

# LAND TRANSPORT ACTIVITY MANAGEMENT PLAN

2021 - 2031

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**TE WAIROA**  
**WAIROA DISTRICT**

**DOCUMENT PREPARATION & QUALITY ASSURANCE**

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## PART A – STRATEGIC CASE EXECUTIVE SUMMARY

### COUNCIL'S VISION:

DESIRABLE LIFESTYLES, THRIVING ECONOMY,  
TREASURED ENVIRONMENTS, CONNECTED COMMUNITIES

This Land Transport Activity Management Plan (LTAMP) acts as a route map for the future. It provides the reasoning and context behind how we propose to maintain, operate, renew and improve Wairoa's land transport network. We want to clearly show the value of any investment made in addressing our strategic transport problems and undertaking core business activities. Any investment needs to **achieve the desired outcomes and benefits for our customers** and **represent value for money**. It is also important that we show how we will meet regulatory requirements and environmental protection.

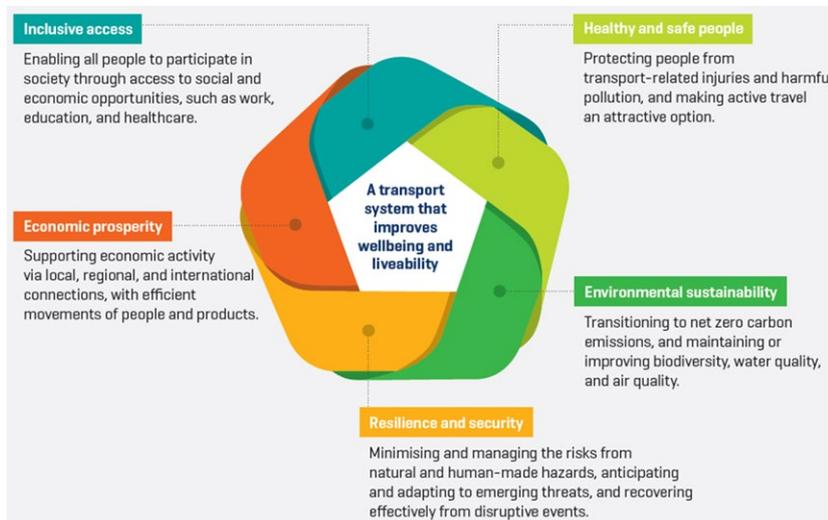
### STRATEGIC FOCUSES

#### NATIONAL STRATEGIC FOCUSES

There are a number of key national documents that provide direction for our local Te Wairoa land transport decision making.

#### TRANSPORT OUTCOMES

The Ministry of Transport's **Transport Outcomes Framework** states that the key purpose of the national land transport system is to improve wellbeing and liveability. The **Five Transport Outcomes** that government is seeking to achieve through the transport system are shown below.



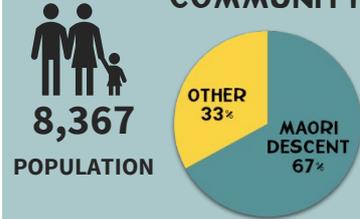
#### GOVERNMENT POLICY STATEMENT ON LAND TRANSPORT 2021 (GPS)

The GPS provides a ten-year investment guidance window for decision-makers about the Government's current strategic priorities, in line with the Transport Outcomes. The four strategic priorities and investments strategy in the GPS 2021:

- **Safety** – developing a transport system where no-one is killed or seriously injured
- **Better Travel Options** – providing people with better transport options to access social and economic opportunities
- **Improving Freight Connections** – for economic development

### WAIROA AT A GLANCE

#### COMMUNITY



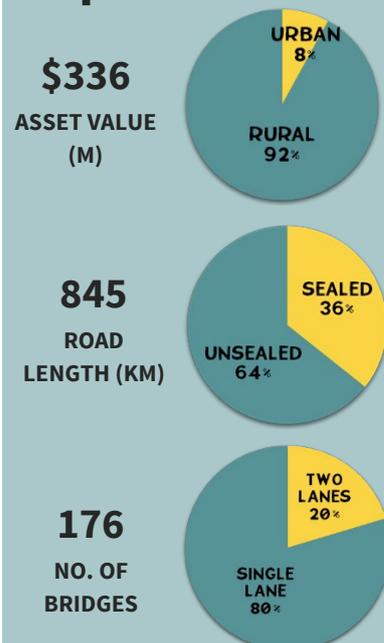
#### ENVIRONMENT



#### ECONOMY



#### TRANSPORT NETWORK



- **Climate Change** – developing a low carbon transport system that supports emission reductions, while improving safety and inclusive access

## ARATAKI STRATEGY 2021 - 2031

The Arataki Strategy is a link between the GPS and Council's investment proposal within this BCA AMP. It presents Waka Kotahi NZ Transport Agency's (Waka Kotahi) 10-year view of what is needed to deliver on the government's current priorities as set out in the GPS and other strategies.

Arataki identifies **five step changes** required to address the above key drivers:



**Improve urban form** – enhance transport's role in creating land use and urban form that provide connections between people, product and places.



**Transform urban mobility** – shift from our reliance on single occupancy vehicles to more sustainable transport solutions for the movement of people and freight.



**Significantly reduce harms** – transition to a transport system that reduces deaths and serious injuries and improves public health.



**Tackle climate change** – support the transition to a low-emissions economy and enhance communities' long-term resilience to the impacts of climate change.



**Support regional development** – optimise transport's role in enabling regional communities to thrive socially and economically.

## HAWKE'S BAY REGIONAL STRATEGIC FOCUSES

The Hawke's Bay Regional Land Transport Plan (RLTP) sets out a picture of the Hawke's Bay community and the current state of the transport network, the context for developing the Plan, the key issues it addresses and the priorities for future investment.

The RLTP has identified the following key areas of focus for Hawke's Bay:

- A safe transport system for users
- A transport network that is resilient, reliable and efficient
- Providing transport choices to meet social, environmental, economic and cultural needs
- Planning and development that minimises travel demand.

**The RLTP identifies the Nuhaka-Opoutama Road blowhole retreat and coastal erosion protection in the Wairoa District as key resilience projects for the region.** The RLTP also identifies that safety is a key strategic focus for Wairoa as the district has an over-representation in the communities at risk register of crashes.

## WAIROA STRATEGIC FOCUSES

### HĀPAITIA - UPLIFTING OUR COMMUNITY

Wairoa has a rich cultural heritage which is an integral part of the community today. **Promoting and encouraging Māori culture and values** and ensuring this remains central to key decision making is a significant focus for Council and an important factor in transportation activity planning and delivery.

### GREAT PLACE TO LIVE

Wairoa is a great place to live and we are working hard as a community to lift the demographic and economic performance of our district. We are developing our district's strength in land-based industries and encouraging diversification of business and attraction of new and returning residents. Our transportation network provides key linkages between our communities, giving **communities access** education, business and health services.

### GREAT THINGS GROW HERE

This regional strategy to see an increase in the use of productive land is a key driver for Wairoa. Our transportation network provides **access** to large productive areas of land which contribute significantly **economic growth** in the Hawke's Bay. As the number of heavy vehicles and legal gross loading has increased, so too has the pressure for stronger bridges, safer, wider roads, with better traction characteristics and longer sight distances. **Resilience** of the entire roading network is key to getting product from the gate to Napier and Gisborne Ports. Forestry traffic, in particular, is forecast to grow as current wood lots mature around 2022-2024.

### VALUABLE TOURISM

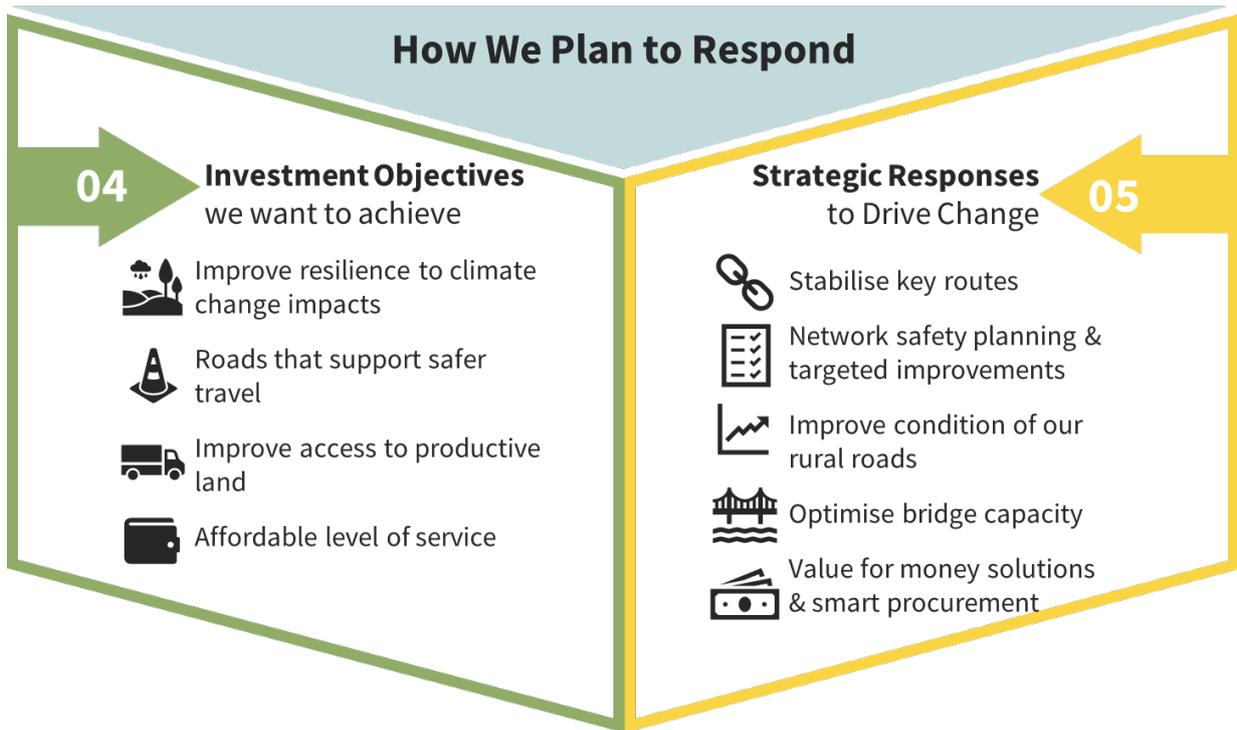
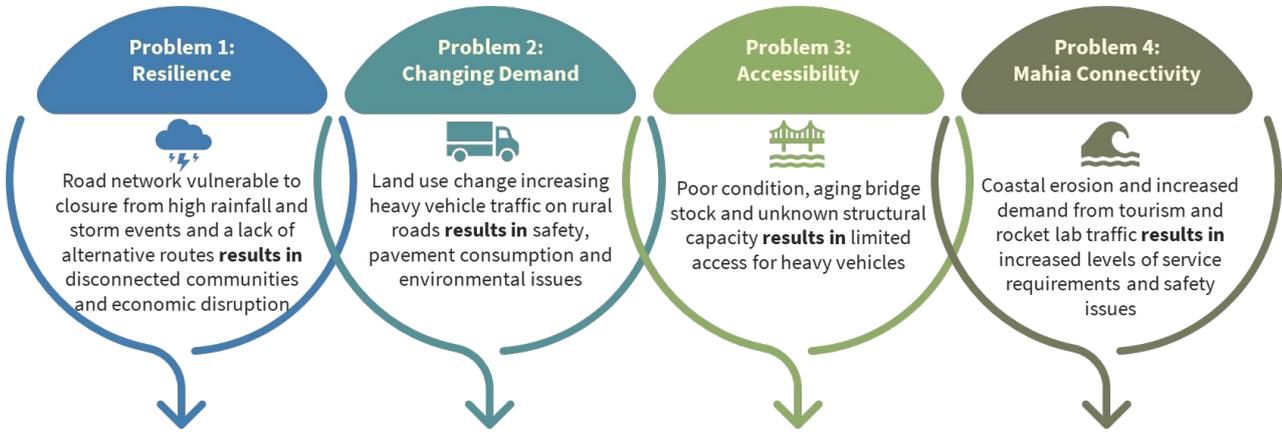
Wairoa is a key gateway to the Te Urewera Rainforest, Mahia beach areas and the Rocket Lab situated at the tip of the Mahia Peninsula, one of a kind in the southern hemisphere. We want to enhance these key tourism features and make Wairoa a place that visitors love to come to. These high tourist areas impact on the **levels of service** and **safety needs** for our road network.

### PROTECTING OUR ENVIRONMENT

One of our key values is Tiakitanga, supporting and promoting the restoration and protection of our natural environment. Our role in protecting our green environment is critical to ensuring future generations get to use it and enjoy a clean, safe place to live. Wairoa is a key gateway to the Te Urewera Rainforest via Special Purpose road to Waikaremoana (SP38). This area is an environmentally sensitive, impacting on the maintenance and renewals strategies we use in this area.

## OUR BIGGEST CHALLENGES & HOW WE PLAN TO RESPOND

Key problems identified for Wairoa’s land transport activity are:



## THE TRANSPORT OUTCOMES WE ARE INVESTING IN

Our investment going forward will address the problems identified for Wairoa within the context of the strategic directions for transport provided by the Transport Outcomes Framework, Government Policy Statement (GPS) on Land Transport Funding, the Regional Land Transport Plan (RLTP), and the One Network Road Classification (ONRC). Our key strategic response initiatives are outlined below.

PROBLEM	OUR INVESTMENT OBJECTIVES	KEY STRATEGIC RESPONSES
<b>RESILIENCE</b> - Road network vulnerable to closure from high rainfall and storm events and a lack of alternative routes results in disconnected communities and economic disruption	Improve resilience to climate change impacts	<b>Stabilise key routes</b> <ul style="list-style-type: none"> <li>Proactive drainage maintenance &amp; renewals</li> <li>Retaining wall condition assessments &amp; renewals in vulnerable areas</li> <li>Riverbank stabilisation on key routes</li> <li>Coastal erosion protection</li> <li>Hazardous tree removal programme on key routes</li> </ul>
<b>CHANGING DEMAND</b> – Land use change increasing heavy vehicle traffic on rural roads results in safety, pavement consumption and environmental issues	Roads that support safer travel	<b>Network safety planning &amp; targeted improvements</b> <ul style="list-style-type: none"> <li>Network wide safety audit to better understand key safety issues</li> <li>Speed management consistent with regional approach</li> <li>Targeted improvements on high risk parts of the network</li> </ul>
	Improve access to productive land	<b>Improve condition of our rural roads</b> <ul style="list-style-type: none"> <li>Demand management &amp; stakeholder engagement to confirm harvesting projections and better plan future investment</li> <li>Traffic Count Programme to better understand network usage</li> <li>Improved Maintenance Intervention Strategy &amp; data collection processes to inform decision making</li> <li>Targeted pavement renewals (on secondary collector roads)</li> </ul>
	Affordable level of service	<b>Value for money solutions &amp; procurement</b> <ul style="list-style-type: none"> <li>Improved data management processes</li> <li>Smart buying through packaging work. Delivering more for the same cost</li> </ul> <b>Improve condition of our rural roads</b> <ul style="list-style-type: none"> <li>Targeted renewals to meet level of service</li> </ul> <b>Improve condition of our rural roads</b> <ul style="list-style-type: none"> <li>Review and development of a Dust Mitigation Strategy</li> </ul>
<b>ACCESSIBILITY</b> - Poor condition aging bridge stock and unknown structural capacity results in limited access for heavy vehicles	Improve access to productive land	<b>Optimise bridge capacity</b> <ul style="list-style-type: none"> <li>Bridge condition assessments</li> <li>Bridge capacity assessments</li> <li>Targeted maintenance &amp; renewals</li> <li>Painting Screening</li> <li>HPMV Permitting</li> <li>Material Testing on key bridges</li> <li>Improved data management processes</li> <li>Targeted bridge strengthening works on key HPMV routes</li> </ul>
<b>MAHIA CONNECTIVITY</b> - Coastal erosion and increased demand from tourism and rocket lab traffic results in increased level of service requirements and safety issues	Improve resilience to climate change impacts  Roads that support safer travel  Affordable level of service	<b>Stabilise key routes</b> <ul style="list-style-type: none"> <li>Condition assessments to better understand condition of existing retaining structures</li> <li>Coastal erosion protection</li> </ul> <b>Improve condition of our rural roads</b> <ul style="list-style-type: none"> <li>High priority route for maintenance &amp; renewals expenditure</li> </ul> <b>Network safety planning &amp; targeted improvements</b> <ul style="list-style-type: none"> <li>Network wide safety audit</li> <li>Speed management consistent with regional approach</li> <li>Targeted improvements safety improvements</li> </ul>

## EXPENDITURE & REVENUE FORECAST HIGHLIGHTS

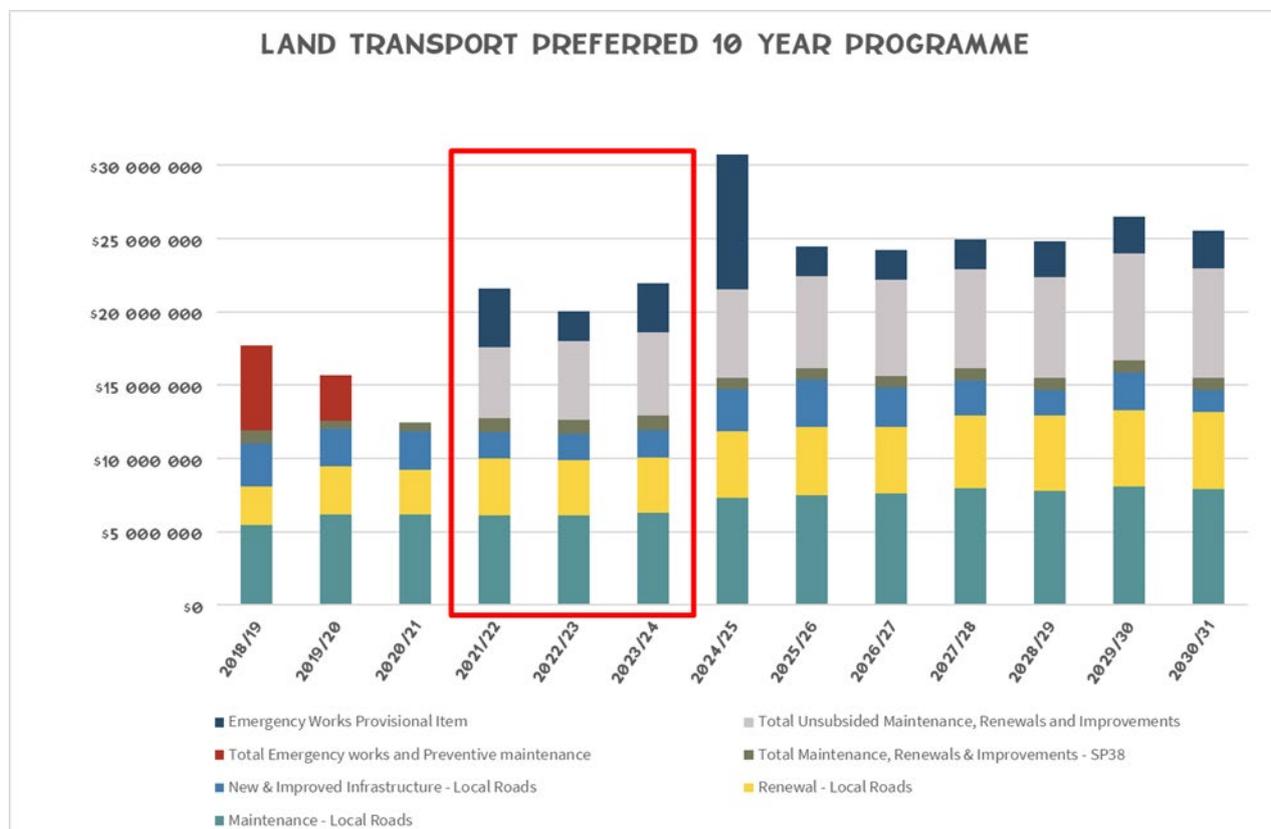
### CORE PROGRAMME EXPENDITURE FORECAST

Our preferred programme to address these problems through our strategic responses and core maintenance programme is outlined below. The programme is largely based around a business as usual approach, with an emphasis on improving our understanding of the network assets through additional inspections and data capture. We have also allowed for some Low Cost-

Low Risk improvement initiatives to address safety and bridge capacity concerns to allow for full accessibility to heavy commercial vehicles.

Some changes have been made to previous strategies and work programmes to provide better alignment with the GPS and address the specific problems identified through the business case process and as a result of COVID-19.

This represents a '**Core Programme**' (rather than an Enhanced Programme) when assessed against Waka Kotahi New Zealand Transport Agency's (Waka Kotahi) Investment Decision Making Framework for Road Maintenance Activities.



The table below shows the subsidised funding requirements for the 2021-24 NLTP for local roads, and the change in the requirements from the 2018-21 period.

PROGRAMME COMPONENT	DESCRIPTION	2021-24 NLTP FUNDING REQUIREMENT	CHANGE FROM 2018-21 PERIOD
Operations & Maintenance	<p>Increased investment required above that approved for the 2018-21 NLTP to meet <b>increased maintenance contract costs, as a result of re-tendering the contracts</b> and provide additional emphasis on drainage and unsealed roads. This will ensure a safe and fit for purpose transportation network to meet customer expectations and to prevent network deteriorating to unacceptable condition.</p> <p>Through the maintenance work category 151 and activity management work category 003 we have allowed for the following asset management initiatives:</p> <ul style="list-style-type: none"> <li>• Network wide safety audit</li> <li>• Asset condition inspections</li> <li>• Additional bridge surveys</li> </ul>	\$18.5M or \$8,165/km/yr	Increase of 4%
Renewals	<p>Increased investment is required to maintain a safe and fit for purpose transportation network to meet customer expectations. The increases include additional proactive drainage renewals to provide network resilience, increased surfacing renewals to catch up on a historic backlog and increased traffic services renewals to address safety issues.</p>	\$11.4M or \$4,498/km/yr	Increase of 27%

# WAIROA

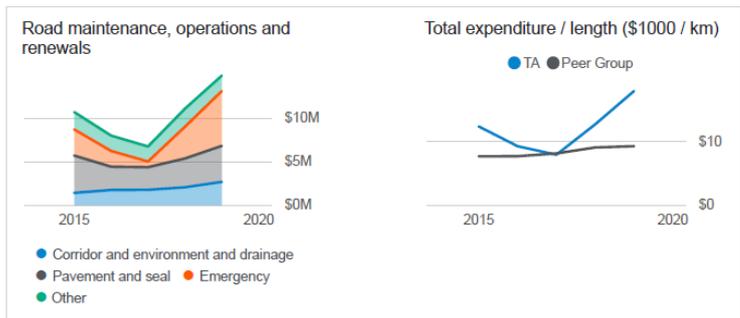
PROGRAMME COMPONENT	DESCRIPTION	2021-24 NLTP FUNDING REQUIREMENT	CHANGE FROM 2018-21 PERIOD
Capital Improvement	Low Cost-Low Risk improvement initiatives to address safety and bridge capacity concerns to expand High Productivity Motor Vehicle (HPMV) access to the network.	\$5.4M or \$2,127/km/yr	Decrease of 34%
<b>Total Budget</b>		<b>\$35.3M or \$13,937/km/yr</b>	<b>Increase of 1%</b>

## SIGNIFICANT CAPITAL PROJECTS

Further to the above 'Core Programme', two major improvements projects have been included in our financial forecasting to Waka Kotahi for the 2024/25 and 2025/26 years for the Nuhaka Opoutama Road 'Blowhole' Retreat and Coastal Erosion Protection projects. These projects are considered unaffordable to Council, so have not been included in the core programme below. However the projects are included in the RLTP, and need to be included in this AMP to signal the need for funding for the projects.

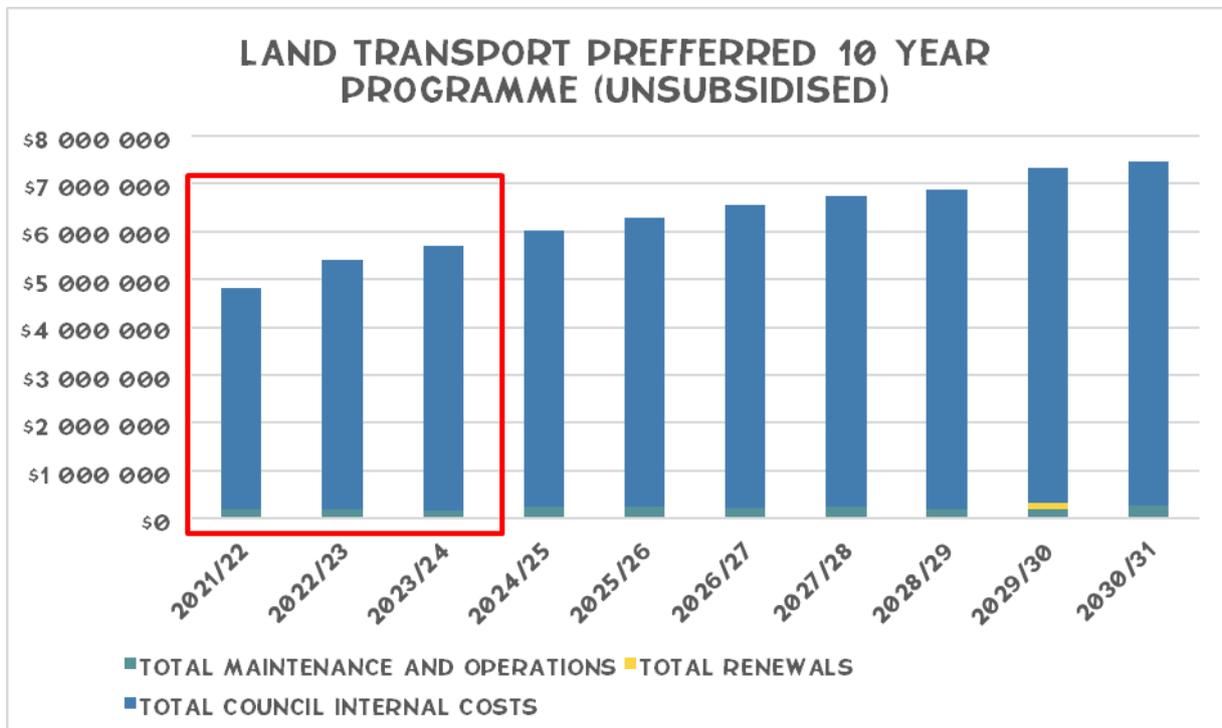
## EXPENDITURE COMPARATIVE TO PEER GROUP

The comparative expenditure graphs below, show our historic expenditure trends, with peer comparison of Total Expenditure per kilometre and Maintenance, Operations and Renewals Expenditure per kilometre. **Wairoa has spent significantly more than the peer group in 2018/19, however the key increase in expenditure was for emergency works.** The expenditure on programmed maintenance, operations and renewals was comparable with the peer group.



## UNSUBSIDISED PROGRAMME EXPENDITURE FORECAST

The graph below shows the preferred unsubsidised programme for the land transport assets. The key items in the unsubsidised programme are carpark maintenance, renewals and expansion, Wairoa Infrastructure business unit expenses, drain clearing and other miscellaneous transport expenses not subsidised by Waka Kotahi.



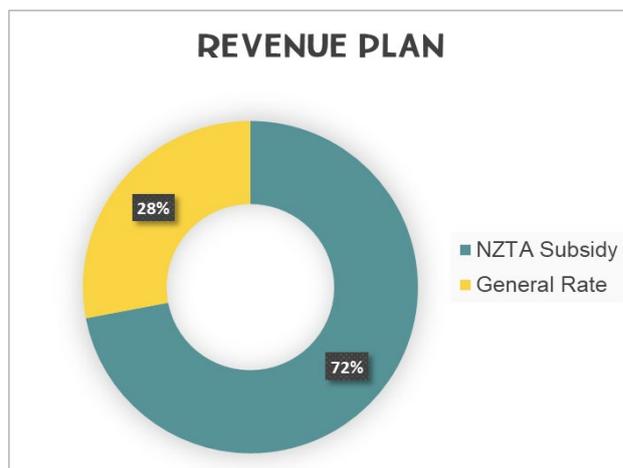
## FUNDING SOURCES

We pay for activities carried out on the land transport network by the following means:

**Waka Kotahi funding subsidy:** For Wairoa this is provided as a Funding Assistance Rate of 75% of the cost of maintenance and renewals work for most activities. As some activities are unsubsidised, the effective subsidy is 72% as shown on the adjacent graph.

**District Rates:** The district’s community funds the balance of the budget costs (e.g. 28%) through its local rates share. Funding for the local share comes from the Uniform Annual General Charge and the Targeted Rate – Roading.

In line with Council’s Revenue and Financing Policy, Council funded activities such as roading, are rated based on a property’s land value. **Council works hard to keep within the rating thresholds planned and ensure that this is as affordable as possible.** This has not been an easy task due to the challenges created by COVID-19 with the long-term effects and impacts still uncertain.



**Based on the 2020/21 level of rates, the local rates share is sufficient to fund Wairoa’s local share of the annual programmed Transport costs for the District.**

**Provincial Growth Fund (PGF):** Through the Provincial Growth Fund (PGF), we have been able to allocate funding to projects which have been deferred or are unbudgeted for to allow us to transform and improve our district without impacting on rates. We have received a \$4.8 million cash injection to regenerate and revitalise the town centre creating a hub for new educational and employment pathways. We also received \$8.3 million for the Mahia East Coast Road sealing and an investigation into the Nuhaka/Opoutama road alignment.

We have submitted a number of other applications for PGF funding for transport related improvement projects, and will continue to seek additional funding through this, and other avenues, as long as it remains available.

## KEY RISKS & ASSUMPTIONS

Key risk and assumptions made as part of this planning process and their likely consequence or impact are included below.

RISK / ASSUMPTION	DESCRIPTION	CONSEQUENCE / IMPACT	RISK LEVEL	UNCERTAINTY LEVEL
Climate Change	Climate change makes our weather more extreme and unpredictable leading to flooding and rising sea levels. Although we understand that change is occurring, it is unknown how fast change will occur or the full extent to which consequences will happen in future.	Increased rainfall intensity will stress our drainage and bridge assets causing flooding and potential loss of assets. Coastal erosion will also cause loss of assets. Road closures are likely to become more frequent and of longer durations. This will also result in the need for more reactive emergency work funding.	High	High
Sustainability of Aggregate Supply	Hawke’s Bay Regional Council have significantly reduced the aggregate extraction allocations for the 2020/21 year for key Wairoa Rivers. There is uncertainty around future aggregate allocations.	Ongoing reduced river aggregate allocations have the potential to impact maintenance programmes specifically re-metalling, negatively impacting levels of service.  Increased costs for aggregate could occur as new sources are established or aggregate is carted from outside the region or district, resulting in increased network	High	High

# WAIROA

RISK / ASSUMPTION	DESCRIPTION	CONSEQUENCE / IMPACT	RISK LEVEL	UNCERTAINTY LEVEL
		maintenance costs for Council.		
Waka Kotahi Funding Constraints	Initial indications from Waka Kotahi are that the funding requests for continuous programmes (Maintenance, Operations & Renewals) across the country exceed the upper funding limits of the GPS. It is therefore likely that further reductions in WDC's funding request will be required, although the extents of this reduction unknown.	Constraints to Waka Kotahi funding will impact WDC's ability to deliver the required programme of works, impacting levels of service, and increasing risk.	<b>High</b>	<b>High</b>
Procurement Challenges	Procurement has been challenging in the past with limited number of local suppliers and difficulty in attracting outside suppliers. Specialist skill sets are particularly difficult to procure.	Prices for programmed works come in at a higher cost than budgeted for.	<b>High</b>	<b>Medium</b>
Community Ability to Pay	Current predictions of a static (or decreasing) population base and socio-economic demographics mean makes it difficult to provide sustainable services that the community can afford. Ongoing COVID-19 impacts may also result in further impacts on the local economy, including possible income reduction.	Programmed works are not affordable in the long term for rate payers.	<b>High</b>	<b>Medium</b>
Funding from Waka Kotahi	It is assumed that the roading Funding Assistance Rate (FAR) of 75% will not change, however changes to the Government Policy Statement (GPS) and Investment Decision Making Framework (IDMF) may impact on future funding	If the FAR reduces for any reason, this will impact on Council's ability to afford to planned programme.	<b>Low</b>	<b>Medium</b>
Emergency Works Funding	It is assumed Waka Kotahi will continue to fund emergency works for WDC at 95% FAR (WDC Standard FAR +20%).	Any reduction in this FAR, or inability to fund emergency works by Waka Kotahi will have a significant impact on WDC's ability to respond to emergency events, and will impact network resilience and accessibility	<b>Low</b>	<b>Medium</b>

## 1 INTRODUCTION

### 1.1 PURPOSE OF THIS PLAN

This Land Transport Activity Management Plan (LTAMP) acts as a route map for the future, by providing the logic, reasoning and context behind how we propose to maintain, operate, renew and improve Wairoa’s land transport network.

It informs the development of Wairoa District Council’s (Council’s) 2021-31 Long Term Plan (LTP) and the National Land Transport Programme (NLTP).

We want to clearly show the value of any investment made in addressing our strategic transport problems and undertaking core business activities. Any investment needs to achieve the desired outcomes and benefits for our customers and represent **value for money**. It is also important that we show how we will meet regulatory requirements and environmental protection.

This LTAMP seeks to demonstrate that the proposed programme presents **value for money** by doing:



In demonstrating that the principles of the business case approach have been used, Council will also meet NZ Transport Agency (NZ Transport Agency) requirements for planning and investment.

### 1.2 PLAN FRAMEWORK

To achieve the above purposes, this LTAMP is divided into three key parts as shown below.



AMP PART	KEY FOCUS	AUDIENCE
<b>PART A STRATEGIC CASE</b>	This part of the plan answers the ‘why invest’ question. It outlines the strategic context, prioritises key issues and problems that Wairoa faces and the benefits to the customer of addressing these.	Investors (e.g. Waka Kotahi, Council, Community etc)
<b>PART B PROGRAMME BUSINESS CASE</b>	This part of the plan provides evidence to support the investment proposed, clearly linking the investment back to service outcomes, including the key issues we are facing and Customer Levels of Service. It explains what we are going to do and how we are going to do it.	Investors; Community; Council Reporting (Annual Plan, LTP)
<b>PART C DETAILED BUSINESS CASE</b>	This part of the plan describes the detailed management approaches and options for asset portfolios and activity programmes. It is broken down into subsections by asset grouping and provides detailed evidence to support the investment proposed.  It also demonstrates value for money by outlining the asset management processes used for managing our transportation assets, as well as how we will meet regulatory requirements.	Transportation Staff; Contractors

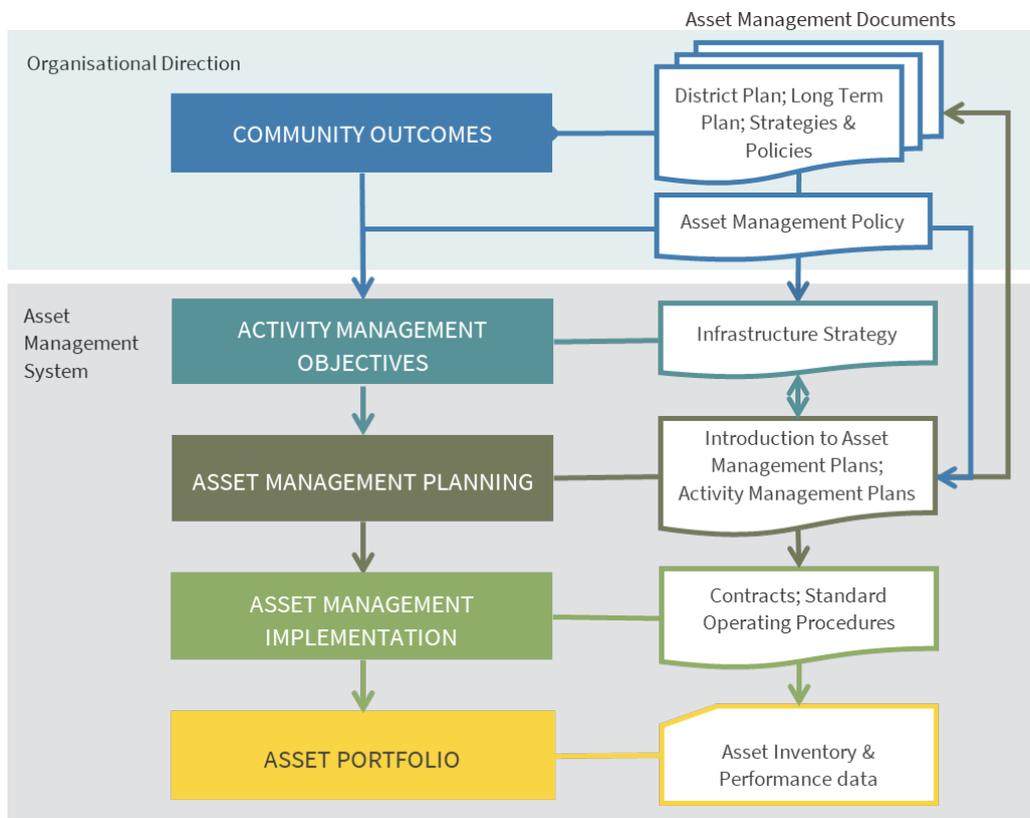


## IMPROVEMENT PLAN

Throughout the development of this BCA AMP, there are aspects that have been identified for future improvement. These are identified throughout the document with this **Improvement Item Symbol** in the margin of the document. Detailed descriptions of each Improvement Item are included in the Programme Business Case.

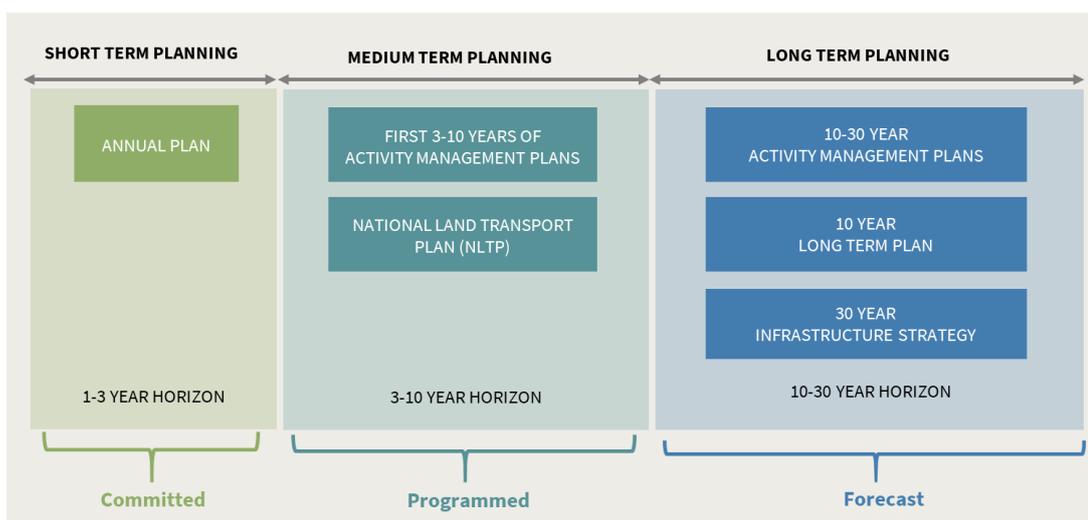
## 1.3 RELATIONSHIP WITH OTHER COUNCIL PLANS

This plan should be read in conjunction with Council’s other key planning documents, including the “Introduction to Asset Management Plans”. The diagram below shows “line of sight” between Council’s objectives and our Activity Management planning through Council’s various strategic and planning documents.



### 1.3.1 PLANNING PERIODS

We need to complete both short term and long term planning to make sure we achieve value for money.



**Short Term:** Reflects committed investment. Funding is locked in and programme should not be changed at this point.

**Medium Term:** Programmed work that should be completed. The planned investment should not be changed unless there is a clear reason or significant changes have occurred to impact Council’s ability to meet programme (e.g. COVID-19)

**Long Term:** Provides a forecast of the likely future expenditure over the long term. While we do our best to give an accurate indication of what is to come based on likely transport drivers and asset replacement requirements, the plan can change over time.

## 1.4 WHY IS TRANSPORT IMPORTANT FOR WAIROA?

The Wairoa District Council exists so that residents and visitors alike can enjoy the community in which they live and visit, supported by local decision-making to promote the social, economic, environmental and cultural well-being of the Wairoa District in the present and for the future. **Our community wellbeings are:**

SOCIAL	ECONOMIC	ENVIRONMENTAL	CULTURAL
1. SAFE SUPPORTED AND WELL-LED COMMUNITY	2. STRONG AND PROSPEROUS ECONOMY	3. PROTECTED AND HEALTHY ENVIRONMENT	4. VALUED AND CHERISHED CULTURE

An effective land transportation network is a key element in the efficient functioning of Wairoa and its economy. As a community, Wairoa is highly dependent on people and goods being able to get where they need to go using this transport network, and a well-designed and maintained roading network is the primary means of doing this.

The Table below shows how Wairoa’s transport network contributes to the community outcomes.

COMMUNITY WELLBEINGS		COMMUNITY OUTCOMES	LAND TRANSPORT’S CONTRIBUTION
Ōhanga Economic	For all of Wairoa from our people as individuals, our people as communities, our people in business. Investment that increases the wealth and economic health and capability of Wairoa, ensuring economic benefit flows to and through Wairoa, the rewards will enrich us.	Strong and prosperous economy	By providing 24/7 access for businesses and consumers for the efficient movement of people and goods, and provision for local contract procurement options.
		Safe, supported and well-led community	By providing and maintaining the local roads that form a significant part of the regional transport system, and provision for local procurement options.

COMMUNITY WELLBEINGS		COMMUNITY OUTCOMES	LAND TRANSPORT'S CONTRIBUTION
Ahurea Cultural	Wairoa looks forward retaining and building on its rich cultural heritage. Our cultural identities and foundations are recognised, embraced, and fostered. Our cultural diversity becomes our strength in building a stronger Wairoa.	Valued and cherished culture	The land transport network will be protected, and all potential negative cultural and social effects will be identified and properly managed.
Oranga Social	Everyone in Wairoa, from our youngest to our oldest have the supports and services they need to be healthy and flourish. Services and advocates ensure that no one is left out or left behind.	Safe, supported and well-led community	By progressively and proactively improving safety features on the land transport network.
			The whole land transport system and its management will be properly integrated and consulted on.
			Council will lead initiatives to ensure communities are connected and desirable.
Taiao Environmental	Collectively we must achieve the restoration, the balance and health of our environment, the river, land, sea, air, and climate. As a community we must safeguard our environment through our actions and our governance. We must ensure that we and others do not damage or destroy our environment regardless of intent.	Protected and healthy environment	The natural environment will be protected, and all potential negative environmental, social and cultural effects will be identified and properly managed.
			By progressively and proactively improving safety features on the land transport network.
			The planning of the land transport activity is sustainable into the future. The natural environment will be protected, and all potential negative environmental, social and cultural effects will be identified and properly managed.

## 1.5 WHAT WE DO TO MAKE IT HAPPEN?

This LTAMP covers all land-based transportation activities that Council pays for either fully or with assistance from the Waka Kotahi. It considers how Council assets can best be managed to deliver the required transportation activities to meet our community outcomes as well the five national Transport Outcomes. The table below demonstrates how our transport activity helps to deliver these outcomes.

TRANSPORT ACTIVITY	KEY SERVICES WE PROVIDE	LINK TO COMMUNITY OUTCOMES	LINK TO NATIONAL TRANSPORT OUTCOMES
Movement of People & Goods	<p>Maintenance and renewal of:</p> <ul style="list-style-type: none"> <li>Sealed roads</li> <li>Unsealed roads</li> <li>Bridges and other structures</li> <li>Drainage</li> <li>Traffic services including signage, road marking, and other road furniture</li> <li>Street Lighting</li> </ul> <p>Safety improvement works</p> <p>Planning and management to ensure the transportation system able to cope with future needs</p> <p>Development of the transportation and traffic networks</p>	<ul style="list-style-type: none"> <li>✓ Strong and prosperous economy</li> </ul>	<p><b>Resilience &amp; security</b> – reducing the risk of interruption to travel as a result of high intensity rainfall events by providing drainage and road support structures</p> <p><b>Economic prosperity</b> – supporting economic activity by providing bridges that allow for heavy vehicle access to productive land</p> <p><b>Healthy &amp; safe people</b> – reduction in accidents due to fit for purpose road surfaces, guardrails, lighting, road marking, signs</p> <p><b>Inclusive access</b> – enabling people to access social and economic opportunities through a road network that is easy to navigate with well maintained guidance signage and comfortable journey provided by pavements</p>
Active Transport (Cycling & Walking)	<p>Maintenance and renewal of:</p> <ul style="list-style-type: none"> <li>Footpaths</li> <li>Cycleways</li> </ul> <p>Safety improvements</p>	<ul style="list-style-type: none"> <li>✓ Safe, supported and well-led community</li> <li>✓ Strong and prosperous economy</li> <li>✓ Protected and healthy environment</li> </ul>	<p><b>Healthy &amp; safe people</b> – protecting people from transport related injuries when using active transport modes by providing paths separated from other traffic</p> <p><b>Inclusive access</b> – cycling and walking paths kept tidy and functional by keeping vegetation controlled, graffiti removal, roadside furniture maintenance</p>
Protecting our environment	<p>Maintenance of the road reserve including:</p> <ul style="list-style-type: none"> <li>Mowing, weed spraying</li> <li>Sweeping and cleaning (e.g. litter and graffiti removal)</li> <li>Dust mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>✓ Protected and healthy environment</li> </ul>	<p><b>Environmental sustainability</b> – maintaining biodiversity, water quality and air quality by managing plant pests, roadside cleaning and dust control</p>
Parking	<p>Maintenance and renewal of:</p> <ul style="list-style-type: none"> <li>Car parks</li> </ul>	<ul style="list-style-type: none"> <li>✓ Strong and prosperous economy</li> <li>✓ Safe, supported and well-led community</li> </ul>	<p><b>Healthy &amp; safe people</b> – on and off-street parking facilities to ease the safe movement of passenger vehicles within the transport network</p> <p><b>Inclusive access</b> – enabling people to access social and economic opportunities through availability of car parking within the CBD and community facilities</p>

## 2 OUR KEY PARTNERS AND STAKEHOLDERS

Our **key partners** are those groups or organisations that we are aligned with as owners of the transportation issues in our region and district.

Our **key stakeholders** are those groups or individuals who can help us to focus our strategic planning on the right things. They have information and knowledge to help us make better decisions.

In terms of setting the strategic context and direction for the LTAMP our key partners and stakeholders and their reason for involvement are shown in the tables below.

### 2.1 OUR KEY PARTNERS

PARTNERS	KNOWLEDGE/INVOLVEMENT
Waka Kotahi (NZ Transport Agency)	Funding partner – Funding Assistance Rate (FAR) subsidy rate 75%. Sets out the activities that can receive funding from the National Land Transport Fund under the Land Transport Management Act. Provides a vital link between government policy making and the operation of the transport sector. Highways and Network Operations (HNO) division manages the maintenance, operations and renewals of State Highways that run through Wairoa, providing connectivity to other parts of the Hawke’s Bay region and beyond.
Road Efficiency Group (REG)	Providing support and tools for implementing One Network Road Classification (ONRC) and Business Case Approach (BCA) Activity Management Plans.
Road Controlling Authorities Forum New Zealand (RCAF)	RCAF is a closed, non-political group with representatives from the 73 territorial local authorities, the Department of Conservation, Local Government New Zealand and Waka Kotahi. Its purpose is to assist Road Controlling Authorities (RCAs) to make informed decisions, through information exchange, working groups, legislation, standards and guidelines, highway and procurement strategies etc.
Hawke’s Bay Regional Council	Sets the direction for the region’s land transport system for the next 30 years through the Regional Land Transport Strategy. Strong focus on working together to deliver multiple projects that contribute to the Wairoa District. Allocate aggregate extraction quantities for Wairoa rivers.
Regional Land Transport Committee (RLTC)	Committee includes regional councillors and appointees from transport interests and other councils in the Hawke’s Bay region. The aim is to prepare both the Regional Land Transport Strategy and the Regional Land Transport Programme for approval by the Hawke’s Bay Regional Council, and consider other issues related to land transport which have a regional impact.
Hastings District Council, Gisborne District Council	Neighboring RCAs with whom we have a strong strategic alignment.
Napier City Council, Central Hawke’s Bay District Council	Other RCAs within the Hawke’s Bay region.

### 2.2 MAORI STAKEHOLDERS

STAKEHOLDER GROUPS	FULL LIST OF STAKEHOLDERS
Council acknowledges the inclusion and importance of mātauranga Māori in its infrastructure design and implementation processes. Council is committed to meaningful engagement with Māori on issues that are pertinent to all parties and working together to agree on the best pathway forward for the community and the environment.	
Iwi	Ngāti Kahungunu Ngāti Pāhauwera Ngāi Tūhoe Ngāti Ruapani Ngāti Rakaipaaka

# WAIROA

STAKEHOLDER GROUPS	FULL LIST OF STAKEHOLDERS
	Rongomaiwahine
Post-Treaty Settlement Governance Entities (PSGE) – Treaty Partners	Ngāti Pāhauwera Development Trust Tu Uru Taumatua (Tūhoe) Tātau Tātau of Te Wairoa Trust (including Tripartite Agreement and Matangirau Reserve Board)
Mandated Iwi Authority (Resource Management Act 1991)	Ngāti Pāhauwera Development Trust Tātau Tātau of Te Wairoa Trust Te Rākatō Marae Te Iwi o Rakaipaaka Incorporated/Trust Ngāti Kahungunu Iwi Incorporation (NKII) Te Uru Taumatua (Ngāi Tūhoe) Rongomaiwahine Iwi Trust (to be confirmed by TPK)
Mandated Iwi Organisation (Maori Fisheries Act 2004)	Ngāti Kahungunu Iwi Incorporation (NKII) Te Uru Taumatua (Ngāi Tūhoe)
Māori Boards / Māori Committees / Tribal Authority	Wairoa Waikaremoana Māori Trust Board Waikaremoana tribal Authority – representing interests for Ngāi Tūhoe Ngāti Kahungunu (Wairoa Taiwhenua) Incorporated – representing the interests of NKII Ngāti Ruapani ki Waikaremoana – representing the interests of Ngāti Ruapani (Treaty Claim) Kahungunu Executive (Māori health and social services) Te Whare Māire o Tapuwae (Whānau Ora) Māhia Māori Committee (Rongomaiwahine) Rongomaiwahine Iwi Trust – representing the commercial interests of Rongomaiwahine Whakaki Lakes Trust Whakaki Lands Trust
Māori Land Blocks	Including Māori trusts, whanau trust (including Ahu Whenua Trusts), farm blocks (stations, etc.)
Marae	Wairoa District Council Māori Standing Committee (representing all 39-operational marae) Ngāti Kaungunu (Wairoa Taiwhenua) Incorporated Kahungunu Executive (Māori Executive Committee) Wairoa Waikaremoana Māori Trust Board Māhia Māori Committee (Representing all marae in Rongomaiwahine) All marae within the Wairoa district
Māori Community at Large	

## 2.3 OTHER STAKEHOLDERS

STAKEHOLDERS	KNOWLEDGE/INVOLVEMENT
Forestry companies: Panpac Ltd Juken NZ PF Olsen Forest Management NZ Forest360 Rayonier	Harvest projections submitted to council for a 5 -10year period. Weekly updates for current harvesting activity. Individual stakeholder meetings with transport team – 6 monthly.
Federated Farmers	Council attendance to AGM.

# WAIROA

STAKEHOLDERS	KNOWLEDGE/INVOLVEMENT
Single end users	Memorandum of understanding for road use and maintenance where they are the only end user. Forestry companies are the majority of single end users.
RocketLab	Provide information on any launches planned and work closely to secure funding for resilience of Mahia East Coast Road and Nuhaka-Opoutama Road.
Road Safe Hawke's Bay	The five Hawkes Bay councils contribute the local share for Hawke's Bay road safe. Quarterly meetings, includes RSAP (road safety action plan). Monthly meeting with Road Safe and Police in Wairoa
NZ Police & other emergency service providers	Knowledge and management of safety issues and accident causes, also management of emergency events on the network.
Roading Contractors: Quality Roding & Services Fulton Hogan	Provide maintenance and management services to council. Have valuable history of knowledge of the network. Council are working to collaborate more with Contractors and involve them in planning and decision making to deliver the best outcomes.
Utility Owners (Chorus, Eastland Network, Crown Fibre Holdings etc)	Bi-monthly utility operations meetings, discussing FWP's & co-ordination of projects.
Department of Conservation	Co-located management i.e. Whakamahia Recreational Reserve.
NZ Heavy Haulage Association Inc.	Represent key users of the network and key transport links being used on the network.
Kiwi Rail	Maintenance of rail crossings over Council roads and provision of alternate land transport mode for some parts of the network (predominantly State Highway).
Up-Stream Wairoa Inc.	A business action group focused on Economic Development in Wairoa. Council & Up-Stream co-manage projects, which are initiated & fundraised by the group with the asset transferred to council once completed. Mainly Non-subsidised – items to date include, lighting upgrading, FlagTrax systems, future projects include - community playground (which includes off-street parking in scope of work).
Other recreational groups such as Fish and Game, Deer Stalkers Association etc.	

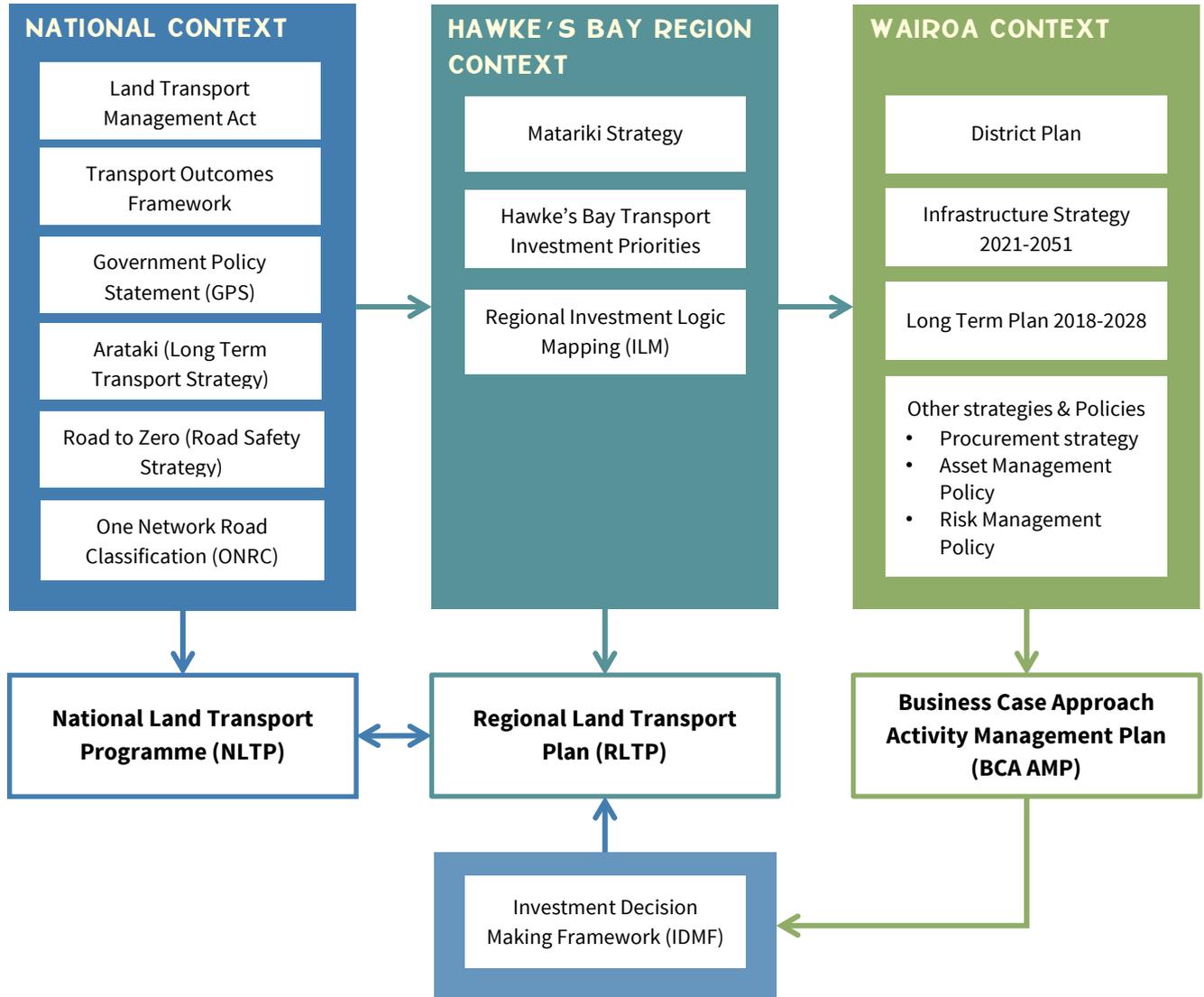


**IMPROVEMENT PLAN** – Engagement with small stakeholder groups of key community representation. These groups would be aligned with each Māori Standing Committee Nga Marae Onga Takiwa Area of Representation, but also include other community representatives such as famers, schools etc. These groups would be used to gather key feedback on transport needs in each community area.



### 3 THE STRATEGIC CONTEXT

This LTAMP has been prepared to align with the national and regional strategic context that it sits within. The diagram below shows how national and regional strategic documents provide strategic context feeding into Council’s planning and activity management approach. The following section describes this strategic context in more detail.



### 3.1 NATIONAL CONTEXT

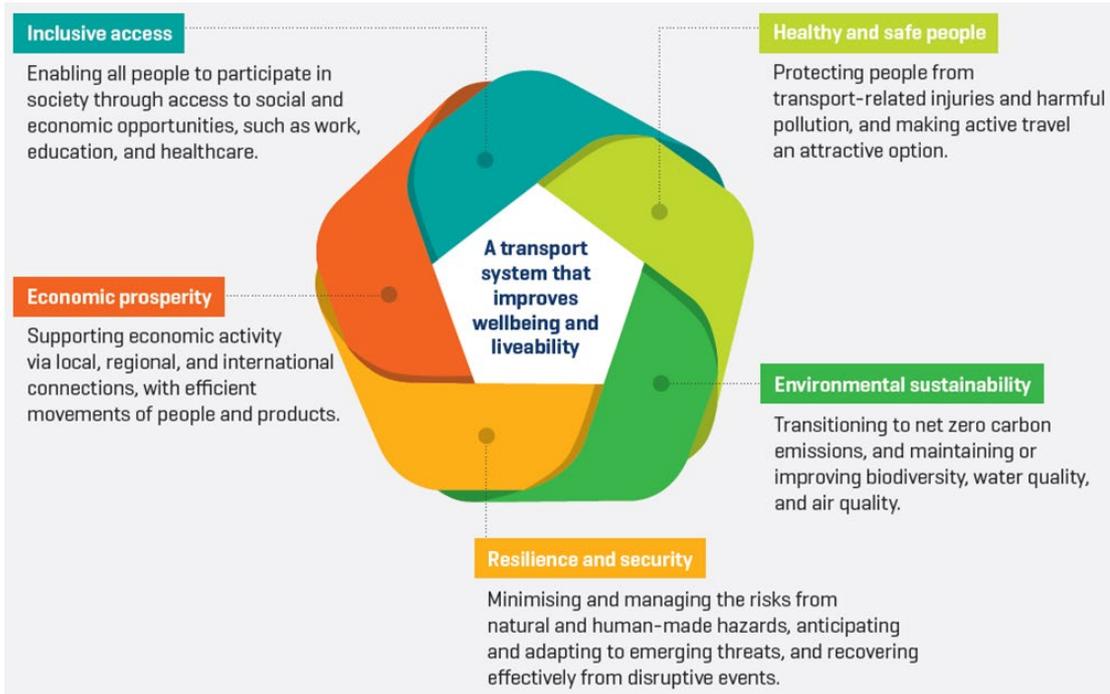
#### 3.1.1 NATIONAL TRANSPORT OUTCOMES

The Ministry of Transport’s **Transport Outcomes Framework** states the key purpose of the national land transport system.

**LAND TRANSPORT PURPOSE:  
A TRANSPORT SYSTEM THAT IMPROVES WELLBEING AND LIVEABILITY**

The **Five Transport Outcomes** that government is seeking to achieve through the transport system are shown below. The five outcomes provide an enduring framework to guide transport decisions and direction. All of these outcome are inter-

related, and need to be met as a whole to improve intergenerational wellbeing and the quality of life in New Zealand’s cities, towns, and provinces.



## 3.1.2 NATIONAL STRATEGIES AND PLANS

Other key documents providing national strategic direction for land transport are included in the following table. These play a key role in the development of this LTAMP.

NATIONAL STRATEGIC DOCUMENTS	PROVIDING DIRECTION FOR WAIROA
<p><b>Reprint as at 2 January 2020</b></p>  <p><b>Land Transport Act 1998</b></p>	<p>Key objectives that provide direction for Wairoa’s Land Transport include:</p> <ul style="list-style-type: none"> <li>• Ensuring environmental sustainability</li> <li>• Assisting economic development</li> <li>• Assisting safety and personal security</li> <li>• Improving access and mobility</li> <li>• Protecting and promoting public health</li> </ul>
<p>Government Policy Statement (GPS) on Land Transport (2021-2031)</p> 	<p>The GPS provides a ten-year investment guidance window for decision-makers about where Government will focus resources. While it is consistent with the Transport Outcomes Framework, it provides guidance on the current strategic priorities.</p> <p>The four strategic priorities and investments strategy in the GPS 2021:</p> <ul style="list-style-type: none"> <li>• <b>Safety</b> – developing a transport system where no-one is killed or seriously injured</li> <li>• <b>Better Travel Options</b> – providing people with better transport options to access social and economic opportunities</li> <li>• <b>Improving Freight Connections</b> – for economic development</li> <li>• <b>Climate Change</b> – developing a low carbon transport system that supports emission reductions, while improving safety and inclusive access</li> </ul> <p>The GPS 2021 also identified key areas of focus for regions to support regional New Zealand by reflecting the enabling role of regional transport to regional development.</p> <ul style="list-style-type: none"> <li>• <b>Freight Network</b> – Improving Freight network for primary industries</li> <li>• <b>Maintaining the Network</b> – Sufficient funding to maintain networks to the condition required to ensure a safe, resilient and accessible network.</li> <li>• <b>Road to Zero</b> – Implementing the Road to Zero Strategy</li> </ul>

NATIONAL STRATEGIC DOCUMENTS	PROVIDING DIRECTION FOR WAIROA
<p>Arataki Strategy (2021-31)</p> 	<p>The Arataki Strategy is a link between the GPS and Council’s investment proposal within this BCA AMP. It presents Waka Kotahi’s 10-year view of what is needed to deliver on the government’s current priorities as set out in the GPS and other strategies. It shares the evidence base that informs their view and helps others to understand the impacts of choices and decisions that will shape the land transport system in to the future.</p> <p>Arataki identifies <b>five step changes</b> required to address the above key drivers:</p> <ul style="list-style-type: none"> <li> <b>Improve urban form</b> – enhance transport’s role in creating land use and urban form that provide connections between people, product and places.</li> <li> <b>Transform urban mobility</b> – shift from our reliance on single occupancy vehicles to more sustainable transport solutions for the movement of people and freight.</li> <li> <b>Significantly reduce harms</b> – transition to a transport system that reduces deaths and serious injuries and improves public health.</li> <li> <b>Tackle climate change</b> – support the transition to a low-emissions economy and enhance communities’ long-term resilience to the impacts of climate change.</li> <li> <b>Support regional development</b> – optimise transport’s role in enabling regional communities to thrive socially and economically.</li> </ul>
<p>Road to Zero</p> 	<p>The Road to Zero Strategy has a vision of “a New Zealand where no one is killed or seriously injured in road crashes”. The strategy acknowledges that people make mistakes on the road, but this should not result in death or injury. These national goals require shared responsibility between road controlling authorities, the vehicle industry, central and local governments, road users and employers.</p> <p>The Road to Zero marks a step change in road safety and builds on the previous Safer Journeys strategy. The strategy will focus on:</p> <ul style="list-style-type: none"> <li>• Infrastructure improvements and speed management.</li> <li>• Vehicle Safety</li> <li>• Work-related safety</li> <li>• Road user choices</li> <li>• System Management</li> </ul>
<p>Investment Decision Making Framework (IDMF)</p>	<p>The IDMF guides investment decisions and how activities are developed, prioritised and assessed for funding in the land transport system. Five principles of investment are:</p> <ol style="list-style-type: none"> <li>1. Invest in the transport system to achieve multiple outcomes</li> <li>2. Take a robust approach to delivering best value for money</li> <li>3. Ensure solutions are future-focused and adaptable</li> <li>4. Collaborate and engage with the local government sector to understand and reflect local, regional and national perspectives</li> <li>5. Make decisions following a transparent, risk-based process informed by a strong evidence base</li> </ol>
<p>National Land Transport Program (NLTP)</p>	<p>The NLTP, developed by Waka Kotahi, sets out the activities that can receive funding from the National Land Transport Fund under the Land Transport Management Act. The NLTP must give effect to the GPS and this also extends to the Regional Land Transport Plans (RLTPs).</p>

### 3.1.3 ONE NETWORK ROAD CLASSIFICATION (ONRC)

The One Network Road Classification (ONRC) has been adopted by the roading sector for national consistency of the level of service delivered by a network. ONRC has been embedded in our investment decision making for the 2021-2024 NLTP. The ONRC classifications are based on a number of different factors. A short description for each classification is included in the table below.

CLASSIFICATION	DESCRIPTION	ANNUAL AVERAGE DAILY TRAFFIC (AADT)		HEAVY COMMERCIAL VEHICLES
		URBAN	RURAL	
National (High Volume)	As below but higher traffic volumes	> 35,000	> 20,000	> 1,200

CLASSIFICATION	DESCRIPTION	ANNUAL AVERAGE DAILY TRAFFIC (AADT)		HEAVY COMMERCIAL VEHICLES
		URBAN	RURAL	
National	Link major population centres and transport hubs	> 25,000	> 15,000	> 800
Regional	Major connectors between regions; often public transport routes	> 15,000	> 10,000	> 400
Arterial	Link regionally significant places and industries	> 5,000	> 3,000	> 300
Primary Collector	Link significant local populations and industries	> 3,000	> 1,000	> 150
Secondary Collector	Provide secondary routes, can be the only route in some places	> 1,000	> 200	> 25
Access	Small roads facilitating daily activities	> 1,000	> 200	< 25
Access (Low Volume)	As above but low traffic volumes (Urban AADT < 200, Rural AADT < 50)	> 200	> 50	< 25

Performance measures for the ONRC, along with Customer Levels of Service (CLoS), have been developed. These CLoS will vary based on the road classification, and are defined as follows:

CUSTOMER LOS	DESCRIPTION
Safety	How road users experience the safety of the road
Resilience	The availability and restoration of each road when there is a weather or emergency event (unplanned), whether there is an alternative route available and the road user information provided
Amenity	Travel Quality - The level of travel comfort experienced by the road user Travel Aesthetics - The aesthetic aspects of the road environment (e.g. cleanliness, comfort, convenience, security) that impact on the travel experience of the 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, including land use access and network connectivity (wayfinding)
Travel Time Reliability	The consistency of travel times that road users can expect

In future ONRC will be replaced with the **One Network Framework (ONF)**, which takes into account place and transport mode as well as movement. As the ONF is formally developed and service outcomes and performance requirements are confirmed, we will review the need to adjust our investment and performance monitoring approach. At this stage our aim is to transition to ONF for the 2024-27 NLTP period.

### 3.1.4 OTHER KEY LEGISLATION

The legislative requirements that the Council is required to comply with when carrying out its services are extensive. There are a number of principal Acts which set out the need, the requirements and the standards for the provision of services. Key legislative requirements include:

- Local Government Act 2002 and 2014 amendment
- Local Government (Rating) Act 2002
- Land Transport (Road Safety and Other Matters) Amendment Act 2011
- Resource Management Act 1991
- Building Act 2004
- Health Act 1956
- Health & Safety at Work Act 2015
- Public Works Act 1981
- Civil Defence Emergency Management Act 2002
- Traffic Regulations Act 1976
- Utilities Access Act 2010 (ref. NZUAG National Code for Utility Operators' Access to Transport Corridors).

## 3.2 HAWKE'S BAY REGIONAL CONTEXT

### 3.2.1 OUR REGIONAL TRANSPORT NETWORK AT A GLANCE

The Hawke's Bay region covers 1.42 million hectares, lies on the east coast of the North Island and includes **Wairoa, Hastings, Central Hawke's Bay District Councils and Napier City Council**.

The transport network for Hawke's Bay includes:



**Hawke's Bay road network:** The Region has around 4,700 km of roads, made up of 55% of local roads and 45% state highways. Traffic modelling demonstrates that while there is currently sufficient capacity to accommodate medium growth, recent predictions highlight that the region is growing faster than this. This is likely to impact on key strategic sections of the network, particularly around Napier Port, and between the growing urban centers of Napier and Hastings. The transport system across Hawke's Bay is dominated by private vehicle trips.



**Napier Port** provides logistics services for the region and central New Zealand and is a significant destination for product and freight from Wairoa, particularly for logging.



**Hawke's Bay commercial airport:** services the full Hawke's Bay area. **Wairoa Airport** owned by Council provides for small aircraft and is currently being reviewed for upgrade.



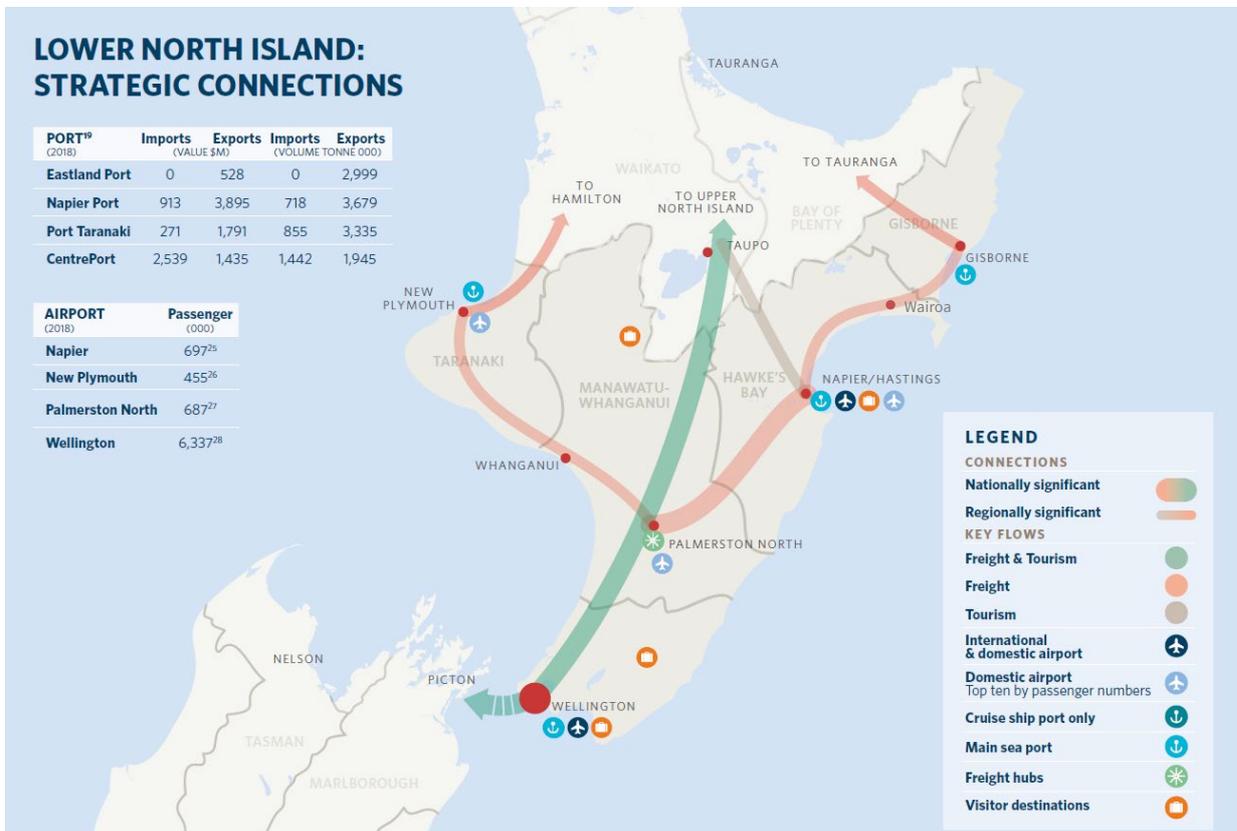
**Rail network:** connects Napier Port to distribution hubs in Palmerston North and extends north to Wairoa. At present rail services are focused on freight movements, with container movements between Palmerston North and Napier Port. The line north to Wairoa is focused on transporting logs to Napier Port.



**Public Transport:** Urban networks in Napier and Hastings provide public transport option for commuting, education and other daily travel needs. However, public transport usage is low accounting for only 1% of trips. Commercial public transport options are available using State Highways for regional and national transport. There is no public transport provision within Wairoa area.



**Cycling and walking:** are becoming key focuses for active transport modes throughout Hawke's Bay, and are slightly above the national average in urban areas. Since 2002, Hawke's Bay has created over 200 kilometres of off-road cycle trails and 100 kilometres of on-road cycle facilities. These are predominantly located around the urban centers of Hastings and Napier.



Source: ARATAKI 2021–31 Pan Regional Lower North Island Summary Version 1.1

## 3.2.2 KEY LINKS TO OTHER REGIONS

The Hawke's Bay region adjoins the Gisborne, Waikato and Manawatu-Wanganui regions by the following key transportation links:

- ➡ **NORTH:** State Highway 2 to Gisborne and beyond to Bay of Plenty
- ➡ **WEST:** State Highway 5 to Taupo and the wider Waikato region, and State Highway 38 to Rotorua and the wider Bay of Plenty region
- ➡ **SOUTH:** State Highway 2 and KiwiRail Rail line to Manawatu-Wanganui regions.

## 3.2.3 WHAT IS GENERATING DEMAND FOR TRANSPORT IN HAWKE'S BAY?

Arataki (Version 2) outlines six key drivers that will shape the future land transport system, including:

1. Demographic change
2. Technology
3. Climate change
4. Customer desire
5. Changing economic structure
6. Funding and financing challenges

A summary of how these are likely to drive change in Hawke's Bay is included below.

DRIVER	CURRENT SITUATION	FUTURE CHANGE	IMPACT FOR WAIROA
Demographic Change	<p><b>Regional population:</b> 166,638 at 2018 census (3.5% of national population). Nearly 80% in Napier and Hastings.</p> <p><b>Over 65 year olds:</b> 18% of population.</p> <p><b>Maori:</b> 27% of population</p>	<p>↗ <b>Regional Population:</b> Projected to increase to 191,500 (2043 high growth scenarios). Most growth in Napier and Hastings.</p> <p>↗ <b>Over 65 year olds:</b> Projected to increase to 28% (2038).</p> <p>Older people are travelling more for physical and social activities. Accessible and reliable transport options, along with well-maintained urban spaces, footpaths and crossing points will be key as our population ages.</p>	<p>→ <b>District Population:</b> 5% of regional population. Forecast static or declining population growth.</p> <p>↗ <b>Over 65 year olds:</b> Projected to increase from 17.2% (2018) to 24.5% (2038) resulting in an aging population.</p> <p><i>Drives changing patterns of housing, support services and travel needs.</i></p>
	<p><b>Income:</b> Median Income is \$77,700 in 2018 (national \$89,100)</p> <p><b>Unemployment:</b> 4.5% in 2019 (national 5.8%)</p> <p><b>Social Deprivation Index:</b> Significant variation across the region, poorest in North.</p>	<p>↗ <b>Unemployment:</b> Predicted to increase post-COVID-19 in the short term (through 2021) to 8.4%. Key employment sectors predicted to return close to BAU levels by 2025.</p> <p>Maori and low income households will be particularly vulnerable to job losses.</p>	<p>→ <b>Median Income:</b> \$62,200 lowest in region</p> <p>↗ <b>Unemployment:</b> 11.2% highest in region, but less impact from COVID-19. Good long-term recovery predicted.</p> <p>→ <b>Social Deprivation:</b> Decile 10, most deprived part of region</p> <p><i>Affects affordability of services.</i></p>
Technology	<p>Technology is broadening the range of mobility options and available services.</p> <p>Technology is helping us to monitor and maintain the land transport system.</p>	<p>↗ Travel options increasing e.g. e-bikes to autonomous vehicles.</p> <p>↗ Customer service and engagement opportunities changing so can respond in real time to</p>	<p>↗ Customer service and engagement opportunities changing so can respond in real time to customer demand and information needs.</p>

# WAIROA

DRIVER	CURRENT SITUATION	FUTURE CHANGE	IMPACT FOR WAIROA
		customer demand and information needs.	
Climate Change	<p>North of the region has unstable, highly erodible land and deeply incised by rivers and streams.</p> <p>Region is vulnerable to natural hazards and climate change impacts such as sea level rise.</p> <p>High temperatures causing drought conditions in parts of the region.</p>	<p>↗ Sea level is expected to rise by an average of 20 to 30cm by 2040</p> <p>↗ Changing weather patterns with extreme weather, rainfall intensity, could lead to increased problems with erosion and flooding.</p> <p>↗ Increased frequency and severity of drought</p> <p>↗ Increased stormwater flooding in urban areas</p>	<p>↗ Coastal areas, such as Mahia are susceptible to further erosion.</p> <p>↗ Growing issues around increased stormwater flooding.</p> <p>↗ Increased flooding particularly in already flood-prone areas</p>
Safety (Customer desire)	<p>Key area of focus for Hawke's Bay is Safety. Currently have a relatively poor safety record. Run-off road crashes, speeding, impairment and not wearing seat belts are primary contributors.</p> <p><b>Deaths &amp; serious injuries (DSI):</b> 146 in 2017/18 (5.6% of national total).</p>	<p>↗ <b>Deaths &amp; serious injuries (DSI):</b> Without intervention, likely to continue to increase</p>	<p>↗ <b>Crashes:</b> In 2019, Wairoa District had New Zealand's highest levels of personal risk (measured as DSI/100MVKT) with particular issues around impairment, speeding, rural roads and not wearing restraints</p>
Changing Economic Structure <sup>1</sup>	<p><b>Regional Gross Domestic Product (GDP):</b> \$8.07b in 2019 (2.9% of NZ GDP). GDP per capita \$48,887 (2018).</p>	<p>↗ <b>GDP</b> has increased by 31.3% in the period 2014-2019. Largest drivers increase were: manufacturing, construction, agriculture (horticulture and sheep, beef, and grain farming) and forestry.</p> <p>The 2020 Covid-19 pandemic is forecast to contract the Hawke's Bay economy by 6.2%.</p>	<p>→ <b>GDP</b> \$284M in 2019. GDP per capita \$32,778. Limited growth for Wairoa in five year period 2014-2019 period.</p>
	<p><b>Freight Movement:</b> 10.7M tonnes, (4.4% of national freight). 70% of freight is generated within the region.</p> <p><b>Transport split:</b> Road carries 95% of region's freight, rail 5%.</p>	<p>↗ Freight in and out of Hawke's Bay is projected to grow by 50% by 2042.</p> <p>↗ Napier Port is New Zealand's 4th largest, expected growth.</p>	<p>↗ Road freight likely to increase. Wairoa to Napier Rail unlikely to take pressure off future local road freight.</p>
	<p><b>Manufacturing:</b> \$1,035M RGDP. Primarily processing of horticulture and agriculture. Key processing centres at Hastings and Napier.</p>	<p>↗ Main processing centres for rural produce are situated in Hastings and Napier.</p> <p>Post COVID-19 there should be little disruption to food manufacturing.</p>	<p>→ AFFCO meat processing plant in Wairoa continues to be key employer in the district.</p>
	<p><b>Forestry:</b> 134,841 hectares in region. Majority concentrated in Hastings and Wairoa districts, with 55,400 ha and 60,400 ha respectively (as at 1 April 2013).</p>	<p>↗ Doubling of log volume over the last three years. Almost half of the forestry within Hawke's Bay is owned by small scale owners, much of it planted in the 1990s. With a harvest age of 28 years, peak</p>	<p>↗ Increases in forestry plantings as a result of the Climate Change Response (Zero Carbon) Amendment Act could have a particular effect in the Wairoa District, which has already seen 8,486 hectares of</p>

<sup>1</sup> Ministry of Business, Innovation & Employment, Regional Fact Sheet: Hawke's Bay, Generated 2020-06-03

DRIVER	CURRENT SITUATION	FUTURE CHANGE	IMPACT FOR WAIROA
		harvesting is will occur over the next 10 years.	sheep and beef land converted to forestry. Latest forecasts indicate that one way logging truck movements on SH2 from Wairoa will increase from 171 (2017) to 278 (2023).
	<b>Agriculture &amp; Horticulture:</b> \$707M RGDP. Primarily Beef and Sheep farming. Highest employment sector in Hawke’s Bay is Fruit and Tree Nut Growing.	↗ Pipfruit industry per hectare production well above the global average and continuing to intensify. Post COVID-19 there should be little disruption to primary production.	→ Wairoa District has already seen 8,486 hectares of sheep and beef land converted to forestry. This of concern to many in the district due to the loss of jobs resulting from such conversion.
	<b>Tourism:</b> Domestic tourism \$526M in 12 months to Feb 2020. Region is less reliant than many on international visitors, with domestic tourism contributing over ¾ of total tourism spend.	→ Likely to have slower recovery post COVID-19 than other industries as retail, food services and accommodation will be worst hit. Government’s Strategic Tourism Assets Protection Programme may support future growth.	→ Mahia Peninsula and Te Urewera (Lake Wakemoana) continue to be key tourism destinations for the Wairoa District.
Funding & Financing	Funding for transport heavily reliant on central government subsidy.	→ Local government funding for the land transport system may be constrained as the sector faces significant investment in three waters and other infrastructure during the next 10 years.	→ Three waters funding requirements likely to increase, may impact transport funding. → Affordability challenge from potentially decreasing ratepayer base.

### 3.2.4 COVID-19 IMPACTS

The **Arataki key drivers** most impacted by COVID-19 are:

- **Changing economic structure:** with declining employment and economic activity in New Zealand and globally, and international tourism and related sectors impacted most negatively in the short to medium term.
- **Funding and financing challenges:** exacerbated as a result of reduced revenues.
- **Demographic change:** driven largely by a slowing of migration into and around New Zealand.
- **Customer desire:** with wider uptake of more flexible working arrangements and ongoing developments in e-commerce and delivery options, which will be monitored for their impact over the medium to longer-term.

**Arataki Regional Summary for Hawke’s Bay** outlines that the regional economy is comparatively well-placed to recover from the COVID-19 pandemic, due to the scale of the primary production, healthcare and manufacturing sectors. The region is less reliant than many on international visitors, with domestic tourism contributing over ¾ of total tourism spend. However, the Hawke’s Bay economy does rely on temporary migrant employment, with above average use of migrant labour in the agriculture, horticulture and admin support sectors.

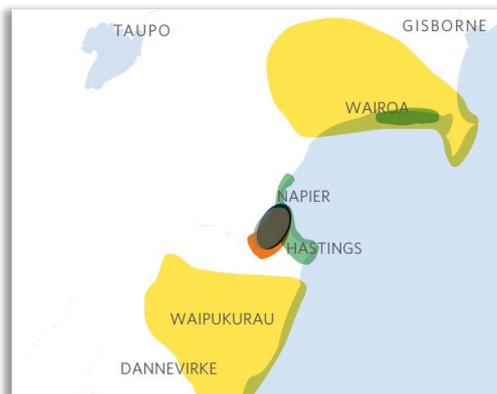
- Given the relative resilience of the Hawke’s Bay economy, no significant changes are expected in the nature, scale and location of transport demand over the medium to long-term. The 10 year outlook remains largely unchanged.
- Maintaining safe and reliable connections to Napier Port and between Napier and Palmerston North remain critical to supporting recovery.
- There will be an ongoing need for transport services to support the COVID-19 recovery by improving access to employment and essential services for vulnerable communities.
- There will be ongoing pressure on transport revenue as a result of the COVID-19 lockdown levels.

### 3.2.5 REGIONAL TRANSPORT PRIORITIES & OBJECTIVES

**Arataki** outlines the focus in Hawke’s Bay is to help create a safer, more resilient land transport system. One that supports economic recovery and regional growth, maintains critical connections, encourages increased use of public

transport, walking and cycling in Napier and Hastings and provides appropriate levels of service across all transport networks. **For Wairoa key focuses are:**

**Support Regional Development (MEDIUM PRIORITY)** – Hawke’s Bay is a priority for regional development support because of the long-term challenges it faces, such as high unemployment and low incomes, **particularly in Wairoa** and Central Hawke’s Bay. To support regional growth, improved access to education and employment, and to help raise living standards, the focuses are:



- Support the development of regeneration plans for towns and villages in Wairoa and the Central Hawke’s Bay making them a great place to live, work and play
- Support transport interventions that maximise industry development
- Support freight initiatives that are multi-modal, efficient and safe
- Support initiatives to increase visitor numbers, particularly in the north of the region
- Support improvements in social and economic outcomes in areas of high deprivation, particularly improving access to employment, education and essential services for isolated communities.

**Tackle Climate Change (MEDIUM PRIORITY)** – Sea level rise and more extreme weather events will increasingly impact communities and infrastructure, particularly in low-lying coastal areas, in particular Mahia area.

- Working with our partners and communities to prioritise interventions and responses to natural hazards in high-risk areas
- Engaging in local planning processes to avoid infrastructure and development in areas at increased risk of natural hazards and effects of climate change
- Enabling continuous improvement in network resilience through maintenance and renewals, and ‘low cost/low risk’ investments
- Enabling quick recovery following disruption to the land transport system. Investigate options for alternate routes that are less likely to be impacted by sea level rise.

**Significantly Reduce Harms (MEDIUM PRIORITY)** – Hawke’s Bay has a relatively poor safety record. Run-off road crashes, speeding, impairment and not wearing seatbelts are primary contributors. Forecast growth in freight traffic could increase this. Focus is needed on the Napier to Hastings urban areas, SH2 between Napier and Waipukurau, and highrisk rural roads. **In 2019 Wairoa District had New Zealand’s highest levels of personal risk** (measured as DSI/100MVKT) with particular issues around impairment and speeding.

Support implementation of **Road to Zero: New Zealand’s road safety strategy 2020–2030** and associated Action plan 2020-22, and regional safety strategies, with a particular emphasis on:

- Safety interventions targeting run-off road and head-on crashes on high-risk rural roads (rural roads are roads with speed limits >80km/h)
- Speed management to provide safe and appropriate speeds on high-risk rural roads. Targeted use of safety cameras to reduce speeding.

## 3.2.6 REGIONAL STRATEGIES AND PLANS

REGIONAL STRATEGIES & PLANS	KEY REGIONAL TRANSPORT PRIORITIES & OBJECTIVES
Regional Land Transport Plan (RLTP)	<p>Statutory document that must be prepared every six years, as required by the Land Transport Management Act (LTMA). The RLTP is being fully updated in 2021 to reflect GPS and Arataki. This plan is the primary document guiding integrated land transport planning and investment for the Hawke’s Bay. It sets out Hawke’s Bay regional 30-year vision and the key objectives and policies to achieve these. The 2021 objectives are:</p> <ul style="list-style-type: none"> <li>• A safe transport system for all users</li> <li>• A resilient, reliable network for journeys within Hawke’s Bay, to Napier Port and connecting other regions</li> <li>• A transport system that contributes to a carbon neutral Hawke’s Bay</li> <li>• Realistic transport choices for all users to meet social, economic and cultural needs</li> </ul>

REGIONAL STRATEGIES & PLANS	KEY REGIONAL TRANSPORT PRIORITIES & OBJECTIVES
	<ul style="list-style-type: none"> <li>Land use planning and development which minimizes travel demand</li> </ul>
Network Operating Framework (NOF)	 Provide a network for pedestrians* that promotes walking as a safe and everyday mode of transport with permeability through the network and connections, both within and between, key origins and destinations  Promote cycling* as a safe everyday mode of transport and recreation with convenient networks that encourage use, reducing reliance on private vehicles  Promote safe, direct and reliable connections to and within centres with appropriate supporting infrastructure and inter-modal hubs  Facilitate and support a safe, connected region providing equitable access to a network that encourages multi-modal options with safe and legible routes that enable trade-offs in higher amenity areas.  Promote and facilitate direct and reliable connections between key origins and destinations. Prioritise safety and manage conflicts with modes in areas of high amenity
Matariki - Hawke's Bay Regional Economic Development Strategy, December 2019 Update	<p>The vision: 'Every household and every whānau actively engaged in, contributing to and benefiting from, a thriving Hawke's Bay economy.'</p> <p>The strategy is linked with national economic development plans as it is part of the Government's Regional Growth Programme, which focuses on increasing jobs, income and investment in regional New Zealand. It also aligns with the Government's Māori Economic Development and Action Plan 'He kai kei aku ringa'.</p> <p>Key initiatives and strategies relevant to Wairoa include:</p> <ul style="list-style-type: none"> <li>Work with Rocket Lab to develop opportunities to leverage business attraction off their Te Mahia initiative</li> <li>Ensure regional and district plans take a coherent and consistent approach to regulating common activities</li> <li>Investigate a common approach to consenting and regulatory approval</li> <li>Accelerate the deployment of Ultra Fast Broadband throughout the Region, in particular to rural communities and marae</li> <li>Identify land available to support new business growth by liaising with councils</li> <li>Develop a targeted regional strategy for the attraction of businesses, investment and migrants</li> </ul>
Heretaunga Plains Urban Development Strategy 2017	<p>The Heretaunga Plains Urban Development Strategy (HPUDS) is a collaboration between the Hastings District Council, Napier City Council and Hawke's Bay Regional Council to plan for urban growth on the Plains between 2015 and 2045. The HPUDS vision is:</p> <p>"In 2045, the Heretaunga Plains is a place where there are thriving communities, quality living environments with high levels of amenity, and where mana whenua values and aspirations are recognised and provided for, and where:</p> <ul style="list-style-type: none"> <li>There is a growing and resilient economy which promotes opportunities to live, work, play and invest.</li> <li>The productive value of its soil and water resources are recognised and provided for, and sustainable use is promoted.</li> <li>The urban centres of Napier and Hastings have distinct identities and provide complementary living, working and learning opportunities.</li> <li>Community and physical infrastructure is integrated, sustainable and affordable."</li> </ul> <p>An integrated and accessible transport network will help to achieve this vision and provide connections from new developments to key destinations.</p>
Regional Cycle Plan	<p>The Hawke's Bay Regional Cycle Plan is a 10 year plan that sets out the region's priorities for cycling. The vision of the plan is "to normalise cycling in Hawke's Bay to such an extent that the region is nationally and internationally recognised as providing the most bike-friendly experience in New Zealand."</p> <p>The Regional Cycle Plan establishes a coordinated approach for the development and delivery of cycle network infrastructure and promotion across the region to ensure resources are pooled and actions prioritised to achieve the greatest gains for cycling in Hawke's Bay. The document sets out an infrastructure plan, as well as a marketing and promotions plan and actions aimed at influencing travel behaviour.</p>



## 3.3 WAIROA LOCAL CONTEXT

**COUNCIL'S MISSION:**  
 TO LEAD AND SUPPORT THE WAIROA COMMUNITY THROUGH DECISION-MAKING THAT PROMOTES THE SOCIAL, ECONOMIC, ENVIRONMENTAL AND CULTURAL WELL-BEING OF THE DISTRICT NOW AND IN THE FUTURE.

**COUNCIL'S VISION:**  
 DESIRABLE LIFESTYLES, THRIVING ECONOMY, TREASURED ENVIRONMENTS, CONNECTED COMMUNITIES

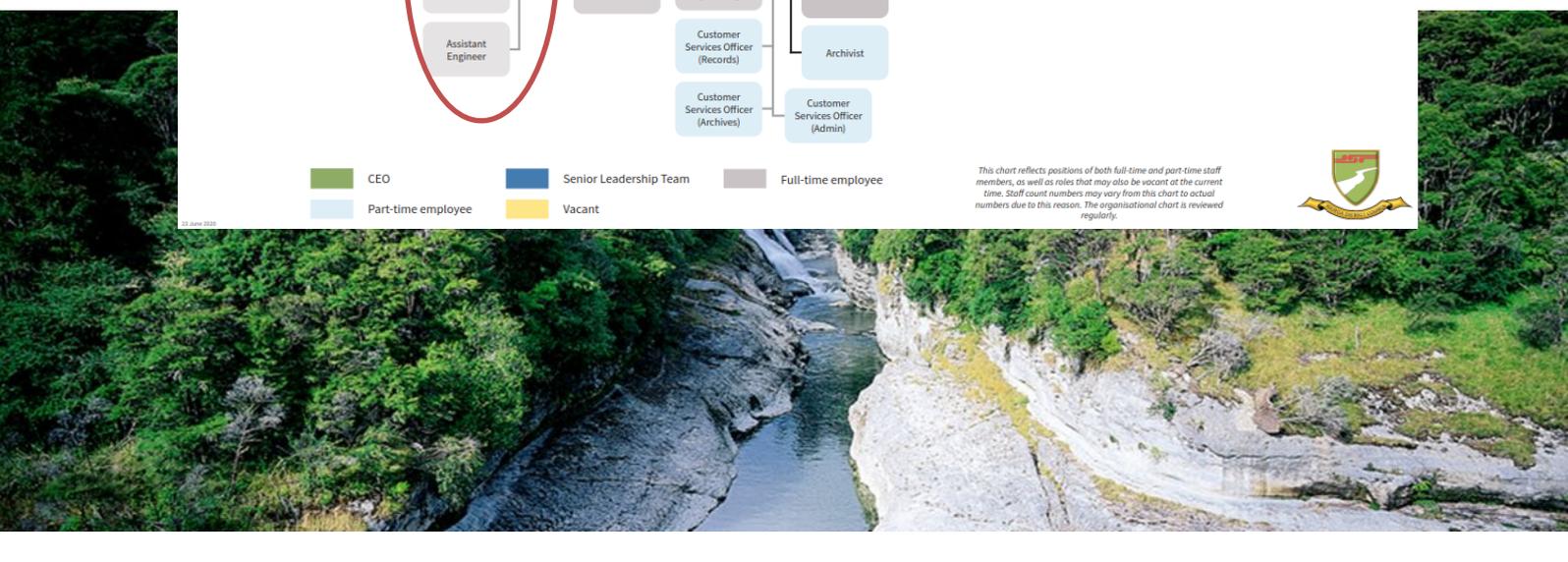
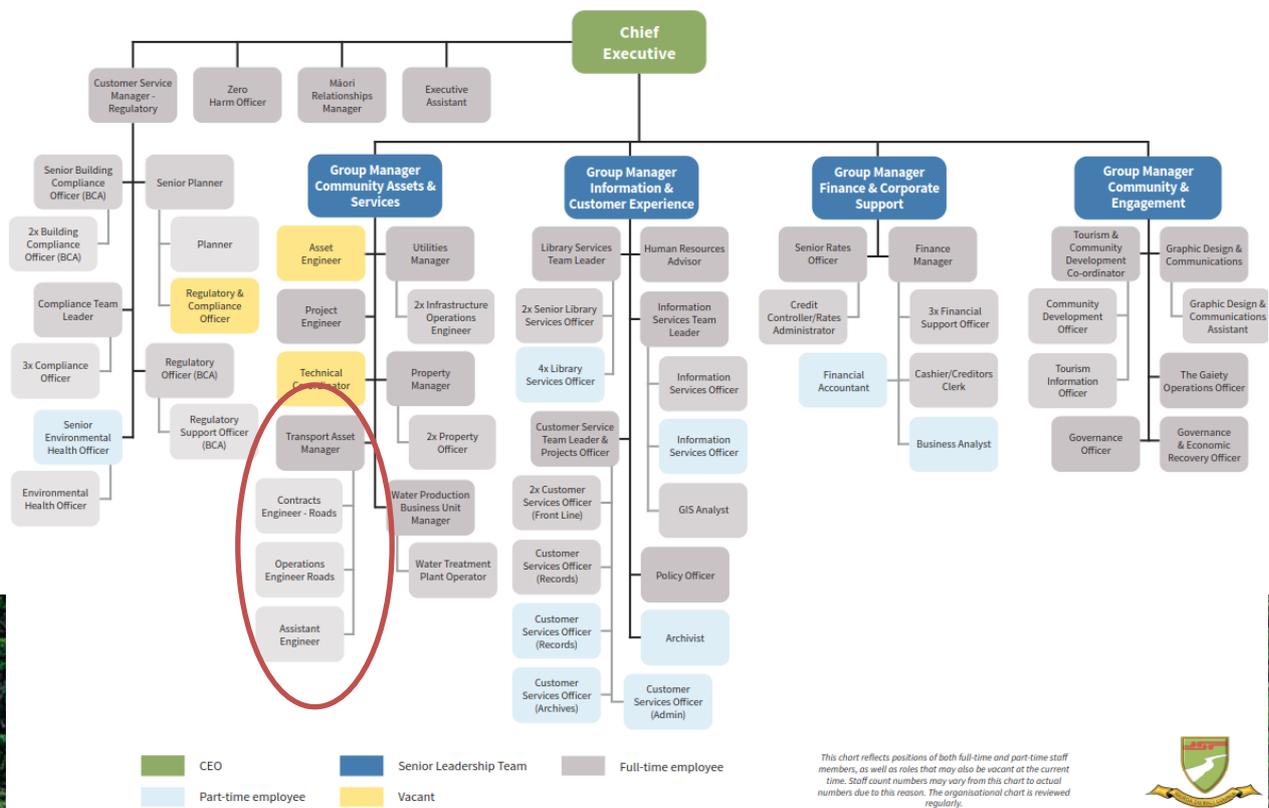
### 3.3.1 OUR TEAM

Our Community Assets & Services Team delivers core services, including land transport, to our community. The Transportation Team report to the Group Manager, Community Assets & Services who is part of the Senior Leadership Team.

Our team provides management and engineering services to deliver all asset-based activities. We are supported by professional services providers who provide planning, technical design and asset management support. The physical works required to deliver the services and assets are completed through various short and long term physical works contracts.

Our transport team also work closely with other Council service areas, including three waters, open and built spaces, waste management and the airport, to deliver all community services in a coordinated and efficient way.

**WAIROA DISTRICT COUNCIL - ORGANISATIONAL CHART**



## OUR LOCAL STRATEGIC FOCUSES

### HĀPAITIA - UPLIFTING OUR COMMUNITY

Wairoa has a rich cultural heritage which is an integral part of the community today. Promoting and encouraging Māori culture and values and ensuring this remains central to key decision making is a significant focus for Council and an important factor in transportation activity planning and delivery.

### GREAT PLACE TO LIVE

Wairoa is a great place to live and we are working hard as a community to lift the demographic and economic performance of our district. We are developing our district's strength in land-based industries and encouraging diversification of business and attraction of new and returning residents. Our transportation network provides key linkages between our communities, giving communities access education, business and health services.

### GREAT THINGS GROW HERE

This regional strategy to see an increase in the use of productive land is a key driver for Wairoa. Our transportation network provides access to large productive areas of land which contribute significantly economic growth in the Hawke's Bay. As the number of heavy vehicles and legal gross loading has increased, so too has the pressure for stronger bridges, safer, wider roads, with better traction characteristics and longer sight distances. Resilience of the entire roading network is key to getting product from the gate to Napier Port. Forestry traffic, in particular, is forecast to grow as current wood lots mature around 2022-2024.

### VALUABLE TOURISM

Wairoa is a key gateway to the Te Urewera Rainforest, Mahia beach areas and the Rocket Lab situated at the tip of the Mahia Peninsula, one of a kind in the southern hemisphere. We want to enhance these key tourism features and make Wairoa a place that visitors love to come to. These high tourist areas impact on the levels of service and safety needs for our road network.

### PROTECTING OUR ENVIRONMENT

One of our key values is Tiakitanga, supporting and promoting the restoration and protection of our natural environment. Our role in protecting our green environment is critical to ensuring future generations get to use it and enjoy a clean, safe place to live. Wairoa is a key gateway to the Te Urewera Rainforest via Special Purpose road to Waikaremoana (SP38). This area is an environmentally sensitive, impacting on the maintenance and renewals strategies we use in this area.



## 3.3.2 OUR LOCAL STRATEGIES AND PLANS

COUNCIL STRATEGIES, PLANS	LINKAGES TO TRANSPORTATION
Long Term Plan (LTP)	<p>The LTP is the key planning document for Council and describes how Council will fulfil its responsibilities under the Local Government Act (LGA) 2002 to promote the well-being of the district and enable democratic decision making.</p> <p>The LTP outlines the <b>Community Outcomes</b> and land transport <b>Level of Service (including associated customer performance measures)</b> the Council seeks to achieve, which this AMP links back to. The LTP is to be adopted by June 2021 with reviews triennially.</p>
Infrastructure Strategy 2021-2051	<p>The 2021-2051 Infrastructure Strategy provides guidance on key district infrastructure issues that need to be at the forefront of infrastructure planning and decision-making. They are:</p> <ul style="list-style-type: none"> <li>• Legislative and policy change</li> <li>• Land use change</li> <li>• Affordability</li> <li>• Economic development</li> <li>• Climate change</li> <li>• Servicing Mahia</li> <li>• Resilience</li> </ul> <p>Specific transport related infrastructure issues identified are:</p> <ul style="list-style-type: none"> <li>• The level of subsidy from Waka Kotahi may reduce</li> <li>• Effects of climate change on roading and bridges</li> <li>• Effects of land use change on expected levels of service</li> <li>• Confidence in data related to location and condition of retaining structures is limited</li> </ul>
A Wairoa Journey Together: Covid-19 Economic Recovery	Tātau Tātau o Te Wairoa, Ngāti Pāhauwera Development Trust and Wairoa District Council have come together to develop a community driven, aligned, focused, and coordinated socio-economic response to COVID-19 supporting the Wairoa region, its communities, and peoples.
Procurement Strategy 2020	Outlines procurement objectives and legislative requirements to ensure value for money, transparency and fairness, accountability and integrity, and sustainability.
Long Term District Planning, Demographic and Economic Growth Directions, 2018-2048	This report completed by Economic Solutions Ltd was developed in December 2017 and provides key insights into economic development and growth over the 2018-2028 LTP period, and beyond. It provides context and direction for potential future Wairoa district transport impacts. This response focuses on immediate actions, employment, short and long-term projects, that address the current response and align with the aims of Wairoa.
Economic Development Strategy	This document provides key strategy for economic development in the district. It outlines Wairoa's current and future economic prospects and goals for further economic development and population growth.
Walking & Cycling Strategy 2020	Our Walking and Cycling Strategy Implementation Plan establishes actions, indicators and completion timeframes for achieving the goals of the Strategy. We align completion timeframes to our Long-Term Plan timeframes.
Maori Policy 2012	<p>This policy provides a foundation for establishing processes that provide for tangata whenua to contribute to Council's decision-making responsibilities.</p> <ul style="list-style-type: none"> <li>• Establish a relationship between Wairoa District Council and tangata whenua to achieve mutually beneficial outcomes for the community of Wairoa.</li> <li>• Set up processes and procedures that facilitate effective communication between Wairoa District Council and Tangata Whenua o te Wairoa.</li> <li>• Enable a Māori world view to be incorporated into local government decision making, policies and procedures.</li> <li>• Improve the degree to which Māori participate in Council/community consultation.</li> </ul>
District Plan	The Plan sets out the framework for the sustainable management of natural and physical resources in the Wairoa District. It gives key guidance on land use, changes and effects, as well as natural resource management impacting on land transport considerations.
Annual Plan	The Annual Plan provides details on the current year's financial predictions and budgets, in accordance with the current LTP. It primarily describes the projects for a single year, however, it may give some indication of projects for subsequent years.

COUNCIL STRATEGIES, PLANS	LINKAGES TO TRANSPORTATION
Annual Report	The Annual Report details achievements against performance measures and targets set in the Annual Plan.

## 3.3.3 INFRASTRUCTURE CONTEXT

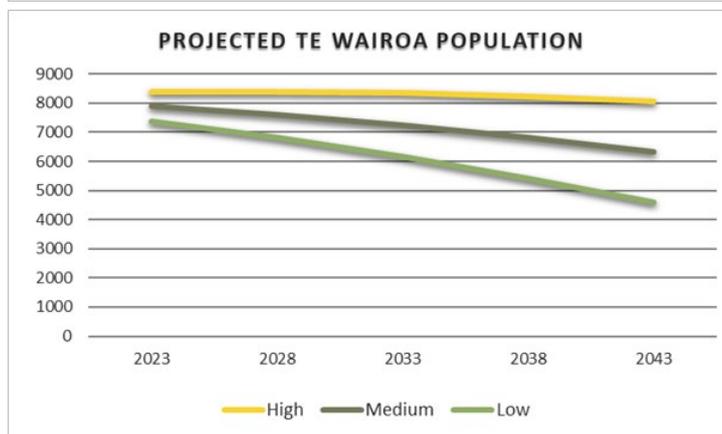
### OUR PEOPLE

Wairoa is home to an estimated population of **8,960 people** (estimate as at 30 June 2020) and has the highest proportion of Māori of any local authority area in the country, with approximately **67% of the district's people being of Māori descent**. This is significantly higher than New Zealand average Māori population of 16.5%.

Statistics New Zealand have provided various prediction scenarios through to 2043, based off 2013 census data. These show general population decline. However, recent population data shows growth for Wairoa. It is expected that Wairoa's population will remain relatively static over the duration of this plan.

It is expected that growth, if any, will occur in Mahia, as that is a desirable location for holiday homes and more people are retiring and returning to the area. It is relatively affordable for coastal property.

An assessment of the change in demographics of the population will also need consideration. **Statistics suggest that by 2028, 1 in 5 Wairoa residents will be over the age of 65.** As the workforce declines and people move to retirement incomes, the ability to fund cost increases can reduce.



Economic Solutions Ltd Report<sup>2</sup> includes an assessment of the average socio-economic deprivation score for each of Wairoa district's communities, based on the 2013 Census results for the area for the relevant indicators. Scores range from 7 to 10, with 1 representing the least deprived decile group and 10 the most deprived decile group.

**Population and socio-economic depravity indicators have a significant impact on affordability of the transport activity**, with limited ability for the ratepayers to finance any increases in road maintenance and renewals costs. Economic Solutions Ltd's 2017 Report outlines "In terms of the ability of district residents to meet Wairoa District Council rating requirements, it is noted that the current level of average residential rates (\$2,500-\$3,000 as advised by Council staff) represents approximately 6-7% of estimated annual median household income in the district at the present time. This compares to approximately 3-4% at the national level." Therefore, **Council will continue to rely on government subsidy (FAR) (currently 75% FAR in 2020).**

### OUR COMMUNITIES

While Wairoa township is the primary service area for the district there are a large number of other smaller rural communities throughout the district. These smaller communities provide an abundance of potential opportunities for the Wairoa community as a whole, and it is key that there is a reliable road network in order for them to fully add value and contribute to the wider community whether it be economic, social, cultural or environmental. Health services and other

<sup>2</sup> Economic Solutions Ltd (4 December 2017), Wairoa District Council - Long Term District Planning - Demographic and Economic Growth Directions 2018-2048

core services within the district are also limited, so for these communities to access key services they need for their wellbeing means that resilience of the road network is critical.

## OUR CULTURE

Wairoa has a rich cultural heritage which is an integral part of the Wairoa community today. 20% of the population speak Te Reo Māori. Māori communities and Marae are located throughout the district, and **many of these communities are in isolated parts of the district, with limited access opportunities.**

The tangata whenua of Wairoa and their culture and traditions have special relationships with their ancestral lands, water, sites, waahi tapu and other taonga. Some activities and developments can have significant adverse effects on these relationships. **Council plays an integral part in promoting and encouraging Māori culture and values and ensuring this remains central to key decision making, including within the transportation activity.**

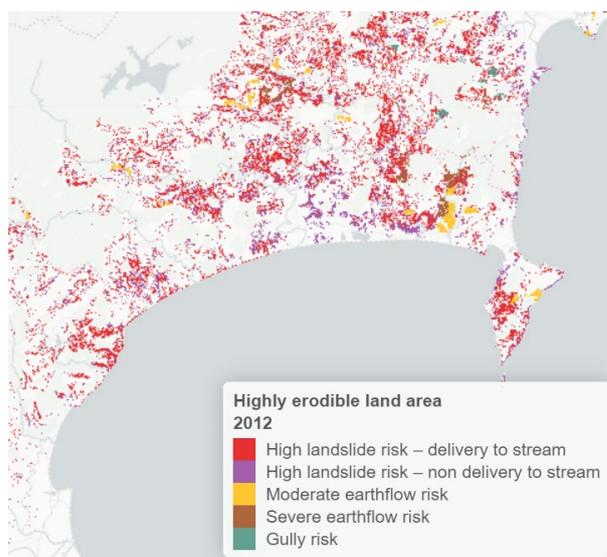
The Māori Standing Committee acts as a check and balance on Council processes, especially on those matters requiring a Māori perspective. Recommendations from the Māori Standing Committee will be communicated through the Chair and will be given due consideration by the Council when making decisions that directly impact on Māori and on all matters that require the perspective of Māori.

## OUR GEOGRAPHY

**Area:** 4,118 square kilometres, with approximately 130 kilometres of coastline.

**Topography:** The majority of the district is hill country merging with mountains in the west, often dissected with gorges. Areas of coastal and river flats of versatile soils give greater variety to the landscape.

**Geology:** Underlying geology is relatively unstable in many places. As shown in the adjacent figure from Statistics NZ<sup>3</sup>, Wairoa has significant amount of High landslide risk. This continues to present challenges for Wairoa roads which have been damaged as a result of land instability.



## OUR CLIMATE

While Wairoa's weather has been predominantly sunny and warm, storm systems from the north and east affect the district seasonally and can cause significant rainfall events to occur. Flooding continues to be a major hazard in Wairoa with many lowland areas, including the Wairoa township, at risk.

**Climate change** is already potentially irreversibly affecting our natural systems, and we can expect more severe effects on our transport network as the change continues. Key impacts on our land impacting transport include:

**Rising sea levels** are projected to increase the risks of coastal flooding, erosion, and saltwater intrusion to groundwater, threatening low-lying infrastructure, cultural sites, and habitats. We can expect tides, waves, and storm surges to reach further inland more regularly. Coastal flooding, usually due to storm surges coinciding with very high tides, already causes disruption and damage along our coastline.

**Increased frequency of intense rainfall events** is expected to increase erosion, predominantly in steep hill-country areas. Resulting soil loss is likely to impact the stability of our transport network, particularly in the rural areas of the district.

## OUR ECONOMY

**Economic Development is viewed as a vital element in keeping the Wairoa District alive and thriving, both now and into the future.** The economy of Wairoa is based on the rural sector. Approximately 60% of the total land is in productive use, of which some 48% is in pasture. Sheep/beef farming and related processing, and forestry are the leading rural production industries in Wairoa district.

<sup>3</sup> <https://www.stats.govt.nz/indicators/highly-erodible-land>

Economic Solutions Ltd 2017 report forecasts increased levels of GDP growth during the 2018-2028 period. The primary production and processing sector accounts for 56% of total industry GDP and employment in the district. Economic growth in the district has fluctuated markedly since 2000 but has averaged out at an underlying annual (growth) rate of 0.82%. This compares with the respective Hawke’s Bay region and national growth rates of 1.66% and 2.54%. Wairoa contributes 5% or the Hawke’s Bay regional GDP.

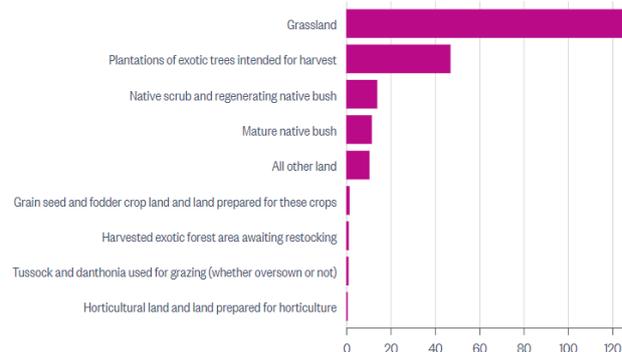
Council has embarked on an ambitious programme of attracting new businesses to the district and further developing our district’s strength in land-based industries. An increased emphasis by the Wairoa District Council on economic development, particularly aimed at encouragement of diversification of agribusiness, ecotourism, digital creative industry attraction, and attraction of new and returning residents, has led to an increasingly positive community view of the district’s future.

**Key economic contributors** are outlined below.

Land use on farms in the Wairoa District, New Zealand



By type, as at June 2017, thousand hectares  
 Provider: Stats NZ

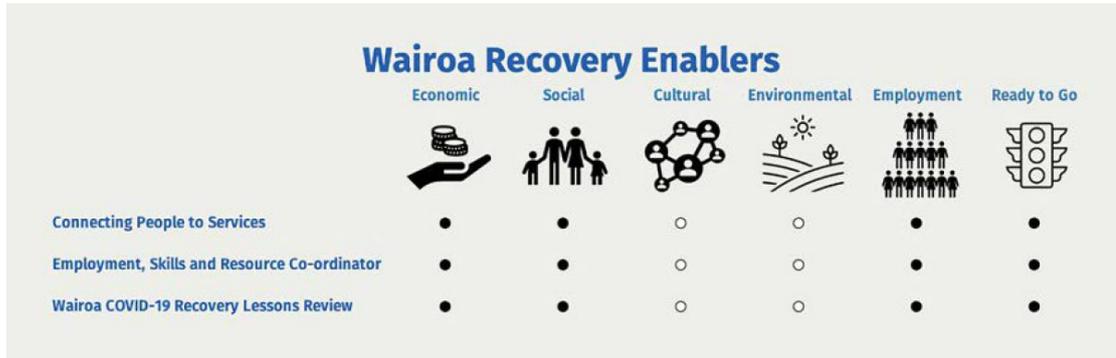


INDUSTRY	DESCRIPTION
Pasture Farming	Wairoa is known nationally as a leading producer of high quality, non-dairy cross beef, principally Angus. Pasture farming and associated meat processing continue to contribute significantly to the local economy. The largest employer in Wairoa is the AFFCO meat works.
Forestry	Increases in forestry plantings as a result of the Climate Change Response (Zero Carbon) Amendment Act could have a particular effect in the Wairoa District, which has already seen 8,486 hectares of sheep and beef land converted to forestry. This is of concern to many in the district due to the loss of jobs resulting from such conversion.  The 2017 annual level of activity is approximately 0.6 million tonnes; this is forecast to increase to a peak level of 1.8 million tonnes in 2021/22 and then fall back gradually to approximately 0.7 million tonnes in 2027/28. The total harvest output for the period is approximately 12 million tonnes.
Horticulture	Wairoa has a high horticulture potential that has seen a number of crops grown here over the years. Further horticultural sector developments in the district, e.g. fruit-growing and vegetables, could contribute to economy.
Tourism	Since 2010, MBIE visitor spending data indicates total annual visitor spending in Wairoa district varying in the range \$15 million to \$18 million. Visitor spending for the year ended September 2017 was recorded at \$17 million, up 13% on the previous year. ESL forecasts this to increase to approximately \$25 million, by year 2028. Potential new tourism opportunities include Maori community/cultural tourism initiatives and tourism spinoffs from the Rocket Lab development. This may be impacted in the short term by post COVID-19 impacts.
Rocket Lab Launch Site	The establishment of a launch site on the Mahia Peninsula by Rocket Lab has opened up the opportunity for new economic contribution to the Wairoa District. In 2019, Rocket Lab announced that it was establishing a second launch site at its Launch Complex 1 site for its Electron Vehicle on the Mahia Peninsula.
Māori Community	Further Maori economic, business, employment and community/social development initiatives underpinned by local application of Treaty of Waitangi settlement claim monies. These are estimated to total in the order of \$340 million.
Service Industry	Wairoa has a good range of service and retail industries with two vet clinics and a number of agriculture and construction supply companies (ITM, Carters, Farmlands, East Coast Lumber etc.). Wairoa Township also has available legal, accounting, medical and dental services, as well as the important vehicle and machinery servicing sector. The District is served by a range of agricultural and forestry contractors and transport companies.  The public service sector is relatively large in Wairoa, comprising health (8.8% of all jobs), education (10.4% of all jobs), police and social services, along with local government.

# WAIROA

## Post Covid-19 Recovery

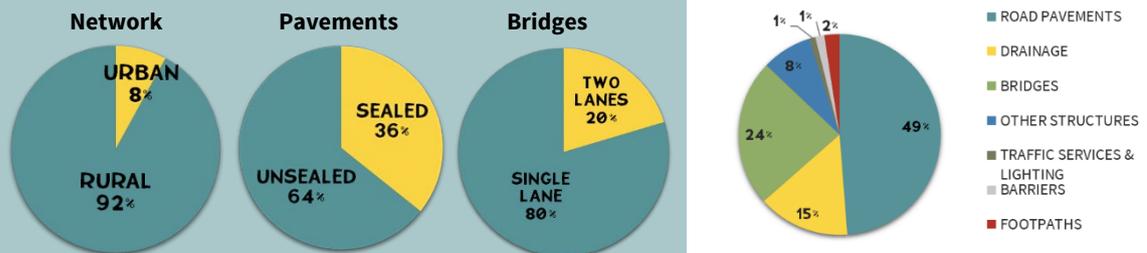
Wairoa has put considerable effort into proactively responding to COVID-19 through strategic planning. A Wairoa Journey Together: Covid-19 Economic Recovery sets out key recovery enablers and contribution to strategic focuses as outlined below. Where possible our transport planning and strategic responses look to utilise these recovery enablers.



## OUR KEY TRANSPORT ASSETS

Council maintains **842km of roads**, of which **301km is sealed**. The roading network is highly rural and many roads traverse challenging terrain with numerous steep, winding, narrow sections.

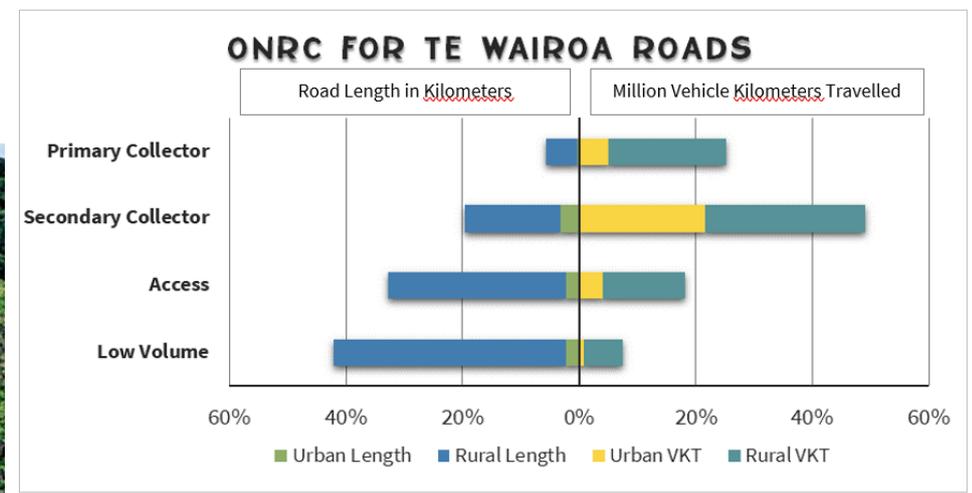
Within the formed road corridor, Council also owns **176 bridges**, **447 retaining structures**, **51km of footpaths**, car parks and numerous other drainage and furniture assets.



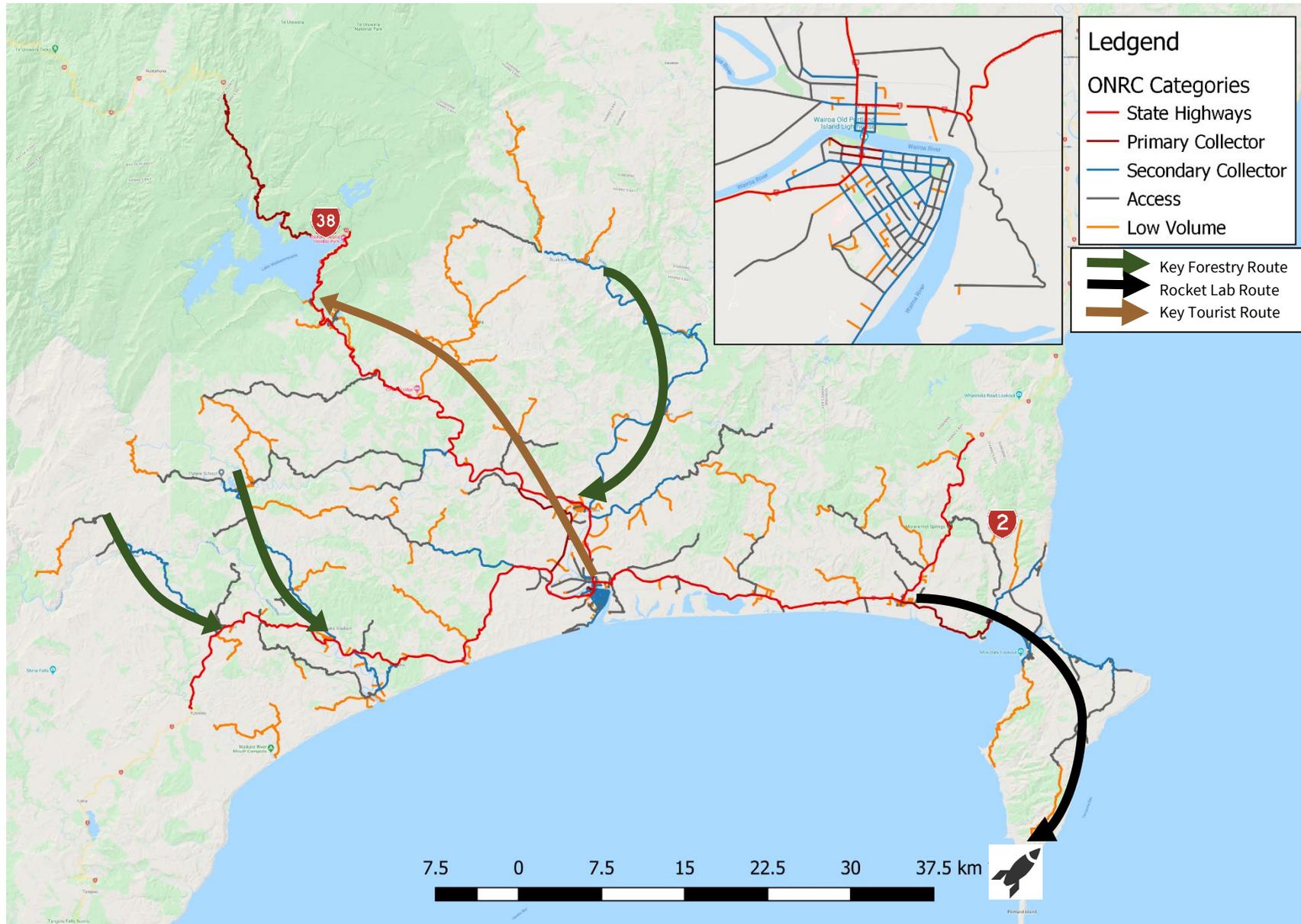
## ONRC

In 2020, Council completed the desktop review of all roads and reclassified them in conjunction with the ONRC levels of service guidelines. Lengths for the ONRC within the Wairoa district and each ONRC as a percentage of the total network length are included in the adjacent figure.

The number of journeys travelled are measured by multiplying the volume of traffic on a road by its length (Vehicles Kilometers Travelled or VKT). This shows where most customer journeys are made. For Wairoa **primary and secondary collector routes make up 25% of the network by length, but carry more than 74% of the amount of travel undertaken** in the district due to the higher traffic volumes.



## 3.3.4 OUR LOCAL TRANSPORT NETWORK AT A GLANCE



## KEY LINKAGES

Key linkages include **State Highway 2** and **State Highway 38**, which run through the district providing key access links between Wairoa and other districts, including Napier Port.

**Hastings District Council** is the neighbouring TLA to the south and **Gisborne District Council** is the neighbouring TLA to the north.

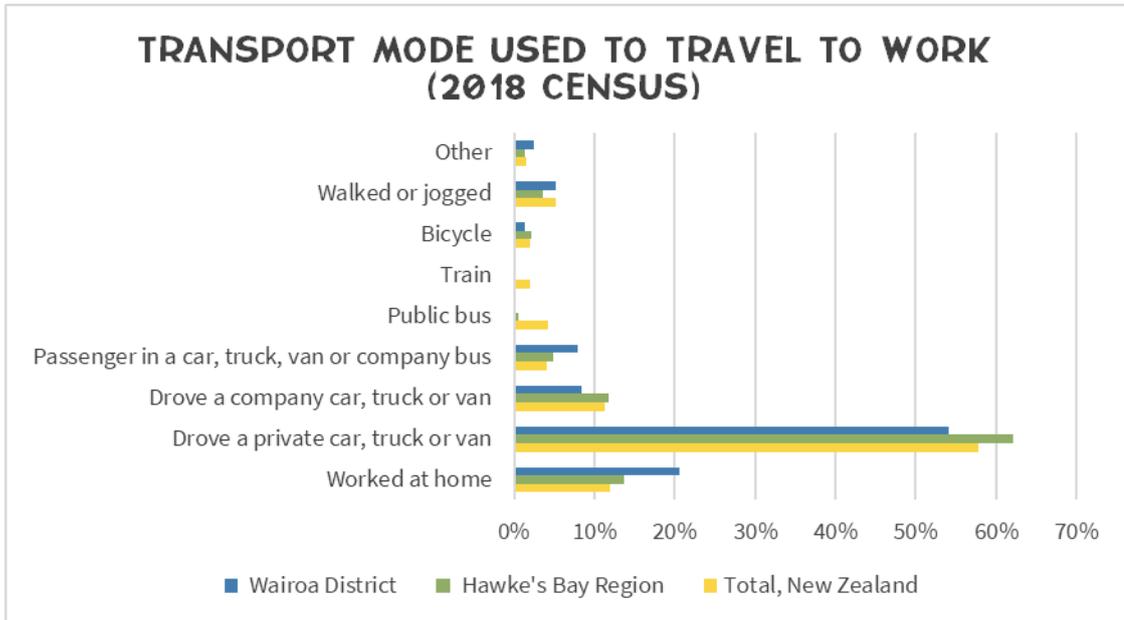
In terms of State Highway 38, there are a number of different maintenance and funding arrangements, based on the various sections of road as outlined in the table to the right.

SH38 SECTION	DESCRIPTION & RESPONSIBILITY	LENGTH
Wairoa to Mangapapa	<b>State Highway</b> – Sealed road section fully maintained and funded by Waka Kotahi	36.7 km
Mangapapa Bridge to Aniwanuiwa	<b>Delegated State Highway</b> – Unsealed road section with maintenance and renewals responsibility delegated to Council to complete on behalf on Waka Kotahi – fully funded by Waka Kotahi	24.9 km
Whakatane Boundary to Aniwanuiwa	<b>Special Purpose road</b> – Unsealed road section fully maintained by Council. Waka Kotahi has confirmed the FARs for Special Purpose Roads (SPRs). In the absence of an agreed transition plan, the rate for SPRs for the 2021-24 NLTP is 100%. From 1 July 2024, these roads will revert to normal FAR.	30.2 km

## CURRENT BEHAVIOURS

## TRAVEL

Statistics NZ presents details of the mode of transport used by people travelling to work from 2018 Census data.



This data shows that the use of private and company vehicles for travel to work is lower in Wairoa than for Hawke's Bay and the rest of New Zealand. However, working from home and travelling as a passenger is higher for Wairoa than Hawke's Bay and New Zealand. As such, **Wairoa residents are heavily dependent on the road network to provide for the predominant mode of transport.**

**Walking and Cycling:** In Wairoa, a 7.7km riverside path has been constructed from the town's lighthouse to Whakamahia Beach. Wairoa District Council is currently developing a cycle plan.

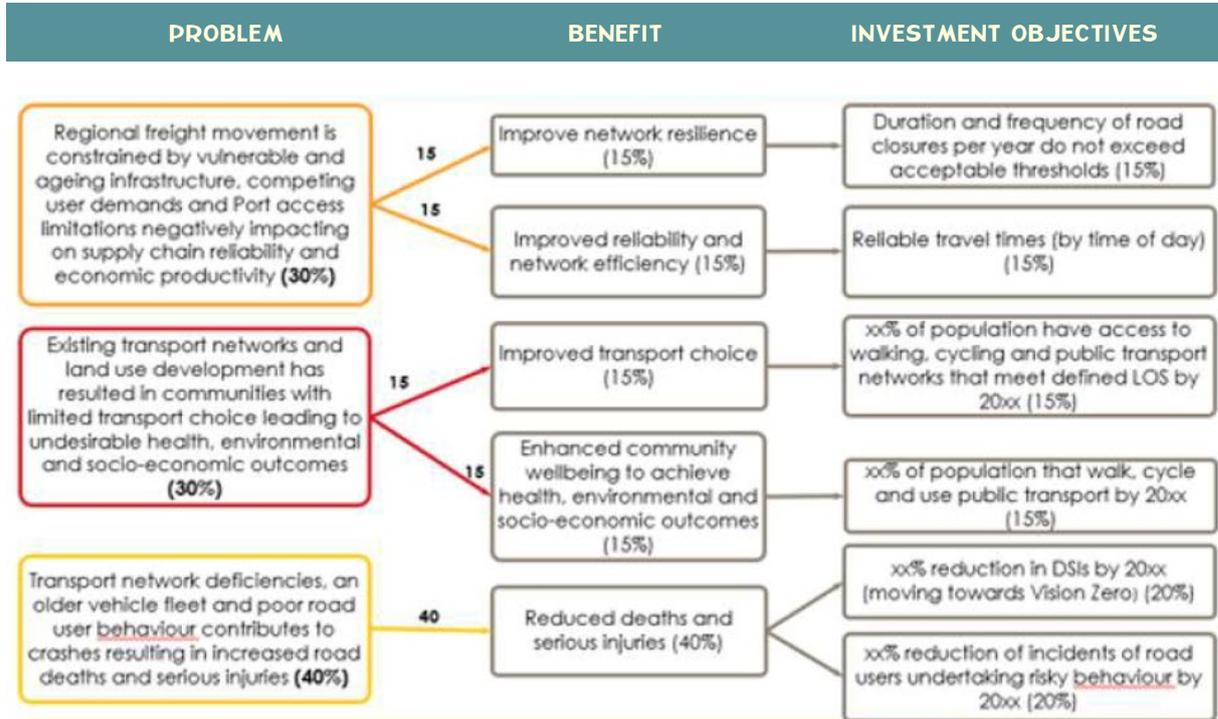
**Public Transport:** No public transport or train transport is available for commuters in Wairoa. Public transport in the district primarily consists of long distance bus services, which operate through the district to Napier and Gisborne, and school bus transport.

## 4 STRATEGIC ASSESSMENT

This section outlines the need for investment. It defines the key issues and challenges facing our region and our district, the evidence base for these issues and the benefits of investing to address them.

### 4.1 KEY ISSUES & CHALLENGES FACING OUR REGION

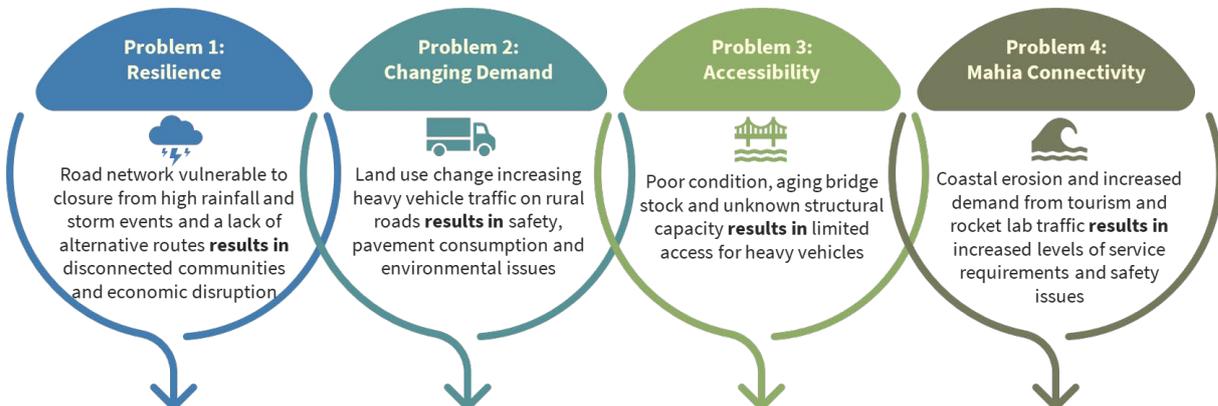
At a regional level Investment logic mapping (ILM) has been reviewed in 2020. The agreed problems facing the region, and the outcomes and benefits of dealing with these problems are detailed below. This guides regional investment decisions.

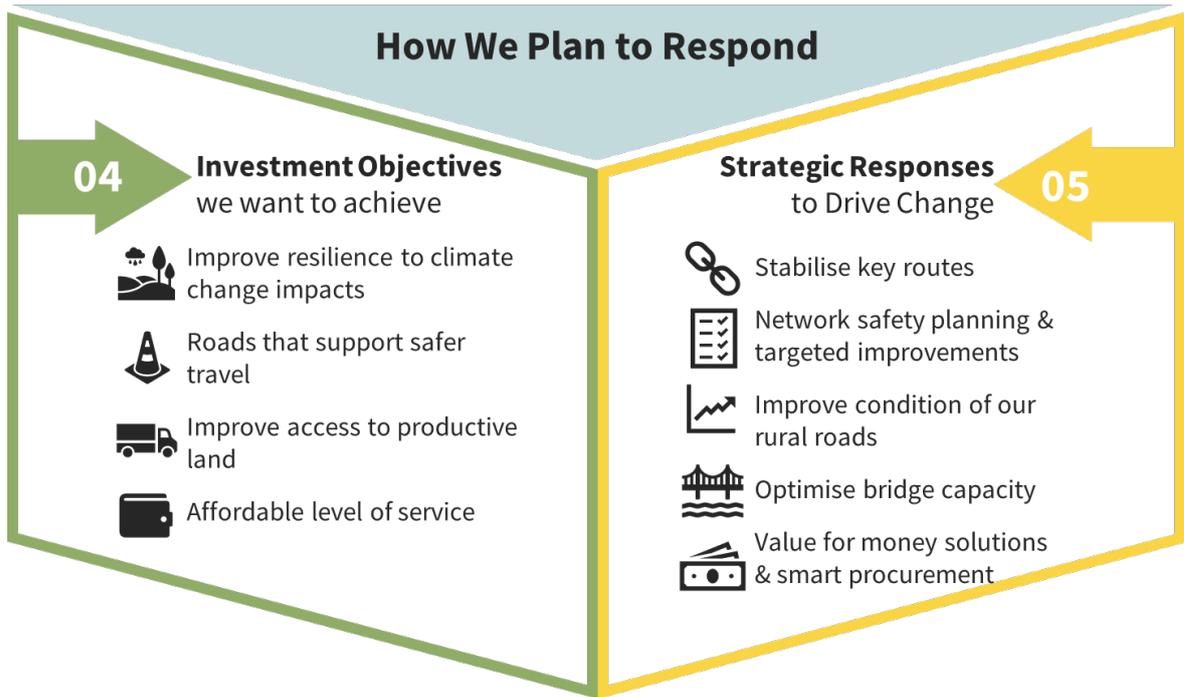


### 4.2 KEY ISSUES & CHALLENGES FACING WAIROA

Council carried out its own assessment of problems facing the district in 2017. This has been completed in consultation with key Stakeholders and a problem identification workshop including the Council Engineering Manager, Waka Kotahi P&I representative and key members of the Roding team. These problems have been reviewed in 2020. Although progress has been made in some areas, changing the relative priority of these problems, overall they remain. Key problems identified for Wairoa are:

In order to address the four key problems identified for Wairoa, we have identified a number of Strategic Objectives we want to achieve as an outcome of addressing these. We have also identified key Strategic Responses that we will use to drive change to achieve these objectives.





Overall alignment of Wairoa’s problems with local, regional and national strategic objectives has been completed in the table below.

## ALIGNMENT OF PROBLEMS WITH STRATEGIC OBJECTIVES

WAIROA TRANSPORTATION PROBLEM STATEMENT	LOCAL	REGIONAL	NATIONAL		
	COUNCIL COMMUNITY OUTCOMES	REGIONAL PROBLEMS	ONRC CUSTOMER OUTCOMES	ARATAKI	GPS – STRATEGIC PRIORITIES FOR REGIONS
<b>RESILIENCE</b> - Road network vulnerable to closure from high rainfall and storm events and a lack of alternative routes results in disconnected communities and economic disruption	<ul style="list-style-type: none"> <li>✓ Strong and prosperous economy</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Freight Supply Chain</b> – Regional freight movement is constrained by vulnerable and aging infrastructure, competing user demands and Port access limitations negatively impacting on supply chain reliability and economic productivity</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Resilience</b> – Limiting disruption to traffic affected by unplanned events and the impacts of closures that occur</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Support Regional Development</b> - optimise transport’s role in enabling regional communities to thrive socially &amp; economically</li> <li>✓ <b>Tackle Climate Change</b> - enhance communities’ long-term resilience to the impacts of climate change</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Freight Network</b> – Improving the freight network for primary producers to markets</li> <li>✓ <b>Maintaining the network</b> - Sufficient funding to maintain networks to the condition required to ensure a safe, resilient and accessible network</li> </ul>
<b>CHANGING DEMAND</b> – Land use change increasing heavy vehicle traffic on rural roads results in safety, pavement consumption and environmental issues	<ul style="list-style-type: none"> <li>✓ Strong and prosperous economy</li> <li>✓ Safe, supported and well-led community</li> <li>✓ Protected and healthy environment</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Freight Supply Chain</b></li> <li>✓ <b>Safety</b> – Transport network deficiencies, an older vehicle fleet and poor road user behaviour contributes to crashes resulting in increased road deaths and serious injuries</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Accessibility</b> – Providing a transportation network that allows land use access and network connectivity</li> <li>✓ <b>Safety</b> - Maintaining roads in such a way as to ensure that people feel safe driving them</li> <li>✓ <b>Amenity</b> – Providing travel quality and comfort to road users</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Support Regional Development</b></li> <li>✓ <b>Significantly Reduce Harms</b> – transition to a transport system that reduces deaths and serious injuries &amp; improves public health</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Freight Network</b></li> <li>✓ <b>Safety</b> – Implementing the Road to Zero strategy</li> <li>✓ <b>Maintaining the network</b></li> </ul>
<b>ACCESSIBILITY</b> - Poor condition aging bridge stock and unknown structural capacity results in limited access for heavy vehicles	<ul style="list-style-type: none"> <li>✓ Strong and prosperous economy</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Freight Supply Chain</b></li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Accessibility</b> – Providing a transportation network that allows access for HCVs (including 50Max vehicles) via key road transport links</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Support Regional Development</b></li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Freight Network</b></li> </ul>
<b>MAHIA CONNECTIVITY</b> - Coastal erosion and increased demand from tourism and rocket lab traffic results in increased levels of	<ul style="list-style-type: none"> <li>✓ Strong and prosperous economy</li> <li>✓ Safe, supported and well-led community</li> <li>✓ Protected and healthy environment</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Freight Supply Chain</b></li> <li>✓ <b>Safety</b></li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Resilience</b></li> <li>✓ <b>Safety</b></li> <li>✓ <b>Amenity</b></li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Tackle Climate Change</b> - Sea level rise and more extreme weather events impacting communities and infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Maintaining the network</b></li> <li>✓ <b>Safety</b></li> </ul>

service requirements and safety issues				✓ <b>Significantly Reduce Harms</b>	
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## 4.3 BENEFITS OF INVESTING

### 4.3.1 MEASURING THE BENEFIT OF INVESTING

Key performance measures help Council to measure their investment performance. They help to answer the question: are the benefits actually being achieved? For each benefit statement, there are investment performance measures developed using Waka Kotahi’s Investment Benefits Framework as shown below. There are twelve Benefit Clusters contributing to the five national Transport Outcomes.



The outcomes from this framework are detailed further in the individual problem sections below.

The benefits of successfully investing to address the problems have been identified in the table below. These align to the Ministry of Transport’s five key Transport Outcomes through Waka Kotahi’s **Investment Benefits Framework**. Alongside the benefits we have also identified the consequences of not investing and key strategic responses. The benefits of investing, consequences of not investing and strategic responses are detailed further in the individual problem sections below.

PROBLEM	OUR INVESTMENT OBJECTIVES	BENEFITS OF INVESTING	PERFORMANCE MEASURES	KEY STRATEGIC RESPONSES
<b>RESILIENCE</b> - Road network vulnerable to closure from high rainfall and storm events and a lack of alternative routes results in disconnected communities and economic disruption	Improve resilience to climate change impacts	<b>Benefit 4.1: Reduced impact on system vulnerabilities and redundancies</b> Reducing the risk of communities not being able to access social and economic opportunities due to unexpected outages.	<ul style="list-style-type: none"> <li>BF 4.1.1: Availability of a viable alternative to high-risk and high-impact route</li> <li>ONRC Resilience CO1: No. of journeys impacted by closure</li> <li>ONRC Resilience CO2: The number of instances where road access is lost</li> </ul>	<b>Stabilise key routes</b> <ul style="list-style-type: none"> <li>Proactive drainage maintenance &amp; renewals</li> <li>Retaining wall condition assessments &amp; renewals in vulnerable areas</li> <li>Riverbank stabilisation on key routes</li> <li>Coastal erosion protection</li> <li>Hazardous tree removal programme on key routes</li> </ul>
<b>CHANGING DEMAND</b> – Land use change increasing heavy vehicle traffic on rural roads results in safety, pavement consumption and environmental issues	Roads that support safer travel	<b>Benefit 1.1: Reduced social cost of deaths and serious injuries</b> The impact of reducing the number of deaths and serious injuries (DSIs) on the all land transport modes and their social costs.	<ul style="list-style-type: none"> <li>BF 1.1.1 (ONRC Safety CO2): Collective Risk</li> <li>BF 1.1.2: Crashes by severity</li> <li>BF 1.1.3: Deaths and serious injuries</li> <li>BF 1.1.4 (ONRC Safety CO3): Personal risk</li> </ul>	<b>Network safety planning &amp; targeted improvements</b> <ul style="list-style-type: none"> <li>Network wide safety audit to better understand key safety issues</li> <li>Speed management consistent with regional approach</li> <li>Targeted improvements on high risk parts of the network</li> </ul>

PROBLEM	OUR INVESTMENT OBJECTIVES	BENEFITS OF INVESTING	PERFORMANCE MEASURES	KEY STRATEGIC RESPONSES
	Improve access to productive land	<p><b>Benefit 5.2: Improved network productivity and utilisation</b></p> <p>Network productivity and utilisation is about efficient use of the land transport network. Optimising our part of the broader economic / social system to allow broader benefits to be gained.</p>	<ul style="list-style-type: none"> <li>BF 10.1.5 (ONRC Amenity CO1): Smooth Travel Exposure (STE)</li> <li>ONRC Amenity CO2: Peak Roughness</li> <li>ONRC Amenity TO1: Roughness of the road (median and average)</li> </ul>	<p><b>Improve condition of our rural roads</b></p> <ul style="list-style-type: none"> <li>Demand management &amp; stakeholder engagement to confirm harvesting projections and better plan future investment</li> <li>Traffic Count Programme to better understand network usage</li> <li>Improved Maintenance Intervention Strategy &amp; data collection processes to inform decision making</li> <li>Targeted pavement renewals (on secondary collector roads)</li> </ul>
	Affordable level of service	<p><b>Benefit 10.1: Improved user experience of the transport system</b></p> <p>How all people experience the transport system, including people with disabilities, school children, and the elderly, and how different modes are experienced</p>	<ul style="list-style-type: none"> <li>BF 10.1.5 (ONRC Amenity CO1): Smooth Travel Exposure (STE)</li> <li>ONRC Amenity CO2: Peak Roughness</li> <li>ONRC Amenity TO1: Roughness of the road (median and average)</li> <li>DIA PM4: Network condition - footpaths</li> </ul>	<p><b>Value for money solutions &amp; procurement</b></p> <ul style="list-style-type: none"> <li>Improved data management processes</li> <li>Smart buying through packaging work. Delivering more for the same cost</li> </ul> <p><b>Improve condition of our rural roads</b></p> <ul style="list-style-type: none"> <li>Targeted renewals to meet level of service</li> </ul>
		<p><b>Benefit 3.2: Reduced impact of air emissions on health</b></p> <p>Land transport air emissions that impact on human health</p>	<ul style="list-style-type: none"> <li>BF 3.2.2: Ambient air quality – PM10</li> </ul>	<p><b>Improve condition of our rural roads</b></p> <ul style="list-style-type: none"> <li>Review and development of a Dust Mitigation Strategy</li> </ul>
<b>ACCESSIBILITY</b> - Poor condition aging bridge stock and unknown structural capacity results in limited access for heavy vehicles	Improve access to productive land	<p><b>Benefit 5.2: Improved network productivity and utilisation</b></p> <p>Network productivity and utilisation is about efficient use of the land transport network. Optimising our part of the broader economic/social system to allow broader benefits to be gained.</p>	<ul style="list-style-type: none"> <li>BF 5.2.1 (ONRC Accessibility CO1): Spatial coverage - freight</li> </ul>	<p><b>Optimise bridge capacity</b></p> <ul style="list-style-type: none"> <li>Bridge condition assessments</li> <li>Bridge capacity assessments</li> <li>Targeted maintenance &amp; renewals</li> <li>Painting Screening</li> <li>HPMV Permitting</li> <li>Material Testing on key bridges</li> <li>Improved data management processes</li> <li>Targeted bridge strengthening works on key HPMV routes</li> </ul>

PROBLEM	OUR INVESTMENT OBJECTIVES	BENEFITS OF INVESTING	PERFORMANCE MEASURES	KEY STRATEGIC RESPONSES
<p><b>MAHIA CONNECTIVITY</b> - Coastal erosion and increased demand from tourism and rocket lab traffic results in increased level of service requirements and safety issues</p>	<p>Improve resilience to climate change impacts</p> <p>Roads that support safer travel</p> <p>Affordable level of service</p>	<p><b>Benefit 4.1: Reduced impact on system vulnerabilities and redundancies</b> Reducing the risk of communities not being able to access social and economic opportunities due to unexpected outages.</p> <p><b>Benefit 1.1: Reduced social cost of deaths and serious injuries</b> The impact of reducing the number of deaths and serious injuries (DSIs) on the all land transport modes and their social costs.</p> <p><b>Benefit 5.2: Improved network productivity and utilisation</b> Network productivity and utilisation is about efficient use of the land transport network. Optimising our part of the broader economic/social system to allow broader benefits to be gained.</p>	<ul style="list-style-type: none"> <li>• BF 4.1.1: Availability of a viable alternative to high-risk and high-impact route</li> <li>• ONRC Resilience CO1: No. of journeys impacted by closure</li> <li>• ONRC Resilience CO2: The number of instances where road access is lost</li> <li>• BF 1.1.1 (ONRC Safety CO2): Collective Risk</li> <li>• BF 1.1.2: Crashes by severity</li> <li>• BF 1.1.3: Deaths and serious injuries</li> <li>• BF 1.1.4 (ONRC Safety CO3): Personal risk</li> <li>• BF 10.1.5 (ONRC Amenity CO1): Smooth Travel Exposure (STE)</li> <li>• ONRC Amenity CO2: Peak Roughness</li> <li>• ONRC Amenity TO1: Roughness of the road (median and average)</li> </ul>	<p><b>Stabilise key routes</b></p> <ul style="list-style-type: none"> <li>• Condition assessments to better understand condition of existing retaining structures</li> <li>• Coastal erosion protection</li> </ul> <p><b>Improve condition of our rural roads</b></p> <ul style="list-style-type: none"> <li>• High priority route for maintenance &amp; renewals expenditure</li> </ul> <p><b>Network safety planning &amp; targeted improvements</b></p> <ul style="list-style-type: none"> <li>• Network wide safety audit</li> <li>• Speed management consistent with regional approach</li> <li>• Targeted improvements safety improvements</li> </ul>

## 4.3.2 EVIDENCE BASE

The evidence base for this strategic case assesses the robustness of the problems and benefits identified, using current information as well as stakeholder knowledge. This evidence helps to confirm that the problem statements are correct by looking at the following:

- **Cause** – what is causing the problem to occur?
- **Effect** – is the problem effecting customers or asset integrity? One of the key forms of evidence here are the ONRC performance measures. Council has reviewed the ONRC performance measures for the district’s roads against a peer group of other Road Controlling Authorities (RCAs). These performance measures show Council’s efficiency and effectiveness at meeting the Customer LoS. Through comparison, a gap analysis has been completed to identify where Wairoa is currently under performing compared to our peer group.

Cause and effect evidence supporting each of the problems identified is detailed further in the individual problem sections below.

## 4.3.3 LINKING OUR PROBLEMS TO ONRC CUSTOMER OUTCOMES

The ONRC customer outcomes are included below. For Wairoa, these are prioritised in order to meet key customer demand areas as identified through our problem statements. Priorities are as follows:

HIGH PRIORITY
IMPORTA
BUSINESS AS  
USUAL

ONRC CLOS	OUR AIM
<b>Resilience</b>	To limit disruption to traffic affected by unplanned events and to limit the impacts of closures that occur
<b>Safety</b>	To maintain the road and roadsides in such a way as to ensure that people feel safe driving them, by progressively eliminating hazards on local roads
<b>Accessibility - Land Access</b>	To provide a transportation network that allows full access to productive land, this includes full HCV (including 50Max vehicles) access via key road transport links
<b>Amenity - Travel Quality</b>	To provide a comfortable road user experience on sealed roads and to limit roughness on unsealed roads as much as possible
<b>Amenity - Aesthetics</b>	To provide a network that is pleasant to use, particularly for tourists
<b>Accessibility - Wayfinding</b>	To provide a road network with appropriate wayfinding and connectivity
<b>Travel Time Reliability</b>	To provide roads that allow for consistent travel times based on road classification

## 4.4 PROBLEM 1 RESILIENCE

**ROAD NETWORK VULNERABLE TO CLOSURE FROM HIGH RAINFALL AND STORM EVENTS AND A LACK OF ALTERNATIVE ROUTES RESULTS IN DISCONNECTED COMMUNITIES AND ECONOMIC DISRUPTION**



**Resilience has been identified as a key issue for Wairoa.** The Wairoa district has a history of being impacted by storm events causing flooding, slips and dropouts on the road network. This is exacerbated by the geology and poor soils in some areas of the network, resulting in erosion and sediment risks.

In order to ensure communities remain connected and to unlock the potential of Wairoa’s land, providing a resilient network is critical. Specific impacts of road resilience include Lifeline Routes. These are critical routes where failure will have significant impact on communities access to health, education and economic opportunities.

### 4.4.1 PROGRESS & CHANGES

This problem was identified in the 2018 AMP and continues to be an issue for Wairoa. We have been employing strategic responses to address this issue and will continue to focus on these going forward. Progress made with strategic responses over the last two years is outlined below.

ISSUE / LOS	KEY STRATEGIC REPOSE	PROGRESS MADE	EFFECTIVENESS	ADJUSTMENTS
Inadequate drainage maintenance is resulting in dropouts impacting customer journeys	Drainage maintenance strategy for improved drainage maintenance reducing the number of dropouts on the network.	Increased focus on proactive drainage maintenance and resilience Drainage Inspection programme commenced Surface Water Channel renewals in new contracts	 Strategic responses completed have been effective in mitigating stormwater issues in these areas	Carry on same approach, continued focus on proactive drainage maintenance
The current maintenance contracts do not promote proactive drainage maintenance practices	Review maintenance contract requirements and performance measures	Increased focus on drainage under new contracts. However, all proactive measures could not be included due to high tendered rates. Need to keep proactive focus.	 Focus on drainage has increased, needs to be implemented further	Strengthen drainage inspection and maintenance approach
Roads close to riverbanks are susceptible to dropout due to riverbank stability	Riverbank stabilisation on key route	Not completed. Budgets cut due to base maintenance costs being high.		Update register and target key areas
Fallen trees are the main cause of road closures, impacting customer access	Hazardous tree removal programme on key routes	Not completed. Budgets cut due to base maintenance costs being high.		Update register and target key areas

### 4.4.2 EVIDENCE

#### COMMUNITY ACCESS TO KEY SERVICES

Limited health services and other key facilities are available to the smaller communities located across the Wairoa District, so resilience of the transport network is critical to communities accessing these facilities.

# WAIROA

COMMUNITY	POPULATION (2018 CENSUS)	SERVICES PROVIDED			
		EMERGENCY	HEALTH CARE	EDUCATION	GROCERIES / SUPPLIES
Wairoa (township)	4,527	✓ Police, Fire, Ambulance	✓ Wairoa Hospital & Health Care, GPs	✓ Primary & Secondary	✓ Supermarket
Whakiki	675				
Mahia	1,119	✓ Police, Fire, Ambulance	✓ Health clinic	✓ Primary	✓ General store
Nuhaka		✓ Fire		✓ Primary	✓ General store
Morere					✓ General store
Frasertown	861	✓ Police, Fire, Ambulance	✓ Wairoa Hospital & Health Care, GPs	✓ Primary	✓ General store
Ruakituri		✓ Fire		✓ Primary	
Ohuka				✓ Primary	
Tuai	1,188	✓ Police, Fire		✓ Primary	
Maungataniwha					
Raupunga					
Putere				✓ Primary	
Mohaka				✓ Primary	
Kotemaori		✓ Police		✓ Primary	

## ISOLATED MAORI COMMUNITIES

Within the Wairoa district there are 38 Marae. There are a number of particularly isolated Maori communities and Marae due to single access roads, as detailed below. These Marae are cut off from key services if these roads are not available.

### Nga Marae O nga Takiwa

NGA MARAE O NGA TAKIWA AREA	ISOLATED MARAE	KEY ACCESS ROAD
Area 1 - Mahia mai Tawhiti	Mahanga Marae	Mahanga Road
	Kaiuku Marae	Mahia East Coast Road
	Tuahuru Marae	Mahia East Coast Road
Area 6 - Waikaremoana	Putere Marae	Putere Road
Area 7 - Pahauwera	Te Maara a Ngata Marae	Putere Road
Area 8 - Ruakituri	Te Reinga Marae	Tiniroto Road (significant detour around Ruakitiri Road if Tiniroto closed)
	Erepeti Marae	Ruakitiri Road

## STORM EVENTS IMPACTING THE NETWORK

**Two storm events in 2017 and 2018 resulted in 85 new dropouts on the network.** The total estimated cost of repairing these dropouts is \$15.1M. A total of 21 of these are on key routes within the transportation network as shown below.



**\$15.1M** REPAIR COST



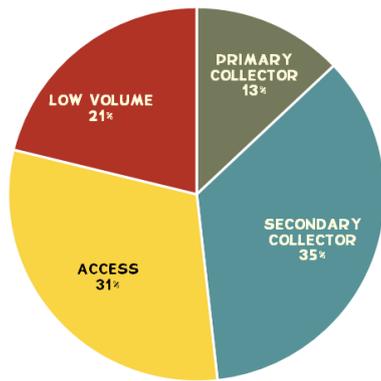
**49% OF DROPOUTS**  
WERE ON ROADS WITH NO  
ALTERNATE ROUTE  
AVAILABLE

# WAIROA

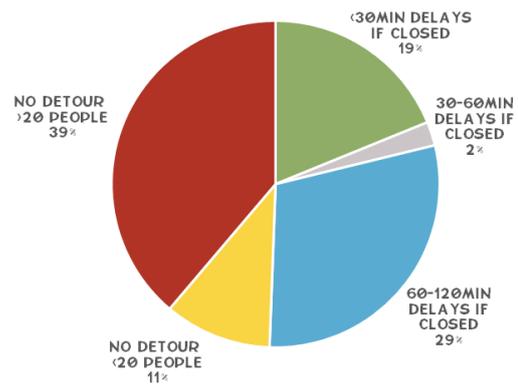
LIFELINE ROUTE	ONRC	NO. OF DROPOUTS
Awamate Road	Primary Collector	2
SP38	Primary Collector	9
Tiniroto Road	Secondary Collector	2
Ruapapa Road	Secondary Collector	6
Tuai Main Road	Access	1
Piripaua Road	Low Volume	1

Evidence suggests that drainage maintenance issues (e.g. blocked culverts or surface water channels overtopping during high rainfall events) and erosion of riverbanks or coastlines adjacent to road are contributing to this problem.

## DROPOUTS BY ONRC CATEGORY



## DROPOUTS BY ALTERNATIVE ROUTE



## DRAINAGE MAINTENANCE IMPACTS

Under the new outcome based unsealed road maintenance contract, a minimum of 30kms of surface water channel must be renewed annually. Compared to previous contracts, this requirement has had a positive impact on pavement condition and consumption. The initial tender documents required a much higher amount of renewals per year, however this amount had to be reduced to fit within budgets. Further work will be undertaken to understand the frequency and extent of surface water channel renewal on the WDC network, and investigate options for procuring and funding the work going forward.

A full network culvert inspection was undertaken in 2019 to better understand the condition of culvert assets. The inspection will be repeated in 2020, with refined inspection criteria to further understanding of condition and priority of repairs. The inspection identified 558 faults, of which 85% are blocked culverts, inlets or outlets. These faults pose a high risk of causing dropouts and scour as the water finds an alternative route to clear.

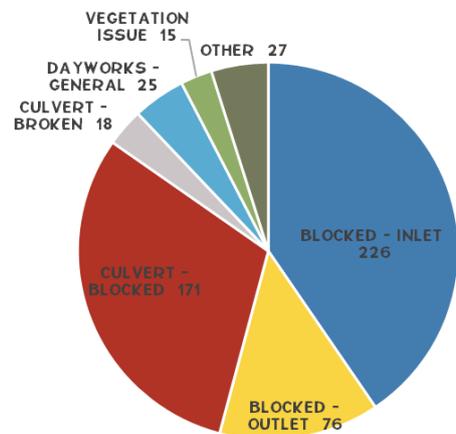
305 helicoil (Armco/steel) pipes exist on the council network, and are approaching the end of their lives.

## RETAINING WALL CONDITION

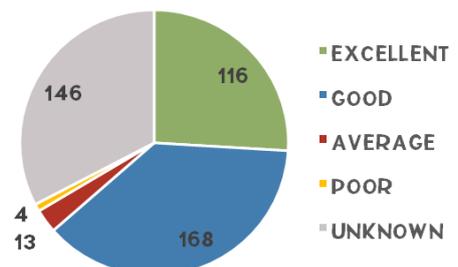
Currently very little information exists on the condition of Council's retaining walls. No condition data exists for many of the council retaining walls, and a significant inspection programme has not been completed for over 10 years.

This lack of understanding of the condition of the existing retaining walls presents a large risk to council in ensuring network resilience.

## CULVERT FAULTS



## RETAINING WALLS CONDITION



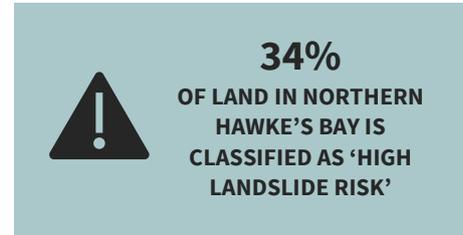
## CLIMATE CHANGE IMPACTS & RIVERS ADJACENT TO ROADS ON THE NETWORK

Climate change is affecting weather patterns, river flows, and runoff in the Wairoa District, putting increased pressure on the resilience of Council’s network. Sea level rise is causing increased coastal erosion issues on coastal routes.

Based on GIS mapping<sup>4</sup>, 37.6km of Wairoa’s road are located adjacent to rivers or streams (road within 30m rivers and streams). These lengths are particularly susceptible to road side dropouts during high river flows caused by storm events.

## NORTHERN HAWKE’S BAY SUSTAINABLE LAND MANAGEMENT STRATEGY<sup>5</sup>

Although not specifically aimed at resilience issues, this report details the poor erosion areas in northern Hawke’ Bay. It outlines that “According to Hawke’s Bay Regional Council, approximately 34% (47,000 ha) of farmland in Northern Hawke’s Bay (Mahia, Nuhaka and Wairoa catchments) is classified as ‘high landslide risk’. The eroding steep-lands of the Wairoa District are eroding the natural capital of northern Hawke’s Bay, as a result of land use that is not compatible with land use capability. This is increasing the risk of flood damage and water quality degradation, that in turn poses a threat to the region’s prosperity.”



### 4.4.3 CONSEQUENCE OF NOT INVESTING

The consequences of not investing to meet our investment objectives are detailed below.

CONSEQUENCE	DESCRIPTION	0-3 YEARS	3-10 YEARS	10 YEARS +
Communities isolated, access to health and other services impacted	Many Wairoa communities rely on a single access road for access to health and other essential services. Failure to maintain access will impact community connectivity and well being.	→ Limited access impact	↘ Decreased access & connectivity	↘ Decreased access & connectivity
Not meeting key direction set by GPS for economic growth & productivity	If we allow our rural network and key urban roads to decline there is the risk that this would have a negative impact on the region’s economic growth and productivity	→ Static productivity	↘ Decreased productivity	↘ Decreased productivity
Impact on strategic issues	Highly critical to overall regional and local strategies including "Good things grow here" and "Gate to the Port." Without resilience, it is unlikely that land owners will invest in further development and diversification of land, reducing export potential.	→ Limited change in land development	→ Limited change in land development	↘ Reduced Land development/diversification
Increased network outage and costs to repair from storm events	A roading network that is not resilient to increasing rainfall intensity potentially places road users at risk, places the asset at risk of avoidable damage and reduces levels of service during storm events.	↗ Increases in emergency works costs	↗ Increases in emergency works costs	↗ Increases in emergency works costs

### 4.4.4 BENEFIT OF INVESTING

The **Investment Objectives** that we want to achieve include:

**Improve resilience to climate change impacts**

It is critical that access is made available to productive land within the Wairoa District. Network resilience leads to more confidence to invest in the district and utilise land to full potential. In turn, this will help boost job opportunities and increase population.

<sup>4</sup> Utilising the LINZ topographical river centreline 1:250k and the RAMM road centreline

<sup>5</sup> Weaver S (July 2016). Northern Hawke’s Bay Sustainable Land Management Strategy – Options Paper. Ekos, Takaka, NZ. Report prepared for the Hawkes Bay Regional Council and the Ministry for Primary Industries

## MEASURING THE BENEFIT

The table below outlines the specific Benefits that will result from investment, based on Waka Kotahi’s Investment Benefits Framework.

INVESTMENT OBJECTIVE	BENEFIT CLUSTER	BENEFIT	DESCRIPTION	PERFORMANCE MEASURES
Improved resilience to climate change impacts  GPS2020: Maintaining the network	4. Changes in impact of unplanned disruptive events on access to social and economic opportunities	4.1 Impact on system vulnerabilities and redundancies	Reducing the risk of communities not being able to access social and economic opportunities due to unexpected outages.	4.1.1 Availability of a viable alternative to high-risk and high-impact route
				ONRC Resilience CO1 measure – No. of journeys impacted by closure
				ONRC Resilience CO2 measure – The number of instances where road access is lost

## 4.4.5 STRATEGIC RESPONSE

To make the right investment decisions to improve the resilience of our key routes on our network, our strategic response to this problem is to:

### Stabilise key routes

We will avoid route closure where appropriate by focusing on the following initiatives over the next three years:

STRATEGIC RESPONSE	KEY ISSUE	RESPONSE TYPE	RESPONSE DESCRIPTION
Stabilise key routes	<b>Poor drainage</b> maintenance and capacity in some parts of the network has been identified as an issue that may be contributing to dropouts and other resilience issues.	Adjust Programme	<b>Proactive Drainage Strategy</b> – Focussed on maintenance being more proactive on high ONRC roads and proactive drainage renewals (e.g. Surface Water Channels), particularly on Lifeline Routes
	<b>Retaining wall condition</b> – inspections have not been undertaken for many years, so retaining wall condition is not well understood. Retaining wall failure poses a high risk to the resilience of the council network.	Policy Approach	<b>Retaining Walls Inspection Policy &amp; Condition Assessments</b> – A thorough assessment of condition will enable better planning of future maintenance and renewal requirements
		Adjust Levels of Service	<b>New retaining structures</b> on coastal routes to combat climate change impacts
	<b>Unstable Riverbanks</b> – Rivers adjacent to the road have contributed to dropouts on key routes, subsequent to high rainfall and storm events which cause significant runoff.	Risk Based Approach	<b>Riverbank Stabilisation on Key Routes</b> – provision will be made for further investigation and physical works to complete riverbank stabilization through planting works.
<b>Hazardous Trees</b> – Although trees play in an important part in stabilising the Wairoa’s poor soils, they also present a risk during storm events.	Risk Based Approach	<b>Hazardous Tree Removal Programme</b> – to target removal of hazardous trees from key lifeline and forestry routes, to reduce the risk of road closure.	

## 4.5 PROBLEM 2 CHANGING DEMAND

### LAND USE CHANGE INCREASING HEAVY VEHICLE TRAFFIC ON RURAL ROADS RESULTS IN SAFETY, PAVEMENT CONSUMPTION AND ENVIRONMENTAL ISSUES

90% of Wairoa’s roading network is rural and 64% of the network is unsealed. Providing a robust roading network is key to the district’s economy. With increased demand predicted for the future, safety, pavement consumption and environmental impacts will need to be carefully managed.



**The 2021-2051 Infrastructure Strategy recommendation:** The district is seeing changes in land use. Farm conversions to forestry and fruit are impacting on the expectation of the level of service of Council’s roads to get product / produce to market or the ports at Napier or Gisborne. Council needs to review the levels of service across the roading network. This may require changes to Council’s response to ensure funding is provided to support economic activities for the district.

### 4.5.1 PROGRESS & CHANGES

This problem was identified in the 2018 AMP and continues to be an issue for Wairoa. We have been employing strategic responses to address this issue and will continue to focus on these going forward. Progress made with strategic responses over the last two years is outlined below.

ISSUE / LOS	KEY STRATEGIC REPOSE	PROGRESS MADE	EFFECTIVENESS	ADJUSTMENTS
Increased forest harvesting is going to increase demand and asset consumption on key routes over the next 10 years.	Demand management including targeted stakeholder consultation to confirm harvesting projections and better plan future investment	Regular meetings with forestry industry have been held. Some long term harvest data has been provided, but doesn’t seem to reflect useage. Changes to programme not always communicated by forestry.	 Understanding forestry movements have allowed for targeting of maintenance and renewals to minimize impacts	Carry on same approach. Continue to develop relationships with forestry companies and plan investments based off forestry data.
Limited information exists on network trends and high growth areas	Traffic Count Programme to better understand network usage	Traffic Counts undertaken have significantly increased in the last 3 years. Still need to focus programme better to target key routes.	 Regular traffic counts are giving a better picture of changes in demand	Carry on same approach, review programme to target key routes.
Pavement maintenance strategies are not documented	Unsealed Pavement Maintenance Intervention Strategy including process for determining where to target dust suppression initiatives	Unsealed Heavy Metal Build Up programme completed. MIS in place, but needs to be refined and incorporated in to maintenance practices.	 FWP gives good forward view of investment levels. MIS has been developed but needs further review and implementation	Review and maintain FWP annually. Update MIS, and test to ensure it is appropriate and is being followed.

ISSUE / LOS	KEY STRATEGIC REPOSE	PROGRESS MADE	EFFECTIVENESS	ADJUSTMENTS
Secondary Collector roads have high peak roughness, and carry the majority of WDC’s traffic load.	Targeted pavement renewals on secondary collector roads.	Unsealed and Sealed pavement and surfacing renewals have been targeted at Primary and Secondary Collector Roads	 Investment is being targeted to Primary and Secondary Collector roads, but delivery is an issue.	Continue to prioritise renewals on Primary and Secondary Collector Roads. Increased investment may be required to meet demand. Need to ensure programmes are being delivered.
Unreported crashes are not recorded, so crash hot spots and trends may be missed.	Crash reporting on non-reported accidents (not attended by police) by maintenance contractors	Crash reporting was not included in the latest maintenance contracts		Include crash reporting in maintenance contracts. Set up table in RAMM to record crashes.
Changing demand is resulting in safety issues.	Targeted safety improvements – addressing unsealed roads issues, target Secondary Collector roads/ sections with high crash rates	Minimal safety improvements have bene undertaken. WDC now top of NZTA communities at risk register.		Undertake network safety review. Review speed management. Identify crash hotspots and treat.

## 4.5.2 EVIDENCE

### FORESTRY DEMAND

The increased demand will come **primarily from forestry industry**. Forecast predictions based on maturing age of forests in the Hawke’s Bay Region indicate a “Wall of Wood” will be extracted and carted over the regions roads starting from 2020 for a 10-year timeframe.

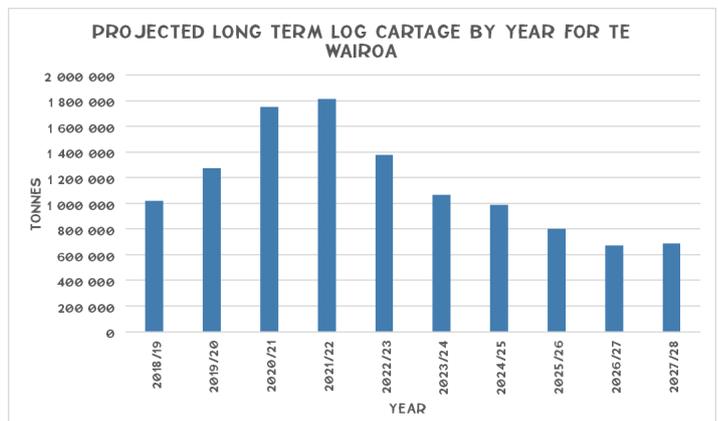
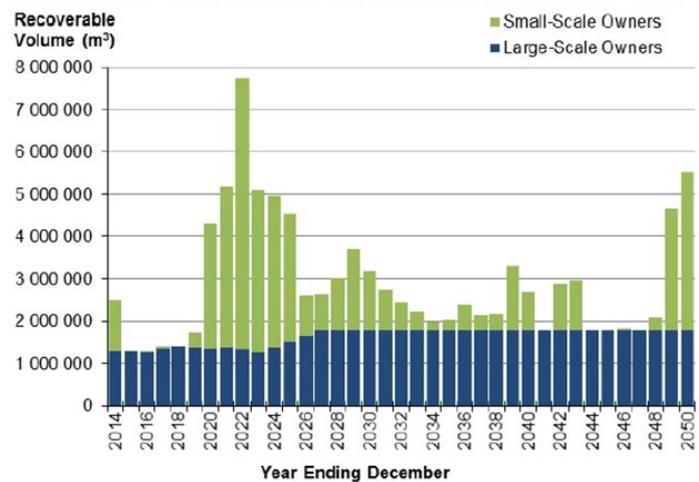
Forestry companies with forestry blocks in Wairoa have been consulted and log cartage volumes have been collated to provide a 10-year forecast of logging tonnages.

This will increase demand on some roads significantly from their current heavy vehicle movements. 59% of the tonnage will be transported on Secondary Collector roads.

It is noted that this will be heavily based on the fickle log export market at the time of maturity. It is also noted that much of this future predicted harvest is from small-scale owners. There is a need to better understand when local small-scale forest owners are likely to harvest their wood lots, so that future investment can be targeted to the area’s most likely to received increased traffic volumes.

The roads that will carry most of this increase in logging traffic area included below.

Figure 4-7: Hawke’s Bay Radiata Pine Availability under Scenario 1 – All Owners



ROAD	ONRC	FORECAST LOG TRUCKS OVER 10 YEARS
Willowflat Road	Secondary Collector / Access	19,360
Putere Road	Secondary Collector / Access	18,728
Nuhaka Opoutama Road	Primary Collector	14,292
Ormond Drive	Secondary Collector	14,292
Mohaka Coach Road	Access	12,133
Mangaone Road	Access	8,744
Cricklewood Road	Secondary Collector	8,103
Waiatai Road	Access	6,890
Preston Road	Access	6,549

54% of council roads have a width of 5m or less, insufficient for a log truck and another vehicle to safely pass. The increased number of forestry trucks travelling on council's narrow roads increases the risk of head on collisions. Substandard curve warning signage has also been identified as an issue on the council network, further increasing the risk of collisions.

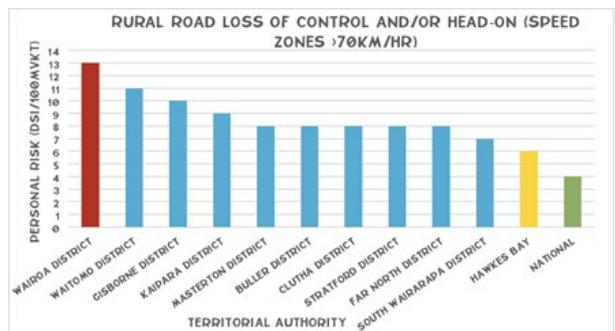
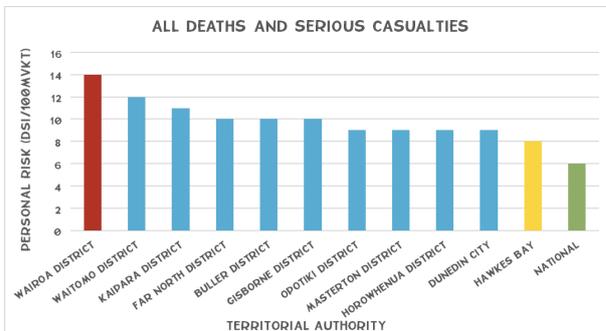


**54%**  
OF COUNCIL ROADS HAVE  
A WIDTH OF 5m OR LESS

Current crash statistics are showing head-on crashes, particularly on curves are the highest crash type for WDC roads, this is highlighted further in the safety section below.

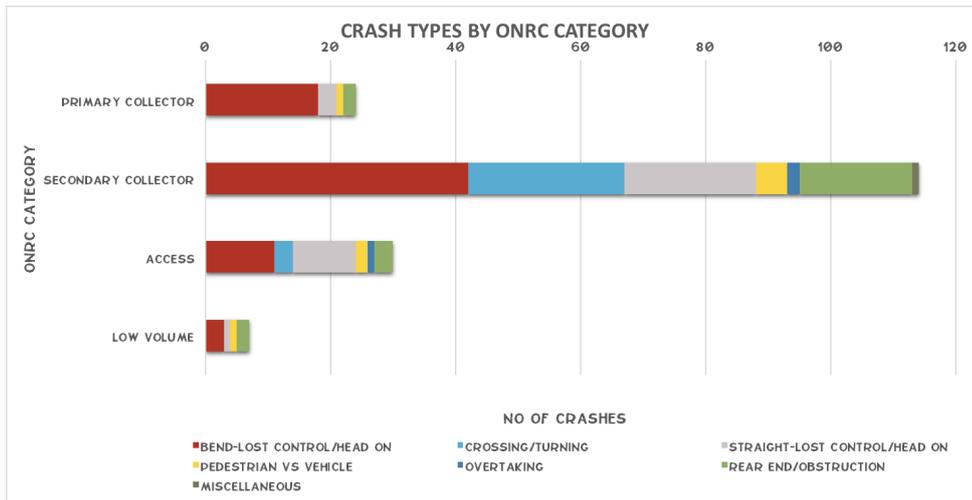
## SAFETY

The Waka Kotahi New Zealand Transport Agency 'Communities at Risk Register 2019' highlights personal risk to road users. Wairoa District Council has the highest overall personal risk in the country. Wairoa District Council has the highest personal risk ranking in the 'Rural road loss of control and/or head on' and 'Speed' crash categories.



Wairoa District Council also rank highest for "Alcohol and/or drugs", 'Fatigue' and 'Restraints (seatbelt not worn)'. As these contributors are generally behavioural, and generally require non-asset-based solutions, the strategic responses to these crash types are not addressed in this activity management plan.

65% of crashes occur on Secondary Collector roads, and 42% of crashes occur on a bend resulting in loss of control or a head on crash.

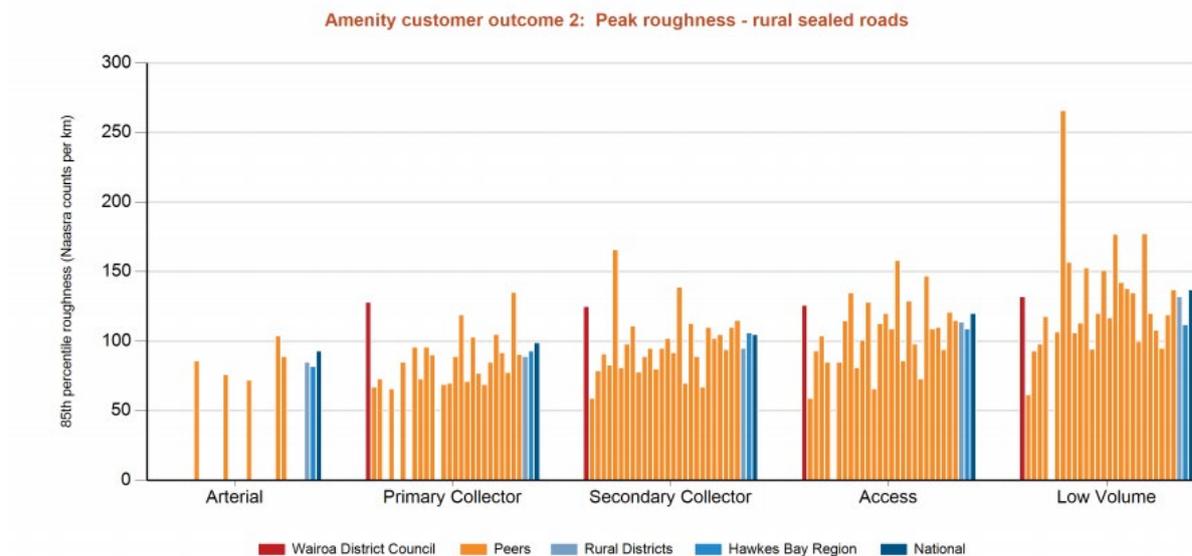


## PAVEMENT CONSUMPTION

Indications of pavement consumption include:

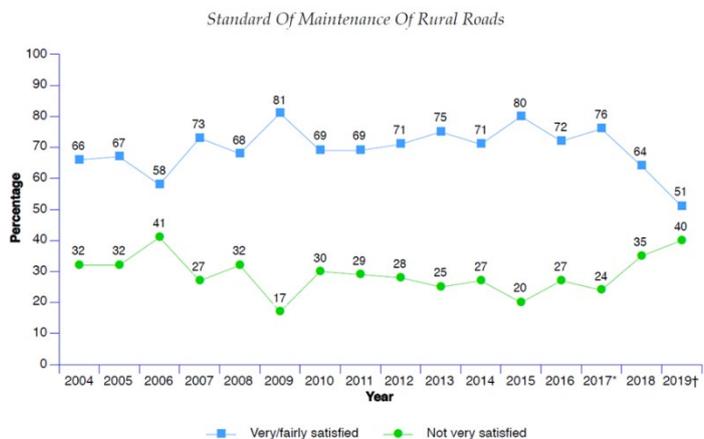
- Peak roughness ONRC measure – high for Wairoa on rural sealed roads compared to peer group for Primary and Secondary Collector Roads.

The graph below shows where Council is sitting compared to their peer group for Peak Roughness:



## ROAD CONDITION – COMMUNITY FEEDBACK

Our most recent survey of residents in our community highlighted the standard of maintenance of rural roads in the District as the highest area of concern. 55% of residents surveyed were not very satisfied with rural roads maintenance, compared to 40% in 2019. The trend of dissatisfaction has continued to grow in recent years as we continue to grapple with providing the desired level of service in an affordable way.



## ENVIRONMENTAL ISSUES

A significant environmental issue for Wairoa, is dust from unsealed roads. Dust affects safe visibility and impacts on health of adjacent residential households.

Council has produced a prioritisation matrix for dust nuisance sites identified by submissions from stakeholders and general network awareness. The current matrix contains 57 sites, totalling 19.983km. The sites are prioritised for treatment by considering proximity to houses to the road, speed, traffic volumes and expected growth, heavy vehicles and the number of houses affected. Of the 57 sites, 18 are on a route with greater than 10% heavy vehicles, and with traffic volumes set to increase on many routes, greater use of dust suppression treatments will be required. Of the sites currently identified, 12 (3.1km) are identified as being on a key growth route. 19 official complaints regarding dust have been received in the last five years.

## 4.5.3 CONSEQUENCE OF NOT INVESTING

The consequences of not investing to meet our investment objectives are detailed below.

CONSEQUENCE	DESCRIPTION	0-3 YEARS	3-10 YEARS	10 YEARS +
Increasing trend in fatal and serious crashes	Increasing trend in deaths and serious injury (DSI) crashes comparative to the amount of traffic on the network (collective & personal risk – crashes per km/vkt).	↗ Increased DSI crashes	↗ Increased DSI crashes	↗ Increased DSI crashes
Not meeting key direction set by GPS – Improving freight connections	If we allow our rural network and key urban roads to decline there is the risk that this would have a negative impact on the region’s economic growth and productivity.	→ Static productivity	↘ Decreased productivity	↘ Decreased productivity
Increasing costs of maintaining the network and future affordability	If key high use and poor condition sections of the network are not targeted for renewal, the maintenance costs in these areas will increase with increased traffic loading.	→ Static cost trend	↗ Increased cost trend	↗ Increased cost trend
Increasing operating costs for road users – especially forestry freight	Longer travel times for heavy vehicles traffic due to rougher roads.	→ Limited change	↗ Increased travel times	↗ Increased travel times
Community feedback on levels of services	Feedback from our community will continue to show dissatisfaction with the level of services provided.	↘ Less satisfaction	↘ Less satisfaction	↘ Less satisfaction
Dust complaints	Potential health risk for residents adjacent to unsealed roads.	→ Similar no. complaints	↗ More complaints	↗ More complaints

## 4.5.4 BENEFIT OF INVESTING

The **Investment Objectives** that we want to achieve include:

**Roads that support safer travel**  
**Improve access to productive land**  
**Affordable levels of service**

### MEASURING THE BENEFIT

The table below outlines the specific Benefits that will result from investment, based on Waka Kotahi’s Investment Benefits Framework.

INVESTMENT OBJECTIVE	BENEFIT CLUSTER	BENEFIT	DESCRIPTION	PERFORMANCE MEASURES
Roads that support safer travel	1. Changes in user safety	1.1 Impact on social cost of deaths and serious injuries	The impact of reducing the number of deaths and serious injuries (DSIs) on the all land transport modes and their social costs.	1.1.1 (ONRC Safety CO2) - Collective Risk
				1.1.2 – Crashes by severity
				1.1.3 – Deaths and serious injuries
GPS 2020: Road to Zero				

INVESTMENT OBJECTIVE	BENEFIT CLUSTER	BENEFIT	DESCRIPTION	PERFORMANCE MEASURES
				1.1.4 (ONRC Safety CO3) - Personal risk
	3. Changes in human health	3.2 Impact of air emissions on health	Land transport air emissions that impact on human health, limited to those arising from roads and rail.	3.2.2 Ambient air quality – PM10
Improve access to productive land  GPS 2020: Improving the freight network for primary producers to markets.	5. System Reliability	5.2 Network productivity and utilisation	Network productivity and utilisation is about efficient use of the land transport network. Optimising our part of the broader economic/social system to allow broader benefits to be gained.	5.2.1 (ONRC Accessibility CO1) – Spatial coverage - freight
Affordable level of service  GPS 2020: Maintaining the network	10. Changes in access to social and economic opportunities	10.1 Impact on user experience of the transport system	How all people experience the transport system, including people with disabilities, school children, and the elderly, and how different modes are experienced.	10.1.5 (ONRC Amenity CO1) – Smooth Travel Exposure (STE) ONRC Amenity CO2 – Peak Roughness ONRC Amenity TO1 – Roughness of the road (median and average) DIA PM4 – Network condition - footpaths

## 4.5.5 STRATEGIC RESPONSE

In order to make the right investment decisions to provide for the increasing demand on the rural network, our strategic responses to this problem are:

**Network safety planning & targeted improvements**  
**Improve condition of rural roads**  
**Value for money solutions & procurement**

We will use the following initiatives over the next three years:

STRATEGIC RESPONSE	KEY ISSUE	RESPONSE TYPE	RESPONSE DESCRIPTION
Network safety planning & targeted improvements	Safety is becoming a significant issue, with Wairoa topping the list of the Communities at Risk Register (CARR) for six factors including: Overall Deaths & Serious Injuries (DSIs), Alcohol and drugs, speed, rural roads, fatigue and not wearing restraints.	Policy Approach	<b>Network Safety Audit</b> – to better understand locations with road safety issues, and target and prioritise high risk locations.
		Policy Approach	<b>Speed Management review and implementation</b> – to address speed related crashes on the network
		Adjust Programme	<b>Targeted Safety Improvements</b> – on Secondary Collector roads and sections with high crash rates and focus on corners/bends by improving signage and width.
		Policy Approach	<b>Crash Reporting</b> – Crash Reporting of non-reported accidents included as a requirement for maintenance contractors so areas of the network that have safety deficiencies can be better identified.

STRATEGIC RESPONSE	KEY ISSUE	RESPONSE TYPE	RESPONSE DESCRIPTION	
Improve condition of our rural roads	<p>Forecast predictions based on maturing age of forests in the district indicate a “Wall of Wood” will be extracted and carted over Council roads starting from 2020 for a 10-year timeframe increasing demand on some roads significantly from their current heavy vehicle movements.</p> <p>30-Year Demand Forecast is not based on robust data. Key inputs into this process will be gaining a better understanding of small wood lot land areas to be harvested over this period.</p> <p>Latest communitrak survey (2020) shows that 55% of respondents are not very satisfied with the standard of maintenance of rural roads.</p> <p>Performance measures and past maintenance inputs indicate pavement consumption.</p>	Demand Management	<b>Stakeholder Engagement</b> – targeted stakeholder engagement to provide a better connection with land owners to assess changes in land use impacting on demand and transport operators, particularly forestry, to better pre-plan which routes will be requiring investment ahead of harvesting.	
		Policy Approach	<p><b>Robust Traffic Count Programme</b> – continuing implementation of a robust traffic counting programme to:</p> <ul style="list-style-type: none"> <li>• capture growth and monitor trends across areas of the network</li> <li>• obtain seasonal adjustment factors across areas of the network</li> <li>• collect enough data to produce traffic estimate data for the remainder of the network.</li> </ul>	
		Policy Approach	<b>Pavement maintenance intervention strategy</b> – has been developed but needs to be measured for effectiveness and further developed.	
		Adjust Programme	<b>Targeted Pavement and Surfacing Renewals</b> – Target Secondary Collector roads/ sections with high maximum roughness. Review high use (forestry) roads - Tinroto, Willowflat / Putere, Ruakatere Roads. Evidence supports increased resurfacing, particularly for Secondary Collector roads.	
		Policy Approach	Environmental issues resulting from dust on high use unsealed roads	<b>Dust Mitigation Strategy</b> – to address priorities and treatments for dust issues
				Adjust Levels of Service
Value for money solutions & procurement	WDC have had a 25% increase in costs for Sealed and Unsealed Maintenance Contracts vs estimate in the 2018 procurement round. Wairoa District continues to have challenges with limited competitiveness in the local market.	Policy Approach	<b>Data Management Processes:</b> Improved data collection processes need to be implemented to inform decision making and ensure appropriate treatments and timing.	
		Procurement	<b>Smart buying</b> – through packing work. Delivering more for the same cost.	

## 4.6 PROBLEM 3 ACCESSIBILITY

### POOR CONDITION AGING BRIDGE STOCK AND LOW STRUCTURAL CAPACITY RESULTS IN LIMITED ACCESS FOR HEAVY VEHICLES



This is a key problem for Wairoa, with 25% of the total network problem rating.

There are 176 bridges on the Wairoa transport network. In recent years, it has become apparent that a lack of historical maintenance and renewals on Wairoa’s bridging stock has been leading to a decline in the integrity and capacity of these structures.

Since the completion of the 2015 AMP, we have engaged WSP NZ Ltd to provide specialist support for the asset management of our bridges. This has included completing capacity assessments of some key bridges, undertaking Principal inspections, developing maintenance management plans for key bridges and putting together a Bridge Criticality Matrix to help prioritise where to focus further structural assessments and maintenance and renewals investment.

### 4.6.1 PROGRESS & CHANGES

This problem was identified in the 2018 AMP and continues to be an issue for Wairoa. We have been employing strategic responses to address this issue and will continue to focus on these going forward. Progress made with strategic responses over the last two years is outlined below.

ISSUE / LOS	KEY STRATEGIC REPOSE	PROGRESS MADE	EFFECTIVENESS	ADJUSTMENTS
Poor understanding of bridge condition. No policy / programme in place for regular inspections	Bridge inspection policy to determine condition of full bridge stock	Inspection policy/programme is in place. Routine (every 2 years) inspections – 95% complete. Prinicpal Inspections (every 6 years) – 50% complete	 A good understanding of bridge condition has been achieved.	Good progress made. Focus on delivering physical works going forward.
Poor understanding of bridge capacity	Undertake bridge capacity inspections	Achieved assessments in line with programme. 90% done at the end of this 3-year block.	 A good understanding of bridge capacity has been achieved.	Good progress made. Focus on delivering physical works going forward.
Key routes are not open for HPMV access	Targeted bridge maintenance & strengthening to open up key HPMV routes	PGF funding obtained for some works. Low cost – low risk for other work. Strengthening on target.	 Strengthening of bridges on key routes is being undertaken	Continue to strengthen bridges on key routes. There will be increased pressure on WDC to open routes for HPMV with SH2 now being fully open.

### 4.6.2 EVIDENCE

#### BRIDGE RESTRICTIONS FOR VEHICLE DIMENSION AND MASS (VDAM) REGULATION CHANGE

On 1 February 2017, the rules governing heavy vehicle size, weight and operation limits changed. A significant change if the increase in gross mass limits for some 7 axle (45 tonnes) and 8 axle (46 tonnes) combination vehicles (from 1 December 2017 available for general access).

Using the 50MAX screening as the default position for the screening review of current bridge capacity, there are **14 bridges that failed the 50MAX screening** that could potentially be restricted for 45 tonnes / 46 tonnes. Based on condition, recent assessments, span length, and route type this reduced **5 bridges in total that will not be able to carry the new VDAM loadings and will require bridge restriction posting.**

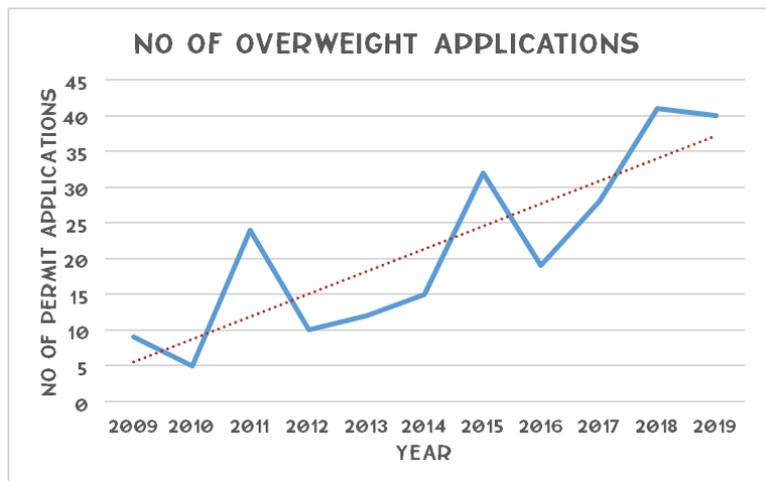
These restrictions impact on Council’s ability to meet the ONRC Accessibility CLoS. In particular, ONRC performance measure OM1 Accessibility – proportion of the network not available to Class 1 heavy vehicles and 50 Max vehicles.

State Highway 2 from Napier to Gisborne has recently been fully opened for HPMV vehicles. As a result of this, **increased pressure will come on Council to open key local roads routes to HPMV vehicles.** Bridge condition and capacity assessments will be required to open key routes to HPMV vehicles.  
**Currently 141 bridges (80%) are restricted to full HPMV vehicles.**

## OVERWEIGHT AND HIGH PRODUCTIVITY MOTOR VEHICLE (HPMV) PERMIT APPLICATIONS

The trend for overweight permit applications made for each calendar year is increasing, as shown on the graph to the right.

Recently, some council roads have been opened for HPMV vehicles and anecdotally, HPMV permit numbers have been increasing. It is difficult to track HPMV permit numbers under the current system, but the move to OPermit will allow better tracking of permits.



## BRIDGE CRITICALITY MATRIX

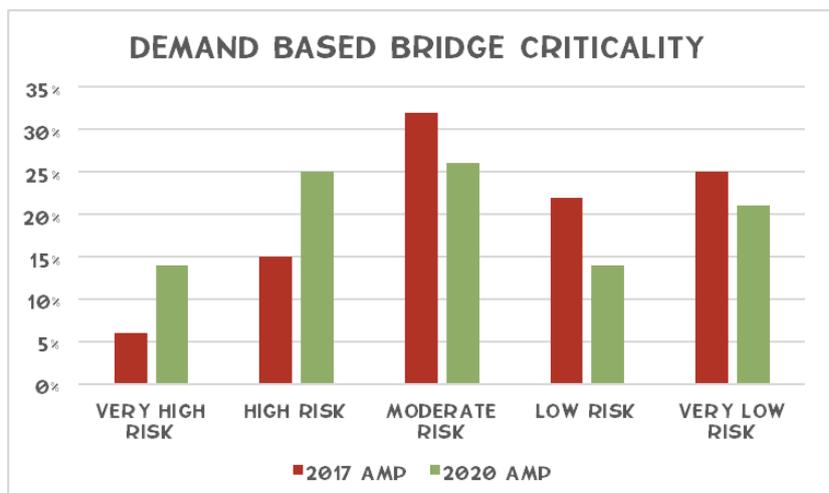
For the 2018 AMP a Bridge Criticality Matrix was developed to assess critical bridge assets and is based on five factors:

- ONRC
- Predicted demand – future short to medium term demand (next 1 to 10 years)
- Route criticality – resilience capability (e.g. alternate route detour time or no detour available)
- Structure replacement cost
- Construction year.

The results of this matrix was used to develop an understanding of the structure in Wairoa. since it’s implementation additional information has been recorded and processed for all structures. This information plays a critical role in determining the risk of the bridge inventory.

The matrix has been applied again for this AMP to offer a direct comparison, and the changes in criticality are shown below. The

number of high and very high criticality bridges have increased, showing the impact of increased forestry demand from updated forestry data.



Basing bridge criticality solely on the usage of structures does not take into account the work undertaken as part of this years improvement items in identifying scour and seismic risks.

The Bridge Criticality Matrix has been further developed to include 2 distinct categories:

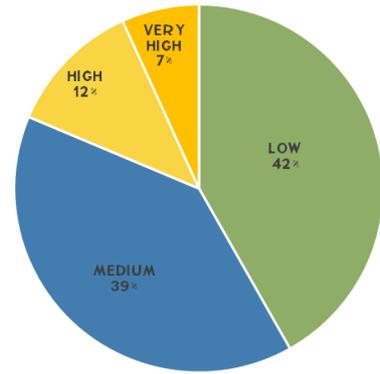
- Capacity
- Resilience

Once sufficient investigation works have been completed, condition will also be included in the matrix. Each of these categories factors the results of the bridge criticality matrix focusing on structures to develop a better understanding of at risk structures. The figure to the left shows the effect of results by including resilience in the bridge criticality matrix where 19% of council bridges have been assessed as high criticality on this basis.

### CONDITION AND CAPACITY

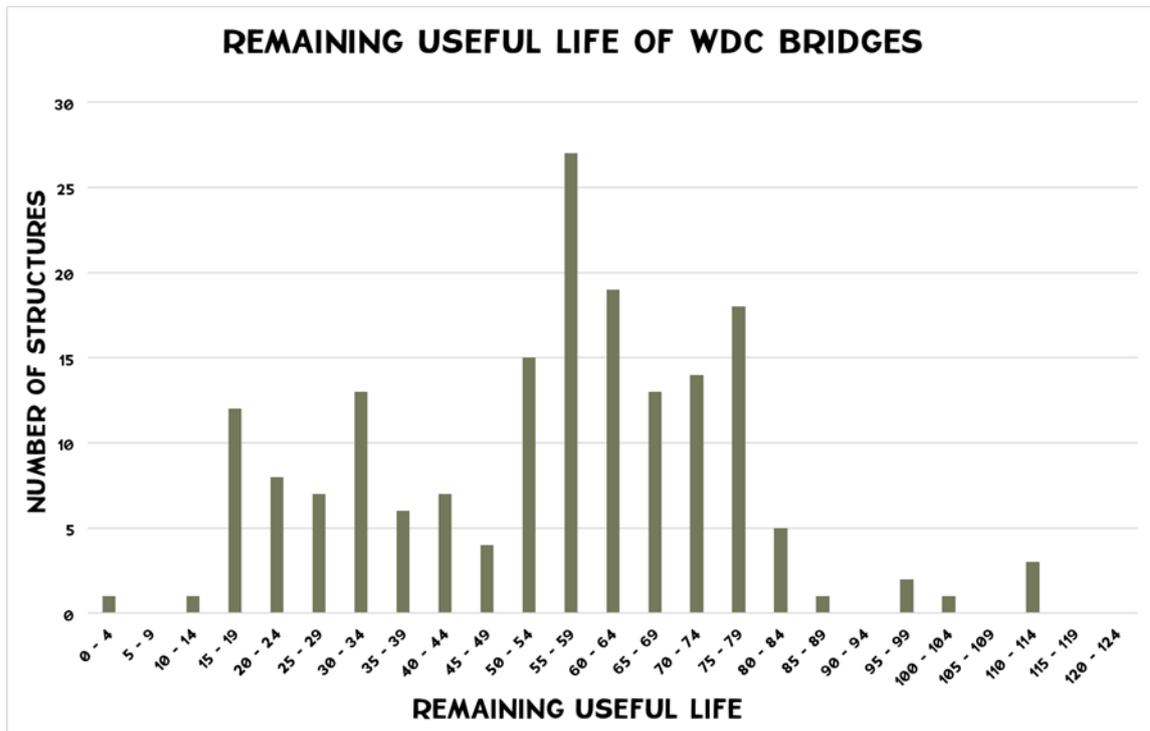
The condition and capacity of many of Council’s bridges is not well understood. Only 38 out of 176 bridges have been assessed for capacity. Condition inspections are ongoing, and understanding of condition is improving, but in the last 6 years, only 113 bridges have been inspected. Over a 6-year period, all 176 council bridges should have received a Principal inspection.

RISK BASED BRIDGE CRITICALITY




**21%**  
OF COUNCIL BRIDGES  
HAVE BEEN ASSESSED FOR  
CAPACITY

An assessment of the remaining useful life of Council’s bridges has been undertaken, based on the age of the structure, and expected useful life. In order to ensure an affordable and achievable forward renewals programme, continued investment in condition and capacity assessment is required to better understand remaining useful life. Ongoing maintenance and renewals is also required to extend the useful lives of bridges and produce a more balanced and affordable forward bridge renewals programme.



### NETWORK RISKS

A risk register was developed for the WDC network to target specific risks around Bridge Structures. The register is a live document and can be updated to ensure accurate risks are maintained. The register highlighted three critical areas for WDC Bridges:

- Inadequate Load Capacity
- Scour/Flooding
- Seismic

A single High risk was identified as Vehicle Barrier containment.

All these risks are manageable and can have the impact reduced by taking the appropriate actions. Risks around seismic and scour have already had developments with screening analysis highlighting priority structures. It is important to continue managing these risks by investing into regular maintenance and/or structural improvements.

## 4.6.3 CONSEQUENCE OF NOT INVESTING

The consequences of not investing to meet our investment objectives are detailed below.

CONSEQUENCE	DESCRIPTION	0-3 YEARS	3-10 YEARS	10 YEARS +
Not meeting key direction set by GPS – Improving freight connections	If we allow our rural network and key urban roads to decline there is the risk that this would have a negative impact on the region’s economic growth and productivity.	→ Static productivity	↘ Decreased productivity	↘ Decreased productivity
Uncertainty in future investment needs	Failure to monitor and understand condition will impact on our ability to accurately forecast future investment requirements leading to reactive maintenance and renewals programme. We won’t be providing long term access for whole of life least cost.	→ Static cost trend	↗ Increased cost trend	↗ Increased cost trend
Affordability in future	Failure to monitor condition and programme appropriate maintenance, renewals and capital works to allow for increased heavy vehicle loads could impact on the integrity of bridges, leading to possible failure and more costly repairs in the long term. We won’t be providing long term access for whole of life least cost. Further to this, funding additional costs may become unsustainable for the local community and possibly lead to a reduced CLoS for Accessibility.	→ Static cost trend	↗ Increased cost trend	↗ Increased cost trend
Communities isolated, access to health and other services impacted	Many communities rely on a single access road for access to health and other essential services. Failure or closure of bridges will impact community connectivity and well being.	→ Limited access impact	↘ Decreased access & connectivity	↘ Decreased access & connectivity

## 4.6.4 BENEFIT OF INVESTING

The **Investment objectives** that we want to achieve include:

**Improve access to productive land**

### MEASURING THE BENEFIT

The table below outlines the specific Benefits that will result from investment, based on Waka Kotahi’s Investment Benefits Framework.

INVESTMENT OBJECTIVE	BENEFIT CLUSTER	BENEFIT	DESCRIPTION	PERFORMANCE MEASURES
Improve access to productive land  GPS 2020: Improving the	5. System Reliability	5.2 Network productivity and utilisation	Network productivity and utilisation is about efficient use of the land transport network. Optimising our part of	5.2.1 (ONRC Accessibility CO1) – Spatial coverage - freight

INVESTMENT OBJECTIVE	BENEFIT CLUSTER	BENEFIT	DESCRIPTION	PERFORMANCE MEASURES
freight network for primary producers to markets			the broader economic/social system to allow broader benefits to be gained.	

## 4.6.5 STRATEGIC RESPONSE

In order to make the right investment decisions to allow heavy vehicle accessibility on our network we need to better understand the current condition and capacity of our bridges. Our strategic response to this problem is to:

### Optimise bridge capacity

We will do this by focusing on the following initiatives over the next three years:

STRATEGIC RESPONSE	KEY ISSUE	RESPONSE TYPE	RESPONSE DESCRIPTION
Optimise bridge capacity	<b>Unknown Bridge capacity</b> – Bridges in unknown bridge capacity is restricting access for HPMVs.	Policy Approach	<b>Bridge Capacity Assessments</b> – these will allow us to accurately assess the loading capacity of our bridges, so we can identify which can sustain 50Max and HPMV loading and which will need strengthening works to allow these heavier vehicles to cross.
		Risk based Approach	<b>Detailed seismic assessment</b> based on screening outcomes - high risk first
	<b>Data quality</b> – Data is currently stored inconsistently and information for some bridges is incorrect.	Policy Approach	<b>RAMM Data Validation</b> – Validation and updating of the RAMM database will ensure accurate information can be used in decision making processes.
	<b>Demand for HPMV Routes</b> – As SH2 is now fully open for HPMVs, there will continue to be pressure for local roads to also be available to HPMVs	Demand Management	<b>HPMV Permitting</b> – undertaking bridge capacity assessments on key routes to open them for HPMV access will ensure economic growth and productivity can be achieved.
	<b>Poor or Unknown Bridge Condition</b> – These bridges are restricting access for increased heavy vehicle loads and also means we may not be providing long term access for whole of life least cost.	Policy Approach	<b>Bridge Inspections</b> – to continue to better understand bridge condition and allow preparation of a prioritised FWP of maintenance and renewals.
		Risk Based Approach	<b>Material Testing on Key Bridges</b> – will allow us to confirm the condition and remaining useful life of structures and prioritise repairs and renewals.
		Risk Based Approach	<b>Painting Screening</b> – screening steel bridges and prioritizing and programming bridges that require painting will extend the life of these bridges and reduce ongoing maintenance costs.

## 4.7 PROBLEM 4 MAHIA CONNECTIVITY

### COASTAL EROSION AND INCREASED DEMAND FROM TOURISM AND ROCKET LAB TRAFFIC RESULTS IN INCREASED LOS REQUIREMENTS AND SAFETY ISSUES



The route from Nuhaka to the Rocket lab route needs to have appropriate road condition and safety for the transport of equipment to the launch site and sight seers to viewing locations. There are significant issues with the current Level of Service on the route, including:

**The 2021-2051 Infrastructure Strategy recommendation:** The impacts of climate change, in particular coastal erosion, are damaging roads across the district. For example, the damage to access roads to Mahia from coastal erosion not only impacts residents but also the access to the Rocket Lab launch site. This needs to be addressed given the

anticipated economic benefit to the district from Rocket Lab, and to maintain access to private properties in a part of the district that is expected to grow. Council has sought central government funding to seal the road to Rocket Lab and will undertake feasibility study to investigate alternative routes to the peninsula.

### 4.7.1 PROGRESS & CHANGES

This problem was identified in the 2018 AMP and continues to be an issue for Wairoa. We have been employing strategic responses to address this issue and will continue to focus on these going forward. Progress made with strategic responses over the last two years is outlined below. While the key strategic responses in the 2018 AMP focussed on RocketLab activities, the focus of the problem statement for this AMP is much wider

ISSUE / LOS	KEY STRATEGIC REPOSE	PROGRESS MADE	EFFECTIVENESS	ADJUSTMENTS
High use area, increased maintenance and renewals will be required to maintain LoS.	High priority route for maintenance & renewals expenditure	Route is programmed for increased renewals expenditure. Delivery of renewals on the route has been limited.	 Delivery of renewal work has been limited	Continue to focus on renewals in the next 3-year block
Significant improvement works are required to provided the required LoS and ensure route resilience.	Complete detailed business case for improvement works	PGF funding obtained for traction sealing of 12.5kms of Mahia East Coast Road. PGF funding obtained for alternative route investigations for Nuhaka-Opoutama Road	 Physical works for sealing of Mahia East Coast Road has commenced. While this improves part of the route, further resilience and safety improvement focus is required.	Focus needs to shift to addressing safety issues. Climate change resulting in coastal erosion is a significant issue, need to focus on retaining walls – new and existing.

### 4.7.2 EVIDENCE

#### REGIONAL LAND TRANSPORT PLAN – KEY STRATEGIC PRIORITY

The Nuhaka-Opoutama Road blowhole retreat and coastal erosion protection projects have been identified as key projects for addressing resilience problems in Hawke’s Bay. While the projects are not able to be funded by Council, they have been included in the capital improvements programme for Years 4 & 5 of the upcoming RLTP in the hope of attracting external funding for these projects in order to ensure the resilience of the route and access to the Mahia Peninsula.

#### INCREASING DEMAND

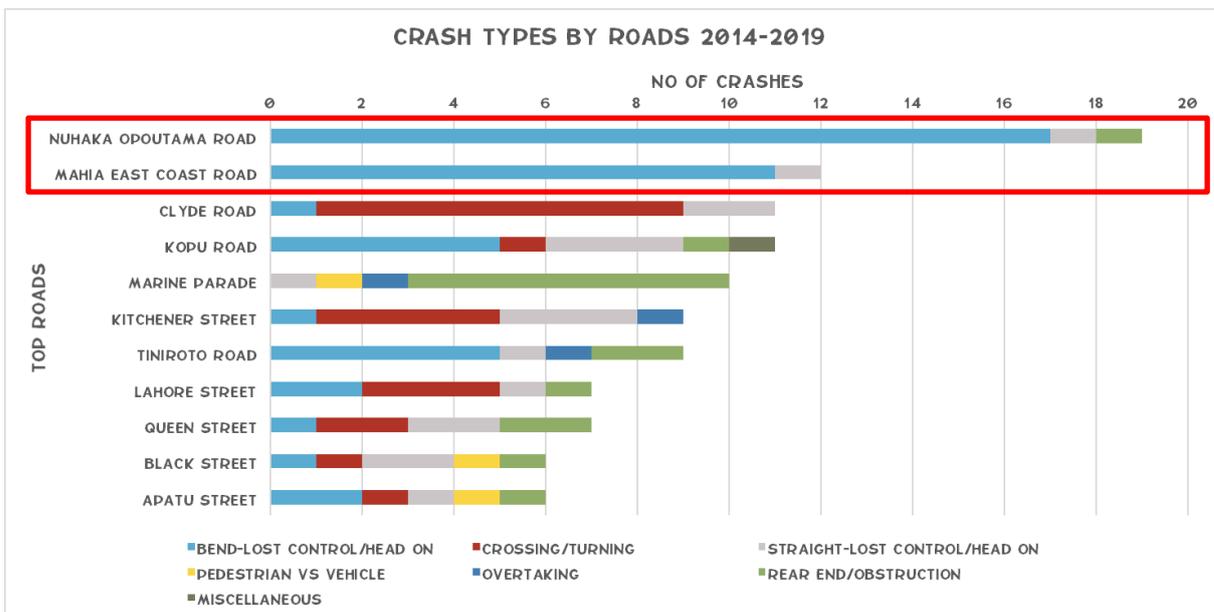
The establishment of RocketLab launch complex 1 at the end of the Mahia Peninsula has resulted in increased demand on the route to Mahia to service launch complex. It is expected tourism numbers to the peninsula will grow as launches become more frequent, resulting in modal conflicts, and increased safety issues generated by tourists unaccustomed to the narrow and winding roads found on the Mahia Peninsula. The lower and upper bounds are one launch per week (52

# WAIROA

launches per year) to close to two launches per week (120 launches per year). 120 launches per year represent the number of launches the Wairoa District Council has consented and therefore represents a natural upper limit in the base case scenario. 52 launches, or a launch a week, reflects current forward orders. RocketLab's first launch occurred in 2017, and as of July 2020, 13 launches have been completed. The likelihood of one launch per week or more is still some years away.

## CRASHES

17% of all reported crashes on the Wairoa District Council in the period 2014-2019 occurred on Nuhaka-Opoutama and Mahia East Coast Roads alone. The majority of these crashes are attributed to bends, resulting in loss of control or head on crashes.



## ACCESSIBILITY

- PGF funding obtained to seal 12.5kms of Mahia East Coast Road - 12.5km unsealed road with poor traction issues
- Existing sealed pavement has high roughness – the worst areas are programmed for AWPT in the next 3 years
- Poor alignment for oversized length heavy vehicles

## COASTAL EROSION

The coastal section (6kms) of Mahia East Coast Road has **17 dropouts** within 1m of the edge of seal, most encroaching in to the roadway. The largest has required the temporary construction of a bailey bridge to ensure access to Te Mahia. 'The Blowhole' dropout on Nuhaka-Opoutama Road has seen this road reduced to one lane while a design solution is developed. **Funding the expensive repairs required for dropouts of this nature is an issue for Council.**



## 4.7.3 CONSEQUENCE OF NOT INVESTING

The consequences of not investing to meet our investment objectives are detailed below.

CONSEQUENCE	DESCRIPTION	0-3 YEARS	3-10 YEARS	10 YEARS +
Communities isolated, access to health and other services impacted	Failure to invest in coastal protection with affect access to health and other essential services	→ Limited access impact	↘ Decreased access & connectivity	↘ Decreased access & connectivity
Increasing trend in fatal and serious crashes	Failure to invest in safety improvements will mean crashes will continue, which have a high social cost for the community.	↗ Increased DSI crashes	↗ Increased DSI crashes	↗ Increased DSI crashes
Project of National Significance	Should the Council not meet the Rocket Lab and local Mahia community's expectations for providing appropriate access, road condition and safety the Council will come under scrutiny nationally. The rocket Industry is new to New Zealand and central government is taking a strong interest in Rocket Lab's operations.	↗ Increased regional scrutiny	↗ Increased national scrutiny	↗ Increased national scrutiny

## 4.7.4 BENEFIT OF INVESTING

The **Investment Objectives** that we want to achieve include:

**Improve resilience to climate change impacts**  
**Roads that support safer travel**  
**Affordable level of service**

This route has many different user groups, so we want to ensure connectivity to benefit the resident community, as well as visitors and in particular the Rocket Lab. The potential for economic, social and cultural benefits to accrue to the Wairoa District and greater East Coast region through the rocket launch activities is potentially significant. A Rocket Launch Tourism Project Scope Report produced in August 2016 states that “a recent Economic Impact Assessment by Sapere Group has modelled the expected economic benefits to New Zealand from the development of a rocket launch industry. From this modelling, which is based on a scenario of between 52 and 120 launches per year (after 5 years), Sapere estimates that Rocket Lab could contribute between \$600 and \$1,550 million of value-add to New Zealand over 20 years, of which direct, indirect and induced effects could be between \$400-\$1,150 million”.

### MEASURING THE BENEFIT

The table below outlines the specific Benefits that will result from investment, based on Waka Kotahi's Investment Benefits Framework.

INVESTMENT OBJECTIVE	BENEFIT CLUSTER	BENEFIT	DESCRIPTION	PERFORMANCE MEASURES
Improve resilience to climate change impacts  GPS2020: Maintaining the network	4. Changes in impact of unplanned disruptive events on access to social and economic opportunities	4.1 Impact on system vulnerabilities and redundancies	Reducing the risk of communities not being able to access social and economic opportunities due to unexpected outages.	4.1.1 Availability of a viable alternative to high-risk and high-impact route
				ONRC Resilience CO1 measure – No. of journeys impacted by closure
				ONRC Resilience CO2 measure – The number of instances where road access is lost
Roads that support safer travel	1. Changes in user safety	1.1 Impact on social cost of	The impact of reducing the number of deaths and serious	1.1.1 (ONRC Safety CO2) - Collective Risk
				1.1.2 – Crashes by severity

INVESTMENT OBJECTIVE	BENEFIT CLUSTER	BENEFIT	DESCRIPTION	PERFORMANCE MEASURES
GPS 2020: Road to Zero		deaths and serious injuries	injuries (DSIs) on the all land transport modes and their social costs.	1.1.3 – Deaths and serious injuries 1.1.4 (ONRC Safety CO3) - Personal risk
Affordable level of service	10. Changes in access to social and economic opportunities	10.1 Impact on user experience of the transport system	How all people experience the transport system, including people with disabilities, school children, and the elderly, and how different modes are experienced.	10.1.5 (ONRC Amenity CO1) – Smooth Travel Exposure (STE) ONRC Amenity CO2 – Peak Roughness ONRC Amenity TO1 – Roughness of the road (median and average) DIA PM4 – Network condition - footpaths

## 4.7.5 STRATEGIC RESPONSE

In order to make the right investment decisions to ensure robust connectivity to Mahia, including the Rocket Lab launch site, our strategic response to this problem is to:

**Stabilise this key route**  
**Network safety planning & targeted improvements**  
**Improve condition of our rural roads**

We will do this by focusing on the following initiatives over the next three years:

STRATEGIC RESPONSE	KEY ISSUE	RESPONSE TYPE	RESPONSE DESCRIPTION
Stabilise key route	<b>Coastal Erosion</b> – Coastline adjacent to the road contributes to dropouts from .	Adjust Programme	<b>Retaining Structures in Vulnerable Areas</b> – Prioritization of new retaining structures to ensure resilience of the route and inspection of exiting retaining structures to understand maintenance and renewal needs.
		Policy Approach	<b>Regional Councils Consent requirements</b> - retaining walls - coastal routes
Network safety planning & targeted improvements	High Crash Rate	Adjust Programme	<b>Targeted Safety Improvements</b> – To target Secondary Collector roads and sections with high crash rates and focus on corners/bends by improving signage and markings.
		Policy Approach	<b>Speed Management review and implementation</b> – to address speed related crashes on the network
Improve condition of our rural roads	Poor Condition Pavements	Adjust Programme	<b>Targeted Pavement and Surfacing Renewals</b> – Prioritise expenditure, maintenance contract requirements etc. for this route.

## 5 KEY OUTCOMES

### 5.1 THE TRANSPORT OUTCOMES WE ARE INVESTING IN

Our investment going forward will address the problems identified through the investment logic mapping process within the context of the strategic directions for transport provided by the Government Policy Statement on Land Transport Funding, the Regional Land Transport Plan, and the ONRC. Our key strategic response initiatives are outlined below.

PROBLEM	OUR INVESTMENT OBJECTIVES	KEY STRATEGIC RESPONSES
<b>RESILIENCE</b> - Road network vulnerable to closure from high rainfall and storm events and a lack of alternative routes results in disconnected communities and economic disruption	Improve resilience to climate change impacts	<b>Stabilise key routes</b> <ul style="list-style-type: none"> <li>Proactive drainage maintenance &amp; renewals</li> <li>Retaining wall condition assessments &amp; renewals in vulnerable areas</li> <li>Riverbank stabilisation on key routes</li> <li>Coastal erosion protection</li> <li>Hazardous tree removal programme on key routes</li> </ul>
<b>CHANGING DEMAND</b> - Land use change increasing heavy vehicle traffic on rural roads results in safety, pavement consumption and environmental issues	Roads that support safer travel	<b>Network safety planning &amp; targeted improvements</b> <ul style="list-style-type: none"> <li>Network wide safety audit to better understand key safety issues</li> <li>Speed management consistent with regional approach</li> <li>Targeted improvements on high risk parts of the network</li> </ul>
	Improve access to productive land	<b>Improve condition of our rural roads</b> <ul style="list-style-type: none"> <li>Demand management &amp; stakeholder engagement to confirm harvesting projections and better plan future investment</li> <li>More focus on proactive heavy metal build ups ahead of increased forestry loading.</li> <li>Traffic Count Programme to better understand network usage</li> <li>Improved Maintenance Intervention Strategy &amp; data collection processes to inform decision making</li> </ul>
	Affordable level of service	<b>Value for money solutions &amp; procurement</b> <ul style="list-style-type: none"> <li>Improved data management processes</li> <li>Smart buying through packaging work. Delivering more for the same cost</li> </ul> <b>Improve condition of our rural roads</b> <ul style="list-style-type: none"> <li>Targeted renewals to address backlog and improve condition and safety issues over the medium term.</li> <li>Review and development of a Dust Mitigation Strategy</li> </ul>
<b>ACCESSIBILITY</b> - Poor condition aging bridge stock and unknown structural capacity results in limited access for heavy vehicles	Improve access to productive land	<b>Optimise bridge capacity</b> <ul style="list-style-type: none"> <li>Bridge condition assessments</li> <li>Bridge capacity assessments</li> <li>Targeted maintenance &amp; renewals</li> <li>Painting Screening</li> <li>HPMV Permitting</li> <li>Material Testing on key bridges</li> <li>Improved data management processes</li> <li>Targeted bridge strengthening works on key HPMV routes</li> </ul>

PROBLEM	OUR INVESTMENT OBJECTIVES	KEY STRATEGIC RESPONSES
<b>MAHIA CONNECTIVITY</b> - Coastal erosion and increased demand from tourism and rocket lab traffic results in increased level of service requirements and safety issues	Improve resilience to climate change impacts  Roads that support safer travel  Affordable level of service	<b>Stabilise key routes</b> <ul style="list-style-type: none"> <li>Condition assessments to better understand condition of existing retaining structures</li> <li>Coastal erosion protection</li> </ul> <b>Improve condition of our rural roads</b> <ul style="list-style-type: none"> <li>High priority route for maintenance &amp; renewals expenditure</li> </ul> <b>Network safety planning &amp; targeted improvements</b> <ul style="list-style-type: none"> <li>Network wide safety audit</li> <li>Speed management consistent with regional approach</li> <li>Targeted improvements safety improvements</li> </ul>

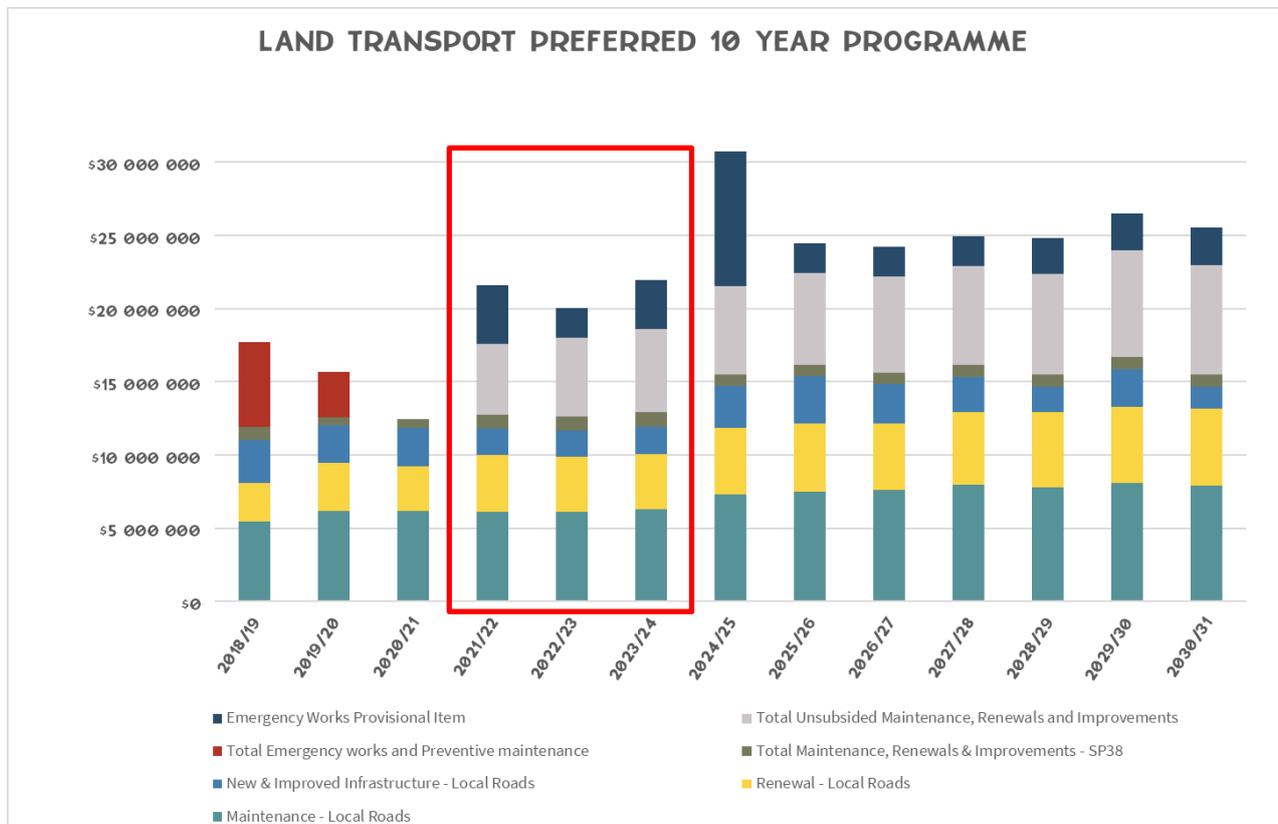
## 5.2 PREFERRED PROGRAMME

### 5.2.1 PROGRAMME EXPENDITURE FORECAST

Our preferred programme to address these problems through our strategic responses and core maintenance programme is outlined below. The programme is largely based around a business as usual approach, with an emphasis on improving our understanding of the network assets through additional inspections and data capture. We have allowed for some Low Cost-Low Risk improvement initiatives to address safety and bridge capacity concerns to allow for full accessibility to heavy commercial vehicles.

Some changes have been made to previous strategies and work programmes to provide better alignment with the GPS and address the specific problems identified through the business case process and as a result of COVID-19.

This represents a '**Core Programme**' (rather than an Enhanced Programme) when assessed against Waka Kotahi New Zealand Transport Agency's (Waka Kotahi) Investment Decision Making Framework for Road Maintenance Activities.

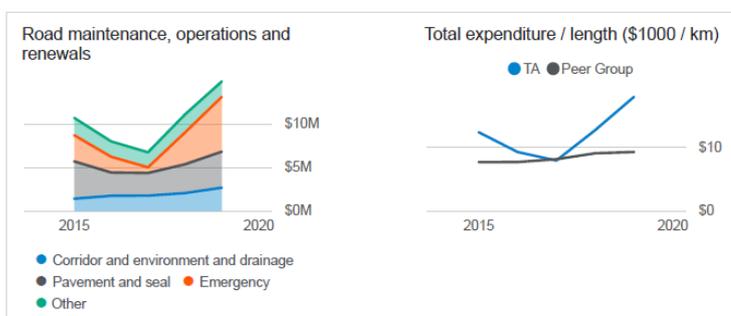


The table below shows the subsidised funding requirements for the 2021-24 NLTP for local roads, and the change in the requirements from the 2018-21 period.

PROGRAMME COMPONENT	DESCRIPTION	2021-24 NLTP FUNDING REQUIREMENT	CHANGE FROM 2018-21 PERIOD
Operations & Maintenance	<p>Increased investment required above that approved for the 2018-21 NLTP to meet <b>increased maintenance contract costs, as a result of re-tendering the contracts</b> and provide additional emphasis on drainage and unsealed roads. This will ensure a safe and fit for purpose transportation network to meet customer expectations and to prevent network deteriorating to unacceptable condition.</p> <p>Through the maintenance work category 151 and activity management work category 003 we have allowed for the following asset management initiatives:</p> <ul style="list-style-type: none"> <li>• Network wide safety audit</li> <li>• Asset condition inspections</li> <li>• Additional bridge surveys</li> </ul>	\$18.5M or \$8,165/km/yr	Increase of 4%
Renewals	<p>Increased investment is required to maintain a safe and fit for purpose transportation network to meet customer expectations. The increases include additional proactive drainage renewals to provide network resilience, increased surfacing renewals to catch up on a historic backlog and increased traffic services renewals to address safety issues.</p>	\$11.4M or \$4,498/km/yr	Increase of 27%
Capital Improvement	<p>Low Cost-Low Risk improvement initiatives to address safety and bridge capacity concerns to expand High Productivity Motor Vehicle (HPMV) access to the network.</p>	\$5.4M or \$2,127/km/yr	Decrease of 34%
<b>Total Budget</b>		<b>\$35.3M or \$13,937/km/yr</b>	<b>Increase of 1%</b>

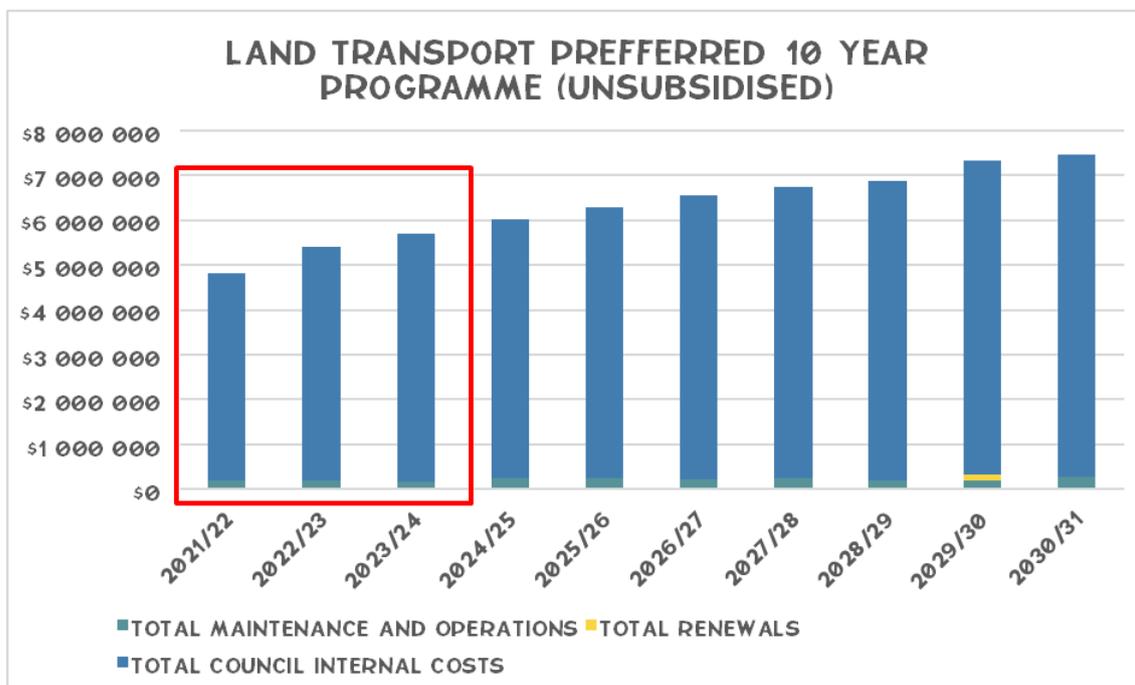
## EXPENDITURE COMPARATIVE TO PEER GROUP

The comparative expenditure graphs adjacent, show our historic expenditure trends, with peer comparison of Total Expenditure per kilometre and Maintenance, Operations and Renewals Expenditure per kilometre. **Wairoa has spent significantly more than the peer group in 2018/19, however the key increase in expenditure was for emergency works.** The expenditure on programmed maintenance, operations and renewals was comparable with the peer group.



## 5.2.2 UNSUBSIDISED PROGRAMME EXPENDITURE FORECAST

The graph below shows the preferred unsubsidised programme for the land transport assets. The key items in the unsubsidised programme are carpark maintenance, renewals and expansion, Wairoa Infrastructure business unit expenses, drain clearing and other miscellaneous transport expenses not subsidised by Waka Kotahi.

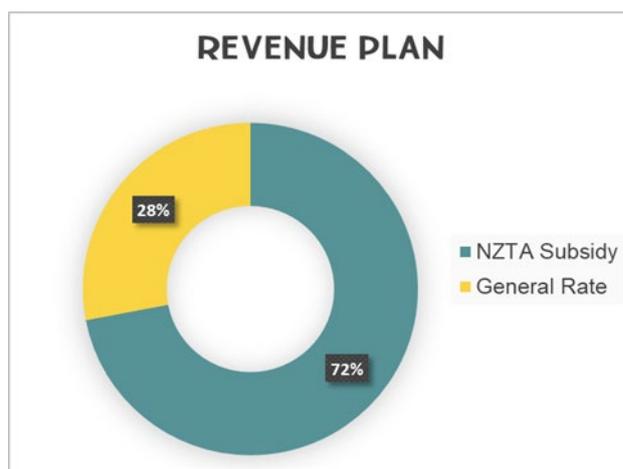


## 5.3 HOW WE WILL PAY FOR IT

We pay for activities carried out on the land transport network by the following means:

**Waka Kotahi funding subsidy:** For Wairoa this is provided as a Funding Assistance Rate of 75% of the cost of most maintenance and renewals work. As some activities are unsubsidised, the effective subsidy is 72% as shown on the adjacent graph.

**District Rates:** The district’s community funds the balance of the budget costs (e.g. 28%) through its local rates share. Funding for the local share comes from the Uniform Annual General Charge and the Targeted Rate – Roothing.



In line with Council’s Revenue and Financing Policy,

Council funded activities such as roading, are rated based on a property’s land value. **Council works hard to keep within the rating thresholds planned and ensure that this is as affordable as possible.** This has not been an easy task due to the challenges created by COVID-19 with the long-term effects and impacts still uncertain.

**Based on the 2020/21 level of rates, the local rates share is sufficient to fund Wairoa’s local share of the annual programmed Transport costs for the District.**

**Provincial Growth Fund (PGF):** Through the Provincial Growth Fund (PGF), we have been able to allocate funding to projects which have been deferred or are unbudgeted for to allow us to transform and improve our district without impacting on rates. We have received a \$4.8 million cash injection to regenerate and revitalise the town centre creating a hub for new educational and employment pathways. We also received \$7.3 million for the Mahia East Coast Road sealing and an investigation into the Nuhaka/Opoutama road alignment.

We have submitted a number of other applications for PGF funding for transport related improvement projects, and will continue to seek additional funding through this, and other avenues, as long as it remains available.

## 5.4 DELIVERY

### 5.4.1 OUR CAPACITY AND CAPABILITY

Our Activity Management Plan uses Business Case principles and Asset Management processes to provide strong support for future investment requirements.

Our transportation team have the capacity and capability to provide professional engineering and management services to all asset based activities, including: managing physical works contracts, collecting maintenance cost data, managing customer and stakeholder interface and future planning for the transportation activity.

#### PROFESSIONAL SERVICES SUPPORT

To support our in-house team, Council recently awarded a contract for Infrastructure Professional Services to WSP New Zealand. The contract is for a 3+1+1 period and includes management of Council's RAMM database, general asset management support, condition rating and roughness, valuations, FWP assistance, dTIMS and other technical and asset management tasks as required. A key focus of the contract is for WSP to work with Council as a team to develop in-house capability and ensure programmes are delivered.

#### CORE LEVEL ASSET MANAGEMENT

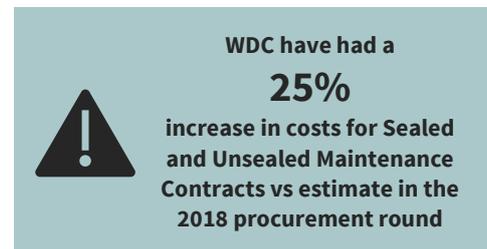
The International Infrastructure Management Manual (IIMM) uses an Asset Management (AM) Maturity Index to provide guidance to advancing asset management practices. Our current capability is assessed as providing Core Level Asset Management meeting minimum legislative requirements.

We have recently completed a full Asset Management Maturity Assessment, which has provided clear guidance on the areas to focus on improving to meet full Core Level requirements.

#### COMPLETING PHYSICAL WORKS

Physical works contractors are appointed to undertake both maintenance and renewal works on Wairoa's roads. We complete the bulk of our operations and maintenance work under two core contracts:

- **Sealed Road Network Maintenance** – Measure and value contract for maintenance, operations and renewals (surfacing and Area Wide Pavement Treatments) related to the sealed road network. The programme of work is developed by Council staff and delivered by contractor.
- **Unsealed Road Network Maintenance** – Outcome based contract with Lump Sum payment for maintenance of the unsealed road network. Unsealed pavement renewals are included as a separable portion under this contract.



A significant procurement review was completed prior to tendering these two contracts in 2018. This included reviewing contract inclusions and packaging of work to make these contracts as attractive as possible to the local and regional market. Expressions of Interest indicated a competitive market was likely, but actual tenders were limited to one per contract and pricing was above estimate. **Wairoa District continues to have challenges with the cost of physical works due to the limited competitiveness in the local market.**

### 5.4.2 SMART PROCUREMENT

Smart procurement remains a crucial focus for Council and there has been a raft of changes within the procurement sector since the previous AMP was adopted. These changes are embodied within several overarching or supporting documents which are listed below:

- Wairoa District Council Procurement Strategy March 2020
- Wairoa District Council Procurement Policy 2020
- NZ Government Procurement Rules 4th Edition October 2019
- NZ Transport Agency Procurement Manual Amendment 5 October 2019
- Construction Sector Accord April 2019
- NZ Transport Agency Road Efficiency Group Road Maintenance Procurement Guidelines March 2018.

These documents contain a number of important and interrelated themes concerning the procurement of services for the operation and maintenance of Council's transportation assets. These themes endeavour to support the following strategic outcomes:

- Increased recognition of secondary benefits of procurement outcomes which may include social and environmental benefits
- The Road Controlling Authority's (RCA) commitment to the Te Tiriti o Waitangi/ Treaty of Waitangi when undertaking procurement
- The incorporation of the Government Procurement Charter into their procurement policies
- Encouraging greater access to New Zealand businesses
- Encouraging greater commitment to related industry skills and training
- Improving conditions for New Zealand workers including the recognition of the strengthened workplace Health and Safety requirements
- Implementing policies to achieve "Best Value for Money" which aligns with Government procurement's concept of "public value"
- Improved understanding of the available procurement models and the selection of the most appropriate model based upon the "Smart Buyer" principles, the capability of the supplier market and Council's management capacity.
- Increased recognition and appropriate sharing of risk during the procurement process and subsequent contract delivery.

With the completion of the **Smart Buyer's Self-Assessment** and the update of Council's Procurement Strategy in 2020 to reflect the key criteria for successful procurement and delivery of services, Council is well placed to achieve the outcomes listed above.

A review of the procurement of key maintenance contracts will be a significant issue for the Transportation team. **The two principle road maintenance contracts (sealed and unsealed) are likely to extend through to 2023 and 2024 respectively if the full two 1-year extensions are granted.** Subject to the supplier's performance, a formal review will therefore be undertaken at least 18 months prior to the next procurement round commencing. The objectives of this review will be to confirm the following crucial procurement process steps:

- 1) Determine whether there is any need and value for Council in undertaking an LGA Section 17A review in advance of the next procurement round.
- 2) Review Council's current Procurement Policy and Procurement Strategy and confirm if any amendments may be necessary.
- 3) Review the service level delivery and best value for money outcomes that have been achieved through the existing contract models and identify where improvements are required.
- 4) Identify the most appropriate future contract model and packaging of the works to maximise the level of interest from the suppliers in tendering for this work (i.e. 2 or more tenderers for all tendered contracts), while also sustaining a locally based capable industry work force.
- 5) Identify any gaps that may exist through a supplier market analysis and implement strategies to mitigate any risks these gaps may present prior to the next procurement round. This analysis should include early discussions with the contractor industry to understand any issues or impediments that may potentially limit their level interest in tendering for future contracts
- 6) Identify any gaps in Council's capability to manage the procurement round and management of the future contracts along with appropriate mitigation strategies.
- 7) Liaise with, and gather information from, Waka Kotahi and adjacent Councils (Hastings, Gisborne and Whakatāne District Councils) to identify opportunities for increased collaboration around shared services, where this approach will better achieve the desired strategic outcomes.
- 8) Identify the most effective procurement process and selection criteria that will maximise the opportunity for Council to select the best supplier for the works tendered. The continued use of the Lowest Price Conforming method is appropriate for well-defined low risk contracts or where Council adopts a Supplier Panel in advance. However, where the works are more complex or where it is appropriate to value non-price elements in the tender evaluation, then the use of the Price Quality method with appropriate price weighting is encouraged.
- 9) Complete any outstanding business case justifications for Waka Kotahi endorsement.

- 10) Develop and implement a detailed procurement programme to track progress through to contract award for all required transportation asset maintenance contracts.

With regard to the two principle road maintenance contracts, steps 3), 4) and 8) in particular require careful consideration to avoid any repeat of the single tenderer situation that was encountered during the 2018 procurement round. This undesirable situation resulted in significant difficulty in determining what the true competitive market values of the tendered works were and should therefore be avoided in the future. It is therefore desirable for Council to retain and support their existing CCO supplier (QRS) while also encouraging at least one, but preferably more, industry suppliers to bid for all major road maintenance contracts. It is also equally desirable to encourage and maintain the presence of a second large contractor within the district to enable Council to seek a competitive price for other work packages such as flood damage repairs and to have confidence around resource availability during large scale emergency events. The benefits of this were highlighted in the limited time required to jointly price and deliver the PGF Mahia East Coast road sealing project in 2020.

Access to suitable and sustainable road construction aggregates within the district is strategically important. Council should therefore encourage the presence of more than one quarry operator into the future, and that there is transparency in the aggregate supply pricing structure to both Council and the wider contracting industry. It is strongly recommended this aspect of the supply chain is regularly reviewed by Council and any risks to aggregate supply continuity and/or pricing are identified.

Liaison with Waka Kotahi and adjacent Councils under step 7) is strongly recommended as this will assist with benchmarking of competitive market prices and rates for equivalent work activities. This liaison will also assist in identifying opportunities to jointly engage specialist suppliers for critical activities (e.g. LED Street Light installation or minor road safety improvements) that can be aggregated into shared contracts. This collaborative approach may be particularly useful where the value or nature of the work makes it difficult for an individual RCA to procure at a competitive price, especially if there is limited interest by the industry in tendering.

With regard to step 5), the **results of most recent (2020) REG Smart Buyer Self-Assessment indicated that Council has embraced Smart Buyer principles but there was still room for improvement** around aspects of collaboration, managing supplier relationships to ensure minimal expenditure, keeping up with procurement best practice and regularly seeking supplier feedback.

## 5.5 UNCERTAINTY & RISK

Key risk and assumptions made as part of this planning process and their likely consequence or impact are included below.

RISK / ASSUMPTION	DESCRIPTION	CONSEQUENCE / IMPACT	RISK LEVEL	UNCERTAINTY LEVEL
Climate Change	Climate change makes our weather more extreme and unpredictable leading to flooding and rising sea levels. Although we understand that change is occurring, it is unknown how fast change will occur or the full extent to which consequences will happen in future.	Increased rainfall intensity will stress our drainage and bridge assets causing flooding and potential loss of assets. Coastal erosion will also cause loss of assets. Road closures are likely to become more frequent and of longer durations. This will also result in the need for more reactive emergency work funding.	High	High
Sustainability of Aggregate Supply	Hawke's Bay Regional Council have significantly reduced the aggregate extraction allocations for the 2020/21 year for key Wairoa Rivers. There is uncertainty around future aggregate allocations.	Ongoing reduced river aggregate allocations have the potential to impact maintenance programmes specifically re-metalling, negatively impacting levels of service.  Increased costs for aggregate could occur as new sources are established or aggregate is carted from outside the region or district, resulting in	High	High

# WAIROA

RISK / ASSUMPTION	DESCRIPTION	CONSEQUENCE / IMPACT	RISK LEVEL	UNCERTAINTY LEVEL
		increased network maintenance costs for Council.		
Waka Kotahi Funding Constraints	Initial indications from Waka Kotahi are that the funding requests for continuous programmes (Maintenance, Operations & Renewals) across the country exceed the upper funding limits of the GPS. It is therefore likely that further reductions in WDC's funding request will be required, although the extents of this reduction unknown.	Constraints to Waka Kotahi funding will impact WDC's ability to deliver the required programme of works, impacting levels of service, and increasing risk.	<b>High</b>	<b>High</b>
Procurement Challenges	Procurement has been challenging in the past with limited number of local suppliers and difficulty in attracting outside suppliers. Specialist skill sets are particularly difficult to procure.	Prices for programmed works come in at a higher cost than budgeted for.	<b>High</b>	<b>Medium</b>
Community Ability to Pay	Current predictions of a static (or decreasing) population base and socio-economic demographics mean makes it difficult to provide sustainable services that the community can afford. Ongoing COVID-19 impacts may also result in further impacts on the local economy, including possible income reduction.	Programmed works are not affordable in the long term for rate payers.	<b>High</b>	<b>Medium</b>
Funding from Waka Kotahi	It is assumed that the roading Funding Assistance Rate (FAR) of 75% will not change, however changes to the Government Policy Statement (GPS) and Investment Decision Making Framework (IDMF) may impact on future funding	If the FAR reduces for any reason, this will impact on Council's ability to afford to planned programme.	<b>Low</b>	<b>Medium</b>
Emergency Works Funding	It is assumed Waka Kotahi will continue to fund emergency works for WDC at 95% FAR (WDC Standard FAR +20%).	Any reduction in this FAR, or inability to fund emergency works by Waka Kotahi will have a significant impact on WDC's ability to respond to emergency events, and will impact network resilience and accessibility	<b>Low</b>	<b>Medium</b>

