand and considers how these may be managed in a way that reduces total demand, especially at peak times. Demand management initiatives generally seek to achieve one or more of the following objectives:

- Improve the overall efficiency of the transport network.
- Prioritise travel so higher value trips and more efficient modes are given priority over low value travel and less efficient modes.
- Increase transport options.

A comprehensive demand management strategy has been developed for the Bay of Plenty covering the following strategy areas:

- **Urban form**
  Poorly connected street networks and fragmented site development contribute to an urban environment where it becomes easier to travel by vehicle than by other modes. An urban form featuring good accessibility and connectivity will reduce travel demand and improve mode choice.
- **Land use**
  Dispersed land use patterns limit travel options and increase journey length. Achieving diverse land use patterns that are adaptable and responsive to changing socio-economic preferences will increase mode choice and reduce overall travel demand.
- **Alternatives to travel**
  Developments in information and communications technology are bringing about rapid changes in the way that people access employment, goods and services. Increased uptake of online services, as well as teleworking and flexitime in traditional working environments has the potential to suppress demand during peak periods in particular.
- **Economic incentives**
  Economic incentives can have a significant impact on demand by increasing the transparency of costs associated with different travel choices, including external costs such as reduced economic efficiency, diminished land use opportunities, pollution and emissions.
- **Social factors**
  Ensuring that transport users are not only aware of, and understand the range of travel options available to them, but also the full costs associated with each of these options, will improve the ability of users to pick the option that best meets their needs.
- **Infrastructure and services**
  Delivering both transport infrastructure and services to provide efficient and effective mode choices improves the management of travel demand across the network. There should also be a focus on measures to improve the reliability of various modes.

Demand management initiatives have been identified to implement the strategy (Figure 20). The majority of these are currently being delivered by relevant organisations through the implementation of various strategies and plans. The measures operate at the following spatial scales:

- **Regional**
  Initiatives that can be effectively applied region-wide or at strategic locations throughout the region. Includes region-wide public transport service enhancements.
- **Urban centres**
  Initiatives that apply to the main urban centres of Tauranga and Rotorua. These initiatives are most applicable to these centres because they respond to urban issues such as larger scale population growth and development.
- **Town centres**
  Initiatives that apply to the Whakatāne, Ōpōtiki, Kawerau, Te Puke and Katikati town centres, as well as identified urban growth areas such as Omokoroa and Waihī Beach. The main objective of these measures is to support the development of town centres in which it is easy to get around by walking, cycling and public transport.

Figure 20: Bay of Plenty demand management initiatives

Strategy Area	Demand Management Initiative	Spatial Scale		
		Regional	Urban Centres	Town Centres
Urban form	Connected street networks - ensure that footpath and road networks minimise the length of required trips and increase viability of active modes. Implement through district plans and network improvement programmes.		✓	✓
	Urban design enhancements – provide safe and attractive walking and cycling links between centres and activities. Focus on key centres, transport corridors and other public spaces. Implement through network improvement programmes.		✓	✓
	Intensify existing areas - to minimise trip lengths and enable access to key locations by different modes. Implement through district plans.		✓	
Land use	Network plans – develop plans that spatially link transport networks for all modes with residential and employment patterns.		✓	
	Freight efficiency improvements – encourage the development of off-Port storage facilities capable of 24/7 operations.	✓		
	Location of key destinations – plan for the strategic location of key destinations such as education and health facilities, large-scale retail and commercial development to reduce travel distances. Implemented through regional policy statement, spatial plans and district plans.	✓	✓	✓
	Remove minimum parking requirements for developments in district plans to allow for more efficient land use in urban centres, encourage increased development densities, and improve the viability of public transport services.		✓	
Alternatives to Travel	Teleworking and flexitime – promote the use of ICT to reduce the total level of work trips during peak periods.	✓		
Economic Incentives	Road pricing – promote ongoing discussion of road pricing within the region.	✓	✓	
	Performance based parking management – includes using pricing (rather than time-limits) to manage demand for parking in key locations where demand for parking is high, and monitoring the use of parking.		✓	✓
Social Factors	Promotion and marketing of travel options - build on existing promotion and marketing of travel options, including public transport services, active modes and ride-share.	✓	✓	✓
	Travel plans - work with larger businesses and organisations, schools and community groups to develop travel plans.		✓	✓
Infrastructure and services	Walking and cycling networks – investment to support completion of strategic walking and cycling networks.	✓	✓	✓
	Improved public transport – investment to increase levels of service on urban networks, particularly strategic corridors.		✓	

Strategy Area	Demand Management Initiative	Spatial Scale		
		Regional	Urban Centres	Town Centres
Infrastructure and services	Multi-modal connections - to improve the integration of public transport, active modes and private transport options. This will involve identifying and developing locations for public transport interchanges (including future Park and Rides), stops and shelters.	✓	✓	✓
	Integrated ticketing - for the public transport system across the region.	✓		
	Real-time information – identify applications for public transport and parking facilities. May include provision of wireless internet access to public transport users at terminals, bus stops and on services.	✓	✓	
	Demand responsive services - to address emerging areas of demand. This may include investigating the feasibility of flexi-bus services for rural areas and night services in urban centres.	✓		
	Priority measures for specific modes - including pedestrian priority at intersections, bus and freight advance signals, bus and HOV lanes within identified areas or times. The relevance of these measures will vary depending on location and the function of strategic routes.		✓	

5.5 Network optimisation

Network optimisation is closely related to demand management and involves using a range of tools to optimise investment in and use of the existing network. Examples of network optimisation measures include:

- Intelligent Transport System (ITS) technologies;
- variable messaging systems and real time traveller information;
- signal phasing and ramp metering;
- implementation of High Productivity Motor Vehicle routes; and
- maintaining networks to fit for purpose levels of service.

Network optimisation is particularly important for urban areas under growth pressures and strategic freight networks. Two tools that have been developed to assist with network optimisation are Network Operating Frameworks (NOFs) and the One Network Road Classification (ONRC).

5.5.1 Network Operating Frameworks

A Network Operating Framework (NOF) is a planning process that establishes agreed strategic objectives for an area then identifies how the network will be operated to deliver the objectives. The five key steps in the process are:

1. Agree **strategic objectives**.
2. Develop a the **network map** for each mode and adjacent land uses.
3. Develop a **mode priorities map** in relation to adjacent land uses and differentiated by time of day.
4. Identify **network performance operating gaps** (the difference between current network performance and that required to achieve strategic objectives).
5. Identify and **test interventions** to improve network performance.

The final outputs of the process are a Network Operating Plan to guide operational activities on the network in the short term, and a Network Improvement Plan which is typically a longer term view of the network.

In the Bay of Plenty, the NOF has been piloted in the Mount Maunganui – Hewletts Road section of the Tauranga urban network. Depending upon the outcomes of the pilot project, it is anticipated that the approach will subsequently be rolled out across the Tauranga and Rotorua urban networks.

5.5.2 One Network Road Classification

The ONRC has been recognised as an important tool for optimising investment in the roading network and achieving value for money from road maintenance and renewal activities. The ONRC has three components as shown in the following figure.

Figure 21: One Network Road Classification components

The classification has six functional categories, with criteria and thresholds for each based on the functions the road performs within the network. There are also high volume and low volume subsets in the National and Access categories respectively (Figure 22).

Figure 22: One Network Road Classification functional categories

Category	Description
National	Make the largest contribution to the social and economic wellbeing of New Zealand by connecting major population centres, major ports or international airports and have high volumes of heavy commercial vehicles or general traffic.
(high volume)	Meets at least 1 of the high volume criteria.
Regional	Make a major contribution to the social and economic wellbeing of a region and connect to regionally significant places, industries, ports or airports. They are also major connectors between regions and in urban areas may have substantial passenger transport movements.
Arterial	Make a significant contribution to social and economic wellbeing, link regionally significant places, industries, ports or airports and may be the only route available to some places within the region (i.e. they may perform a significant lifeline function). In urban areas they may have significant passenger transport movements and numbers of cyclists and pedestrians using the road.
Primary Collector	Locally important roads that provide a primary distributor/ collector function, linking significant local economic areas or areas of population. They may be the only route available to some places within the region and in urban areas they may have moderate passenger transport movements and numbers of cyclists and pedestrians using the road.
Secondary Collector	Provide a secondary distributor/ collector function, linking local areas of population and economic sites and may be the only route available to some places within this local area.
Access	All other roads.
(low volume)	Meets low volume criteria.

A number of benefits are anticipated from implementing the ONRC. These include:

- More consistent asset management across the country.
- Road users will increasingly have consistent experiences across the country on roads in the same category. This will aid journey safety and consistency.
- Improved opportunities for collaboration between organisations responsible for planning, delivering, operating and maintaining the nation's road network.

Customer Levels of Service (CLoS) have been developed at the national level to describe the 'fit for purpose' customer experience each category of road should provide to road users, over time, if the road is to fulfil its function within the national network. CLoS outcomes are described in Figure 23.

Figure 23: One Network Road Classification – customer levels of service

Customer Levels of Service Outcomes	
Mobility	• *Travel time reliability* - the consistency of travel times that road users can expect. • *Resilience* - the availability and restoration of each road when there is a weather or emergency event, whether there is an alternative route available and the road user information provided. • *Optimal speeds (safety and efficiency):* indicates the optimal speed for each road. The optimal speed is the speed that is appropriate for road function (classification), design (including safety) and use. Optimal speeds support both safety and economic productivity.
Safety	How road users experience the safety of the road.
Amenity	The level of travel comfort experienced by the road user and aspects of the road environment (e.g. cleanliness, comfort/ convenience and security) that impact on the travel experience of road users in the road corridor.
Accessibility	The ease with which people are able to reach key destinations and the transport networks available to them – includes land use access and network connectivity.

For many roads, customer levels of service will be the same as those currently experienced. However, in some cases there may be a gap between what is experienced and what should be experienced or is 'fit for purpose' (either more or less).

Applying the ONRC involves:

1. categorising the region's roads according to the six functional categories;
2. applying fit for purpose CLoS to each road category;
3. identifying any key gaps between current conditions and the CLoS;
4. developing a business case to address any gaps; and
5. developing transition plans to move from maintaining the current condition of networks to investing in fit for purpose CLoS.

The following milestones have been identified for ONRC implementation in the Bay of Plenty (Figure 24).

Figure 24: Bay of Plenty One Network Road Classification milestones

NLTP 2015/18
Road controlling authorities have: • applied the ONRC to their networks • identified differences between current and 'fit for purpose' CLoS • agreed appropriate Performance Measures • developed an understanding of the financial implications of the ONRC • developed transition processes in their Activity Management Plans (AMPs)
NLTP 2018/21
Road controlling authorities have: • implemented business cases to address CLoS gaps in their networks • ensured that the ONRC is fully embedded in their AMPs

5.6 New and improved infrastructure

Investment in new and improved infrastructure will be necessary once other options in the intervention hierarchy have been fully explored. The following sections provide a high level summary of mode specific investment that has the potential to deliver on the region's investment priorities. Detailed investment objectives will be identified for individual corridors or activities as programme business cases are developed over the 2015-18 period.

Road network

Modelling of regional travel demands found that even in a low travel demand scenario, car-based transport modes (driver and car-passenger) will make up approximately 74% of trips and 85% of kilometres travelled in the region in 2040[51]. The road network will remain the backbone of the regional transport system even if the growth in demand is increasingly accommodated in other ways. Consequently, continued investment in new infrastructure will be necessary once other options in the intervention hierarchy have been fully explored.

A balanced investment approach will serve to improve the effectiveness and efficiency of the road network because, for a given level of roading capacity, traffic congestion and travel times will be lower. This will enhance the benefits generated by investment in roading improvements and in the long-term, may provide the opportunity to delay some road improvement projects by reducing the rate of traffic growth.

Recommended investment focus areas include:

- strategic freight networks
- safety improvements
- connectivity improvements
- network resilience
- key tourist routes

Rail network

Investment in the rail network should focus on supporting the inter and intra-regional movement of products to and from the Port of Tauranga to ensure there is sufficient capacity to meet projected freight demand increases, and possible changes in the pattern of demand resulting from the introduction of larger ships.

Recommended investment focus areas include:

- resilience improvements (Kaimai Tunnel floor, rail bridges)
- reliability improvements (signalling upgrades, preventative maintenance)
- rail capacity improvements (passing loops, additional rolling stock, increased axle loads)
- inter-modal facilities and hubs (sidings, expanded loading and storage facilities)

Public transport

Public transport competes most effectively with private vehicles for medium distance trips in urban areas, particularly into areas affected by congestion and with managed parking. Analysis of trends in public transport use in the Bay of Plenty found that 99% of the growth in trips over a five year period was concentrated in a few key area units within the Tauranga and Rotorua urban areas[52].

Investment should be focused on the improvement of urban services and infrastructure. The continued expansion of service sectors and movement towards higher value added activities in the regional economy will increase passenger flows in the larger urban centres. Investment in the Tauranga network is necessary in the short term because the transitioning of children from school bus services will place additional strain on the road network if the bus network has insufficient capacity. There will also be increased access requirements as the urban population ages.

Continued support for rural services is also necessary to provide people with access to essential community goods and services. While fixed services should continue to operate between settlements, there is also the potential to provide more flexible demand-responsive services for different groups of users.

Recommended investment focus areas include:

- targeted increases in urban services at peak times
- transitioning of Tauranga school bus services
- provision of high quality and accessible public transport infrastructure

51 *Bay of Plenty Transport Futures Study.*

52 Stock Take of Passenger Transport Functions in the Bay of Plenty Region.

Walking and cycling

Cycling and walking are viable transport options for short to medium length utility journeys and fulfil an important demand management role in urban areas. These modes can also contribute to a healthier work force, which can in turn, increase productivity and support economic development outcomes.

Recent analysis has shown that relatively low cost investment in improved facilities on key urban walking and cycling routes has achieved significant increases in walking and cycling trips in the Bay of Plenty[53]. Consequently, investment should focus on the delivery of strategic urban cycle networks in Tauranga, Rotorua and Whakatāne. The integration of existing networks with high quality connections to new urban growth areas should also be encouraged.

In terms of walking, priority should be given to pedestrian improvements that support key activity centres, such as town centres, complement increases in public transport, or integrate with new urban growth areas. For both modes, strategic investments need to be supported by more dispersed improvements to increase the safety of walking and cycling environments.

Recommended investment focus areas include:

- delivery of urban cycle networks
- pedestrian environments that support key activity centres
- connections to new growth areas
- walking and cycling safety improvements
- inter and intra-regional networks for commuting, recreation and tourism purposes that link to the national cycle network.

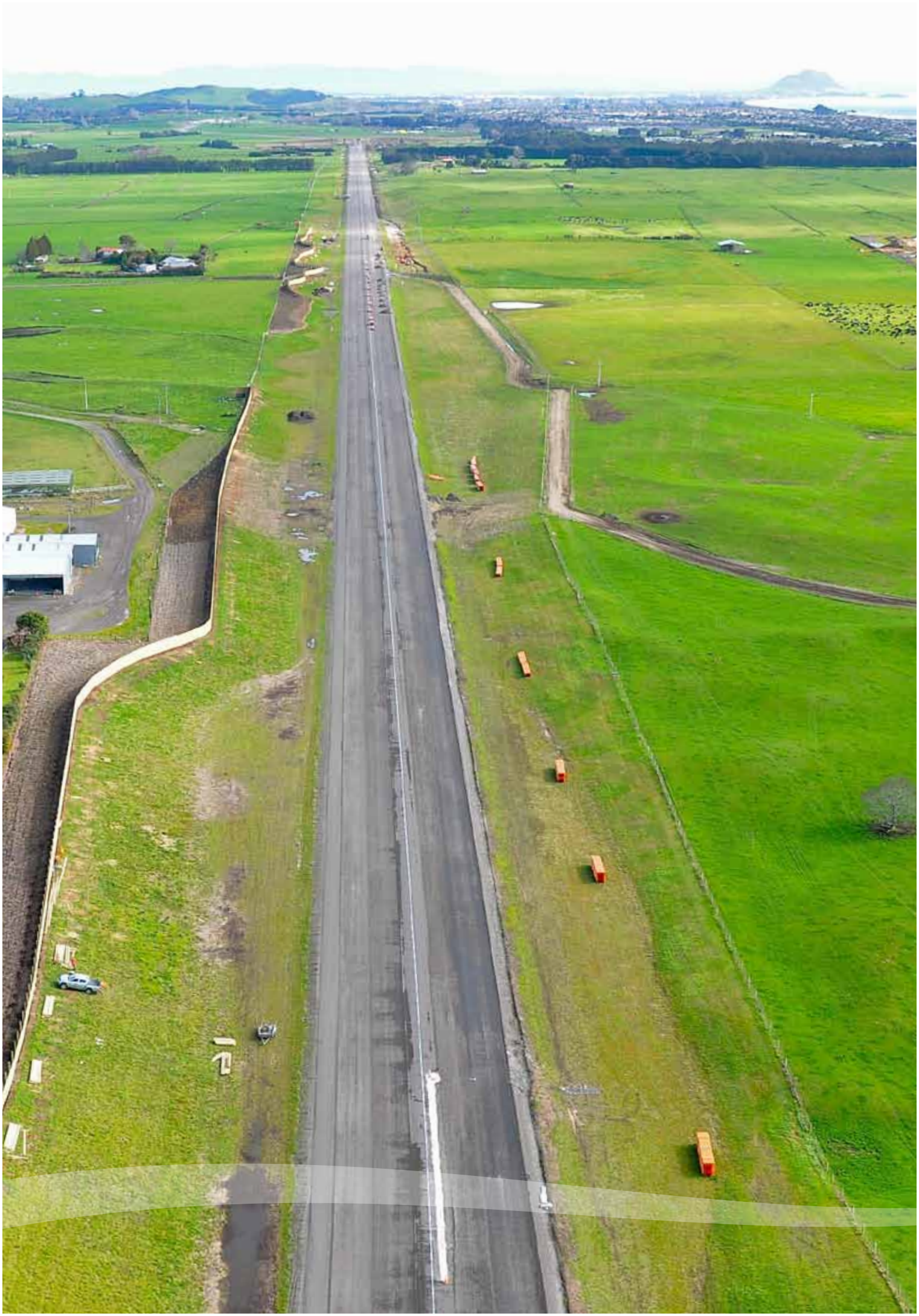
53 *Bay of Plenty Transport Futures Study.*

Part II: **Delivery**

Delivery of the RLTP strategic direction will require a range of regional, sub-regional and local interventions to support the region's objectives and to implement the Optimised Transport System approach. The interventions in this plan operate at two spatial scales:

- Region-wide implementation of policies **(Chapter 6)**; and
- Implementation of the Optimised Transport System through a range of activities for each significant corridor and network in the region **(Chapter 7)**.

The regional programme detailed in **Chapter 8** and **Appendix 3** then identifies and prioritises those activities for which the region is seeking funding from the National Land Transport Fund over the next 6 years (2015/16-2020/21).



Chapter 6: **Policies**

The policies in this chapter are designed to guide the actions of organisations responsible for implementing the plan, and are organised according to the primary regional transport objective that they support. It is important to note that the objectives are inter-related so a policy may support one or more objectives in the plan. The policies rely heavily on the co-operation and commitment of the identified agencies to ensure their successful implementation.

6.1 Economic performance

1. Prioritise investment for transport activities in the Regional Land Transport Plan, the State Highway Activity Management Plan (Bay of Plenty) and local authority Long Term Plans to implement the strategic response in the Plan. *(Regional Transport Committee, NZTA, city and district councils, BOPRC)*
2. Promote, develop and protect the State Highway 1/29-East Coast Main Trunk corridor as the strategic long term corridor connecting Auckland and the Waikato with the Bay of Plenty. *(SH1/29-ECMT Working Group, NZTA, KiwiRail, city and district councils, BOPRC, WRC, AC)*
3. Co-ordinate planning for roads, rail and shipping to ensure that freight movements in the region and the upper North Island are managed in an integrated manner. *(NZTA, KiwiRail, Port of Tauranga, BOPRC, WRC, city and district councils)*
4. Advocate for increased investment in rail capacity and rolling stock in the region and the upper North Island to accommodate projected inter and intra-regional freight movements. *(Regional Transport Committees, SH1/29-ECMT Working Group, KiwiRail, BOPRC, WRC, AC)*
5. Prioritise investment for activities identified in the Tauranga Eastern Link Network Plan to gain maximum value from the Tauranga Eastern Link. *(NZTA, TCC, WBOPDC)*
6. Improve and maintain key tourism routes to provide safe and efficient access to major tourist destinations. *(NZTA, regional tourism organisations, city and district councils, BOPRC)*
7. Increase the productivity of high value urban land by removing minimum parking requirements for urban areas in city and district plans, and using performance-based parking management techniques. *(City and district councils)*

6.2 Safety

8. Adopt a safe system approach to managing priority road safety issues. *(Road safety committees, NZTA, city and district councils, BOPRC, Police)*
9. Work collaboratively to reduce risk and improve safety across and along rail corridors. *(KiwiRail, city and district councils, NZTA, BOPRC, Police)*
10. Implement school walking and cycling programmes to increase safety and reduce congestion associated with schools at peak times. (City and district councils)
11. Implement low speed and shared space environments in urban areas, particularly in town and suburban centres, and residential areas. *(City and district councils, NZTA)*
12. Encourage the adoption of Intelligent Transport System technologies that improve transport safety and efficiency. *(NZTA, city and district councils, BOPRC)*

6.3 Access and resilience

13. Identify, prioritise and mitigate network resilience issues to improve route security and maintain access for people and goods. *(NZTA, city and district councils, KiwiRail)*
14. Develop and manage transport corridors to maintain the permeability of the corridor for all users and minimise the severance effects on surrounding communities. *(NZTA, city and district councils, KiwiRail)*
15. Implement the Bay of Plenty Regional Public Transport Plan. *(BOPRC, city and district councils, NZTA)*

6.4 Land use and transport integration

16. Collaborate with neighbouring regions, city and district councils, the New Zealand Transport Agency and KiwiRail to protect the inter-regional functions of strategic transport corridors. *(BOPRC, WRC, AC, GDC, HBRC, HRC, NZTA, KiwiRail, city and district councils)*
17. Identify future transport corridors in plans or strategies, and ensure their long-term protection. *(BOPRC, city and district councils, NZTA, KiwiRail)*

18. Plan the location and design of new development in urban areas, including greenfield urban development[54], to give effect to:
    - minimising the number of private motor vehicle trips;
    - minimising the distance of remaining private motor vehicle trips; and
    - increasing the uptake of walking, cycling and public transport. *(City and district councils, BOPRC, NZTA)*
19. Plan the location and design of new development to support and complement the functioning of strategic transport networks, while managing the impact of reverse sensitivity and access effects. *(City and district councils, BOPRC, NZTA, KiwiRail)*
20. Encourage high person trip generating activities to locate in town centres or in locations that have good access to the region's strategic public transport network. *(City and district councils, BOPRC, NZTA)*
21. Encourage high freight trip generating activities to develop in locations with good access to the region's strategic road and rail networks. *(City and district councils, BOPRC, NZTA)*
22. Provide connected street networks to improve accessibility and route options for walking, cycling and public transport. *(City and district councils)*

6.5 Affordability

23. Develop and implement activity management plans that deliver fit for purpose and affordable levels of service consistent with the One Network Road Classification. *(NZTA, city and district councils)*
24. Maintain rail assets to protect the integrity of the network and minimise operating costs. *(KiwiRail)*
25. Work collaboratively to identify efficiencies and improve value for money in the delivery of road network maintenance activities. *(NZTA, city and district councils)*

6.6 Environmental sustainability

26. Implement demand management initiatives (regional, urban, town) within integrated packages of activities that respond to regional and national transport issues. *(City and district councils, BOPRC, NZTA)*
27. Identify and implement road construction, renewal and maintenance techniques that minimise the environmental impacts of noise, dust, vibration, air pollution, and storm water run-off. *(NZTA, city and district councils)*
28. Develop and expand inter-connected walking and cycling networks in urban areas that prioritise direct connections to key destinations. *(City and district councils, NZTA)*
29. Develop and expand inter and intra-regional walking and cycling networks for commuting, recreation and tourism that link to the national walking and cycling network. *(City and district councils, NZTA, BOPRC)*

6.7 Energy efficiency

30. Promote alternative transport and fuel technologies that reduce the use of fossil fuels. *(MoT, NZTA, city and district councils, BOPRC)*
31. Adopt national best practice fuel efficiency and emissions standards when procuring public transport services. *(BOPRC)*

54 For the western Bay of Plenty sub-region this means growth management areas identified in the Bay of Plenty Regional Policy Statement.

Chapter 7: Bay of Plenty Corridors and Networks

The Bay of Plenty has taken a corridors and networks approach to delivering the region's response to the issues (or pressures) that have been identified in this plan. The region has been divided into 14 key land use and transport corridors or networks as depicted in Figure 25.

Information is presented for each corridor or network to demonstrate the link between the region's strategic direction and the activities that make up the regional programme. It also references the evidence base underpinning the activities that are proposed for each corridor or network.

This approach recognises that while the region has an overarching set of transport issues, each corridor or network has its own unique mix of issues that need to be addressed. It is also designed to demonstrate the integrated approach being taken in the region not only in terms of integrated land use and transport strategies, but also the one network approach across state highway and local transport programmes. While high level issues and objectives have been identified for each corridor or network, these are subject to further refinement as programme business cases are developed for individual corridors and/or activities over the 2015-18 period.

Figure 25: Bay of Plenty corridors and networks

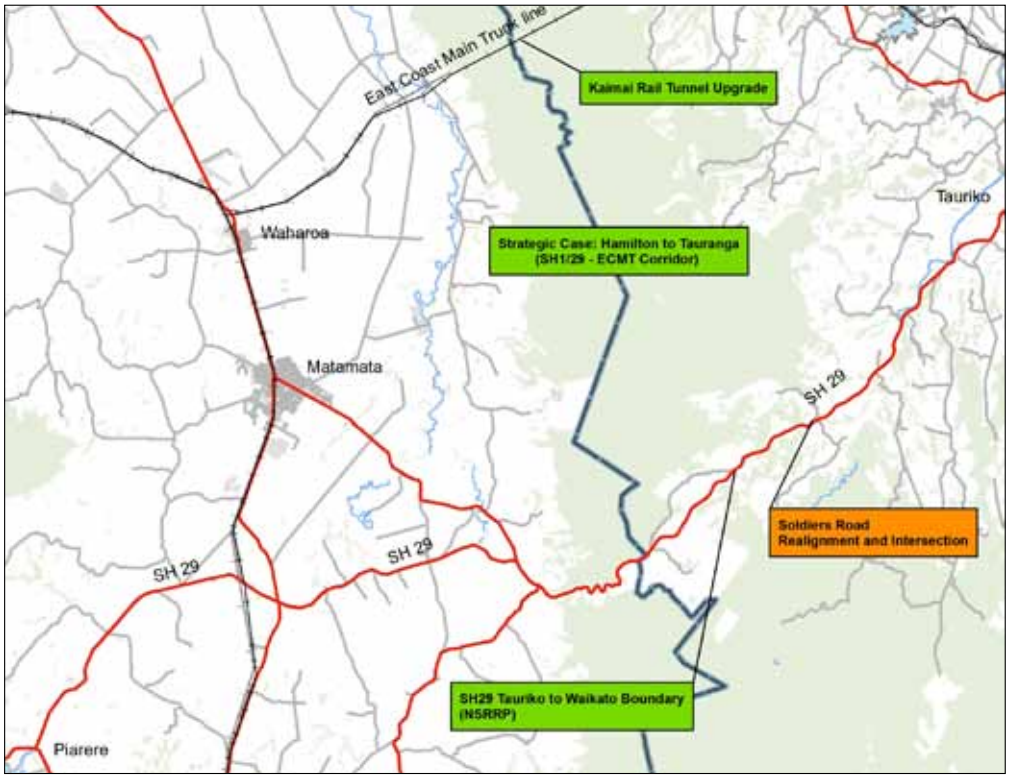
7.1 Piarere – Tauranga

Description	• Extends east from the SH1/29 intersection at Piarere to the Tauranga urban area. • Incorporates the SmartGrowth Western Corridor. • Features of the Bay of Plenty section (Tauranga-regional boundary) include: – SH29 between the Kaimai summit and Tauranga (National – High Volume) and HPMV route; – the ECMT between the Kaimai tunnel and Apata; and – the local road network and adjacent land uses.
Issues	The key RLTP issues applying to this corridor are: • **Freight growth** – projected increases in inter-regional freight movements between the Waikato and Bay of Plenty by road and rail. Road environment and access disruptions result in sub-optimal road freight operator costs. • **Safety** – the SH29 section in this corridor is rated High for collective risk. Western Bay of Plenty District is rated High Concern for young drivers, and alcohol and drugs. • **Land use and transport integration** – residential growth in Tauriko is placing pressure on the existing road network at the approaches to the Tauranga urban area. • **Network resilience** – unplanned events occasionally disrupt access on SH29 (crashes, slips and flooding).
Objectives	The key RLTP objectives for this corridor are: • **Economic performance** - the transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region. • **Land use and transport integration** - long term planning ensures regional growth patterns and urban form reduce travel demand, support public transport and encourage walking and cycling. • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Access and resilience** - communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs.
Regional investment priorities	• Improved economic performance • Increased safety
Inter-regional factors	• The SH1/29-ECMT corridor is identified as the strategic, long term, transport corridor connecting Auckland and the Waikato with the Bay of Plenty.
Land use factors	• The strategic importance of the corridor is largely related to its role in the movement of freight and people between the Auckland, Waikato and Bay of Plenty regions. There are also significant areas of pastoral farming and horticulture within corridor. • Freight and people movements along the eastern section of SH29 move through the Tauriko urban growth area (see Tauranga Urban Network). Land use changes in Tauriko have the potential to impact on the strategic transport function of SH29.
Freight Integration	• Most of the freight moving between Waikato and Bay of Plenty regions is transported either by road or rail on this corridor. There are opportunities to better integrate freight movements to optimise the relative strengths of the two modes.
Evidence base	• SmartGrowth Strategy 2013 • Upper North Island Freight Story (2013) • KiwiRAP (2012) • Communities at Risk Register 2014 • State Highway road closures 2010-14
Key partners	Western Bay of Plenty District Council, Matamata-Piako District Council, NZ Transport Agency, KiwiRail, Police, Tauranga City Council, Bay of Plenty Regional Council

Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025-)
Integrated planning	Alignment of transport planning with growth management and land use through delivery of SmartGrowth	✓	✓	✓	✓
	State Highway 1/29 – East Coast Main Trunk Working Group	✓	✓	✓	✓
	Strategic Case: Hamilton – Tauranga	✓			
	SH29 Tauranga to Hamilton Programme Business Case	✓			
Demand management	Rail network improvements to encourage increased use of ECMT for freight	✓	✓		
Network optimisation	Implementation of ONRC levels of service	✓	✓		
New and improved infrastructure	Kaimai Rail Tunnel upgrade	✓	✓		
	Minor improvements	✓	✓		
	Soldiers Road Realignment and Intersection	✓			
	SH29 Tauriko to Waikato Boundary (National Safer Roads and Roadsides)		✓		
	SH29 Stock Effluent Disposal Facility		✓		
	SH29 corridor freight efficiency improvements			✓	
	Belk Road upgrade including Belk Rd / SH29 intersection upgrade			✓	

Map Legend

- Significant activity in six year programme
- Significant activity not in draft SHAMP
- Activity of inter-regional significance
- Significant activity not funded from NLTF
- State highway
- Railway line



7.2 Waihī - Tauranga

Description	• Extends south from Waihī to the SH2 / Route K intersection within Tauranga. • Incorporates the SmartGrowth Northern Corridor. • Features of the Bay of Plenty section include: – SH2 between the regional boundary and Tauranga (Regional); – the ECMT rail line between Apata and Tauranga; – the local road network and adjacent land uses; and – a Rural Connector public transport service linking Katikati, Omokoroa and Te Puna to Tauranga.
Issues	The key RLTP issues applying to this corridor are: • **Safety** – SH2 sections in this corridor are rated High and Medium-High for collective risk. Western Bay of Plenty District is rated High Concern for young drivers, and alcohol and drugs. • **Land use and transport integration** – residential growth along this corridor is placing pressure on the existing road network, particularly at the approaches to, and within, the Tauranga urban area. • **Freight growth** – projected increases in inter-regional rail freight movements between the Waikato and Bay of Plenty. • **Network resilience** – constrained network with flooding and road crashes occasionally disrupting access on SH2. ECMT line closures also identified as a network risk. • **Social and environmental effects** - severance effects created by high use corridors passing through urban and peri-urban areas.
Objectives	The key RLTP objectives for this corridor are: • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Land use and transport integration** - Long term planning ensures regional growth patterns and urban form reduce travel demand, support public transport and encourage walking and cycling. • **Economic performance** - the transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region. • **Access and resilience** - communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs. • **Environmental sustainability** - the social and environmental effects arising from use of the transport system are minimised.
Regional investment priorities	• Improved safety • Improved economic performance
Inter-regional factors	• The corridor currently carries a significant proportion of the direct inter-regional freight movements between Auckland and the Bay of Plenty (road and rail). • The corridor provides tourism access between Auckland (via the Karangahake Gorge), the Coromandel and the Bay of Plenty.
Land use factors	• Major freight generating land uses include intensive kiwifruit and horticulture in the lowland areas, and more extensive areas of pastoral farming in the lower Kaimais. These require reliable access to processing centres and the Port of Tauranga. • The main settlements in the corridor are Katikati (population of 4,056 in 2013), Waihī Beach/Athenree (3,150) and Omokoroa (2,547). These settlements all include areas designated for future residential growth under the SmartGrowth Strategy.

Freight Integration	• The ongoing development of inter-modal facilities in South Auckland supports the relative efficiency of rail for direct inter-regional freight movements between Auckland and the Bay of Plenty on this corridor.
Evidence base	• SmartGrowth Strategy 2013 • Waikato Commercial Vehicle Route Preference Analysis (2014) • KiwiRAP (2012) • Communities at Risk Register 2014 • State Highway road closures 2010-14
Key partners	Western Bay of Plenty District Council, New Zealand Transport Agency, KiwiRail, Police Tauranga City Council, Bay of Plenty Regional Council, Waikato Regional Council, Hauraki District Council

Strategic response		**Yrs 1-3 (2015-18)**	**Yrs 4-6 (2018-21)**	**Yrs 7-10 (2021-25)**	**Yrs 11+ (2025-)**
Integrated planning	Alignment of transport planning with growth management and land use through delivery of SmartGrowth	✓	✓	✓	✓
	Tauranga Transport Strategy	✓	✓	✓	✓
	SH2 Waihī to Tauranga Programme Business Case (Safer Journeys)	✓			
Demand management	Application of town centre initiatives to Katikati, Waihī Beach and Omokoroa	✓	✓	✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
	Rail network improvements to encourage increased use of ECMT for freight	✓	✓		
New and improved infrastructure	SH2 Northern Corridor Safe System Programme	✓			
	HPMV - SH2 Waihī to Port of Tauranga	✓			
	Minden Te Puna Intersection Improvements	✓			
	Waihī Beach Road Alignment Improvement	✓			
	Omokoroa to Tauranga City Cycleway	✓			
	Waihī to Waihī Beach Cycle Trail	✓			
	Athenree to Omokoroa Cycle Route	✓			
	TCC Section of Omokoroa to Otumoetai Cycleway	✓			
	Minor improvements	✓	✓		
	Tauranga Northern Link		✓		
	Tuapiro Road Passing Lane		✓		
	Bridgman Lane Passing Lane		✓		
	Kauri Point Passing Lane		✓		
	Katikati Bypass				✓


Waihi
Waihi to Waihi Beach Cycle Trail
Waihi Beach
Waihi Beach Road Alignment Improvements
Bridgman Lane
Passing Lane
Tuapiro Road
Passing Lane
Athenree to Omokoroa
Cycle Route
Kauri Point
Passing Lane
Katikati Bypass
Katikati
Omokoroa to Tauranga
City Cycleway
SH2 Northern Corridor
Safe System Programme
Omokoroa
Minden Te Puna
Intersection Improvements
Tauranga Northern Link

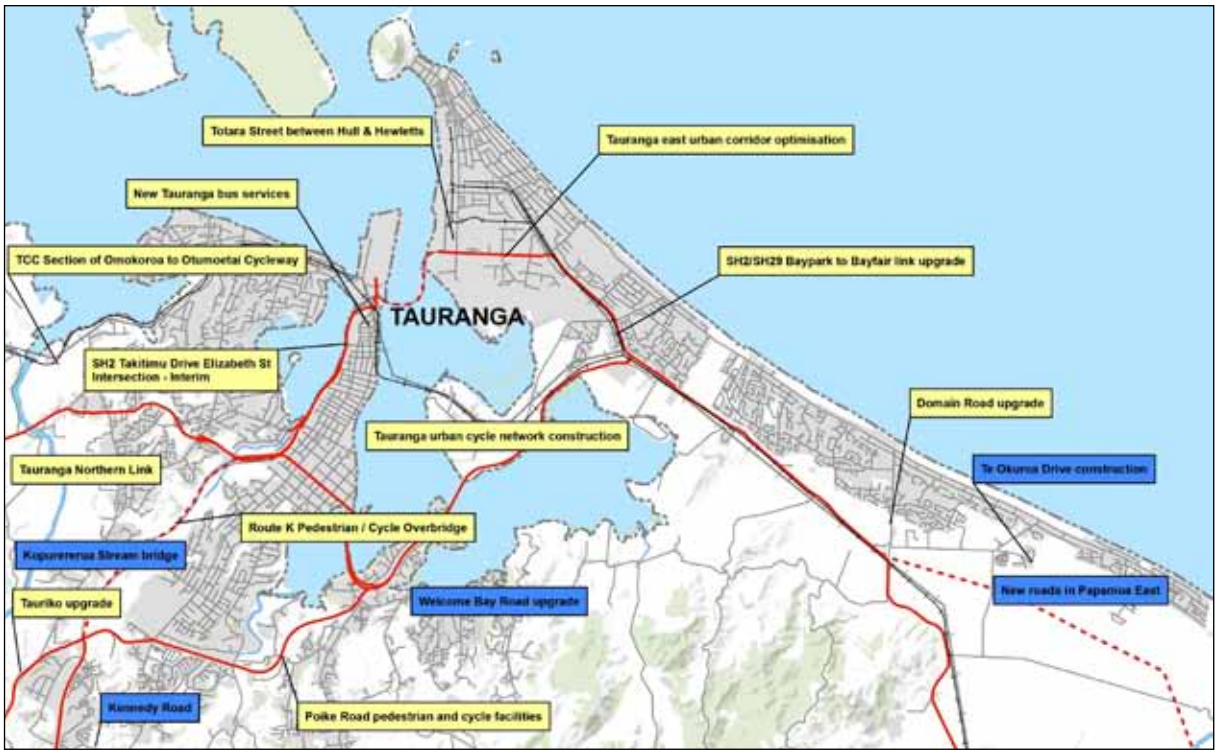
7.3 Tauranga Urban Network

Description	• Includes the Ring Road North Corridor, Ring Road South Corridor and Peninsula Corridor as defined in the Tauranga Transport Strategy. Incorporates the SmartGrowth Central Corridor. • Features include: – SH29 between Belk Rd (Tauriko) and Te Maunga: Belk Rd – Maungatapu (National – High Volume), Maungatapu – Te Maunga (Regional); – Route K toll road and SH2A (National – High Volume); – SH2 between the Wairoa River and Domain Rd (Papamoa): Wairoa River-Route K (Regional), Route K-Domain Rd (National – High Volume); – the local road network including Totara St (National – High Volume) and Cameron Rd (Regional), and adjacent land uses; – the Port of Tauranga; – Tauranga Airport; – the Tauranga urban public transport network; and – the Tauranga urban cycle and pedestrian networks.
Issues	The key RLTP issues applying to this network are: • **Urban congestion** - housing and commercial growth resulting in traffic congestion on key parts of the road network. • **Freight growth** - growing demand for efficient access to the Port of Tauranga and other commercial centres. • **Land use and transport integration** - a dispersed population and low density around key centres is increasing trip distances, reducing the attractiveness of non-car modes and increasing reliance on private car travel. • **Social and environmental effects** - the reliance on private car travel is impacting on access for those without the use of a private vehicle and creating severance effects. • **Ageing population** - Tauranga's ageing population will mean increasing future demand for accessible travel amongst those with few mobility options. • **Network resilience** - the strategic road and rail transport networks are vulnerable to disruption at high risk locations. • **Safety** - State Highway sections within the Tauranga urban area are rated High or Medium-High for collective risk. Tauranga City is rated Medium Concern for pedestrians. The Tauranga Transport Strategy identifies road crashes involving young drivers, motorcycles and intersections as areas of concern.
Objectives	The key RLTP objectives for this network are: • **Economic performance** - the transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region. • **Land use and transport integration** - long term planning ensures regional growth patterns and urban form reduce travel demand, support public transport and encourage walking and cycling. • **Access and resilience** - communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs. • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Environmental sustainability** - the social and environmental effects arising from use of the transport system are minimised.
Regional investment priorities	• Improved economic performance • Improved access and resilience

Inter-regional factors	• Port of Tauranga is New Zealand's largest export port, accounting for around 32% of New Zealand's exports by volume and value in 2014. Around 24% of all freight in the Bay of Plenty is inter-regional, most of it moving to or from the Port of Tauranga. • Tauranga is a significant attractor of domestic and international tourists. Total trips by visitors to the Bay of Plenty are forecast to increase to 3.9 million in 2016, including approximately 84,000 annual cruise ship visitors.
Land use factors	• Residential growth as a consequence of a growing population. Tauranga currently has a population of 117,280, which is forecast to increase by 52% to 178,773 in 2043. Tauranga includes areas designated for future urban growth under the SmartGrowth Strategy. • The Port of Tauranga plays a significant role in the regional and national economy, supporting wider economic productivity. • Significant trip generating land uses include: Tauranga CBD, Tauranga Hospital and the Bay of Plenty Polytechnic/University of Waikato campus. • Industrial and commercial areas at Mount Maunganui, Greerton and Tauriko are also significant contributors to the local and regional economy.
Evidence base	• Tauranga Transport Strategy 2012-2042 • SmartGrowth Strategy 2013 • Tauranga Eastern Link Network Plan 2011 • KiwiRAP (2012) • Communities at Risk Register 2014 • Tauranga Urban Network Risk Assessment • NIDEA Population Projections 2014
Key partners	Tauranga City Council, Western Bay of Plenty District Council, NZ Transport Agency, Bay of Plenty Regional Council, KiwiRail, Police

Strategic response		**Yrs 1-3 (2015-18)**	**Yrs 4-6 (2018-21)**	**Yrs 7-10 (2021-25)**	**Yrs 11+ (2025-)**
Integrated planning	Tauranga Transport Strategy	✓	✓	✓	✓
	Alignment of transport planning with growth management and land use through delivery of SmartGrowth	✓	✓	✓	✓
	Pāpāmoa East Interchange with Tauranga Eastern Link	✓			
	Tauranga Eastern Link Network Plan	✓			
	Tauriko Network Plan	✓			
	Tauranga Transport Model Rebuild	✓			
	SH2 Tauranga East Urban Corridor PBC		✓		
	South Urban Corridor (Tauranga Transport Strategy) PBC		✓		
Demand management	Application of urban centre initiatives	✓	✓	✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
	Application of freight priority and traffic management measures	✓	✓	✓	✓
	Public Transport - Inter-Regional Ticketing Improvement	✓			
	New Tauranga bus services		✓		
New and improved infrastructure	Route K - conversion to Electronic Toll Collection	✓			
	Hairini Link - Stage 4 (Development/Construction)	✓			
	SH2/SH29 Baypark to Bayfair link upgrade (Development/ Construction)	✓			
	Totara Street Upgrade	✓			

Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025-)
New and improved infrastructure	Tauriko Upgrade (Development/Construction)	✓	✓		
	Tauranga Northern Link (Development)	✓			
	Poike Road Pedestrian & Cycle Facility	✓	✓		
	Bethlehem to Wairoa Pedestrian/Cycle Facilities	✓	✓		
	Tauranga Urban Cycle Network Construction	✓			
	TCC Section of Omokoroa to Otumoetai Cycleway	✓			
	Te Okuroa Drive Construction	✓		✓	
	Tauranga East Urban Corridor Optimisation		✓		
	SH2 Takitimu Dr Elizabeth St Intersection - Interim		✓		
	SH2 Hewletts Rd Flyover-Bayfair (National Safer Roads & Roadsides Programme)		✓		
	Domain Road Upgrade		✓		
	Tara Road Upgrade		✓		
	Route K Pedestrian / Cycle Overbridge		✓		
	City Centre car park building			✓	
	Pāpāmoa East Interchange[55]			✓	
	Turret Road / 15th Avenue four laning				✓



55 The SmartGrowth Settlement Pattern Review (SSPR) had not been completed at the time the RLTP was being finalised. The indicative timing of the Papamoa East Interchange in the RLTP is subject to change pending the outcomes of the SSPR. The RLTP will be varied as required following completion of the SSPR.

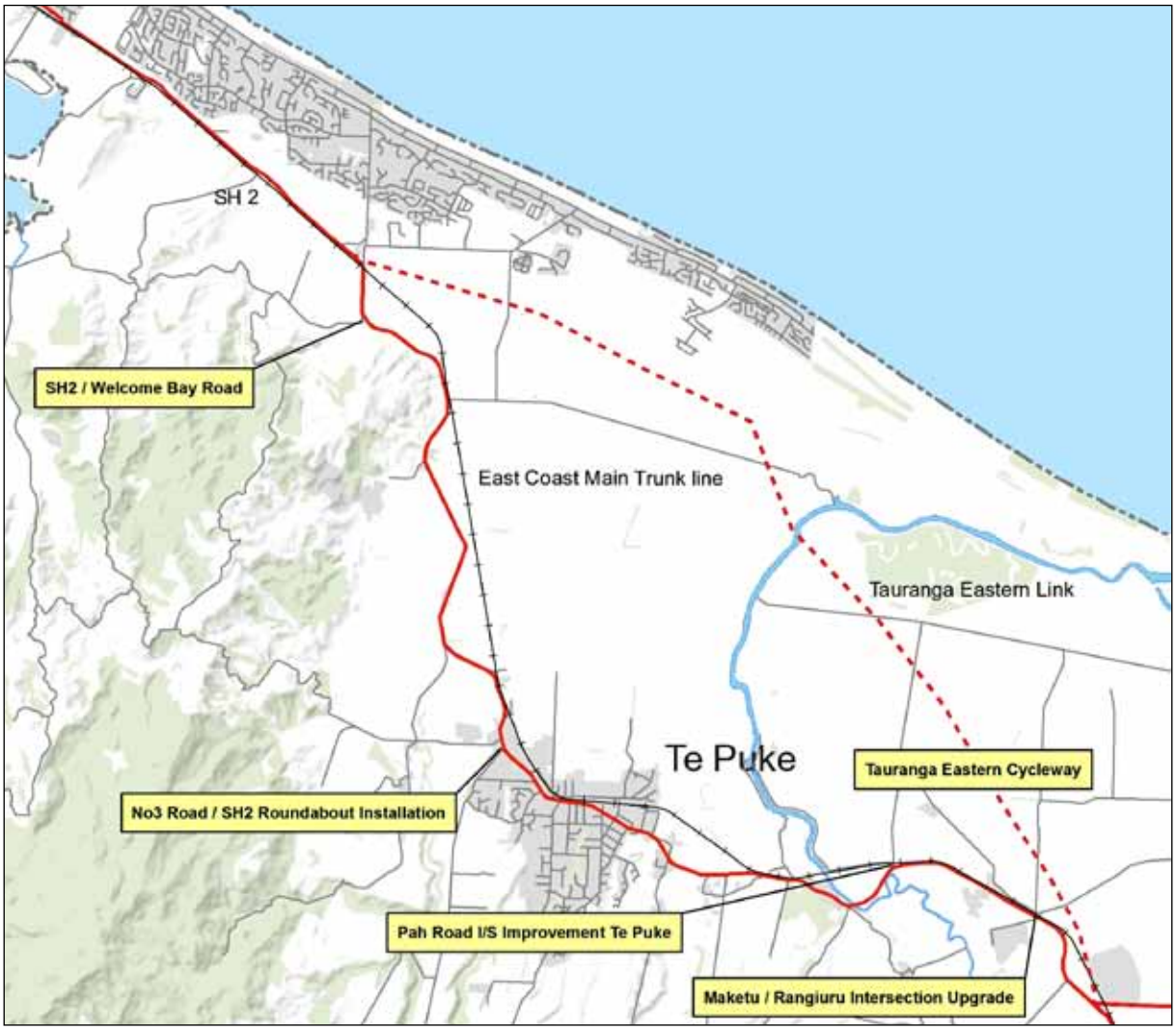
7.4 Tauranga - Paengaroa

Description	• Extends south-east from the Tauranga urban area to the SH2/33 intersection at Paengaroa. • Incorporates the SmartGrowth Eastern Corridor. • Features include: – SH2 between the Tauranga urban area and Paengaroa (National – High Volume); – Tauranga Eastern Link – Road of National Significance (due for completion by end of 2015); – the ECMT rail line between Tauranga and Paengaroa; – the local road network and adjacent land uses; and – Rural Connector public transport services linking Te Puke to Tauranga.
Issues	The key RLTP issues applying to this corridor are: • **Safety** –the current SH2 section of this corridor is rated High for collective risk. Western Bay of Plenty District is rated High Concern for young drivers, and alcohol and drugs. • **Land use and transport integration** – residential growth along this corridor is placing pressure on the existing road network. • **Freight growth** – a key corridor for moving freight between the eastern Bay of Plenty (road and rail), Rotorua and the central North Island (road), and the Port of Tauranga. • **Network resilience** – a constrained network with flooding (occasionally) and road crashes (more frequently) disrupting access on SH2. • **Social and environmental effects** - severance effects created by high use corridors passing through Te Puke and surrounding areas.
Objectives	The key RLTP objectives for this corridor are: • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Land use and transport integration** - long term planning ensures regional growth patterns and urban form reduce travel demand, support public transport and encourage walking and cycling. • **Economic performance** - the transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region. • **Access and resilience** - communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs. • **Environmental sustainability** - the social and environmental effects arising from use of the transport system are minimised.
Regional investment priorities	• Improved economic performance • Improved safety
Inter-regional factors	• A key corridor for inter-regional freight movements between the central North Island and the Port of Tauranga (road and rail). • The corridor provides tourism access between the western Bay of Plenty, the central North Island and the East Coast.

Land use factors	• Major freight generating land uses include dairy farming, kiwifruit and horticulture in the lowland areas, and more extensive pastoral farming in upland areas. These require reliable access to processing centres and the Port of Tauranga. • Te Puke (population of 7,494 in 2013) is the main settlement in the corridor and the centre of the New Zealand kiwifruit industry. Te Puke includes areas designated for future residential growth under the SmartGrowth Strategy. • The corridor is adjacent to the major urban growth area of Papamoa (see Tauranga Urban Network) which generates high traffic volumes on SH2 as it approaches Tauranga. • Significant industrial sites include a meat processing plant at Rangiuru and kiwifruit processing facilities. Future industrial land is identified at Rangiuru under the SmartGrowth Strategy.
Freight Integration	• There is potential for rail connections to future industrial land at Rangiuru.
Evidence base	• SmartGrowth Strategy 2013 • Tauranga Transport Strategy 2012-2042 • Tauranga Eastern Link Network Plan (2011) • KiwiRAP (2012) • Communities at Risk Register 2014 • Bay of Plenty Regional Council Transportation Infrastructure Study Report - Eastern Bay of Plenty (2014)
Key partners	Western Bay of Plenty District Council, NZ Transport Agency, Tauranga City Council, KiwiRail, Bay of Plenty Regional Council, Police

Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025-)
Integrated planning	Tauranga Transport Strategy	✓	✓	✓	✓
	Alignment of transport planning with growth management and land use through delivery of SmartGrowth	✓	✓	✓	✓
	Tauranga Eastern Link Network Plan	✓			
Demand management	Application of town centre initiatives to Te Puke	✓	✓	✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
	Rail network improvements to encourage increased use of ECMT for freight	✓	✓		
New and improved infrastructure	Tauranga Eastern Link (completion)	✓			
	No3 Road / SH2 Roundabout Installation	✓			
	Tauranga Eastern Cycleway	✓			
	SH2/Welcome Bay Road		✓		
	Maketū/Rangiuru Intersection Upgrade		✓		
	Pah Road I/S Improvement Te Puke		✓		
	Kaituna Link[56]				✓

56 The SmartGrowth Settlement Pattern Review (SSPR) had not been completed at the time the RLTP was being finalised. The indicative timing of the Kaituna Link in the RLTP is subject to change pending the outcomes of the SSPR. The RLTP will be varied as required following completion of the SSPR.



7.5 Tauranga – Ngongotahā

Description	• Extends south from the SH36/Pyes Pa Road intersection to Ngongotahā. • Incorporates the SmartGrowth Southern Corridor. • Features include: – SH36 between Tauranga and Ngongotahā (Primary Collector); and – the local road network and adjacent land uses.
Issues	The key RLTP issues applying to this corridor are: • **Safety** – SH36 is rated Medium-High for collective risk and High for personal risk. • **Land use and transport integration** – the future settlement pattern to accommodate residential growth in south Tauranga may impact on the transport functions of this corridor. • **Network resilience** – SH36 access is occasionally disrupted by road crashes and natural hazard events. SH33 (Paengaroa – Rotorua corridor) provides an alternative access route between Tauranga and Rotorua.

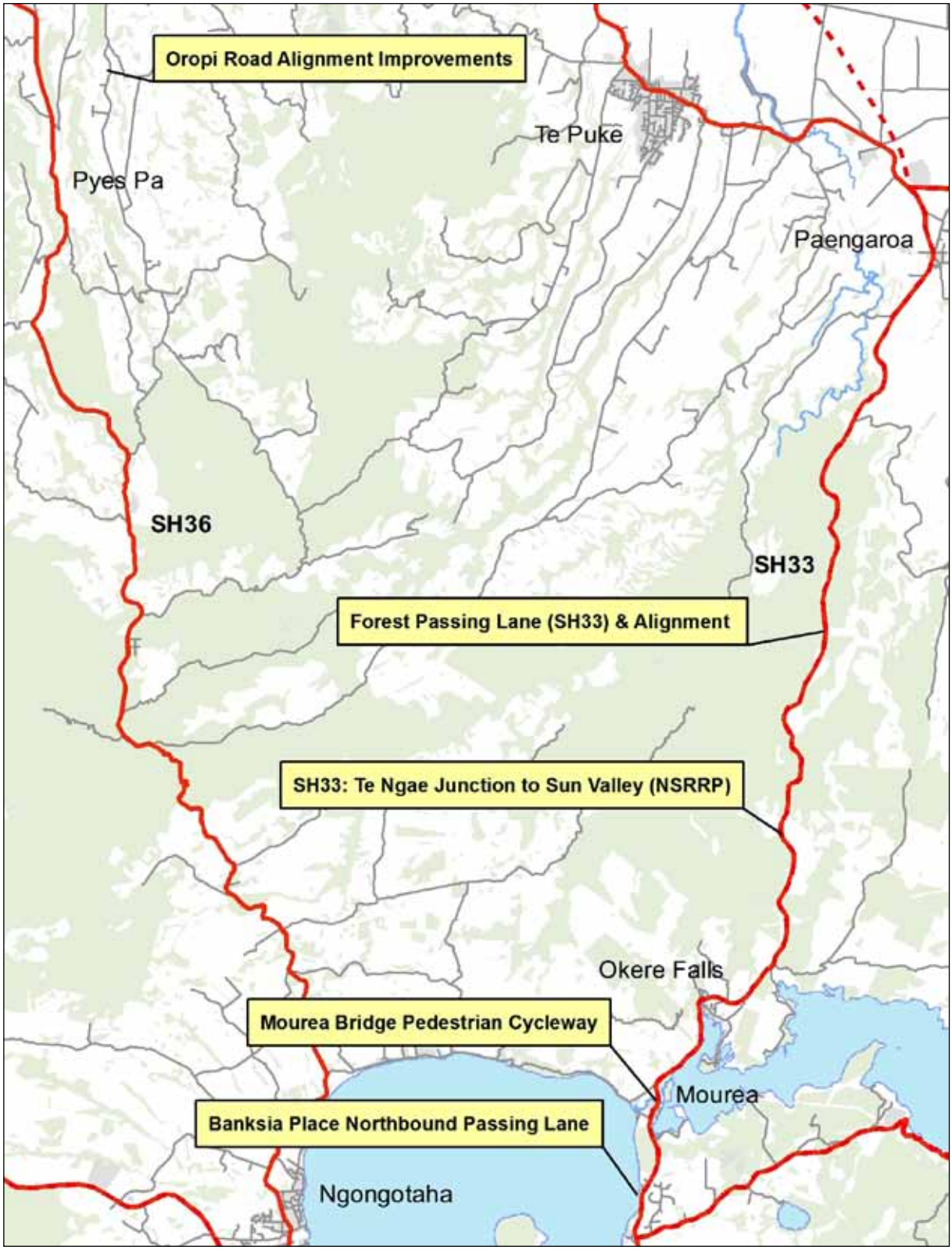
Objectives	The key RLTP objectives for this corridor are: • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Land use and transport integration** - Long term planning ensures regional growth patterns and urban form reduce travel demand, support public transport and encourage walking and cycling. • **Access and resilience** - communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs.
Regional investment priorities	• Improved safety
Inter-regional factors	• The corridor attracts some inter-regional freight and tourism movements between Tauranga and Taupō
Land use factors	• The corridor contains a mix of land uses, including: – rural residential at both the northern and southern ends; – kiwifruit and horticulture south of Tauranga; and – more extensive areas of forestry and pastoral farming. • TECT All-Terrain Park is located within the corridor.
Evidence base	• Tauranga Transport Strategy 2012-2042 • Rotorua Integrated Network Strategy 2012-2042 • SmartGrowth Strategy 2013 • KiwiRAP (2012) • Communities at Risk Register 2014 • State Highway road closures 2010-14
Key partners	Western Bay of Plenty District Council, Rotorua Lakes Council, Tauranga City Council, NZ Transport Agency, Police, Bay of Plenty Regional Council

Strategic response		**Yrs 1-3 (2015-18)**	**Yrs 4-6 (2018-21)**	**Yrs 7-10 (2021-25)**	**Yrs 11+ (2025-)**
Integrated planning	Tauranga Transport Strategy	✓	✓	✓	✓
	Rotorua Integrated Network Strategy	✓	✓	✓	✓
	Alignment of transport planning with growth management and land use through delivery of SmartGrowth	✓	✓	✓	✓
Demand management	*Predominantly rural area - limited application*				
Network optimisation	Implementation of ONRC levels of service	✓	✓		
New and improved infrastructure	Minor improvements	✓	✓		
	Oropi Road Alignment Improvements	✓			

7.6 Paengaroa – Rotorua

Description	• Extends south from the SH2/33 intersection at Paengaroa to the SH33/30 intersection. • Features include: – SH33 between Paengaroa and Lake Rotorua (Regional); – forms part of the HPMV route between Taupō and the Port of Tauranga; – the local road network and adjacent land uses; and – the Twin City Express (Rural Connector) public transport service linking Rotorua and Tauranga.
Issues	The key RLTP issue applying to this corridor is: • **Safety** – SH33 is rated Medium-High for collective risk. There were 35 deaths and serious injuries on this section of SH33 between 2008 and 2012.
Objective	The key RLTP objective for this corridor is: • **Safety** - deaths and serious injuries on the region's transport system are reduced.
Regional investment priorities	• Increased safety
Inter-regional factors	• SH33 is a strategic connection linking Rotorua and the central North Island with the Port of Tauranga and carries a high proportion of heavy vehicles (16% in 2013).
Land use factors	• Freight generating land uses along the corridor include forestry, and kiwifruit production near Paengaroa. These require reliable access to processing centres and the Port of Tauranga. • The corridor includes small settlements and peri-urban areas on its northern (Paengaroa) and southern sections (Okere Falls and Mourea).
Evidence base	• Draft State Highway 33 Tauranga to Rotorua – Strategic Assessment for Investment (2014) • Rotorua Integrated Network Strategy 2012-2042 • KiwiRAP (2012) • Bay of Plenty Regional Council Transportation Infrastructure Study Report - Eastern Bay of Plenty (2014)
Key partners	Rotorua Lakes Council, Western Bay of Plenty District Council, NZ Transport Agency, Police, Bay of Plenty Regional Council

Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025+)
Integrated planning	Draft State Highway 33 Tauranga to Rotorua – Strategic Assessment for Investment	✓			
Demand management	Initiatives to encourage pedestrian and cycle safety in peri-urban areas	✓	✓	✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
New and improved infrastructure	Minor improvements	✓	✓		
	Mourea Bridge Pedestrian Cycleway	✓	✓		
	SH33: Te Ngae Junction to Sun Valley North (National Safer Roads & Roadsides Programme)		✓		
	Forest Passing Lane (SH33) & Alignment		✓		
	Banksia Place Northbound Passing Lane		✓		


Oropi Road Alignment Improvements
Te Puke
Pyes Pa
Paengaroa
SH36
SH33
Forest Passing Lane (SH33) & Alignment
SH33: Te Ngae Junction to Sun Valley (NSRRP)
Okere Falls
Mourea Bridge Pedestrian Cycleway
Mourea
Banksia Place Northbound Passing Lane
Ngongotaha

7.7 Tirau - Rotorua

Description	• Extends east from the SH1/5 intersection at Tirau to the Rotorua urban area. • Features of the Bay of Plenty section (Rotorua-regional boundary) include: – SH5 between the regional boundary and Rotorua (Regional); – the local road network and adjacent land uses; and – the inoperative rail corridor between Putaruru and Rotorua.
Issues	• **Urban congestion** – some delays at peak periods as inter-regional traffic on the corridor mixes with local traffic on approaches to the Rotorua Urban Network.
Objectives	The key RLTP objective for this network is: • **Economic performance** - the transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region.
Regional investment priority	• Improved economic performance
Inter-regional factors	• A key tourism route. SH5 (Thermal Explorer Highway) carries more than one million international tourists each year between the Waikato and Rotorua.
Land use factors	• The main land use in the corridor is pastoral farming. • Key trip generators include tourism ventures near Ngongotahā (Agrodome, Zorb Rotorua).
Evidence base	• Rotorua Integrated Network Strategy 2012-2042 • KiwiRAP (2012) • Communities at Risk Register 2014
Key partners	Rotorua Lakes Council, Bay of Plenty Regional Council, Waikato Regional Council, Police, KiwiRail

Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025-)
Integrated planning	Rotorua Integrated Network Strategy (RINS)	✓	✓	✓	✓
Demand management	*See Rotorua Urban Network*				
Network optimisation	Implementation of ONRC levels of service	✓	✓		
New and improved infrastructure	Minor improvements	✓	✓		
	SH5 Rotorua Western Corridor, RINS		✓		

7.8 Rotorua Urban Network

Description	• Incorporates the Rotorua Urban Area, Rotorua Western Corridor, Rotorua Eastern Corridor and Rotorua Southern Corridor as defined in the Rotorua Integrated Network Strategy. • Key features include: – Rotorua Airport; – SH5, SH30 and SH30A within the Rotorua urban area (Regional); – SH5 between the Rotorua urban area and Ngongotahā (Regional); – SH30 between the Rotorua urban area and the SH30/33 intersection (Regional) and HPMV route; – the local road network and adjacent land uses; – the Rotorua urban public transport network; and – the Rotorua urban cycle and pedestrian networks and Redwoods mountain bike trails.
Issues	The key RLTP issues applying to this network are: • **Land use and transport integration** - managing runoff to the lakes through changing land use and infrastructure; unplanned land use changes and their impacts on infrastructure; the redistribution of growth and managing the risks of slower or faster growth; encouraging centre city vitality and improving access for public transport, walking and cycling. • **Freight growth** – the Rotorua urban network forms a strategic connection linking the central North Island forestry and timber industries with the Port of Tauranga. • **Urban congestion** - existing capacity issues relate mainly to peak periods and urban approaches on the eastern and western corridors. • **Safety** – SH30 between the Rotorua urban area and the SH30/33 intersection is rated Medium-High for collective risk. Rotorua District is rated Medium Concern for young drivers, intersections, pedestrians and older road users. The SH5/30 Hemo Road/Old Taupō Road intersection is currently rated the 4th worst intersection for road safety in New Zealand.
Objectives	The key RLTP objectives for this network are: • **Economic performance** - the transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region. • **Land use and transport integration** – long term planning ensures regional growth patterns and urban form reduce travel demand, support public transport and encourage walking and cycling. • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Environmental sustainability** - the social and environmental effects arising from use of the transport system are minimised.
Regional investment priorities	• Improved economic performance • Improved access and resilience
Inter-regional factors	• The Rotorua urban network forms an important hub for inter-regional freight and tourism movements. • Rotorua Airport is a strategic tourist transport hub for the region.
Land use factors	• The Rotorua urban area has a population of 49,074 (2013). Ngongotahā with a population of 4,194 in 2013 is an adjacent urban settlement. • Rotorua is the third most visited tourist destination in New Zealand. In 2010 there were 3.2 million visitor arrivals to Rotorua. Rotorua has a high proportion of tourism-related employment such as in accommodation, retail and food services. Rotorua Airport serves both domestic and international flights. • Rotorua acts as an important service and freight distribution centre for the surrounding area. The Fairy Springs industrial zone is a significant industrial area within the Rotorua urban network.

Evidence base	• Rotorua Integrated Network Strategy 2012-2042 • Bay of Plenty Regional Council Transportation Infrastructure Study Report - Eastern Bay of Plenty (2014) • KiwiRAP (2012) • Communities at Risk Register 2014
Key partners	Rotorua Lakes Council, NZ Transport Agency, Bay of Plenty Regional Council, Police

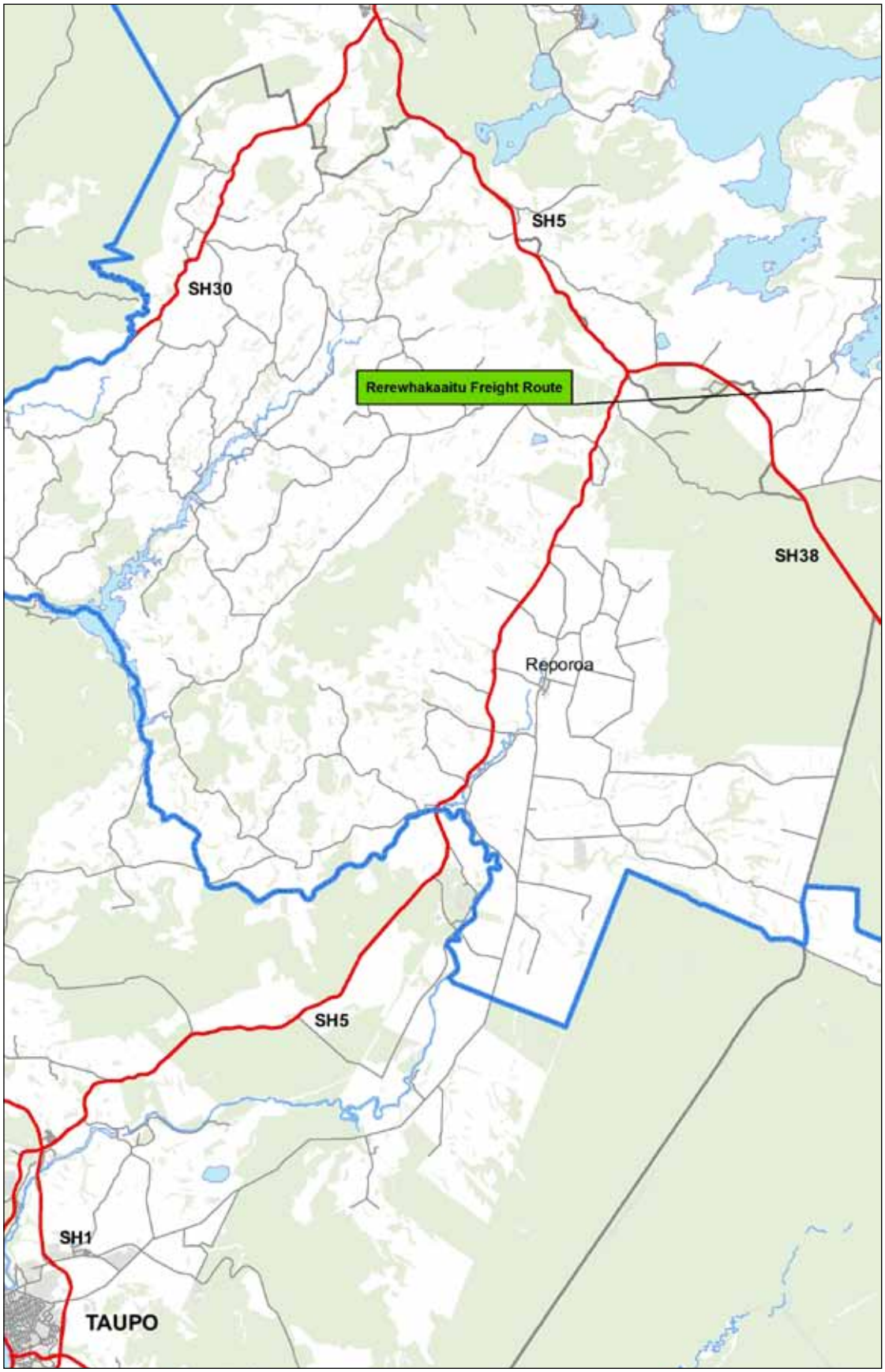
Strategic response		**Yrs 1-3 (2015-18)**	**Yrs 4-6 (2018-21)**	**Yrs 7-10 (2021-25)**	**Yrs 11+ (2025-)**
Integrated planning	Rotorua Integrated Network Strategy (RINS)	✓	✓	✓	✓
	Rotorua Spatial Plan	✓	✓	✓	✓
	Rotorua Eastern Corridor , RINS		✓		
	SH5 Rotorua Western Corridor, RINS		✓		
	SH30A Urban Revitalisation, RINS		✓		
Demand management	Application of urban centre initiatives	✓	✓	✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
	Application of freight priority and traffic management measures	✓	✓	✓	✓
	Public Transport - Inter-Regional Ticketing Improvement	✓			
New and improved infrastructure	Rotorua Eastern Arterial (Investigation & Design)	✓			
	Rotorua Eastern Arterial (Construction)		✓		
	SH5/30 Safety Improvements	✓			
	HPMV SH30/SH34 Te Kuiti to Whakatāne	✓			
	Rotorua Urban Cycleways	✓	✓		
	Minor improvements	✓	✓		
	SH5: Ngongotahā-Fairy Springs Rd (National Safer Roads & Roadsides Programme)		✓		
	SH30: Owhata to Te Ngae Junction (National Safer Roads & Roadsides Programme)		✓		
	Rotorua Transport Centre		✓		
	Malfroy/Old Taupō Intersection Capacity		✓		
	SH30 Sala St/Te Ngae Road Urban Intersection Optimisation		✓	✓	
	SH30A Urban Revitalisation		✓		


Ngongotaha
SH30
SH5
Rotorua Urban Cycleways
SH30A Urban Revitalisation
Rotorua Eastern Arterial (Construction)
SH30A
SH30 Sala St/Te Ngae Road Urban Intersection Optimisation
SH5/SH30 Safety Improvements

7.9 Rotorua - Taupō

Description	• Extends south from the Rotorua urban area to Taupō. • Features of the Bay of Plenty section (Rotorua - regional boundary) include: – SH5 between Rotorua and Reporoa (Regional) and HPMV route; – SH30 between SH5 and the regional boundary (Primary Collector); – SH38 between SH5 and Murupara (Primary Collector); – a network of forestry roads; – the local road network and adjacent land uses; – Rural Connector public transport service (Rotorua - Murupara); and – Te Ara Ahi (New Zealand Cycle Trail).
Issues	The key RLTP issues applying to this corridor are: • **Safety** – SH30 and SH38 sections are rated Medium-High for personal risk. • **Freight growth** – projected increases in the movement of logs and dairy products.
Objectives	The key RLTP objectives for this corridor are: • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Economic performance** - the transport system is integrated with well planned development, enabling the efficient and reliable movement of people and goods to, from and throughout the region.
Regional investment priority	• Increased safety • Improved economic performance
Inter-regional factors	• The sections of SH5 and SH30 in this corridor cross the regional boundary into the Waikato region, providing links to Taupō and forestry areas in the Central North Island. Operates as a secondary freight route between the Central North Island and the eastern Bay of Plenty. • SH5 also functions as a tourism route between Rotorua and Taupō.
Land use factors	• Major freight generating land uses include forestry and dairy farming. These require reliable access to processing centres and the Port of Tauranga. • Significant industrial sites include Waipa Mill and Reporoa Dairy Factory.
Evidence base	• Bay of Plenty Regional Council Transportation Infrastructure Study Report - Eastern Bay of Plenty (2014) • KiwiRAP (2012) • Communities at Risk Register 2014
Key partners	Rotorua Lakes Council, NZ Transport Agency, Bay of Plenty Regional Council, Waikato Regional Council, Whakatāne District Council, Police

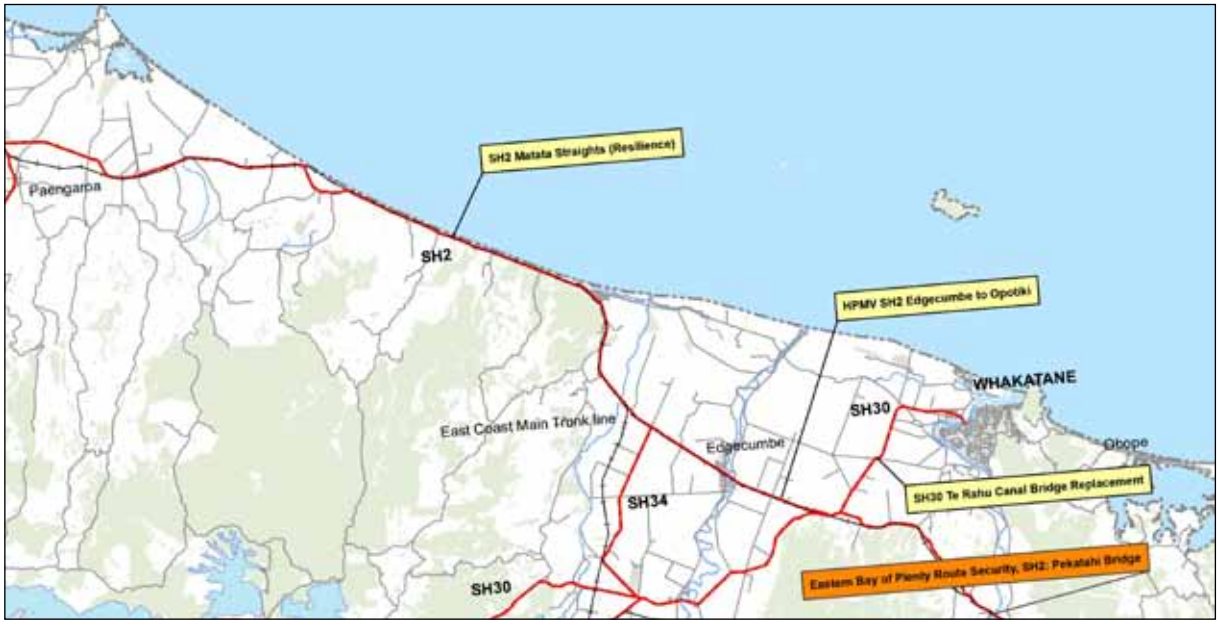
Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025-)
Integrated planning	Rotorua Integrated Network Strategy	✓	✓	✓	✓
Demand management	Encourage ongoing use of the forestry road network to manage demand on the public road network	✓	✓	✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
New and improved infrastructure	Minor improvements and safety activities	✓	✓		
	Rerewhakaaitu Freight Route	✓	✓		


SH5
SH30
Rerewhakaaitu Freight Route
SH38
Reporoa
SH5
SH1
TAUPO

7.10 Paengaroa – Whakatāne

Description	• Extends east from the SH2/33 intersection at Paengaroa to and including the Whakatāne and Ōhope urban areas. • Features include: – Whakatāne and Ōhope urban network; – SH2 between Paengaroa and Taneatua (Arterial); – SH30 between Awakeri and Whakatāne (Arterial); – SH34 between Matatā and Kawerau (Arterial); – Thornton Rd, a key local road route (Arterial); – the local road network and adjacent land uses; – the ECMT rail line between Paengaroa and Awakaponga; – Whakatāne Airport; – Rural Connector public transport services linking Whakatāne to Tauranga, Matatā and Ōhope; and – the inoperative rail corridor between Awakaponga and Taneatua
Issues	The key RLTP issues applying to this corridor are: • **Network resilience** – constrained network with flooding and slips occasionally disrupting access on SH2, the ECMT and key local road connections. • **Freight growth** – a key corridor for moving freight between the eastern Bay of Plenty and the Port of Tauranga (road and rail). • **Safety** – SH2 between Matatā and Taneatua is rated High for personal risk. Whakatāne District is rated High Concern for restraint use. • **Asset affordability** – rural areas with relatively extensive local road networks and low rating bases.
Objectives	The key RLTP objectives for this corridor are: • **Access and resilience** - communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs. • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Affordability** - Investment in the transport system maximises use of available resources and achieves value for money.
Regional investment priority	• Improved access and resilience • Increased safety
Inter-regional factors	• The SH2 section of this corridor provides a link for inter-regional journeys between the Bay of Plenty and Gisborne regions, including tourism journeys. • Thornton and Wainui roads provide an alternative route via the Whakatāne and Ōhope urban areas.
Land use factors	• Major freight generating land uses include dairy farming in the lowland areas, and kiwifruit and horticulture particularly near Paengaroa and Whakatāne. These require reliable access to processing centres and the Port of Tauranga. • Whakatāne and Ōhope (combined population of 16,695 in 2013) are the main urban centres in this corridor. • Significant industrial sites include the Edgecumbe Dairy Factory and Whakatāne Board Mill.
Evidence base	• Eastern Bay of Plenty Route Security Strategy (2013) • Eastern Bay of Plenty Route Security Study (2011) • Bay of Plenty Regional Council Transportation Infrastructure Study Report - Eastern Bay of Plenty (2014) • KiwiRAP (2012) • Communities at Risk Register 2014 • State Highway road closures 2010-14 • Whakatāne Coastal Arterial Route Study (2011)
Key partners	Western Bay of Plenty District Council, Whakatāne District Council, NZ Transport Agency, KiwiRail, Bay of Plenty Regional Council, Police

Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025-)
Integrated planning	Eastern Bay of Plenty Route Security Strategy	✓	✓	✓	✓
	Eastern Bay of Plenty Rural Road Safety Signature Project	✓			
Demand management	Application of town centre initiatives to Whakatāne and Ōhope	✓	✓	✓	✓
	Rail network improvements to encourage increased use of ECMT for freight			✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
	Landing Road Roundabout Reconstruction	✓	✓		
New and improved infrastructure	HPMV SH2 Edgecumbe to Ōpōtiki	✓			
	Hillcrest Slumps	✓			
	Minor improvements	✓	✓		
	SH2 Matatā Straights (Resilience)		✓		
	Eastern Bay of Plenty Route Security, SH2: Pekatahi Bridge		✓		
	SH2 Western Drain Bridge Replacement		✓		
	SH30 Te Rahu Canal Bridge Replacement		✓		



7.11 Rotorua - Awakeri

Description	• Extends east from the SH33/30 intersection at Lake Rotorua to the SH2/30 intersection at Awakeri. • Features include: – Kawerau urban area; – SH30 between Lake Rotorua and Awakeri (Primary Collector); – SH34 (Primary Collector); – the local road network and adjacent land uses; – the operational Murupara rail line between Awakaponga and Kawerau; and – a Rural Connector public transport service linking Whakatāne to Kawerau.
Issues	The key RLTP issues applying to this corridor are: • **Freight growth** – a key corridor for moving freight between the eastern Bay of Plenty and the Port of Tauranga via SH34 (road) and ECMT (rail). • **Safety** – SH34 is rated Medium-High for collective risk and High for personal risk. Kawerau District is rated High Concern for young drivers, alcohol and drugs, intersections, rural roads, distraction, older road users and restraint use. • **Network resilience** – constrained network with flooding and slips occasionally disrupting access on SH30. • **Asset affordability** – rural areas with relatively extensive local road networks and low rating bases.
Objectives	The key RLTP objectives for this corridor are: • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Access and resilience** - communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs. • **Affordability** - Investment in the transport system maximises use of available resources and achieves value for money.
Regional investment priority	• Increased safety • Improved access and resilience
Inter-regional factors	• Inter-regional movements of logs and woodchip from the central North Island wood supply region.
Land use factors	• Kawerau (population of 6,363 in 2013) is the main urban centre in this corridor. • Kawerau is a major hub for the forestry and wood processing industries. • Significant industrial sites include the Norske Skog mill.
Freight Integration	• There is potential for rail connections to major customers at industrial sites in Kawerau.
Evidence base	• KiwiRAP (2012) • Communities at Risk Register 2014 • Eastern Bay of Plenty Route Security Strategy (2013) • Eastern Bay of Plenty Route Security Study (2011) • Bay of Plenty Regional Council Transportation Infrastructure Study Report - Eastern Bay of Plenty (2014) • Kawerau District Council - Railway Line Extension and Crossing Transportation and Safety Assessment (2014)
Key partners	Kawerau District Council, Rotorua Lakes Council, Whakatāne District Council, NZ Transport Agency, KiwiRail, Bay of Plenty Regional Council, Police

Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025-)
Integrated planning	Eastern Bay of Plenty Route Security Strategy	✓	✓	✓	✓
	Eastern Bay of Plenty Rural Road Safety Signature Project	✓			
	SH30: Te Teko to Awakeri (National Safer Roads & Roadsides Programme)	✓			
	SH34: SH30 to Kawerau (National Safer Roads & Roadsides Programme)	✓			
Demand management	Application of town centre initiatives to Kawerau	✓	✓	✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
	Rail network improvements to encourage increased use of ECMT for freight			✓	✓
New and improved infrastructure	HPMV SH30/SH34 Te Kuiti to Whakatāne	✓			
	Minor improvements	✓	✓		

7.12 Kawerau – Murupara

Description	• Extends south from SH30 near Kawerau to Murupara. • Features include: – Special purpose roads linking Murupara to Wairoa through Te Urewera National Park; – the operational ECMT branch rail line between Murupara and Kawerau; – McKee Road and the off-highway forestry road network; and – the local road network and adjacent land uses.
Issues	The key RLTP issues applying to this corridor are: • **Asset affordability** – maintaining the rail, off highway forestry and local road networks. • **Safety** – Whakatāne District is rated High Concern for restraint use.
Objectives	The key RLTP objectives for this corridor are: • **Affordability** - Investment in the transport system maximises use of available resources and achieves value for money; and • **Safety** - deaths and serious injuries on the region's transport system are reduced.
Regional investment priority	• Increased safety
Inter-regional factors	• Special purpose roads through Te Urewera National Park provide an inter-regional link between the Bay of Plenty and Wairoa in the Hawkes Bay region. • Roads accessing the corridor through the Rerewhakaaitu area operate as a secondary freight route between the Central North Island and the eastern Bay of Plenty.
Land use factors	• Major freight generating land uses are forestry, and dairy farming on the Galatea plains. These require reliable access to processing centres and the Port of Tauranga.
Evidence base	• Communities at Risk Register 2014
Key partners	Whakatāne District Council, Kawerau District Council, Rotorua Lakes Council, KiwiRail, NZ Transport Agency, Police, Bay of Plenty Regional Council, Wairoa District Council, Hawkes Bay Regional Council

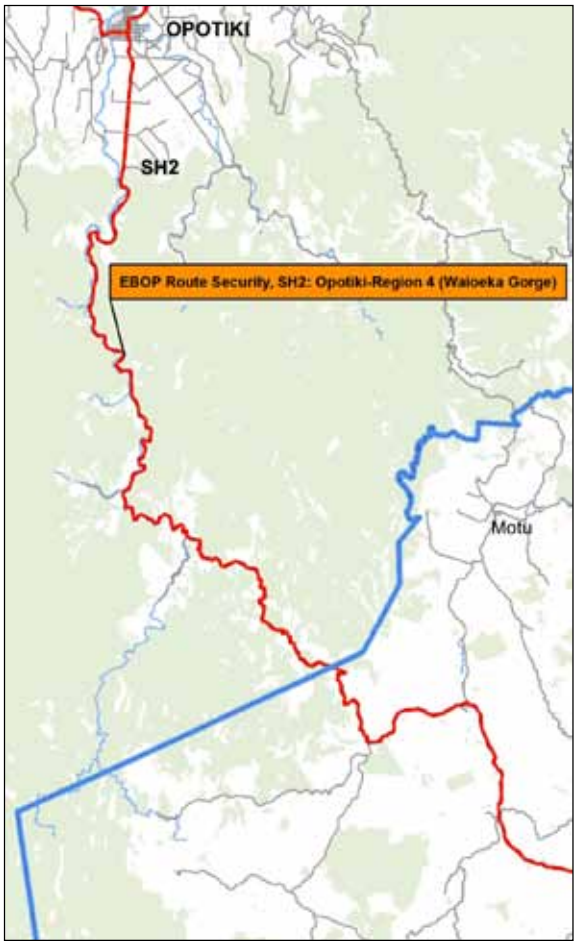
Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025-)
Integrated planning	Eastern Bay of Plenty Rural Road Safety Signature Project	✓			
Demand management	Encourage ongoing use of the forestry road and rail networks to manage demand on the public road network	✓	✓	✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
	Rail network investment to encourage increased use of ECMT for freight			✓	✓
New and improved infrastructure	Te Urewera Rainforest Route Resilience Improvements	✓			
	Rerewhakaaitu Freight Route	✓	✓		
	Minor improvements and safety activities	✓	✓		

7.13 Ōpōtiki – Gisborne

Description	• Extends south from the boundary of the Ōpōtiki urban area towards Gisborne. • Features of the Bay of Plenty section (Ōpōtiki - regional boundary) include: – SH2 through the Waioeka Gorge (Arterial); – the local road network and adjacent land uses; and – inland sections of the Motu Trails (New Zealand Cycle Trail).
Issues	The key RLTP issues applying to this corridor are: • **Network resilience** – constrained network with slips frequently disrupting access on SH2. • **Safety** – SH2 section is rated Medium-High for personal risk. Ōpōtiki District is rated High Concern for young drivers, alcohol and drugs, speed, rural roads, distraction and restraint use. • **Asset affordability** – rural area with relatively extensive local road network and low rating base.
Objectives	The key RLTP objectives for this corridor are: • **Access and resilience** - communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs. • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Affordability** - Investment in the transport system maximises use of available resources and achieves value for money.
Regional investment priority	• Improved access and resilience • Increased safety
Inter-regional factors	• SH2 is the shortest route and the main economic and social lifeline between the Bay of Plenty and Gisborne. This route also provides local access for communities and land uses between Ōpōtiki and Gisborne.
Land use factors	• Major freight generating land uses include dairy farming and kiwifruit production in the lowland areas south of Ōpōtiki. These require reliable access to processing centres and the Port of Tauranga.
Evidence base	• Eastern Bay of Plenty Route Security Strategy (2013) • Eastern Bay of Plenty Route Security Study (2011) • Bay of Plenty Regional Council Transportation Infrastructure Study Report - Eastern Bay of Plenty (2014) • KiwiRAP (2012) • Communities at Risk Register 2014
Key partners	Ōpōtiki District Council, Whakatāne District Council, NZ Transport Agency, Bay of Plenty Regional Council, Gisborne District Council, Police

Strategic response		**Yrs 1-3 (2015-18)**	**Yrs 4-6 (2018-21)**	**Yrs 7-10 (2021-25)**	**Yrs 11+ (2025-)**
Integrated planning	Eastern Bay of Plenty Route Security Strategy	✓	✓	✓	✓
	Eastern Bay of Plenty Rural Road Safety Signature Project	✓			
Demand management	*Predominantly rural area - limited application*				
Network optimisation	Implementation of ONRC levels of service	✓	✓		
New and improved infrastructure	Minor improvements and safety activities	✓	✓		
	EBOP Route Security, SH2: Ōpōtiki-Region 4 (Waioeka Gorge)		✓		

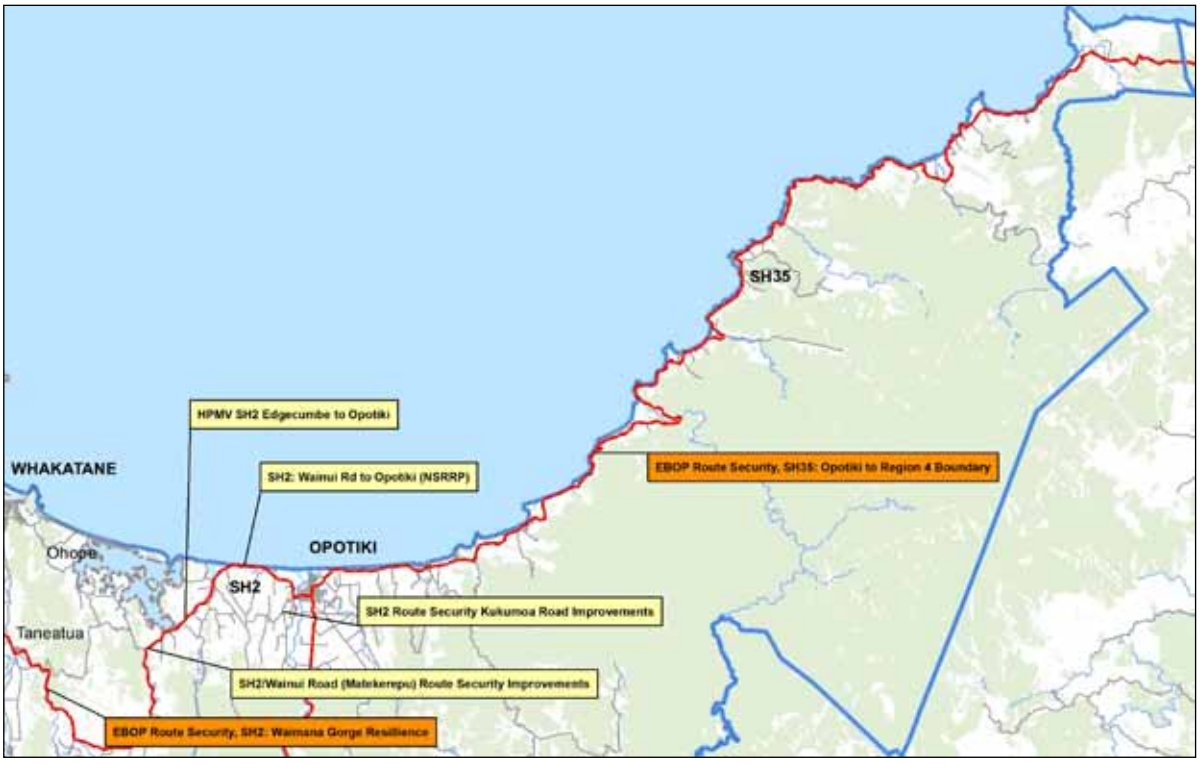

SH34
KAWERAU
Taneatua
SH2
Murupara Rail Line
Rerewhakaaitu Freight Route
Murupara
Te Urewera Rainforest Route Resilience Improvements


OPOTIKI
SH2
EBOP Route Security, SH2: Opotiki-Region 4 (Waioeka Gorge)
Motu

7.14 Whakatāne – East Cape

Description	• Extends east from the boundary of the Whakatāne and Ōhope urban areas to the regional boundary near East Cape. • Features include: – SH2 between Taneatua and Ōpōtiki (Arterial); – SH35 from Ōpōtiki to the regional boundary (Primary Collector); – Wainui Rd, a key local road route (Arterial); – the local road network and adjacent land uses; – Ōpōtiki urban area; – Rural Connector public transport services (Whakatāne-Ōpōtiki, Ōpōtiki-Potaka); and – the coastal section of the Motu Cycle Trails (New Zealand Cycle Trail).
Issues	The key RLTP issues applying to this corridor are: • **Network resilience** – constrained network with flooding and slips frequently disrupting access on SH2, SH35 and key local connections (e.g. Wainui Road, Matekerepu intersection). • **Safety** – SH2 and SH35 sections are rated High for personal risk. Ōpōtiki District is rated High Concern for young drivers, alcohol and drugs, speed, rural roads, distraction and restraint use. • **Asset affordability** – rural areas with relatively extensive local road networks and low rating bases.
Objectives	The key RLTP objectives for this corridor are: • **Access and resilience** - communities have access to a resilient and reliable transport system that provides them with a range of travel choices to meet their social, economic, health and cultural needs. • **Safety** - deaths and serious injuries on the region's transport system are reduced. • **Affordability** - Investment in the transport system maximises use of available resources and achieves value for money.
Regional investment priority	• Improved access and resilience • Increased safety
Inter-regional factors	• SH35 continues around the East Cape to Gisborne. This route provides access for communities and land uses between Ōpōtiki and Gisborne and acts as a significantly longer alternative route between Ōpōtiki and Gisborne when SH2 is closed. • The SH2 and SH35 sections of this corridor provide tourism access between the Bay of Plenty and Gisborne regions.
Land use factors	• Major freight generating land uses include dairy farming in the lowland areas, kiwifruit production in areas surrounding Ōpōtiki, and forestry, particularly in areas adjacent to SH35. These require reliable access to processing centres and the Port of Tauranga. • Ōpōtiki township, with a population of 3,819 (2013) is the main urban centre in this corridor. • Future planned development includes redevelopment of Ōpōtiki harbour to service large areas of aquaculture in the coastal waters off Ōpōtiki.
Evidence base	• Eastern Bay of Plenty Route Security Strategy (2013) • Eastern Bay of Plenty Route Security Study (2011) • Bay of Plenty Regional Council Transportation Infrastructure Study Report - Eastern Bay of Plenty (2014) • KiwiRAP (2012) • Communities at Risk Register 2014
Key partners	Ōpōtiki District Council, Whakatāne District Council, NZ Transport Agency, Bay of Plenty Regional Council, Gisborne District Council, Police

Strategic response		Yrs 1-3 (2015-18)	Yrs 4-6 (2018-21)	Yrs 7-10 (2021-25)	Yrs 11+ (2025-)
Integrated planning	Eastern Bay of Plenty Route Security Strategy	✓	✓	✓	✓
	Eastern Bay of Plenty Rural Road Safety Signature Project	✓			
Demand management	Application of town centre initiatives to Ōpōtiki	✓	✓	✓	✓
Network optimisation	Implementation of ONRC levels of service	✓	✓		
New and improved infrastructure	SH2/Wainui Road (Matekerepu) Route Security Improvements	✓			
	SH2: Wainui Rd to Ōpōtiki (National Safer Roads & Roadsides Programme)	✓			
	HPMV SH2 Edgecumbe to Ōpōtiki	✓			
	Taneatua Rd Route Security	✓			
	Minor improvements	✓	✓		
	EBOP Route Security, SH2: Waimana Gorge Resillience		✓		
	EBOP Route Security, SH35: Ōpōtiki to Region 4 Boundary		✓		
	SH2 Route Security Kukumoa Road Improvements		✓		



Chapter 8: Regional Programme

8.1 Overview

The regional programme consists of the transport programmes of the region's local authorities and the NZTA (state highways). Activities in the regional programme fall within one of the following categories:

- proposed activities that are being submitted for funding support from the National Land Transport Fund (NLTF) for the 6-year period 2015/16-20/21;
- activities that have been approved but are not yet completed (committed activities); and
- significant activities to be funded from sources other than the NLTF.

The National Land Transport Programme (NLTP) is the mechanism through which the NLTF is allocated. Activities proposed for funding must meet the criteria for one of the following activity classes as determined by the GPS:

- State highway improvements
- State highways maintenance
- Local road improvements
- Local road maintenance
- Public transport
- Walking and cycling improvements
- Regional improvements (eligible state highway and local road improvements)
- Road safety promotion
- Investment management

Figure 26 shows the forecast total cost of all activities that have been submitted for funding from the NLTF. A detailed list of all activities in the Bay of Plenty that have been submitted for funding is included in Appendix 3.

Figure 26: Forecast total cost of activities submitted for NLTF funding (000s)

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total	NLTF Share
Investment Management	$2,187	$1,946	$1,872	$681	$449	$555	$7,690	$5,288
Road safety promotion	$1,627	$1,633	$1,627	$1,684	$1,681	$1,674	$9,926	$5,606
Walking & cycling improvements	$4,859	$9,269	$3,894	$611	$840	$1,020	$20,493	$11,894
Public transport*	$17,649	$16,329	$17,544	$20,157	$20,381	$21,161	$113,221	$38,855
Local road maintenance	$49,656	$49,767	$50,380	$51,869	$52,253	$52,932	$306,857	$161,500
State highways maintenance	$32,908	$35,639	$36,352	$37,273	$39,402	$38,657	$220,232	$220,232
Local road improvements	$9,432	$16,686	$10,281	$9,429	$12,621	$6,981	$65,430	$33,961
State highway improvements	$51,149	$44,445	$107,742	$114,750	$109,750	$104,750	$532,586	$532,586
						Total	**$1,276,435**	**$1,009,922**

*Includes fare revenue from public transport

8.2 Development of the regional programme

8.2.1 Determining significant activities for prioritisation

Section 106(2) of the LTMA requires each regional transport committee to adopt a policy that defines what constitutes a significant activity and must consequently be prioritised within the programme of activities submitted for NLTF funding. This policy is included in Chapter 10.

In adopting the policy, the RTC has determined that the following activities are significant for the purposes of prioritisation:

- Projects or programmes with total expenditure likely to exceed $1 million over the duration of the project; or
- Projects or programmes that the Regional Transport Committee deems to make a significant contribution to the objectives of the RLTP by way of resolution.

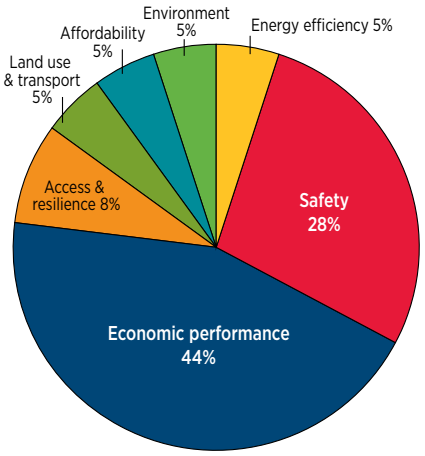
The following types of activities are deemed to be 'business as usual' and are excluded from prioritisation:

- state highway and local road maintenance;
- transport planning;
- road safety promotion; and
- existing public transport services.

These activities are essential to the continuing operation of the transport system, and the region is of the view that they should be funded before resources are allocated to significant new improvement activities.

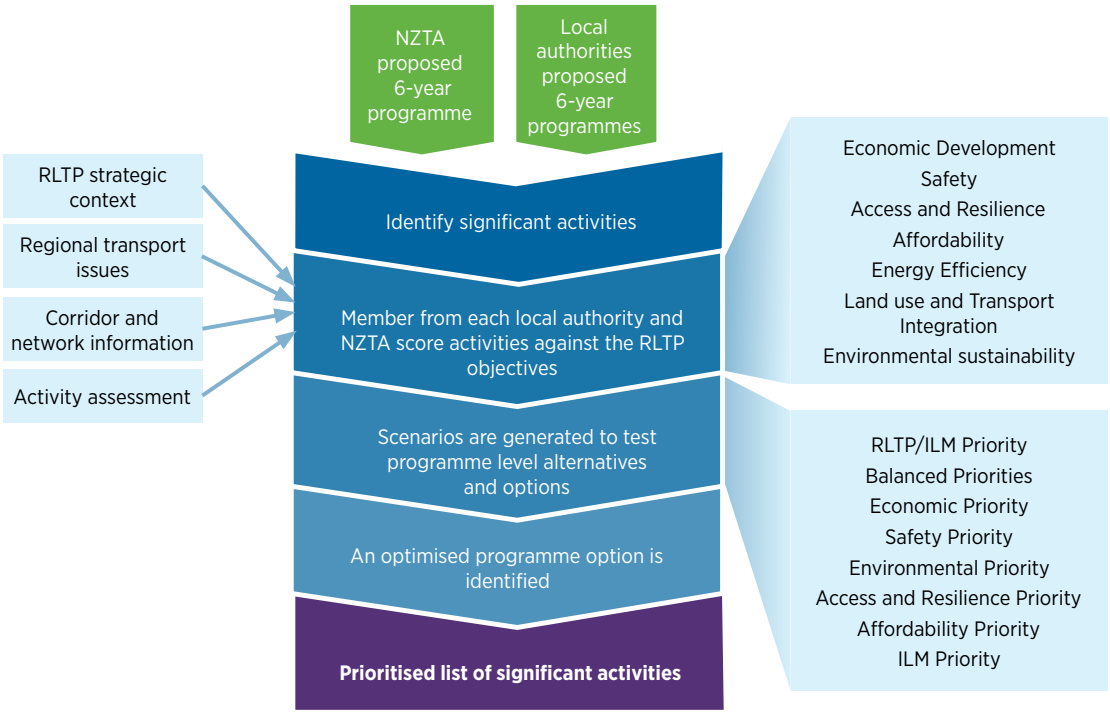
8.2.2 Prioritising significant activities

Significant activities have been prioritised using a methodology based on the region's investment priorities identified in **Section 5.2**.



The prioritisation process is summarised in Figure 27. This was a collaborative process undertaken by representatives of the regional council, city and district councils and the NZTA.

Figure 27: Summary of prioritisation process



8.3 Prioritised activities

The region's prioritised list of activities across all activity classes is shown in Figure 28. Included in the table is a brief description of the activity and its regional priority ranking. Those activities that are ranked highest in the list have been assessed as making the most substantial contribution to national and regional objectives. The relative priority of activities within each activity class is included in Appendix 3.

It is important to note that factors other than the priority of an activity contribute to the timing of its implementation or construction. The region's prioritised activities are submitted to the NLTP alongside the priorities of all other regions which are then prioritised nationally. Funding allocated for each activity class by the GPS is distributed to the highest ranking activities. It is also feasible that a priority activity might not proceed if is not ready and so be programmed for construction later than a lower priority activity.

Figure 28: Regional priorities

NOTE:

* Activity is not included in the draft 6 year State Highway Activity Management Plan **(see Section 8.3.1)**
^ Activity may be eligible for funding from the regional improvements activity class. **(see Section 9.1.4)**.

Regional Priority	Activity	Org	Activity class	Phase	Description	Primary RLTP Objective
1	*SH2/SH29 Baypark to Bayfair link upgrade*[57]	*HNO*	*State highway improvements*	*Develop & construct*	*Grade separation of the Maunganui / Girven Road and SH2/SH29 intersections to reduce delays and improve travel time reliability.*	*Economic performance*
2	Totara Street Upgrade	TCC	Local road improvements	Develop & construct	Widen Totara Street between Hull Road and Hewletts Road. Signalise Hull Road intersection and construct a segregated walking and cycling path on this route.	Economic performance
3	SH29 Tauriko to Waikato Boundary, NSRRP	HNO	State highway improvements	Develop & construct	Defined in National Safer Roads and Roadsides PBC. Indicative Intervention: realign existing curves, median wire rope barrier, roadside hazard protection	Safety
4	Tauriko Upgrade	HNO	State highway improvements	Develop & construct	Investigation and construction of a long-term solution for SH29 through Tauriko that maintains efficient road freight access to the Port of Tauranga and accommodating sub-regional residential and commercial growth.	Economic performance
5	SH 2 Northern Corridor Safe System Programme	HNO	State highway improvements	Develop & construct	Programme of works of Safe System improvements along SH2 between Waihī and Tauranga to reduce crash risk.	Safety
6	SH5/SH30 Safety Improvements^	HNO	State highway improvements	Develop & construct	Safety improvements to existing T-intersection. Intersection sits at the southern edge of Rotorua providing the route choice between traveling via the Eastern Bay (SH30) or Hamilton/Waikato (SH5)	Safety

57 Funding was approved for the SH2/SH29 Baypark to Bayfair link upgrade as the RLTP was being finalised.

Regional Priority	Activity	Org	Activity class	Phase	Description	Primary RLTP Objective
7	Tauranga urban cycle network construction	TCC	Walking and cycling	Construct	Construction of remaining 80km of city cycle network	Land use and transport integration
8	Rotorua Urban Cycleways	RLC	Walking and cycling	Develop & construct	Construct a network of linked urban cycleways within Rotorua	Land use and transport integration
9	Tauranga Northern Link	HNO	State highway improvements	Develop & construct	Approx. 6.5kms of new 4-lane two-way highway linking SH 2 from just North West of Te Puna through to Route K. The new route provides a bypass of Te Puna and Bethlehem	Economic performance
10	Rotorua Eastern Arterial*^	HNO	State highway improvements	Develop & construct	Project to address congestion, safety and access issues along SH30 Te Ngae Road, Rotorua's eastern arterial.	Economic performance
11	Tauranga Eastern Cycleway	WBOPDC	Walking and cycling	Construct	Cycleway network linking Papamoa / Te Puke / Waitangi / Rangiuru Business Park / Maketū and Paengaroa communities	Land use and transport integration
12	Omokoroa to Tauranga City Cycleway	WBOPDC	Walking and cycling	Construct	Development of new cycleway infrastructure connecting Omokoroa and Tauranga City cycle network, utilising local roads and Railway corridors.	Land use and transport integration
13	SH30 Sala St/Te Ngae Road Urban Intersection Optimisation^	HNO	State highway improvements	Develop	Development of an activity to optimise the performance of existing intersections on the urban fringe on a regionally significant freight route.	Affordability
14	TCC Section of Omokoroa to Otumoetai Cycleway	TCC	Walking and cycling	Construct	Construction of boardwalk / path between the Wairoa river and Ngatai Road as part of the wider Omokoroa - Otumoetai cycleway	Land use and transport integration
15	Maketū/ Rangiuru Intersection Upgrade	HNO	State highway improvements	Develop	New intersection to connect Rangiuru Business Park to SH2, between Pah Road and Affco freezing works.	Safety
16	Poike Road Pedestrian & Cycle Facility	HNO	Walking and cycling	Construct	Provide pedestrian / cycle facilities over SH29 at Poike Road, to provide links between Welcome Bay and the Bay of Plenty Polytechnic at Windermere.	Land use and transport integration
17	Pah Road I/S Improvement Te Puke	HNO	State highway improvements	Develop & construct	Roundabout construction at existing intersection	Safety
18	SH2 / Welcome Bay Road	HNO	State highway improvements	Develop & construct	Safety improvements at one of New Zealand top 100 dangerous intersections	Safety

Regional Priority	Activity	Org	Activity class	Phase	Description	Primary RLTP Objective
19	Katikati Bypass*	HNO	State highway improvements	Develop & construct	Plan and construct a bypass for Katikati to alleviate community severance, and safety issues resulting from significant heavy vehicle flows.	Land use and transport integration
20	SH2: Wainui Rd to Ōpōtiki, NSRRP^	HNO	State highway improvements	Develop & construct	Works defined in National Safer Roads and Roadsides to improve the roadside environments and reduce accidents.	Access and resilience
21	HPMV T2 SH2 Edgecumbe to Ōpōtiki^	HNO	State highway improvements	Develop & construct	Roading improvements to accommodate high productivity motor vehicles on this route.	Economic performance
22	New Tauranga bus services	BOPRC	Public transport	Implement	Funding for additional bus services in Tauranga as part of regular Tauranga Bus network reviews	Access and resilience
23	Mourea Bridge Pedestrian Cycleway	HNO	Walking and cycling	Construct	Widen bridge to accommodate 2.5m wide combined pedestrian/cyclist facility separated from traffic lanes.	Affordability
24	Route K Pedestrian / Cycle Overbridge	TCC	Walking and cycling	Develop & construct	New pedestrian / cycle over bridge on Route K.	Access and resilience
25	EBOP Route Security SH2: Waimana Gorge Resillience*^	HNO	State highway improvements	Develop & construct	Improvements to increase the resilience of a regularly flooded section of SH2 with limited alternative routes available to freight traffic.	Access and resilience
26	Public Transport - Inter-Regional Ticketing Improvement	BOPRC	Public transport	Implement	Adoption of an electronic ticketing solution in partnership with other Regional councils.	Access and resilience
27	EBOP Route Security, SH2: Pekatahi Bridge*^	HNO	State highway improvements	Develop & construct	Design and construction/ remediation of the Pekatahi Bridge to reduce the risk of closures and improve efficiency	Access and resilience
28	SH33: Te Ngae Junction to Sun Valley NSRRP^	HNO	State highway improvements	Develop & construct	Identified in National Safer Roads and Roadsides as a high crash rate intersection requiring safety improvements.	Safety
29	SH2/ Wainui Road (Matekerepu) Route Security Improvements^	HNO	State highway improvements	Develop & construct	Works include raising the road and investing in the SH2 & Wainui Rd intersection to mitigate for a 1 in 10 year flood event.	Access and resilience
30	Rerewhakaaitu Freight Route^	WDC	Local road improvements	Develop	To investigate a shorter route to accommodate increasing freight demand between the Central North Island and the Eastern Bay of Plenty.	Economic performance

Regional Priority	Activity	Org	Activity class	Phase	Description	Primary RLTP Objective
31	No3 Road / SH2 Roundabout Installation	WBOPDC	Local road improvements	Develop & Construct	Intersection upgrade to accommodate planned land use development	Land use and transport integration
32	SH 2 Matata Straights (Resilience)^	HNO	State highway improvements	Develop & construct	Network resilience improvement to secure and maintain regional economic growth and productivity. Corridor particularly vulnerable to natural hazards such as slips	Access and resilience
33	SH2 Route Security Kukumoa Road Improvements^	HNO	State highway improvements	Develop	Upgrade Hukutaia Road-Old Creamery Road as a viable detour to SH2 between Ōpōtiki & Waiotahi in the event of State Highway disruption.	Access and resilience
34	EBOP Route Security, SH2: Ōpōtiki to Region 4 Boundary (Waioeka Gorge)*^	HNO	State highway improvements	Develop & construct	Package of improvements to reduce the susceptibility of this critical link between the BOP and Gisborne District to natural hazard closures.	Access and resilience
35	Oropi Road Alignment Improvements	WBOPDC	Local road improvements	Construct	Realign section of Oropi Road which has a crash history to increase safety	Safety
36	Waihī Beach Road Alignment Improvement RP 1.0km to RP 2.4km	WBOPDC	Local road improvements	Develop & construct	Improvements to the alignment of Waihī Beach Road to address undesirable crash rates.	Safety
37	Weigh Facility BOP^	HNO	State highway improvements	Develop & construct	Addition of a weigh facility to the BOP State highway network at a yet to be determined site.	Economic performance
38	Domain Road Upgrade	TCC	Local road improvements	Develop & construct	Upgrade Domain Road to provide acceptable levels of performance on SH2 and on the local arterial road network	Economic performance
39	Forest Passing Lane (SH33) & Alignment	HNO	State highway improvements	Develop & construct	Southbound passing lane & realignment on the Regional Strategic SH33 between Paengaroa and Rotorua. Will address safety issues and improve vehicle travel times on a route with high volume of heavy vehicles and steep gradients	Safety
40	Banksia Place Northbound Passing Lane	HNO	State highway improvements	Develop & construct	New northbound passing lane on SH33 near Banksia Place to allow passing opportunities where steep inclines exist. Aim is to improve both safety and efficiency on this route.	Safety

Regional Priority	Activity	Org	Activity class	Phase	Description	Primary RLTP Objective
41	Tuapiro Rd Passing Lane	HNO	State highway improvements	Construct	Install a southbound passing lane on SH2 between Waihī & Katikati with the aim of improving safety and travel times on this route.	Safety
42	Soldiers Road Realignment and Intersection *	HNO	State highway improvements	Construct	Safety improvement with additional benefits in terms of freight efficiency and travel time on this National High Volume route.	Safety
43	Kauri Point Passing Lane	HNO	State highway improvements	Construct	Addition of passing lane on SH2 near Kauri Point	Safety
44	Bridgman Lane Passing Lane	HNO	State highway improvements	Develop & Construct	Southbound and northbound passing lane to reduce high crash rate associated with lack of passing lanes.	Safety
45	SH30 Te Rahu Canal Bridge Replacement^	HNO	State highway improvements	Develop & construct	Replacement of canal bridge which is nearing the end of its economic life.	Economic performance
46	EBOP Route Security, SH35: Ōpōtiki to Region 4 Boundary*^	HNO	State highway improvements	Develop & construct	Works to improve the natural hazard resilience of a critical route for the numerous communities and significant horticultural and forestry industries along the East Cape.	Access and resilience

8.3.1 Activities not included in the draft State Highway Activity Management Plan

In order for activities to receive funding from the NLTF, they must first be proposed by an Approved Organisation, or the NZTA, and included in the RLTP. The RTC has identified a number of activities capable of making a significant contribution to the objectives of the RLTP that have not been included in the NZTA's draft 6-year State Highway Activity Management Plan (SHAMP). The activities are not currently in the regional programme.

The RTC has requested that the activities in Figure 29 be included in the SHAMP (and therefore the regional programme), and has prioritised them alongside proposed activities to provide an indicative regional priority if they are subsequently included in the programme.

Figure 29: Activities the RTC requested for inclusion in the SHAMP

Activity	Organisation	Phase	Description
Rotorua Eastern Arterial	HNO	Construction Phase only	Project to address congestion, safety and access issues along SH30 Te Ngae Road, Rotorua's eastern arterial.
Katikati Bypass	HNO	Develop & construct	Planning and construction of a bypass for Katikati to alleviate community severance, and safety issues resulting from significant heavy vehicle flows.
EBOP Route Security SH2: Waimana Gorge Resilience	HNO	Develop & construct	Improvements to increase the resilience of a regularly flooded section of SH2 with limited alternative routes available to freight traffic.
EBOP Route Security, SH2: Pekatahi Bridge	HNO	Develop & construct	Design and construction/remediation of the Pekatahi Bridge to reduce the risk of closures and improve efficiency.
EBOP Route Security, SH2: Ōpōtiki to Region 4 Boundary (Waioeka Gorge)	HNO	Develop & construct	Package of improvements to reduce the susceptibility of this critical link between the BOP and Gisborne District to natural hazard closures.
Soldiers Road Realignment and Intersection	HNO	Construct	Safety improvement with additional benefits in terms of freight efficiency and travel time on this National High Volume route.
EBOP Route Security, SH35: Ōpōtiki to Region 4 Boundary	HNO	Develop & construct	Works to improve the natural hazard resilience of a critical route for the numerous communities and significant horticultural and forestry industries along the East Cape.

8.4 Committed activities

The activities in Figure 30 have funding committed either through the NLTF or through Crown appropriation and therefore do not need to be prioritised.

The exception to this is the Rotorua Eastern Arterial. The Crown has committed funding for the investigation and design phases only. The construction phase of this activity does not have funding committed and it has not been included in the draft 6 year SHAMP. Consequently, the region has deemed it prudent to prioritise construction of the Rotorua Eastern Arterial and seek its inclusion in the SHAMP to ensure that this project can be progressed within the 6 year programme.

Figure 30: Activities with funding committed

Activity	Organisation	Phase	Description
SH2/SH29 Baypark to Bayfair link upgrade[58]	HNO	Develop & construct	Grade separation of the Maunganui / Girven Road and SH2/SH29 intersections to reduce delays and improve travel time reliability.
Tauranga School Bus Services	BOPRC	Implementation	The Ministry of Education from 2015 will no longer operate a school bus service within urban Tauranga. This activity will provide resources for BOPRC to provide a replacement for this service.
Hairini Link - Stage 4	HNO	Develop & construct	Creation of a direct link from SH2A to Welcome Bay beneath SH29 to reduce urban congestion at the SH29/SH2A/Welcome Bay Road intersections.
Rotorua Eastern Arterial	Crown/HNO*	Investigation & Design	Project to address congestion, safety and access issues along SH30 Te Ngae Road, Rotorua's eastern arterial.
Route K Conversion to ETC	HNO	Construct	Installation of electronic tolling system on Route K, Tauranga.
TEL Tauranga Eastern Link	HNO	Construct	Completion of the Tauranga Eastern Link, bypassing Te Puke and providing significant safety and travel time benefits between the eastern and western Bay of Plenty.
HPMV - SH2 Waihī to Port of Tauranga	HNO	Develop & construct	Roading improvements works that will support high productivity motor vehicles (larger freight vehicles).
SH2 Takitimu Dr Elizabeth St Int-Interim	HNO	Construct	Signalising of the SH2 Takitimu Dr/Elizabeth St roundabout to provide medium term capacity improvements to the intersection.
Minden Te Puna Intersection Improvement	HNO	Construct	Upgrade existing priority controlled cross intersection to improve safety & support local economic development.
Eastern Bay of Plenty Rural Roads Signature Project: Safer State Highways	HNO	Implementation	Development and implementation of a preferred option of safety treatments along rural sections of SH2 in the Eastern Bay of Plenty.

* this project is crown funded but managed by the NZTA (Highways & Network Operations)

58 Funding was approved for the *SH2/SH29 Baypark to Bayfair link* upgrade as the RLTP was being finalised.

8.5 Significant expenditure on activities not funded from the NLTF

There are a number of land transport activities in the region which make a significant contribution to the objectives of the RLTP that are either not eligible for NLTF funding, or are funded from other sources.

The majority of these activities are being delivered by KiwiRail or Tauranga City Council with the exception of the Rotorua Eastern Arterial investigation and design phases, which are funded by the Crown and delivered by NZTA.

KiwiRail funds its improvement works through a combination of Crown funds and through the reinvestment of operating profits. Ongoing investment in the rail network is critical to ensuring that the land transport network remains efficient and reliable for freight travel. This is a key part of supporting the region's primary and manufacturing industries which are reliant on both rail and road transport to the Port of Tauranga and to domestic markets.

Ongoing and forecast population and economic growth in Tauranga city requires significant infrastructure investment from TCC across many areas of its business including the local road network. Much of the work required to increase existing capacity and provide new roads and access is funded by TCC through developer contributions and local rates.

Figure 31 details significant expenditure on non-NLTF funded activities programmed for the 6-year period covered by the regional programme (2015/16 - 2020/21).

Figure 31: Significant expenditure on activities not funded from the NLTF

Activity	Funding Source	Description	Total Expenditure 2015-21
SH30 Rotorua Eastern Arterial (Investigation Phase)	Crown	Project to address congestion, safety and access issues along SH30 Te Ngae Road, Rotorua's eastern arterial	$300,000
Kaimai Tunnel Works	KiwiRail	Extensive series of ongoing works to improve the axle-load capacity and extend the life of the Kaimai Rail tunnel for a further 40 years.	$40,000,000
KiwiRail Maintenance and Renewals	KiwiRail	Maintenance, upgrades and replacement of tracks that are nearing or have exceeded their economic life	$56,700,000
Upgrade of Welcome Bay Road	TCC	Continuation of contributions to Western Bay District Council as they upgrade this boundary road	$1,395,576
Widen and extend Kennedy Road	TCC	Upgrade existing rural road to urban standard to enable adjacent development to occur.	$2,225,356
Tauriko road widening and land purchases	TCC	Enable Tauriko Business Estate development as they roll out industrial land by funding a proportion of Taurikura Drive costs.	$6,344,082
Bridge Over Kopurererua Stream - Tauriko	TCC	Connection between Tauriko Industrial Estate and Pyes Pa West. Development funded but to be delivered by TCC.	$1,400,000
Te Okuroa Drive land purchase, construction and intersections	TCC	Construction of Te Okuroa Drive at the appropriate time to enable ongoing delivery of the Wairakei Urban Development Area	$25,845,039
New roads in Pāpāmoa East	TCC	Enable development in Papamoa by funding a proportion of collector road construction costs.	$ 1,769,200

8.6 Activities of inter-regional significance

The Bay of Plenty transport system does not work in isolation and to perform its role at optimum efficiency requires working closely with neighbouring regions. The region has defined activities of inter-regional significance to be those that have an impact on inter-regional connectivity or require collaboration with other regions. Consequently, Figure 32 identifies key activities both in the Bay of Plenty and other regions that the region considers to be of inter-regional significance.

Figure 32: Activities of inter-regional significance

Activity	Region(s)	Description
Waikato Expressway	Waikato	Reduces travel time, improves journey time reliability, and improves safety for journeys from Bay of Plenty to Auckland via Hamilton.
SH29 (Bay of Plenty boundary to SH24), National Safety Roads & Roadside Programme	Bay of Plenty & Waikato	Road safety improvements for journeys between Bay of Plenty and Auckland via Hamilton
SH29 Tauriko to Waikato Boundary, National Safety Roads & Roadside Programme	Bay of Plenty & Waikato	Road safety improvements for journeys between Bay of Plenty and Auckland via Hamilton
SH2 Northern Corridor Safe System Business Case	Bay of Plenty & Waikato	Development of the business case to support ongoing investment in the corridor and identify individual activities to improve the corridor. Particular focus on safety due to the conflict between local traffic, freight, and land use development.
Eastern Bay of Plenty Route Security, SH2 Opotiki to Region 4 Boundary (Waioeka Gorge)	Bay of Plenty & Gisborne	Package of improvements to reduce the susceptibility of this critical link between the Bay of Plenty and Gisborne to natural hazard closures.
Eastern Bay of Plenty Route Security, SH35: Opotiki to Region 4 Boundary	Bay of Plenty & Gisborne	Works to improve the natural hazard resilience of a critical route for the numerous communities and significant horticultural and forestry industries along the East Cape.
KiwiRail Auckland 3rd Main between Westfield and Wiri	Auckland	The third main trunk line is seen as a necessary component of the rail network to enable continued freight capacity growth between Auckland and Port of Tauranga. This is necessary due to a growing number of passenger rail services on this line.
Rerewhakaaitu Freight Route	Bay of Plenty & Waikato	Project to investigate the sealing of roads to accommodate HPMV and increase other freight volumes between Taupō and the EBOP via Rerewhakaaitu Rd. This could remove some heavy vehicles from the Rotorua Urban area.
SH1/29 – ECMT Strategic Case	Bay of Plenty & Waikato	Development of the business case to support ongoing investment in the corridor and identify individual activities to improve the corridor.
Kaimai Rail Tunnel Works	Bay of Plenty & Waikato	Extensive series of ongoing works to improve the axle-load capacity and extend the life of the Kaimai rail tunnel for a further 40 years.
Waihī to Waihī Beach Cycle Trail	Bay of Plenty & Waikato	Development of a cycleway linkage that connects the Hauraki Cycle Trail in the Waikato Region to the Tauranga Moana Coastal Cycle Trail in the Bay of Plenty Region.
Te Urewera Rainforest Route Resilience Improvements	Bay of Plenty & Hawke's Bay	Works to improve the resilience of this route between the Bay of Plenty and Hawke's Bay regions.

8.7 Department of Conservation activities

The Department of Conservation (DOC) is responsible for managing significant lengths of public road which provide public access to various parks and recreation areas across New Zealand. These roads are often the only access to key tourist destinations. DOC is regarded as a road controlling authority and receives funding from the NLTF to assist in managing its road network.

For the 2015-18 period, DOC will be bulk funded nationally, with allocations then made to regions for specific projects. Over the 2015-18 period DOC will transition into developing regional land transport programmes in line with other Approved Organisations, including adoption of the One Network Road Classification framework and investigation of co-management options with adjoining councils and road controlling authorities.

8.8 Māori roadways

Section 22 of the LTMA enables the NZTA or territorial authorities to receive funding from the NLTF for an activity relating to a Māori roadway if it is included in the RLTP. While no specific activities relating to Māori roadways have been included in the current Plan, the opportunity exists to add an activity by way of a variation to the RLTP (see Section 10.3).

Chapter 9: Funding

The LTMA requires that a forecast of anticipated revenue and expenditure for a ten year period between 2015/16 and 2025/26 be included in the RLTP. This chapter outlines the different funding streams that are available to fund the transport network and provides a forecast for funding from each of these sources.

9.1 How transport is funded

9.1.1 Local government

Local government provides the majority of the investment in the local road network through a combination of subsidised and unsubsidised activities. The level of subsidy that each local council attracts is dependent on the Financial Assistance Rate (FAR) which is determined by the NZTA.

The programmes submitted by local councils are subject to the long term and annual planning processes at each council. These processes are ongoing at the time of writing and as a consequence the regional programme may be subject to variations once these processes have concluded.

Some activities do not attract NLTF funding and must be paid entirely through a combination of rates, investments, and developer contributions. These activities include:

- footpath maintenance and renewal;
- new footpaths (other than for safety);
- public off-street parking provision, maintenance and enforcement;
- on-street landscaping and urban design elements (provision and maintenance);
- amenity lighting;
- public off-street lighting;
- growth related new roads;
- recreational walking and cycling facilities; and
- seal extensions.

9.1.2 Development and financial contributions

In growth areas there is a need for those developing the area for residential, commercial, or industrial use to contribute to the development of infrastructure that will support that development. In some instances the developer will construct the assets themselves before vesting these to the council but more commonly local authorities ask for a contribution from the development to fund the required infrastructure. This mechanism enables local authorities to fund infrastructure that might not otherwise be affordable and ensure that the associated costs are equitably distributed between existing rate payers and the developers of new areas.

9.1.3 National Land Transport Fund

The NLTF is the primary source from which the region is seeking funding through this RLTP. The NLTF is sourced from road user charges, fuel excise duty and other income collected as land transport revenue. The NLTF is distributed across a number of activity classes as determined by the GPS, which also sets indicative national funding ranges for each class (Figure 33). The NZTA is required to allocate funding within these ranges for the first three years of the programme in the NLTP. If planned expenditure in one activity class is greater than the mid-point, it must be compensated by lower expenditure elsewhere. As these funds are allocated nationally, they are contestable between each of the regions with no fixed or guaranteed funding levels for each region.

Figure 33: Government Policy Statement activity classes

		Funding Available Nationally ($m)			
Activity Class	**Covers**	**Band**	**2015/16**	**2016/17**	**2017/18**
Investment management	• Transport planning activities; • Transport model development; • Sector research; • Activity management planning; and • Management of the funding allocation system.	Lower Upper	53 59	54 60	55 61
Road safety promotion	Activities that promote the safe use of the land transport network through education, advertising, raising awareness and public information activities.	Lower Upper	30 37	31 38	31 38
Walking and Cycling Improvements	Development of walking and cycling infrastructure. Cycle facilities used purely for recreational purposes are not eligible for financial assistance.	Lower Upper	15 33	15 34	16 36
Public Transport	• Investment in public transport infrastructure operation • Investment in new public transport infrastructure • Operation of new or existing public transport services • Total Mobility services including hoist installation and operation costs.	Lower Upper	275 390	290 405	300 420
Local road maintenance	Investment in operation of existing local roads capacity or services	Lower Upper	405 565	410 580	415 595
State highway maintenance	Investment in operation of existing State highway capacity or services	Lower Upper	445 585	450 605	455 620
Regional Improvements	Improvements to roads in regional New Zealand that meet the criteria of having no existing RONS and are located within districts that are predominantly rural and provincial.	Lower Upper	50 90	60 90	70 90
Road policing*	Investment in road policing by the New Zealand Police	Lower Upper	280 320	285 325	290 330
Local road improvements	Investment in local roads that improves capacity or service levels	Lower Upper	150 230	155 240	160 250
State highway improvements	Investment in State highways that improves capacity or service levels	Lower Upper	1000 1400	1050 1450	1100 1500
	Total NLTF Expenditure Target		**3400**	**3500**	**3600**

*Road policing is not included within the RLTP and is administered directly to Police by the NZTA

9.1.4 Regional improvements activity class

The GPS has established a new Regional Improvements activity class, which is designed to support roading investment in regional New Zealand and contribute to the long term results of economic growth, greater network resilience, improved safety and increased understanding of the costs of environmental mitigation.

Funding for this activity class comes from the NLTF. Current advice indicates that the Regional Improvements activity class will provide funding support for activities based on the following principles:

- funding is restricted to national and local road improvements work categories,
- is a nationally contestable fund, rather than a set distribution across regions or districts,
- allows a regional focus on national priorities of freight efficiency, resilience , road safety and tourism travel,
- funding is restricted to eligible areas outside the major metropolitan areas. For the Bay of Plenty, this means the Tauranga urban area is excluded from this activity class; and
- activities use the road improvements activity classes investment assessment criteria.

Regional Improvements will represent the highest priority, eligible, regional activities that are not prioritised for national investment. Funding will be allocated to eligible activities once funds from other activity classes have been exhausted. The activities that are funded will be dependent on the ranking of the activity in the NLTP and will not be at the region's discretion as was previously the case with regional R-funds.

The region supports the establishment of a regional improvements activity class, but is of the view that funding should be allocated to regionally supported activities that address the national priorities of freight efficiency, resilience, road safety and tourism travel, rather than simply on the basis of their national ranking. Figure 28 (Regional Priorities) notes activities the region has identified that support the national priorities and may be eligible for funding from the Regional Improvements fund.

9.1.5 Crown funding

From time to time the Crown will identify a specific need for investment that may not fit neatly within the standard model for funding transport investment. This may be due to issues relating to timing of projects or Government priorities that are not being addressed through this mechanism. The most recent round of Crown funding was made available from the Government's 'Future Investment Fund' which sits outside the standard funding model. This funding was used to advance the investigation stage of the Rotorua Eastern Arterial.

9.1.6 Urban cycleways fund (Crown)

The current government has announced an urban cycleway investment fund that will be made available for the improvement of urban cycling infrastructure and to assist with operational expenditure. It is expected that any local cycleway improvement activities that are funded will also require financial support from local authorities. This funding is in addition to the funding allocation made available through the NLTF of between $45m and $103m over the next three years.

An Urban Cycleway Investment Panel made up of representatives from local government, central government, and other organisations will make recommendations to the Minister of Transport on the allocation of investment from this fund. The process for seeking and receiving funds from this fund is yet to be finalised, however, funding allocation processes will run parallel to the NLTP 2015/18 process.

Expected government funding for cycling activities over the next three years are shown in Figure 34.

Figure 34: Cycle funding available nationally 2015-18 ($million)

	2015/16	2016/17	2017/18	Total
Urban cycleway fund	35	30	25	100
Walking and cycling improvements (NLTF)	15-33	15-34	15-36	45-103

9.1.7 Other funding

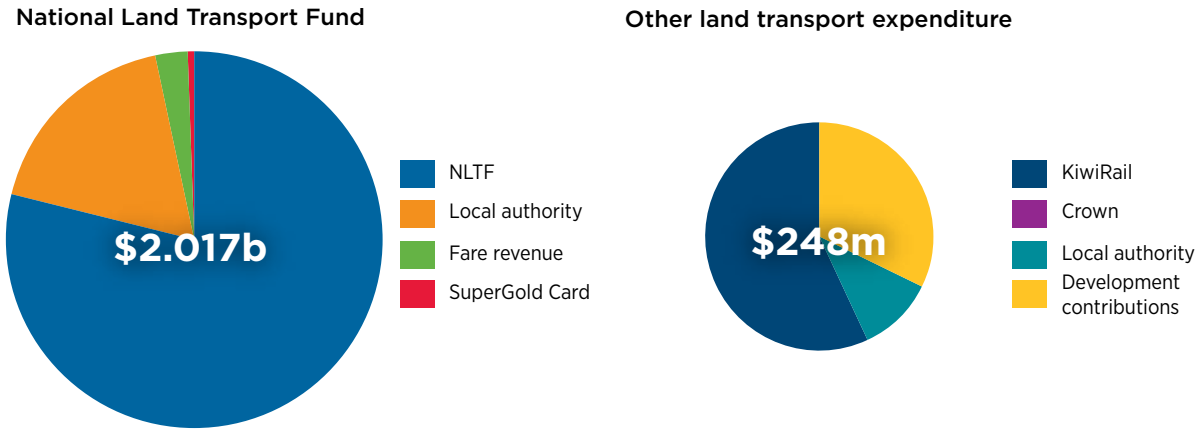
Funding is also available from the following sources:

- additional contributions from local authorities beyond that usually required for a subsidised activities;
- SuperGold fare subsidy (paid by Ministry of Social Development to fund free bus travel for seniors);
- public transport fares;
- contributions from community groups or other government agencies to community programmes;
- betterment from landowners receiving values from road improvements;
- fees and charges; and
- vested developer assets.

9.2 Ten year financial forecast

The Bay of Plenty region's ten year financial forecast comprises two parts: anticipated expenditure on land transport activities that are eligible for funding from the NLTF, and anticipated expenditure on land transport activities that are not part of the NLTF funding system (Figure 35).

Figure 35: Summary of Bay of Plenty ten year financial forecast



Total anticipated expenditure for Bay of Plenty transport activities that are eligible for funding from the NLTF are shown in Figure 36. The figures in this section will be subject to change given that the Approved Organisations submitting to the programme were in the process of developing long term plans at the time the RLTP was finalised, which will have a considerable impact on these estimates.

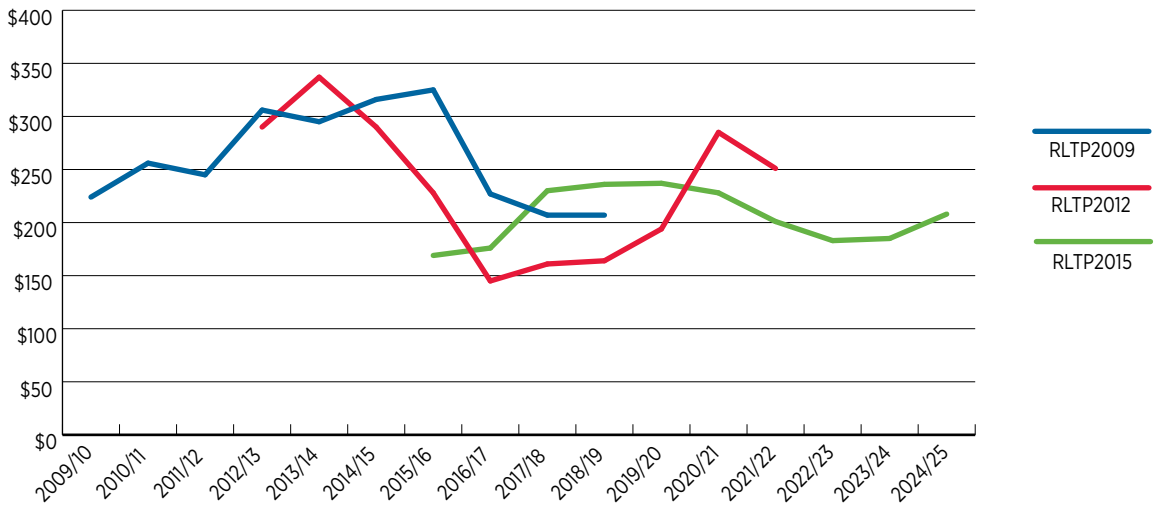
Figure 36: Bay of Plenty ten year financial forecast (NLTF)

Activity class	NLTF share	Local authority	Fare Revenue	GoldCard Subsidy	Ten year expenditure
Investment Management	$6,606,000	$3,333,000	-	-	$9,939,000
Road safety promotion	$9,656,000	$7,120,000	-	-	$16,776,000
Walking & cycling improvements	$11,095,000	$7,997,000	-	-	$19,092,000
Public transport	$68,329,000	$63,514,000	$59,384,000	$8,626,000	$199,853,000
Local road maintenance	$283,621,000	$242,576,000	-	-	$526,197,000
State highways maintenance	$393,522,000	-	-	-	$393,522,000
Local road improvements	$63,692,000	$56,104,000	-	-	$119,796,000
State highway improvements	$731,586,000	-	-	-	$731,586,000
Total	**$1,568,107,000**	**$380,644,000**	**$59,384,000**	**$8,626,000**	**$2,016,761,000**

The anticipated ten year financial forecast for the Bay of Plenty region has a total cost of $2.017 billion. The NLTF share of this expenditure is $1.568 billion. The balance of the funding is made up from local share and other funding.

Figure 37 shows the ten year expenditure forecasts for this and the two previous programmes. It indicates that the current programme is more conservative than in previous funding rounds which can in part be explained by the impending completion of the Tauranga Eastern Link which made up a large component of previous programmes.

Figure 37: Summary of ten year financial forecasts 2009/12, 2012/15, 2015/21



Total anticipated expenditure for all land transport activities that sit outside the NLTF is shown in Figure 38. This forecast includes anticipated expenditure by KiwiRail, the Crown, and local authorities that does not attract NLTF funding.

Figure 38: Ten year forecast of other land transport expenditure

Year	KiwiRail	Crown*	Local authority	Development contributions	Total
2015/16	$11,300,000	$300,000	$2,984,000	$8,000,000	$22,584,000
2016/17	$15,900,000		$2,964,000	$8,000,000	$26,864,000
2017/18	$19,500,000		$2,964,000	$8,000,000	$30,464,000
2018/19	$19,900,000		$3,012,000	$8,000,000	$30,912,000
2019/20	$19,700,000		$3,121,000	$8,000,000	$30,821,000
2020/21	$10,400,000		$2,678,000	$8,000,000	$21,078,000
2021/22	$12,100,000		$2,545,000	$8,000,000	$22,645,000
2022/23	$11,500,000		$2,243,000	$8,000,000	$21,743,000
2023/24	$10,200,000		$2,099,000	$8,000,000	$20,299,000
2024/25	$10,200,000		$2,009,000	$8,000,000	$20,209,000
Total	**$140,700,000**	**$300,000**	**$26,619,000**	**$80,000,000**	**$247,619,000**

* Crown expenditure excludes funding that may be made available from the urban cycleways fund.


HAMBURG SÜD
HAMBURG SÜD
HAMBURG SÜD
bayhopper

Chapter 10: Monitoring and Review

10.1 Monitoring

The Regional Transport Committee (RTC), with the assistance of the Regional Advisory Group, will undertake monitoring to assess implementation of the RLTP. Monitoring will involve:

- Gathering and reviewing information from organisations responsible for delivering RLTP activities.
- Annual reporting of key performance indicators to measure progress toward achieving RLTP objectives.

10.2 Review

The LTMA requires that the RTC must complete a review of the RLTP during the 6-month period immediately before the expiry of the third year of the plan.

10.3 Variations

The RTC may prepare a variation to the RLTP in the six years to which it applies at the request of an Approved Organisation or the NZTA, or on the RTC's own motion providing good reason exists to do so.

Any requested or recommended variation to the RLTP will be reported to the RTC for a decision on its significance. The RTC will undertake public consultation according to the requirements of the LTMA on any variation that is deemed significant. The RTC has adopted the significance policy in the following section to guide its decision-making.

10.4 Significance policy

10.4.1 Significance policy for variations to the RLTP

Section 106(2) of the Land Transport Management Act 2003 (LTMA) requires each RTC to adopt a policy that determines significance in respect to variations made to its RLTP. The significance policy applies to any process initiated under section 18D of the LTMA, which states that a variation of the RLTP in the six years to which it applies does not require public consultation providing the variation is not significant or arises from the declaration or revocation of a state highway.

The significance of proposed variations to the Bay of Plenty RLTP will be determined on a case by case basis. In reaching its decision, the RTC will be guided by whether the variation involves:

- The addition or removal of an activity with a total cost in the three years of the programme of more than $10 million;
- A change in the priority of an activity with a total cost in the three years of the programme of more than $10 million;
- The addition or removal of a phase or phases of a prioritised activity that varies the total cost of the activity by more than $10 million in the three years of the programme;
- A scope change to a prioritised activity that impacts on the contribution of the activity towards GPS objectives and/or varies the total cost of the activity by more than $10 million in the three years of the programme; and
- Any other variations the Bay of Plenty RTC deems to be significant by way of resolution.

For the purposes of clarity, the following are unlikely to be considered significant:

- Variations to activities or new activities that are in the urgent interests of public safety;
- Variations to activities or new activities involving preventative maintenance and emergency works;
- Variations to activities or new activities relating to local road maintenance, local road minor capital works, existing public transport services;
- Variations to road safety promotion activities;
- Addition of the development phase of a new or existing activity;
- Addition of the programme business case phase of a new or existing activity.

10.4.2 Significance policy for prioritisation in the RLTP

Section 16(3)(d) of the LTMA requires the prioritisation of all significant activities for the six years from the start of the RLTP. For the purposes of prioritisation a number of activities will be excluded from prioritisation based on the expectation that these activities will be funded ahead of new improvements. These activities include:

- state highway and local road maintenance;
- investment management activities;
- road safety promotion; and
- existing public transport services.

The determination of significance for activities prioritised in the RLTP is:

- Projects or programmes with total expenditure likely to exceed $1 million over the duration of the project; or
- Projects or programmes that the RTC deems to make a significant contribution to the objectives of the RLTP by way of resolution.

10.4.3 Significant expenditure from other sources

Section 16 (2)(c) of the LTMA requires the identification of all regionally significant expenditure on land transport activities to be funded from sources other than the NLTF during the first 6 years plan. Regionally significant expenditure has been defined as:

- Any expenditure from sources other than the NLTF likely to contribute more than $1 million to land transport activities during the 6 financial years from the start of the RLTP; and
- Any other expenditure that the RTC deems to be significant by way of resolution.

10.4.4 Inter-regional significance policy

Section 16 (2)(d) of the LTMA requires the identification of any activities that have inter-regional significance. Inter-regional significance has been defined as:

- Activities that have an impact on inter-regional connectivity or require collaboration with other regions.

Glossary and Appendices

Glossary of Terms and Acronyms

Term / Acronym	Meaning
Accessible journey	The accessible journey covers all the steps needed for a person to get to their destination and return. The concept includes the ease with which all categories of passenger can use public transport and recognises that bus passengers are pedestrians at each end of a public transport journey.
AC	Auckland Council
AO	Approved Organisation eligible to receive NZTA funding.
BCR	Benefit Cost Ratio (or B/C) compares the benefits accruing to land transport users and the wider community from implementing a project, with that project's costs.
BOP	Bay of Plenty region
BOPRC	Bay of Plenty Regional Council
CAS	Crash Analysis System
CBD	Central Business District
CDEM	Civil Defence and Emergency Management
DC	Developer Contribution
Demand Responsive Services	Demand responsive public transport services respond to demand and fill the gaps between fixed-route, network services and single hire taxi services. Demand responsive services provide flexibility in one or more of the following: route, vehicle allocation and operator, payment type, and passenger category. Demand responsive services are particularly useful for connecting isolated communities in rural areas/small towns to essential services.
DM	Demand Management
Development phase	The development phase of an activity may include the following project phases: • For existing projects progressing through the traditional approach development includes investigation and/or design phases. • For projects proceeding under the business case approach, the phases include: indicative business case, detailed business case or pre-implementation phases. Development does not include strategic or programme business case phases, or construction.
ECMT	East Coast Main Trunk railway line
Economic Evaluation Manual	The industry standard for the economic evaluation of transport activities. Used by Approved Organisations for economic evaluation and the preparation of funding applications to the NZTA.
Facility pricing	Pricing the use of transport infrastructure to fund (or partially fund) the cost of developing or providing that infrastructure e.g. roads, car parking. Can also be used as a demand management tool.
FAR	Financial Assistance Rate – percentage of total cost of an activity paid by NZTA.
GDC	Gisborne District Council

Term / Acronym	Meaning
GDP	Gross Domestic Product
GPS	Government Policy Statement on Land Transport
HBRC	Hawkes Bay Regional Council
HNO	NZ Transport Agency Highways and Network Operations
HOV	High Occupancy Vehicle
HPMV	High Productivity Motor Vehicle
HRC	Horizons Regional Council
ICT	Information and Communications Technology
ITS	Intelligent Transport Systems
KDC	Kawerau District Council
Key Congested Routes	Tauranga Routes monitored in the NZTA Travel Time Performance Indicators report.
KiwiRail	KiwiRail has been formally separated into two entities – KiwiRail Holdings Limited (KiwiRail) a State-Owned Enterprise, and New Zealand Railways Corporation (NZRC). This structural change sees the commercial operations undertaken through KiwiRail, with the land assets retained by NZRC.
KiwiRAP	New Zealand Road Assessment Programme for proactively assessing crash risk on rural state highways and allocating Star Ratings.
LA	Local Authority (regional, district or city council)
LGA	Local Government Act
LIM	Land Information Memorandum
Long Term Plan	A plan prepared by all local authorities under the Local Government Act and covering a period of at least ten years.
LTP	Long Term Plan
LTMA	Land Transport Management Act
MoT	Ministry of Transport
National Strategic	Road and rail - major access routes for people and goods, or provide for large volume freight movements of importance to the national economy. Cycling - trails on the national cycle trail network.
NLTF	National Land Transport Fund
NLTP	National Land Transport Programme
NOF	Network Operating Framework
NSRRP	National Safer Roads & Roadsides Programme
NZTA	New Zealand Transport Agency
NZTS	New Zealand Transport Strategy
ODC	Ōpōtiki District Council
PoT	Port of Tauranga
PBC	Programme Business Case

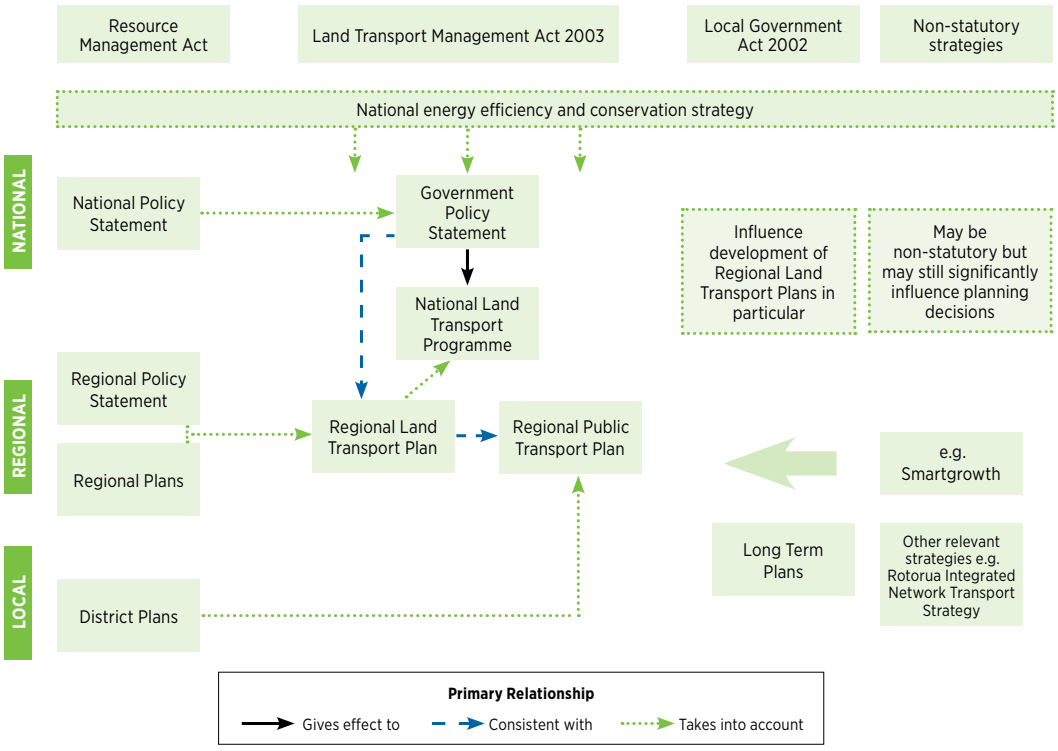
Term / Acronym	Meaning
PPP	Public Private Partnership - a mechanism for funding large infrastructure projects in which construction and operating costs (and risks) are allocated between public and private sector parties.
PT	Public Transport
Public transport farebox recovery	Proportion of public transport costs recovered through revenue generated by fares.
RAG	Regional Advisory Group
RCA	Road Controlling Authority
RLC	Rotorua Lakes Council
REA	Rotorua Eastern Arterial
RLTP	Regional Land Transport Plan
RMA	Resource Management Act
Route K	Tolled road in Tauranga.
RPS	Regional Policy Statement
RPTP	Regional Public Transport Plan
RSAP	Road Safety Action Plan
RTC	Regional Transport Committee
SH	State Highway (managed by NZTA)
SI	Safety Improvement
SmartGrowth	Spatial plan for the western Bay of Plenty sub-region.
SOV	Single Occupancy Vehicle
SPR	Special Purpose Road
TA	Territorial Authority (city or district council) aka TLA
TCC	Tauranga City Council
TEL	Tauranga Eastern Link
TLA	Territorial Local Authority (city or district council) aka TA
TNL	Tauranga Northern Link
UNI	Upper North Island
VKT	Vehicle Kilometres Travelled
WBOPDC	Western Bay of Plenty District Council
WDC	Whakatāne District Council
WRC	Waikato Regional Council

Appendix 1: Statutory and Policy Context

A number of national, regional, sub-regional and local policy documents have influenced the development of the RLTP, and will continue to do so as the plan is implemented. Figure 39 illustrates the relationship between national, regional and local policy documents.

The statutory and policy context for the RLTP is subject to ongoing change. The following summarises some of the key statutes and policies based on the latest information available when the RLTP was being finalised. A full list of the documents considered during the preparation of the RLTP can be found in **Appendix 5**.

Figure 39: Policy context for regional land transport plans



Land Transport Management Act

The Land Transport Management Act (LTMA) sets out the core requirements that must be followed when preparing a regional land transport plan. These include specifying how the plan:

- contributes to an effective, efficient, and safe land transport system in the public interest (the purpose of the LTMA);
- is consistent with the GPS on land transport;
- has considered alternative regional land transport objectives that would contribute to the purpose of the LTMA; and
- the feasibility and affordability of those alternative objectives;
- has taken into account any national energy efficiency and conservation strategy; and
- relevant national policy statements and any relevant regional policy statements or plans; and
- likely funding from any source.

The LTMA also sets out specific content requirements for regional land transport plans. A full assessment of how the RLTP complies with LTMA statutory requirements is detailed in **Appendix 4**.

Appendix 1

Government Policy Statement on Land Transport 2015/16-2024/25

The Government Policy Statement (GPS) was released in December 2014, and sets out national land transport objectives for a period of at least ten financial years and the results that the Government wishes to achieve from allocation of the National Land Transport Fund.

The GPS also provides broad direction on where investment should be directed by determining how much funding is allocated between different activity classes such as road policing, state highways, local roads, public transport, and walking and cycling.

The GPS is critical for planning and funding land transport in the region because:

- the Regional Land Transport Plan must be consistent with the GPS; and
- the National Land Transport Programme must give effect to the GPS.

The GPS proposes the following overall national strategic direction for land transport:

To drive improved performance from the land transport system by focusing on:

- economic growth and productivity
- road safety
- value for money

National land transport objectives are for a land transport system that:

- addresses current and future demand for access to economic and social opportunities
- provides appropriate transport choices
- is reliable and resilient
- is a safe system, increasingly free of death and serious injury
- mitigates the effects of land transport on the environment
- delivers the right infrastructure and services to the right level at the best cost

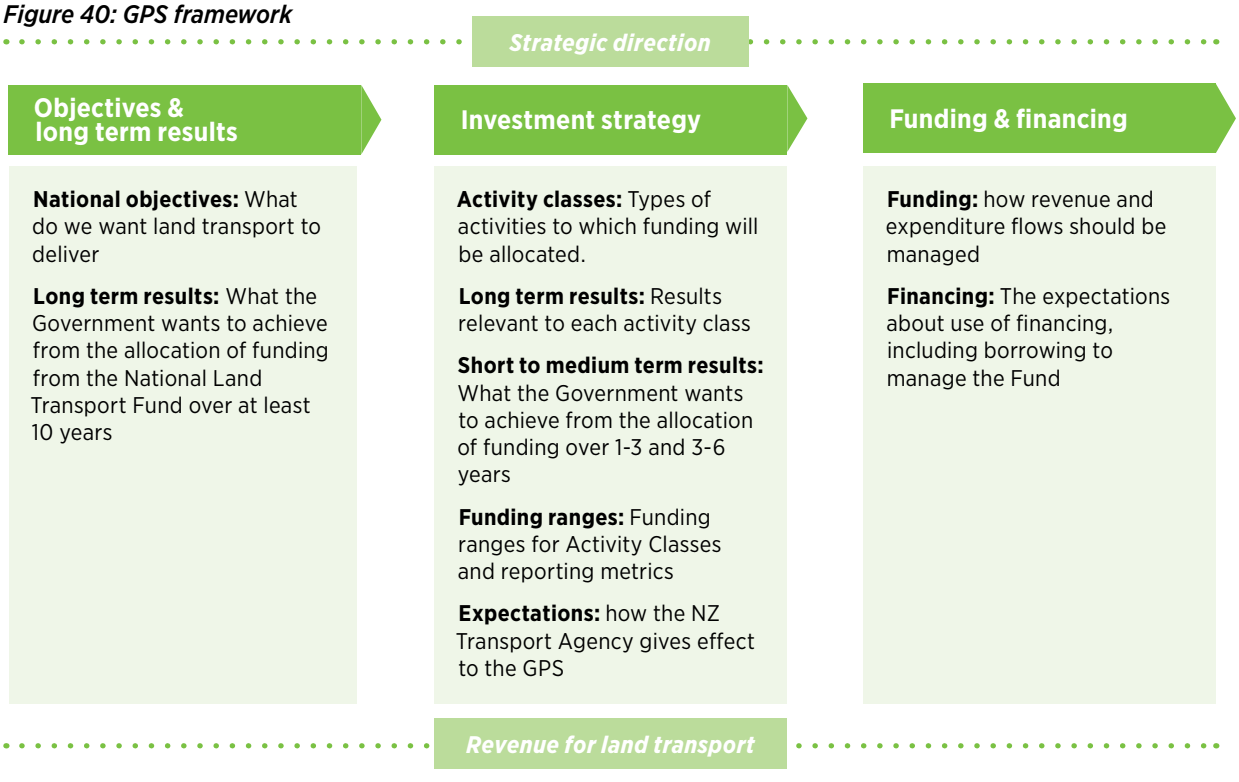
The GPS also identifies a range of long term and short to medium term results the Government wants to achieve from the allocation of investment from the NLTF.

The overall policy framework in the GPS is depicted in Figure 40.

Connecting New Zealand

Connecting New Zealand contains the Government's broad policy direction for the whole transport sector to assist investment decision making in land transport. Connecting New Zealand identifies economic growth and productivity, value for money and road safety as areas of focus.

Figure 40: GPS framework



National Infrastructure Plan

The National Infrastructure Plan sets the vision that by 2030 New Zealand's infrastructure is resilient and coordinated, and contributes to economic growth and increased quality of life. The plan provides the framework for infrastructure development over the next twenty years and is focused on ensuring that New Zealand makes better use of existing infrastructure and allocates new investment that will meet long term needs.

New Zealand Energy Efficiency and Conservation Strategy 2011–2016

The New Zealand Energy Efficiency and Conservation Strategy (NZEECS) was developed alongside the New Zealand Energy Strategy. The NZEECS outlines the Government's priorities to make improvements in energy efficiency, energy conservation and renewable energy. It sets the following objective and targets for the transport sector:

Objective:	A more energy efficient transport system, with a greater diversity of fuels and renewable energy technologies.
Target:	By 2016: The efficiency of light vehicles entering the fleet has further improved from 2010 levels.

Safer Journeys – New Zealand's Road Safety Strategy 2010-2020

Safer Journeys is the national strategy to guide improvements in road safety over the period 2010 - 2020. The Safer Journeys vision is:

A safe road system increasingly free of death and serious injury.

To support the vision, Safer Journeys takes a safe system approach to road safety. This means working across all elements of the road system (roads, speeds, vehicles and road use) and recognising that everybody has responsibility for road safety.

Safer Journeys also identifies the issues that are priorities for road safety in New Zealand and actions to address them. The first priority areas are:

- Increasing the safety of young drivers.
- Reducing alcohol / drug impaired driving.
- Safe roads and roadsides.
- Increasing the safety of motorcycling.

Bay of Plenty Regional Policy Statement

The Bay of Plenty Regional Policy Statement (RPS) is prepared under the RMA and is the guiding resource management policy document for the Bay of Plenty region. The RPS became operative on 1 October 2014.

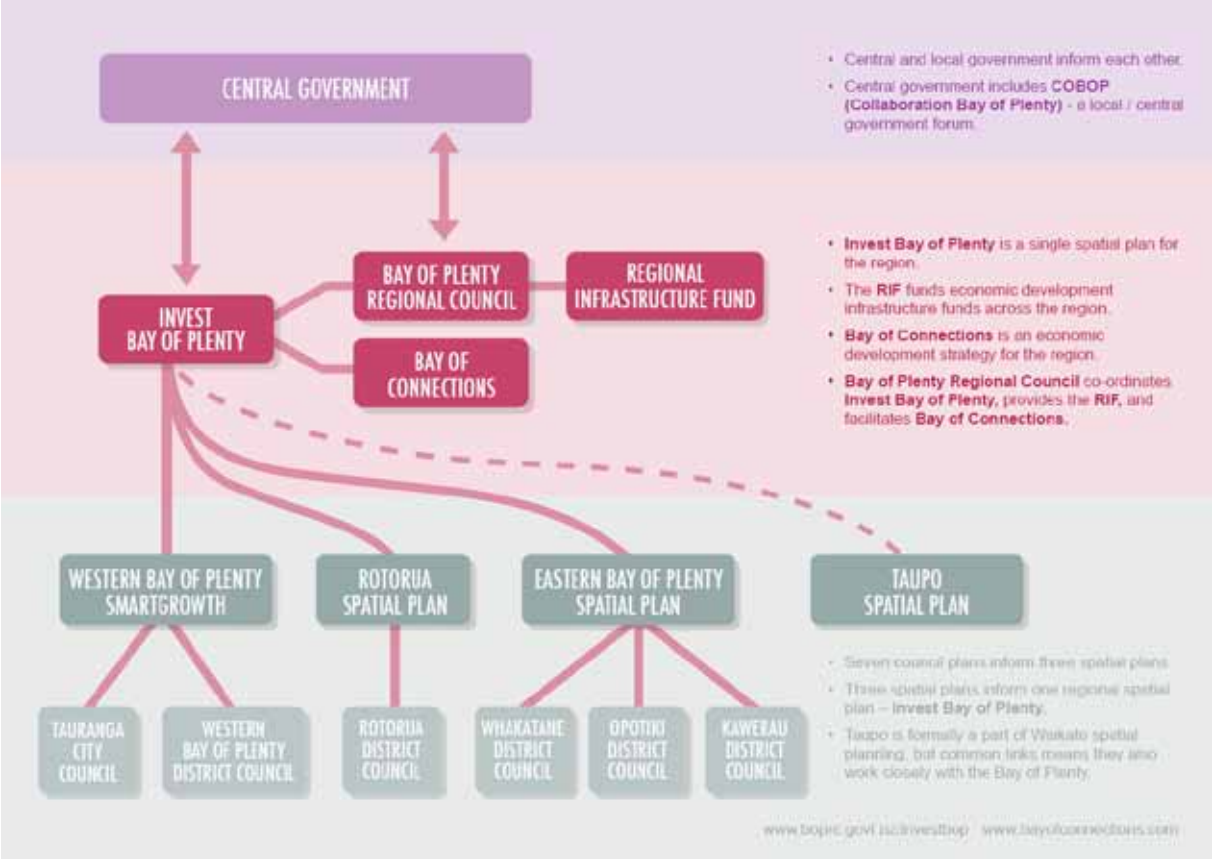
The RPS aims to achieve the purpose of the RMA by providing a framework for sustainably managing the region's natural and physical resources. It highlights regionally significant issues and includes policies and methods to achieve the integrated management of natural and physical resources, including the integration of land use and infrastructure.

Spatial Planning

Several spatial planning processes are currently underway at the regional and sub-regional level. These include:

- **Invest Bay of Plenty**, the regional spatial plan (under development);
- **SmartGrowth Strategy** - Spatial Plan for the Western Bay of Plenty (review completed 2013);
- **Smart Futures** – Rotorua's Spatial Plan (under development); and
- **Eastern Bay Beyond Today** - Eastern Bay of Plenty Spatial Plan (under development)

A common evidence base for these spatial plans has been developed under the Invest Bay of Plenty banner. The strategic drivers identified in the RLTP have been drawn from this evidence base. The following diagram shows how the respective spatial plans link together.



SmartGrowth Strategy

The SmartGrowth Strategy (2013) is the spatial plan for the western Bay of Plenty sub-region. The central focus of SmartGrowth is managing growth in the sub-region. The sub-region poses unique land transport management issues associated with its rapid growth rates. SmartGrowth also places an emphasis on future land use and transport linkages based on a series of corridors.

Key desired outcomes relating to transport in the SmartGrowth Strategy include:

- We work proactively and in partnership with the community to make western Bay active, vibrant, connected, caring, healthy and safe.
- Our economy is thriving, growing, diverse and sustainable.
- We all work from the same long term planning blueprint which incorporates planning for land use, transport and other infrastructure in an efficient and affordable way.

SmartGrowth takes a corridor approach to the integration of infrastructure, land-use and funding. The corridors and networks in Chapter 7 of the RLTP align with the SmartGrowth corridors, and key growth projections and land use information from SmartGrowth has been factored into their development.

Bay of Plenty Regional Public Transport Plan 2013 (RPTP)

The RPTP has been developed by BOPRC and covers public transport services within the Bay of Plenty regional boundaries.

Public transport objectives

The RPTP sets out the following objectives for the region's public transport services, and policies to achieve them:

- Networks and services – reliable and integrated public transport services that go where people want to go.
- Fares, ticketing and information – fares, ticketing and information systems that attract and retain customers while covering a reasonable proportion of operating costs.
- A procurement system that enables efficient and effective delivery of the desired network of public transport services.
- Infrastructure – high quality and accessible public transport infrastructure that supports safe and comfortable travel.

Public transport services

The RPTP identifies the following public transport service layers:

- Regional Strategic corridors - along which a number of Urban Connector services converge

to create enhanced levels of service for public transport users.

- Urban Connector routes - provide the levels of service that are necessary for public transport to be a viable option for commuting and other daily travel needs.
- Rural Connector routes - provide access to essential community goods and services, and connections to Regional Strategic corridors and Urban Connector routes.

Public transport investment priorities

The investment priorities for public transport in the RPTP are:

1. Maintain service levels.
2. Deliver target peak time service levels.
3. Deliver target off-peak service levels and targeted services.

Tauranga Transport Strategy 2012–2042

The Tauranga Transport Strategy 2012-2042 (TTS) identifies, describes and prioritises the actions required to deliver the city vision of a place that is easy and safe to move around, and a place that is built to fit our hills, harbour and coast over the next 30 years.

The TTS identifies the following key transport issues for Tauranga:

- Growth
- Safety
- Network resilience
- The role and demand for non-car travel
- Access, severance and mobility

The TTS then considers strategic responses in nine key implementation areas to respond to the identified issues:

- Safety
- Asset management
- Travel demand management
- Public transport
- Walking and cycling
- Access and mobility
- Parking
- Rail
- Road network

Integrated delivery is subsequently outlined for each of the following corridors identified in the strategy:

- Ring Road North – South Western Corridor
- Ring Road North – North Western Corridor
- Ring Road North – Eastern Corridor
- Ring Road South Corridor
- Internal Peninsular Corridor

Rotorua Integrated Network Strategy 2012-2042

The Rotorua Integrated Network Strategy (RINS) was developed to guide and inform land transport programmes and future growth management planning.

The objective for the Rotorua Integrated Network Strategy is to support economic growth, safety and accessibility with an affordable, integrated, safe, responsive, and sustainable land transport system. The objective builds on the following desired outcomes:

- Integration (land use and transport)
- Prosperity (efficiency and economic growth)
- Safety
- Accessibility
- Environmental sustainability

Delivery of RINS is through corridor plans and integrated packages of activities developed for each of Rotorua's strategic corridors:

- Rotorua Eastern Corridor
- Rotorua Western Corridor
- Rotorua Urban Network
- Rotorua Southern Corridor

Bay of Connections

Bay of Connections is the economic strategy for the wider Bay of Plenty region. It includes industries and sectors from the Eastern Bay of Plenty, Rotorua, Tauranga and Taupo and the Western Bay of Plenty. The aim is to establish and implement sector-based strategies that generate more job growth. Bay of Connections is also about growing a strong and vibrant community, encouraging collaboration between business and industry, improving well-being and encouraging innovation and leadership, and identifying and capturing areas of growth and opportunity.

Bay of Plenty Freight Logistics Strategy

The Bay of Plenty Freight Logistics Strategy is a sector-based strategy developed under the Bay of Connections umbrella. The Freight Logistics strategy recognises that partnership and collaboration will contribute to more effective and efficient supply chains. A Freight Logistics Action Group has been established to support implementation of the strategy. This operates four sub-groups focusing on:

- workforce and skills;
- technology;
- health, safety and the environment; and
- infrastructure.

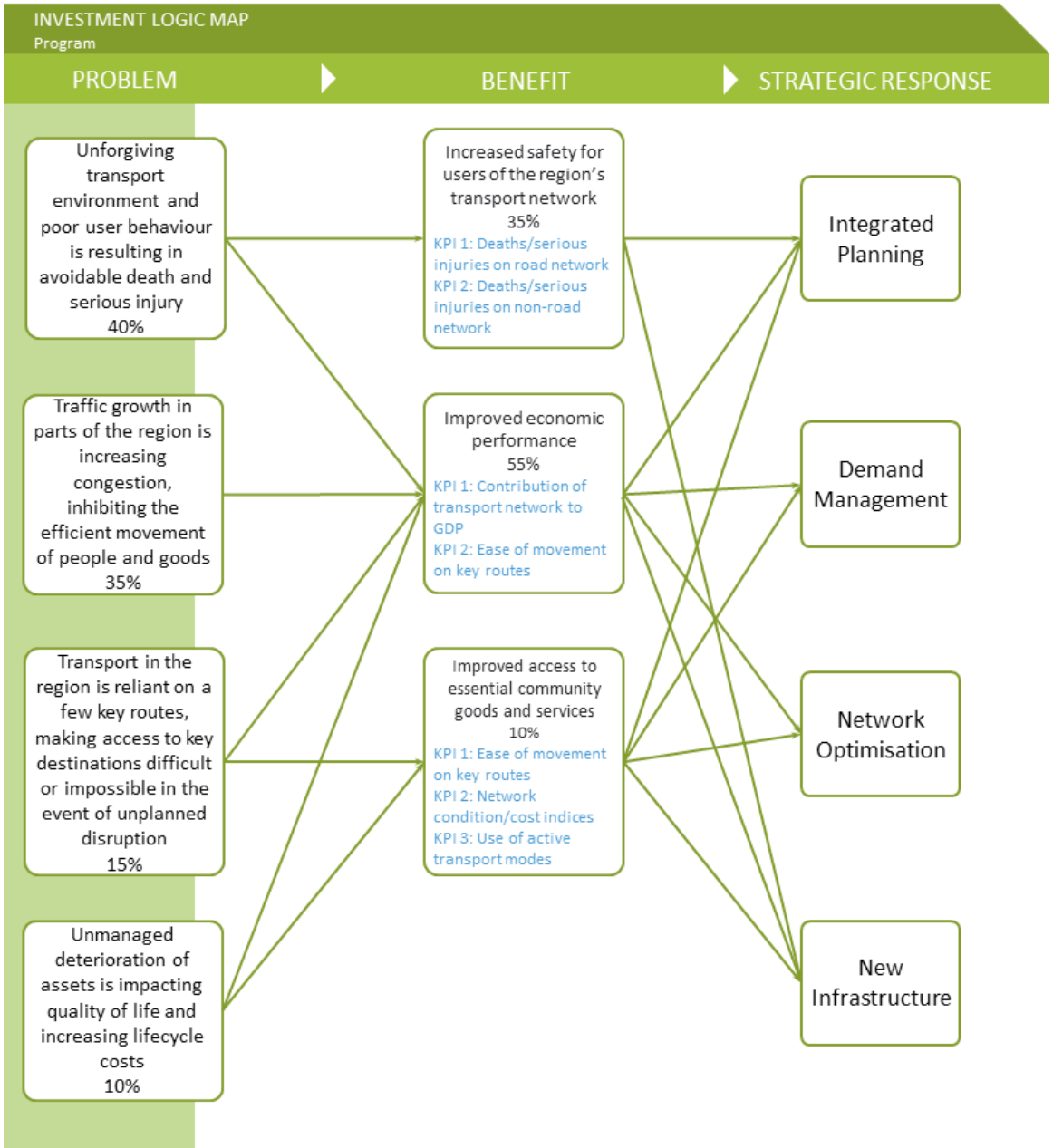
Appendix 2: **Investment Logic Map**

Note: The original ILM weightings for economic performance, safety and access were modified following Regional Transport Committee agreement to balance them with the remaining four RLTP objectives.

BAY OF PLENTY REGIONAL COUNCIL

Responding to the Bay of Plenty's Transport Needs

Regional Land Transport Plan



Investor: Bay of Plenty Regional Transport Committee
Facilitator: Sylvia Meakin
Accredited Facilitator: Yes

Version no: 2.5
Initial Workshop: 13/03/2014
Last modified by: Bron Healey 14/04/2014
Template version: 5.0

Appendix 3: **Regional Programme**

Notes:

1) Items in the activity class tables that are in italics have been extrapolated from being a three-year programme, as required by the NLTP, to a six-year programme to match the RLTP time frame.

2) In the regional priority column a '-' denotes an activity that meets the criteria for a significant activity but is a late addition to the programme meaning it was unable to be regionally prioritised alongside the other significant activities. The term 'n/a' applies to an activity that is not defined as a significant activity for the purposes of prioritisation (see section 10.4.2).

3) The indicative 6-year programme costs for some prioritised activities are less than the $1 million threshold for a significant activity. These have been identified as significant because the estimated total cost for all phases of the activity is expected to be above $1 million.

Local road improvements

Activity	Organisation	Phase	Description	Regional Priority	6-Year Programme Cost	Primary Objective
Totara Street Upgrade	TCC	Develop & construct	Widen Totara Street between Hull Road and Hewletts Road. Signalise Hull Road intersection and construct a segregated walking and cycling path on this route.	2	$1,468,000	Economic performance
Rerewhakaaitu Freight Route^	WDC	Develop	To investigate a shorter route to accommodate increasing freight demand between the Central North Island and the Eastern Bay of Plenty.	30	$52,250	Economic performance
No3 Road / SH2 Roundabout Installation	WBOPDC	Develop & Construct	Intersection upgrade to accommodate planned land use development	31	$2,100,000	Land use and transport integration
Oropi Road Alignment Improvements	WBOPDC	Construct	Realign section of Oropi Road which has a crash history to increase safety	35	$1,050,000	Safety
Waihī Beach Road Alignment Improvement RP 1.0km to RP 2.4km	WBOPDC	Develop & construct	Improvements to the alignment of Waihī Beach Road to address undesirable crash rates.	36	$4,750,000	Safety
Domain Road Upgrade	TCC	Develop & construct	Upgrade Domain Road to provide acceptable levels of performance on SH2 and on the local arterial road network	38	$6,820,233	Economic performance
Chapel Street Bridge Seismic Retrofitting	TCC	Develop & construct	Seismic retrofitting of existing bridge.	-	$1,780,000	Access and resilience

Activity	Organisation	Phase	Description	Regional Priority	6-Year Programme Cost	Primary Objective
Landing Road Roundabout Reconstruction	WDC	Develop & construct	Reconstruction of Landing Road roundabout.	-	$1,817,125	Access and resilience
Minor improvements 2015-18	TCC		Group of improvement activities valued at under $300,000	n/a	$6,075,886	Safety
Minor improvements 2018-21	*TCC*		*Group of improvement activities valued at under $300,000*	*n/a*	*$6,075,886*	*Safety*
Minor improvements 2015-18	WBOPDC		Group of improvement activities valued at under $300,000	n/a	$6,000,000	Safety
Minor improvements 2018-21	*WBOPDC*		*Group of improvement activities valued at under $300,000*	*n/a*	*$6,000,000*	*Safety*
Minor improvements 2015-18	WDC		Group of improvement activities valued at under $300,000	n/a	$7,485,000	Safety
Minor improvements 2018-21	*WDC*		*Group of improvement activities valued at under $300,000*	*n/a*	*$7,485,000*	*Safety*
Tara Road Upgrade	TCC	Construct	Upgrade Tara Road as per Tauranga Eastern Link Network Plan	n/a	$800,000	Economic performance
Minor improvements 2015-18	RLC		Group of improvement activities valued at under $300,000	n/a	$1,683,000	Safety
Minor improvements 2018-21	*RLC*		*Group of improvement activities valued at under $300,000*	*n/a*	*$1,683,000*	*Safety*
Hillcrest Slumps	WDC	Develop & Construct	Construction of retaining structure and reinforced earth fill.	n/a	$525,400	Access and Resilience
Taneatua Rd Route Security	WDC	Develop & Construct	Lifting the height of the road to eliminate regular inundation of the road during flood events	n/a	$791,600	Access and Resilience
Te Urewera Rainforest Route Resilience Improvements	WDC	Develop & Construct	River training and armouring in streams, slope stabilisation and / or realignment of road at under slip sites.	n/a	$617,700	Access and Resilience
Whakatāne District Streetlights LED Upgrade	WDC	Develop & construct	Upgrade existing streetlights to energy efficient LED.	n/a	$2,000,000	Affordability
Coastal Roading Protection - Dive Crescent	TCC	Develop & Construct	New works that protect existing road and large water main from sea damage.	n/a	$875,000	Access and Resilience
Streetlighting upgrade to LED	TCC	Develop & Construct	Upgrade street lighting across the city to LED standards	n/a	$3,300,000	Affordability
Cameron Road Peak Hour Capacity Measures	TCC	Develop & Construct	Investigate, design and construct potential future clearways and bus service priority measures	n/a	$250,000	Access

Activity	Organisation	Phase	Description	Regional Priority	6-Year Programme Cost	Primary Objective
Pāpāmoa East Interchange with Tauranga Eastern Link	TCC	Develop	Subject to PEI strategic case to be completed by June 2015. Understand process to give effect to the TEL Network Plan by exploring connectivity to Te Tumu and the TEL. Seek to understand scope of national benefits.	n/a	$50,000	Land Use and Transport Integration
Minor improvements 2015-18	KDC		Group of improvement activities each valued at under $300,000	n/a	$85,500	Safety
Minor improvements 2018-21	*KDC*		*Group of improvement activities each valued at under $300,000*	*n/a*	*$85,500*	*Safety*
Minor improvements 2015-18	ODC		Group of improvement activities each valued at under $300,000	n/a	$361,008	Safety
Minor improvements 2018-21	*ODC*		*Group of improvement activities each valued at under $300,000*	*n/a*	*$361,008*	*Safety*

Local road maintenance

Activity	Organisation	Description	6-Year Programme Cost	Primary Objective
Maintenance, Operations and Renewals Programme 2015-18	TCC	Maintenance, Operations and Renewals of Road Network	$36,323,253	Safety
Maintenance, Operations and Renewals Programme 2018-21	*TCC*	*Maintenance, Operations and Renewals of Road Network*	*$36,323,253*	*Safety*
Maintenance, Operations and Renewals Programme 2015-18	WBOPDC	Maintenance, Operations and Renewals of Road Network	$41,007,352	Safety
Maintenance, Operations and Renewals Programme 2018-21	*WBOPDC*	*Maintenance, Operations and Renewals of Road Network*	*$41,007,352*	*Safety*
Maintenance, Operations and Renewals Programme 2015-18	RLC	Maintenance, Operations and Renewals of Road Network	$30,394,000	Safety
Maintenance, Operations and Renewals Programme 2018-21	*RLC*	*Maintenance, Operations and Renewals of Road Network*	*$30,394,000*	*Safety*
Maintenance, Operations and Renewals Programme 2015-18	WDC	Maintenance, Operations and Renewals of Road Network	$28,848,800	Safety
Maintenance, Operations and Renewals Programme 2018-21	*WDC*	*Maintenance, Operations and Renewals of Road Network*	*$28,848,800*	*Safety*
Maintenance, Operations and Renewals Programme 2015-18	ODC	Maintenance, Operations and Renewals of Road Network	$7,769,285	Safety
Maintenance, Operations and Renewals Programme 2018-21	*ODC*	*Maintenance, Operations and Renewals of Road Network*	*$7,769,285*	*Safety*
Maintenance, Operations and Renewals Programme 2015-18	KDC	Maintenance, Operations and Renewals of Road Network	$1,682,000	Safety
Maintenance, Operations and Renewals Programme 2018-21	*KDC*	*Maintenance, Operations and Renewals of Road Network*	*$1,682,000*	*Safety*
Carpooling website contribution 2015-18	BOPRC	Contribution to the inter-regional carpooling website	$24,000	Access

Public transport

Activity	Organisation	Phase	Description	Regional Priority	6-Year Programme Cost	Primary Objective
New Tauranga bus services	BOPRC	Develop & implement	Funding for additional bus services in Tauranga as part of regular Tauranga Bus network reviews	22	$5,280,000	Access
Public Transport - Inter-Regional Ticketing Improvement	BOPRC	Implement	Adoption of an electronic ticketing solution in partnership with other Regional councils.	26	$5,129,099	Access
Tauranga City Real Time Passenger Information System	BOPRC	Implement	Providing improved, up-to-date information for bus patrons	n/a	$810,000	Access
Public Transport Programme 2015-18	BOPRC	Implement	Operation of regions bus, ferry, and the total mobility services.	n/a	$33,600,000	Access
Public Transport Programme 2018-21	*BOPRC*	*Implement*	*Operation of regions bus, ferry, and the total mobility services.*	*n/a*	*$33,600,000*	*Access*
Tauranga School Bus Services	BOPRC	Implement	Replacement of Ministry of Education school bus services with regular bus services.	n/a	$7,706,900	Access
Minor improvements 2015-18	BOPRC	Implement	Install new bus shelters across the region and extend the Tauranga real time passenger information system to Rotorua.	n/a	$711,200	Access
Minor improvements 2018-21	*BOPRC*	*Implement*	*Install new bus shelters across the region and extend the Tauranga real time passenger information system to Rotorua.*	*n/a*	*$711,200*	*Access*
City Centre Public Transport Interchange Review	TCC	Develop & construct	Undertake a review of the current use and future capacity of the city centre bus stops and investigate suitability of current and other locations for increased capacity in the future.	n/a	$350,000	Access

Road safety promotion

Activity	Organisation	Description	Indicative Profile	Indicative Ranking	6-Year Programme Cost	Primary Objective
Road Safety Promotion 2015-18	WDC/ KDC/ODC	Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on local roads	HHH	1	$1,282,215	Safety
Road Safety Promotion 2018-21	*WDC/ KDC/ODC*	*Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on local roads*	*HHH*	*1*	*$1,282,215*	*Safety*
Road Safety Promotion 2015-18	RLC	Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on local roads	HMH	2	$1,145,000	Safety
Road Safety Promotion 2018-21	*RLC*	*Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on local roads*	*HMH*	*2*	*$1,145,000*	*Safety*
Road Safety Promotion 2015-18	TCC	Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on local roads	HMH	2	$1,500,821	Safety
Road Safety Promotion 2018-21	*TCC*	*Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on local roads*	*HMH*	*2*	*$1,500,821*	*Safety*
Road Safety Promotion 2015-18	BOPRC	Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on local roads	HLH	4	$561,297	Safety
Road Safety Promotion 2018-21	*BOPRC*	*Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on the regions roads*	*HLH*	*4*	*$561,297*	*Safety*
Road Safety Promotion 2015-18	HNO	Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on State highways	HLH	4	$398,000	Safety
Road Safety Promotion 2018-21	*HNO*	*Development and deployment of road safety campaigns to reduce the rate of injuries and deaths on State highways*	*HLH*	*4*	*$398,000*	*Safety*

State highway improvements

Note: * Activity is not included in the draft 6 year State Highway Activity Management Plan.
^ Activity may be eligible for funding from the regional improvements activity class.

Activity	Organisation	Phase	Description	Regional Priority	6-Year Programme Cost	Primary Objective
SH2/SH29 Baypark to Bayfair link upgrade	HNO	Develop & construct	Grade separation of the Maunganui / Girven Road and SH2/SH29 intersections to reduce delays and improve travel time reliability	1	$128,378,000	Economic performance
SH29 Tauriko to Waikato Boundary, NSRRP	HNO	Develop & construct	Defined in National Safer Roads and Roadsides PBC. Indicative Intervention: realign existing curves, median wire rope barrier, roadside hazard protection	3	$2,380,000	Safety
Tauriko Upgrade	HNO	Develop & construct	Investigation and construction of a long-term solution for SH29 through Tauriko that maintains efficient road freight access to the Port of Tauranga and accommodating sub-regional residential and commercial growth.	4	$50,576,000	Economic performance
SH 2 Northern Corridor Safe System Programme	HNO	Develop & construct	Programme of works of Safe System improvements along SH2 between Waihī and Tauranga to reduce crash risk.	5	$61,000,000	Safety
SH5/SH30 Safety Improvements^	HNO	Develop & construct	Safety improvements to existing tee-intersection. Intersection sits at the southern edge of Rotorua providing the route choice between traveling via the Eastern Bay (SH30) or Hamilton/ Waikato (SH5)	6	$5,360,000	Safety
Tauranga Northern Link	HNO	Develop & construct	Approx. 6.5kms of new 4-lane two-way highway linking SH 2 from just North West of Te Puna through to Route K. The new route provides a bypass of Te Puna and Bethlehem	9	$12,812,679	Economic performance
Rotorua Eastern Arterial*^	HNO	Develop & construct	Project to address congestion, safety and access issues along SH30 Te Ngae Road, Rotorua's eastern arterial.	10	$135,263,000	Economic performance
SH30 Sala St/Te Ngae Road Urban Intersection Optimisation^	HNO	Develop	Development of an activity to optimise the performance of existing intersections on the urban fringe on a regionally significant freight route.	13	$250,000	Affordability
Maketū/Rangiuru Intersection Upgrade	HNO	Develop & construct	New intersection to connect Rangiuru Business Park to SH2, between Pah Road and Affco freezing works.	15	$13,120,000	Safety
Pah Road I/S Improvement Te Puke	HNO	Develop & construct	Roundabout construction at existing intersection	17	$5,830,000	Safety

Activity	Organisation	Phase	Description	Regional Priority	6-Year Programme Cost	Primary Objective
SH2 / Welcome Bay Road	HNO	Develop & construct	Safety improvements at one of New Zealand top 100 dangerous intersections	18	$2,238,900	Safety
Katikati Bypass*	HNO	Develop & construct	Plan and construction of a bypass for Katikati to alleviate community severance, and safety issues resulting from significant heavy vehicle flows.	19	$37,000,000	Land use and transport integration
SH2: Wainui Rd to Ōpōtiki, NSRRP^	HNO	Develop & construct	Works defined in National Safer Roads and Roadsides to improve the roadside environments and reduce accidents.	20	$1,535,549	Access and resilience
HPMV T2 SH2 Edgecumbe to Ōpōtiki^	HNO	Develop & construct	Roading improvements to accommodate high productivity motor vehicles on this route.	21	$4,400,000	Economic performance
EBOP Route Security SH2: Waimana Gorge Resillience*^	HNO	Develop & construct	Improvements to increase the resilience of a regularly flooded section of SH2 with limited alternative routes available to freight traffic.	25	$1,000,000	Access and resilience
EBOP Route Security, SH2: Pekatahi Bridge*^	HNO	Develop & construct	Design and construction/remediation of the Pekatahi Bridge to reduce the risk of closures and improve efficiency	27	$1,302,000	Access and resilience
SH33: Te Ngae Junction to Sun Valley North NSRRP^	HNO	Develop & construct	Identified in National Safer Roads and Roadsides as a section of SH with a high crash rate requiring safety improvements.	28	$1,550,000	Safety
SH2/Wainui Road (Matekerepu) Route Security Improvements^	HNO	Develop & construct	Works include raising the road and investing in the SH2 & Wainui Rd intersection to mitigate for a 1 in 10 year flood event.	29	$2,267,500	Access and resilience
SH 2 Matata Straights (Resilience)^	HNO	Develop & construct	Network resilience improvement to secure and maintain regional economic growth and productivity. Corridor particularly vulnerable to natural hazards such as slips	32	$3,042,831	Access and resilience
SH2 Route Security Kukumoa Road Improvements^	HNO	Develop	Upgrade Hukutaia Road-Old Creamery Road as a viable detour to SH2 between Ōpōtiki & Waiotahi in the event of State Highway disruption.	33	$325,752	Access and resilience
EBOP Route Security, SH2: Ōpōtiki to Region 4 Boundary (Waioeka Gorge)*^	HNO	Develop & construct	Package of improvements to reduce the susceptibility of this critical link between the BOP and Gisborne District to natural hazard closures.	34	$6,000,000	Access and resilience

Activity	Organisation	Phase	Description	Regional Priority	6-Year Programme Cost	Primary Objective
Weigh Facility BOP^	HNO	Develop & construct	Addition of a weigh facility to the BOP State highway network at a yet to be determined site.	37	$5,450,000	Economic performance
Forest Passing Lane (SH33) & Alignment	HNO	Develop & construct	Southbound passing lane & realignment on the Regional Strategic SH33 between Paengaroa and Rotorua. Will address safety issues and improve vehicle travel times on a route with high volume of heavy vehicles and steep gradients	39	$3,295,000	Safety
Banksia Place Northbound Passing Lane	HNO	Develop & construct	New northbound passing lane on SH33 near Banksia Place to allow passing opportunities where steep inclines exist. Aim is to improve both safety and efficiency on this route.	40	$1,300,000	Safety
Tuapiro Rd Passing Lane	HNO	Construct	Install a southbound passing lane on SH2 between Waihī & Katikati with the aim of improving safety and travel times on this route.	41	$3,800,000	Safety
Soldiers Road Realignment and Intersection *	HNO	Construct	Safety improvement with additional benefits in terms of freight efficiency and travel time on this National High Volume route.	42	$9,543,000	Safety
Kauri Point Passing Lane	HNO	Construct	Addition of passing lane on SH2 near Kauri Point	43	$4,664,687	Safety
Bridgman Lane Passing Lane	HNO	Develop & Construct	Southbound and northbound passing lane to reduce high crash rate associated with lack of passing lanes.	44	$2,171,000	Safety
SH30 Te Rahu Canal Bridge Replacement^	HNO	Develop & construct	Replacement of canal bridge which is nearing the end of its economic life.	45	$3,000,000	Economic performance
EBOP Route Security, SH35: Ōpōtiki to Region 4 Boundary*^	HNO	Develop & construct	Works to improve the natural hazard resilience of a critical route for the numerous communities and significant horticultural and forestry industries along the East Cape.	46	$7,000,000	Access and resilience
Enhanced Network Resilience BOP	HNO	Construct	Works to improve the ability of the network to withstand short and long term events. Potential works to be considered include seismic retrofit of structures, enhanced preventative maintenance and better slope stability monitoring.	-	$3,750,000	Access and resilience
Minor improvements 2015-18	HNO		Group of improvement activities each valued at under $300,000	n/a	$14,514,625	Safety

Activity	Organisation	Phase	Description	Regional Priority	6-Year Programme Cost	Primary Objective
Minor improvements 2018-21	HNO		Group of improvement activities each valued at under $300,000	n/a	$14,514,625	Safety
SH2 Hewletts Rd Flyover-Bayfair NSRRP	HNO	Develop & Construct	National Safer Roads and Roads investigation. Possible indicative Intervention measures may include median wire rope barrier	n/a	$660,000	Safety
SH29 Stock Effluent Disposal Facility	HNO	Construct	Cattle truck stock effluent disposal station on SH29.	n/a	$695,600	Safety
SH30: Owhata to Te Ngae Junction NSRRP	HNO	Develop & Construct	Defined in National Safer Roads and Roadsides programme business case. Interventions may include street lighting, tree removal, bridge widening.	n/a	$550,000	Access and resilience
SH30: Te Teko to Awakeri NSRRP	HNO	Develop & Construct	Defined in National Safer Roads and Roadsides. Possible interventions may include transverse audio tactile profiles at intersection approaches, chevrons on curves	n/a	$530,000	Access and resilience
SH5: Ngongotahā-Fairy Springs Rd NSRRP	HNO	Develop & Construct	Defined in National Safer Roads and Roadsides programme business cases. Intervention may include widening to 4 lanes and/or median wire rope barrier	n/a	$522,000	Access and resilience
HPMV T2 SH30/SH34 Te Kuiti to Whakatāne	HNO	Construct	Bridge strengthening and pavement improvement works to accommodate High Productivity Motor Vehicle traffic between Te Kuiti and Whakatāne.	n/a	$867,701	Economic performance
SH2 Western Drain Bridge Replacement	HNO	Develop & Construct	Bridge replacement identified in as priority in the National SH Bridge Programme & Structures Asset Management Plan	n/a	$1,000,000	Access and resilience

State highway maintenance

Activity	Organisation	Description	6-Year Programme Cost	Primary Objective
Maintenance, Operations and Renewals Programme 2015-18	HNO	Maintenance, Operations and Renewals of Road Network	$104,899,290	Safety
Maintenance, Operations and Renewals Programme 2018-21	*HNO*	*Maintenance, Operations and Renewals of Road Network*	*$115,332,410*	*Safety*

Transport Planning

Activity	Org	Description	Indicative Profile	Total Cost	6-Year Programme Cost	Primary Objective
Activity Management Plan Development	WBOPDC	Development of Activity Management Plans including ONRC implementation, Asset Management Plan improvements and Business Case Development.	HH-	$250,000	$250,000	Affordability
Activity Management Plan Development	ODC	Development of the AMP to fully embed the ONRC and Business Case Approach for the 2018-21 LTP.	HH-	$240,000	$240,000	Affordability
ONRC Transition Plan Implementation	TCC	Delivery of One Network Road Classification Transition Plan as required by NZTA by 2018.	HH-	$90,000	$90,000	Affordability
Regional Land Transport Planning Management 2015-18	BOPRC	Development of the RLTP	HH-	$1,020,260	$1,020,260	All Objectives
Regional Public Transport Plan	BOPRC	Research and development of the Regional Public Transport Plan following the planned review of Tauranga bus services	HH-	$42,600	$42,600	Access and resilience
Activity Management Plan Implementation	WDC	Development of the AMP to fully embed the ONRC and Business Case Approach for the 2018-21 LTP.	HM-	$90,000	$90,000	Affordability
Network Operating Plan - Ring Road North (North-west)	TCC	Development of a Network Operating Plan to optimise network performance in the Ring Road North (North-west) area as defined within the Tauranga Transport Strategy 2012-2042	HM-	$20,000	$20,000	Land use and Transport Integration
Programme Business Case - Ring Road North (North-west)	TCC	Continuation of the programme business case started within the Tauranga Transport 2012-2042 to consider options for the Ring Road North (North-west) Corridor Area	HM-	$50,000	$50,000	Land use and Transport Integration
Tauriko Network Plan	HNO	Develop a preferred programme to maintain efficient access to the Port and accommodate sub-regional growth.	HM-	$100,000	$100,000	Economic performance

Activity	Org	Description	Indicative Profile	Total Cost	6-Year Programme Cost	Primary Objective
SH2 Waihi to Tauranga – Programme Business Case	HNO	Develop a programme business case to confirm/test the appropriateness of initiatives on this section of state highway.	HM-	$200,000	$200,000	Safety
SH29 Tauranga to Hamilton Programme Business Case (Bay of Plenty Section)	HNO	Develop a programme business case to identify a programme of investment for safer roads and roadsides along SH29.	HM-	$100,000	$100,000	Safety
SH30: Te Teko to Awakeri, NSRRP – Programme Business Case	HNO	Develop a programme business case to identify a programme of investment for safer roads and roadsides along SH30.	HM-	$100,000	$100,000	Safety
SH34: SH30 to Kawerau, NSRRP – Programme Business Case	HNO	Develop a programme business case to identify a programme of investment for safer roads and roadsides along SH34.	HM-	$100,000	$100,000	Safety
Wainui Road to Opotiki, NSRRP – Programme Business Case	HNO	Develop a programme business case to identify a programme of investment for safer roads and roadsides on this section of SH2.	HM-	$100,000	$100,000	Safety
Rotorua Network Corridor Plans	RLC	Development of corridor plans to support the Rotorua Integrated Network Strategy	MH-	$60,000	$60,000	Land use and Transport Integration
Tauranga Traffic Model restructure / rebuild	TCC	Restructuring and/or rebuilding the sub-regional traffic model so that it is fit for purpose	MH-	$420,000	$420,000	Affordability
Tauranga Traffic Model restructure / rebuild	WBOPDC	Restructuring and/or rebuilding the sub-regional traffic model so that it is fit for purpose	MH-	$210,000	$210,000	Affordability
Activity Management Plan Bay of Plenty 15/18	HNO	Development of the State Highway Asset Management Plan and Regional Asset Management Plans including development of level of service targets and implementation plans.	MM-	$650,000	$650,000	Affordability
SH5 Rotorua Western Corridor, RINS	HNO	Investigation of remediation for high crash rate between SH36 and SH30 as well as journey time reliability and congestion issues from Rotorua CBD.	MM-	$100,000	$100,000	Access and resilience
SH30A Urban Revitalisation - Programme Business Case	HNO	Develop programme of works to urbanise SH30A before revoking its State highway status. Supports RLC objectives to revitalise the city centre.	MM-	$100,000	$100,000	Access and resilience

Activity	Org	Description	Indicative Profile	Total Cost	6-Year Programme Cost	Primary Objective
SH2 Tauranga East Urban Corridor Programme	HNO	Identify short-term priorities to minimise freight delays making best use of existing urban network. Any improvements will complement completion of the Tauranga Eastern Link (RoNS)	MM-	$200,000	$200,000	Economic performance
South Urban Corridor, TTS	HNO	Develop a programme business case to programme potential interventions to respond to sub-regional growth pressures.	MM-	$100,000	$100,000	Access and resilience
Rotorua Eastern Corridor, RINS	HNO	Further development of the Rotorua Eastern Corridor Plan.	MM-	$100,000	$100,000	Access and resilience
Contribution to public transport network review	TCC	Contribution to BOPRC review of Tauranga Public Transport network	MM-	$40,000	$40,000	Access and resilience
Network Operating Plan - Southern Hills	TCC	Development of a Network Operating Plan for the Southern Hills corridor as defined within the Tauranga Transport Strategy 2012-2042	MM-	$20,000	$20,000	Land use and Transport Integration
Programme Business Case - Southern Hills	TCC	Continuation of the programme business case started within the Tauranga Transport 2012-2042 to consider options for Southern Hills Corridor Area	MM-	$50,000	$50,000	Land use and Transport Integration
Tauranga Transport Model Rebuild	HNO	Develop a strategic case for the redevelopment of the Tauranga transport model	MM-	$700,000	$700,000	Affordability
Tauranga Public Transport Network Review	BOPRC	At the end of 2017 Council's contracts for urban and school bus services end. Prior to letting new contracts a review of services will be undertaken.	ML-	$100,000	$100,000	Access and resilience
Eastern Bay of Plenty Cycle Trail	WDC/ ODC	Identification of on-road structures and other facilities required to enable the development of the Eastern Bay of Plenty Cycle Trail.	LM-	$20,000	$20,000	Economic performance
Network Operating Plan - Peninsular Corridor	TCC	Development of a Network Operating Plan for the Peninsular area as defined within the Tauranga Transport Strategy 2012-2042	LM-	$20,000	$20,000	Land use and Transport Integration
Programme Business Case - Peninsular Corridor	TCC	Continuation of the programme business case started within the Tauranga Transport 2012-2042 to consider options for the Peninsular Corridor Areas	LM-	$50,000	$50,000	Land use and Transport Integration

Walking and cycling improvements

Activity	Organisation	Phase	Description	Regional Priority	6-Year Programme Cost	Primary Objective
Tauranga urban cycle network construction	TCC	Construct	Construction of remaining 80km of city cycle network	7	$1,205,000	Land use and transport integration
Rotorua Urban Cycleways	RLC	Develop & construct	Construct a network of linked urban cycleways within Rotorua	8	$1,700,000	Land use and transport integration
Tauranga Eastern Cycleway	WBOPDC	Construct	Cycleway network linking Papamoa / Te Puke / Waitangi / Rangiuru Business Park / Maketū and Paengaroa communities	12	$2,550,000	Land use and transport integration
Omokoroa to Tauranga City Cycleway	WBOPDC	Construct	Development of new cycleway infrastructure connecting Omokoroa and Tauranga City cycle network, utilising local roads and Railway corridors.	13	$5,000,000	Land use and transport integration
TCC Section of Omokoroa to Otumoetai Cycleway	TCC	Construct	Construction of boardwalk / path between the Wairoa river and Ngatai Road as part of the wider Omokoroa - Otumoetai cycleway	14	$1,500,000	Land use and transport integration
Poike Road Pedestrian & Cycle Facility	HNO	Construct	Provide pedestrian / cycle facilities over SH29 at Poike Road, to provide links between Welcome Bay and the BOP Polytechnic at Windermere.	16	$1,852,250	Land use and transport integration
Mourea Bridge Pedestrian Cycleway	HNO	Construct	Widen bridge to accommodate 2.5m wide combined pedestrian/cyclist facility separated from traffic lanes.	23	$795,000	Affordability
Route K Pedestrian / Cycle Overbridge	TCC	Develop & construct	New pedestrian / cycle over bridge on Route K.	24	$840,000	Access
Bethlehem to Wairoa Pedestrian & Cycle Facilities	HNO	Construct	Provide Pedestrian and Cycle Facilities on SH2 between Carmichael Road & Wairoa River Bridge	n/a	$450,000	Safety
Waihī to Waihī Beach Cycle Trail	WBOPDC	Develop & construct	Development of a cycleway linkage that connects the Hauraki Cycle Trail in the Waikato Region to the Tauranga Moana Coastal Cycle Trail in the Bay of Plenty Region.	-	$1,100,000	Economic performance
Athenree to Omokoroa Cycle Route	WBOPDC	Develop & construct	Develop and construction of new cycleway co-ordinated with the SH2 Safer Systems Programme.	-	$2,000,000	Safety
Eastern Bay of Plenty Cycle Trail	WDC/ODC	Develop & construct	The development and construction of an Eastern Bay of Plenty Cycle Trail that meets objectives including economic development, safety, recreation and connecting communities.	-	-	Economic performance

Appendix 4: **Assessment of Compliance**

Before a regional transport committee submits a regional land transport plan to a regional council for approval, the regional transport committee must be satisfied that the regional land transport plan complies with section 14 of the LTMA. The following table contains an assessment against the requirements of section 14. The Bay of Plenty Regional Transport Committee is satisfied that the Plan complies with the LTMA.

LTMA Reference	Provision	Assessment
14(a)(i)	The RTC must be satisfied that the RLTP contributes to an effective, efficient, and safe land transport system in the public interest.	The RLTP contributes to the purpose of the LTMA in the following manner: ***Effective and efficient*** The region's strategic response an 'Optimised Transport System' considers a hierarchy of interventions, prioritising low cost interventions such as integrated planning, demand management and network optimisation before investing in new infrastructure. Various programme-level options and alternatives were tested before the most efficient and effective investment model was selected. ***Safe*** Improved safety is one of the seven key objectives in the RLTP. Safety is also identified as one of the investment priorities in the regional programme. The RLTP has adopted the safe system approach to road safety and contains a number of policies to improve road safety outcomes. ***Public interest*** As representatives of the public interest, the RTC has developed draft RLTP in consultation with key stakeholders, including Māori. The RLTP will undergo a full public consultation process to allow the wider public to provide input into the plan development process.
14(a)(ii)	The RTC must be satisfied that the RLTP is consistent with the GPS on land transport.	The RLTP objectives align closely to the national land transport objectives in the GPS. The RLTP investment priorities of economic performance, safety, and access and resilience are consistent with the GPS priorities of economic growth and productivity, road safety and value for money. The regional programme was developed to align with the activity classes identified in the GPS.
14(b)(i)&(ii)	The RTC must have considered alternative regional land transport objectives that would contribute to the purpose of the LTMA, and their feasibility and affordability.	The RTC considered alternative objectives at a plan development workshop. Different programme-level options and alternatives were subsequently developed and considered to test the feasibility of alternative policy settings, before an optimal programme was selected.

LTMA Reference	Provision	Assessment
14(c)(i)	The RTC must have taken into account any national energy efficiency and conservation strategy.	The RLTP includes an energy efficiency objective and policies that explicitly address the transport objective and target in the NZEECS.
14(c)(ii)	The RTC must have taken into account relevant national policy statements and any relevant regional policy statements or plans that are for the time being in force under the Resource Management Act 1991.	The RLTP has been assessed for consistency with relevant national and regional policy statements and regional plans. The assessment found that the RLTP is consistent with these policy statements and plans. The assessment is documented in the supporting paper: Assessment of Consistency with Resource Management Act Documents.
14(c)(iii)	The RTC must have taken into account likely funding from any source.	The RLTP funding chapter takes into account all likely funding sources, including those that sit outside the national land transport funding system.

Appendix 5: **Evidence Base**

The following strategies, policies and technical reports were considered during the preparation of the Bay of Plenty Regional Land Transport Plan.

- Ageing Trends and Transitions: Population Ageing in the Bay of Plenty. A report prepared for Invest Bay of Plenty – CG Consulting (2014)
- Bay of Connections – Bay of Plenty Regional Economic Development Strategy
- Bay of Plenty Aviation Stocktake – Background and Discussion Paper – AECOM (2013)
- Bay of Plenty Regional Council Transportation Infrastructure Study Report – Eastern Bay of Plenty (2014)
- Bay of Plenty Regional Public Transport Plan 2013
- Bay of Plenty Regional Policy Statement
- Bay of Plenty: Settlement and Agglomeration Impacts – BERL (2014)
- Bay of Plenty Transport Futures Study (2010)
- Communities at Risk Register (2014)
- Connecting New Zealand
- Eastern Bay of Plenty Route Security Strategy (2013)
- Eastern Bay of Plenty Route Security Study (2011)
- Energy in New Zealand 2013 – Ministry of Business, Innovation and Employment
- Government Policy Statement on Land Transport 2015/16-2024/25 (draft)
- How can we meet increasing demand for ports in the Upper North Island? A report for the Upper North Island Strategic Alliance - Price Waterhouse Coopers (2012)
- How Safe Are Our Roads? - KiwiRAP New Zealand Road Assessment Programme (2012)
- Infrastructure Analysis - NZ Transport Agency on behalf of Invest Bay of Plenty (2014)
- Invest Bay of Plenty - Our Place in the World (technical summary reports)
- Kawerau District Council – Railway Line Extension and Crossing Transportation and Safety Assessment (2014)
- Land Transport Management Act 2003
- National Freight Demand Study (2014)
- National Infrastructure Plan
- New Zealand Deprivation Index
- New Zealand Energy Efficiency and Conservation Strategy 2011–2016
- Regional Economic Activity Report - Ministry of Business, Innovation & Employment (2014)
- Regional Tourism Estimates - Ministry for Business, Innovation & Employment (2014)
- Review of Demographic and Labour Force Projections for the Bay of Plenty Region for the Period 2013 – 2063 – National Institute of Demographic and Economic Analysis (2014).
- Rotorua Air Emissions Inventory – Bay of Plenty Regional Council
- Rotorua Integrated Network Strategy 2012-2042
- Safer Journeys – New Zealand's Road Safety Strategy 2010 – 2020
- Safer Journeys 2013-15 Action Plan
- Safer Journeys for People Who Cycle – Cycling Safety Panel Final Report and Recommendations (2014)
- SmartGrowth Strategy (2013)
- State Highway 33 - Tauranga to Rotorua – Strategic Assessment for Investment (draft) (2014)
- State Highway Road Closures 2010-2014
- Stocktake of Passenger Transport Functions in the Bay of Plenty – McCormick Rankin Cagney (2010)
- Tauranga Eastern Link Network Plan (2011)
- Tauranga Urban Network Risk Assessment
- Upper North Island Freight Story – Upper North Island Strategic Alliance (2013)
- Valuing the Health Benefits of Active Transport Modes - NZTA Research Report 359 (2008)
- Waikato Commercial Vehicle Route Preference Analysis (2014)

BAY OF PLENTY
REGIONAL COUNCIL
TOI MOANA

PO Box 364
Whakatāne 3158
New Zealand

Website: www.boprc.govt.nz

Phone: 0800 884 880
Fax: 0800 884 882

www.facebook.com/boprc

www.twitter.com/boprc