Bay of Plenty Region
Passenger and Freight Rail

Phase 1 Investigation

May 2019

Prepared by Janeane Joyce, Channeled Planning and Contracting on behalf of the Bay of Plenty Regional Council. Contact janeanejoyce@gmail.com
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1.0 Introduction

A high performing rail network is critical to the Bay of Plenty region’s transport system. Rail plays a significant freight role in the region. The Bay of Plenty section of the East Coast Main Trunk line (ECMT) carries over a third of New Zealand’s rail traffic and is the most densely utilised section of the national rail network.

The Bay of Plenty region contributed $15.8 billion to the economy in 2018, equating to 5.6% of national GDP. Key industries include agriculture, forestry, manufacturing, construction, business property services and healthcare and social services.

The region is home to the Port of Tauranga, New Zealand’s largest export port, which handles 30% of the country’s imports and exports. The Port is a key connection between the upper North Island, central New Zealand and international markets and transports significant volumes of product internally via rail and road.

The region is made up of three distinct sub-regions with the Western Bay of Plenty being one of the fastest growing sub-regions in New Zealand. The SmartGrowth Strategy (2013) predicts the western bay will be home to 275,000 people by 2051, a doubling of population since 2013.

The region has 321 km of rail network extending from Hamilton in the west to Taneatua and Murupara in the east. The East Coast Main Trunk (ECMT) is 182 km long and runs through Hamilton and Tauranga to Kawerau. The unused portions of rail track in the region include Hawkens – Taneatua (26 km), and the Rotorua branch (48km).

A Bay of Plenty Rail Strategy was previously prepared in 2007 in response to changes in the operating framework for rail. This Strategy focused on opportunities for rail in the region, both in the short and longer term. It also looked at the use of passenger rail transport in the longer-term.

Many other reports and studies have also been undertaken in previous years looking at future transport scenarios and options for the Bay of Plenty region including the future use of rail. These have formed part of the background research for this Phase 1 Investigation.

The Government through the updated Government Policy Statement on Land Transport 2018 (GPS) has signalled a strong intention to increase the use of rail to enable efficient passenger and freight use. A second stage GPS 2018 (if it is released) will be limited to matters that need immediate action outside of the regular three-year GPS cycle, such as investment in rail. The Ministry of Transport is currently working on the development of GPS 2021.

To support its intentions, the government is currently undertaking two important reviews; the Upper North Island Supply Chain Review and the Future of Rail Review.

The Upper North Island Supply Chain Review is to ensure the supply chain is fit for purpose in the long term. The Review is being led by an independent panel reporting to the Government, supported by the Ministry of Transport, the NZ Transport Agency and the Ministry of Business Innovation and Employment. This Review also includes looking at the future location and use of the Ports of Auckland. An Interim Report was released by the Associate Minister of Transport in late April 2019.

The Future of Rail Review is undertaking a strategic review of New Zealand’s rail network including possible future planning and investment structures and operations. It is being led by the Ministry of Transport, with support from the Treasury and the NZ Transport Agency.
In May 2019, the media also reported that the Deputy Prime Minister, Hon. Winston Peters signaled a major boost in funding for rail would be included in the Government’s 2019 budget announcements.

It is important that any outcomes from these, be reviewed in light of the future opportunities outlined within this Report as well as any subsequent regional planning and investment processes and decisions.
2.0 Overall Findings and Future Opportunities

2.1 Overall Findings

2.1.1 General

- A high performing rail network, as part of the region’s wider transport system, is critical to the Bay of Plenty region and its connections to upper and central North Island.

- The Western Bay of Plenty sub-region is one of the fastest growing sub-regions in New Zealand with the SmartGrowth Strategy (2013) projecting a doubling of population from 2013 to 275,000 by 2051. New roading infrastructure and operations alone will not support the growing sub-region’s transport vision, desired outcomes and transport user demands.

- The region’s road vehicle fleet increased by just under 12,000 in the 2017/18 year (an increase of 4.2% to the total fleet), predominantly through light commercial vehicles and cars.

- In 2017/18, 8.2 annual trips per person in the region were taken by public transport. This is a 7.9% decrease from the previous year. The number of trips on public transport per person per year is continuing to trend downwards. Ministry of Transport data (2016/17) shows that this downward trend is comparable across other similar sized cities in New Zealand.

- In 2017, Tauranga was reported to be the most car-dependent city in New Zealand, with 97% of all work and recreational trips taken by private vehicle.

- New transport provision in the Bay of Plenty over the last decades has focused mainly on new roading and state highway infrastructure. However, in some transport corridors, primarily in the western Bay of Plenty sub-region, traffic congestion has continued to increase.

- The new Urban Form and Transport Initiative (UFTI) in the western Bay of Plenty has been established to develop a strategic approach for the sub-region’s urban form and multi modal transport system, to provide short (0 to 10 years), medium (10 to 30 years) and long term (30+ years) recommendations.

- The Urban Form and Transport Initiative includes key workstreams focused on development of a multi-modal strategy to address congestion issues within the western Bay of Plenty sub-region; and regional freight flows research. Rail is expected to form part of these workstreams.

- Tauranga is defined as a ‘high growth urban area’ under the National Policy Statement on Urban Development Capacity (NPS-UDC) and, given its rapid growth, there is potential to explore further rapid transit options as the City continues to grow.

- A report undertaken in 2011 looking at the economic linkages between Auckland, Hamilton and Tauranga city-regions found that there is very low level of commuting between the three cities. The report stated that for both commuting and business travel, the low flows are at least in part a reflection of the considerable travel times and distances between the three cities.

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2 https://atlas.boprc.govt.nz/api/v1/edms/document/A3148682/content
3 Statistics New Zealand Household Travel Survey
2.1.2 Freight Rail

- KiwiRail has confirmed that there is sufficient capacity within the Bay of Plenty rail network to accommodate the planned regional growth in freight and rail demand in the region, at this time.
- KiwiRail continues to invest in the Bay of Plenty rail network including level crossing upgrades, bridge and tunnel maintenance and renewals.
- There are significant freight connections, by volume and value, between the Bay of Plenty and Port of Tauranga; and the upper North Island and central New Zealand.
- The Port of Tauranga, New Zealand's largest export Port is planning further expansion, including increased freight rail services to and from the upper North Island. The Port of Tauranga transports approximately 40% of imports and 50% of exports via rail. This is a significant amount compared to other New Zealand ports including the Ports of Auckland.
- Conflict at road and rail level crossings in peak time is increasing with additional trains and services accessing the Tauranga city rail network. Any significant increases in freight rail will need to plan for and manage any resulting increased conflict. It is important to note that an increase in freight rail, can also result in a decrease in freight carried by road.
- New industrial development within Kawerau in the Eastern Bay of Plenty has secured investment from the Government’s Provincial Growth Fund (PGF). This includes investigating and planning for increased rail services, infrastructure and operations to support the Putauaki Industrial Development and Kawerau Container Terminal.
- Emerging industries within the Eastern Bay of Plenty including aquaculture in Opotiki, water bottling through Murupara and further high value horticulture development could also require additional rail services and infrastructure, especially in regard to the early volume projections for water bottling. These are all in early stages of business case development.
- Kiwifruit is one of New Zealand’s major exports. 83% of orchard production is in the Bay of Plenty region. 141 million trays were produced by the industry in 2018. The industry is projecting to produce 216 million trays in 2023/24. Currently all kiwifruit product is transported internally in New Zealand by road.
- Increases in rail freight volumes and operations will place added pressure on urban development and the transport system, predominantly at level crossings and high populated urban areas. However, the ability to move significant volumes of freight, away from the road network, is a critical component to any growing metro centre and transport system.

2.1.3 Passenger Rail

- Passenger rail services were previously operated between Tauranga, Hamilton and Auckland, however ceased operation in 2001 due to low patronage numbers and increasing costs.
- Passenger rail services also operated between Rotorua and Auckland via the Geyserland Express. These services also ceased in 2001.

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4 Port of Tauranga data 2016
• KiwiRail have confirmed that there is sufficient capacity within the Bay of Plenty rail network. This capacity could accommodate future passenger rail services. However, it is important to note, that the establishment of any passenger rail services will require significant advanced planning and investment, including:
  o Capital costs: investment in new infrastructure including parking facilities (park and ride), station facilities (buildings, platforms), track facilities (signals, level crossings);
  o Annual operating costs: noting that fare revenue would cover part of the costs, however further subsidy investment would be required per person, per trip.
  o Impacts on Existing Services: consideration of impacts such as displacement of freight services, to allow for passenger rail. These impacts would need to be well understood within both a road and rail context, so appropriate integrated planning and operations could be implemented.

• Passenger rail requires high populations and high population densities to be viable in economic or financial terms. International evidence states that:
  o “Although successful passenger rail service depends on several factors, experience from similar operating rail lines shows that feasible rail service requires a population density greater than 4,000 to 5,000 per square mile in the vicinity of the rail line\(^5\).”
  o “No Australasian cities under 400,000 population have a rail service (the only city under 800,000 with a rail service is Wellington which has a very linear geography). A light rail service, for example, requires loadings of 5000-10,000 passengers per hour in the peak direction to be viable\(^6\).
  o An Australia Light Rail Report\(^7\) outlines their aim is to create a completely integrated transport system, where the light rail component plans to accommodate for an average passenger capacity of 10,000 – 28,000 people/per hour, with heavy rail accommodating for an average passenger capacity of 18,000 – 54,000 people per/hour.

In terms of population size and density Tauranga, as the region’s largest city, is currently well below these thresholds.

• Discussions and ideas on rail and the role it could play in the region’s transport system are topical with a number of community interest and stakeholder groups, primarily based in Tauranga.

• In August 2017, the Government’s Green Party announced that it will trial a passenger rail service between Auckland, Hamilton and Tauranga starting in 2019, when it is in government\(^8\). A Hamilton to Auckland (Frankton to Papakura) passenger rail service start-up trial has recently been agreed with the Government, commencing services in 2020. Currently there is no confirmed extension of this trial to also include services to and from Tauranga.

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\(^5\) www.sustainabletransportationsc.org
\(^6\) Public Transport Viability Western Bay of Plenty, SmartGrowth (Booz Allen Hamilton 2002)
\(^8\) https://thestandard.org.nz/greens-commit-to-tauranga-hamilton-auckland-passenger-rail-service/
2.1.4 An Integrated Transport System

- Currently the majority of rail investment in New Zealand (other than passenger rail service provision) is undertaken via a separate organisation and processes that sit outside the rest of the transport system supported through the National Land Transport Fund (NLTF) and Programme. This makes it challenging to integrate planning and investment decisions and future aspirations for rail within the wider national land transport system.

- Transport studies and reviews often focus on specific or singular modes and challenges i.e. passenger rail provision; bus services or walking and cycling connections. Managing growth requires integrated planning and investment. Transport, and within that – Rail, is just one part of this future plan.

- The western Bay of Plenty, under the SmartGrowth partnership, have established an Urban Form and Transport Initiative (UFTI)9 to deliver an integrated plan and programme that outlines priorities and investment opportunities in urban form, transport, and other connected areas such as education and health. The overall Plan is due for completion end 2019/ early 2020.

- The sub-regions of Rotorua and the Eastern Bay of Plenty have also developed spatial plans that outline their vision for their communities and places that require integrated planning including high performing transport systems to achieve.

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9 The Urban Form and Transport Initiative (UFTI) is a collaborative project led by SmartGrowth and the NZ Transport Agency and involves Western Bay of Plenty District Council, Tauranga City Council, the Bay of Plenty Regional Council, iwi, and community leaders.
2.2 Future Opportunities

This section outlines a number of key opportunities that could be taken forward.

2.2.1 Partner with Central Government

- Approach central government, via the Minister and Associate Ministers of Transport, to ascertain their current position on passenger rail services for the Bay of Plenty region, including their appetite to invest in an extension of the Hamilton to Auckland start-up trial.

- Ascertain the government’s position on investing in further feasibility and/or technical work on passenger rail services to and within the western Bay of Plenty sub-region (integrated with the wider sub-regional urban form and transport planning initiatives).
  - Including undertaking a feasibility study to investigate the possibility of passenger rail services to ease congestion within the western Bay of Plenty sub-region in identified transport corridors in peak times. This Study would need to form part of the wider regional transport modal-shift package to ensure a whole of transport system position and forward plan.
  - This Study would also support the multi-modal strategy workstream proposed within the Urban Form and Transport Initiative (UFTI programme in the western Bay of Plenty).

Future Opportunity: Determine feasibility of Passenger Rail Services to Ease Congestion

The Government has signalled its intention to increase the use of rail to enable efficient passenger and freight use. Tauranga is a high growth urban area and, given its rapid growth, there could be potential to explore rapid transit including rail as future multi-modal transport options.

The western Bay of Plenty has experienced continuous growth for a number of decades resulting in key transport corridors in and out of Tauranga city becoming increasingly congested in peak time. A number of these transport corridors run within close proximity to the region’s rail network.

There is an opportunity to work with Government to investigate options for passenger rail to ease congestion within these relevant transport corridors.

The current Bay of Plenty rail network has capacity for further services and given the network is in place it could be technically feasible to run a passenger service on these lines.

However, it must be acknowledged that significant capital and operational expenditure would be required to support any new passenger rail services, as well as the need for evidence based data on future passenger demand projections and also on the subsequent impacts on current freight rail operations and level crossing conflicts.

2.2.2 Develop a Rapid Transit Transition Plan for the western Bay of Plenty sub-region

- Develop a partner led strategy and transition plan that identifies the critical steps the region could take to move to rapid transit services (bus, rail, multi-modal).

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10 Rapid transit is defined by the NZ Transport Agency as infrastructure, to deliver a modern, integrated public transport system of light rail, heavy rail, busways, bus priority lanes, and ferries.
• Develop an evidence based strategic plan that supports decision makers on the key transport system steps they could integrate and implement into wider planning and investment decisions as the sub-region continues to grow.

Future Opportunity: Align and support the Urban Form and Transport Initiative (UFTI)

With a growing sub-region comes significant transport and land use challenges. There is no one mode fix, nor is there one solution. Transport and land use planning go hand in hand, and it is important that as, and where, a city and district grow, transport provision is aligned and delivered through timely, sustainable and affordable planning and investment.

A key principle of the newly established Urban Form and Transport Initiative (UFTI) under the SmartGrowth umbrella is “to improve measurable transport outcomes such as congestion levels, road safety, travel choice and private vehicle dependency, and environmental impacts” within the western Bay of Plenty sub-region.

Two core workstreams within the UFTI programme are relevant to rail. One is focused on ‘Multi-Modal Transport Options’ for the sub-region and the other on ‘Regional Freight Flows’. Both will include rail. This gives a great opportunity to align with these workstreams.

It is essential that any planning and investment decisions for rail services or infrastructure provision in the region are made within wider strategic transport system thinking to ensure that the region invests in the right mode, in the right place at the right time.

2.2.3 Encourage protection and optimisation of the Bay of Plenty rail network

• Work with KiwiRail and the Government, on the opportunity to:
  o optimise the Bay of Plenty rail network;
  o protect current and future rail corridors; and
  o identify future infrastructure options to increase access to rail i.e. new sidings and/or line extensions.

Future Opportunity: Protection and optimisation of the Rail Network

Transport decision makers often look at opportunities to optimise the transport system. However, this often specifically focuses on just the roading network.

Given the forecasted growth in freight rail across the region, including the new and emerging industries within the Eastern Bay of Plenty, there is an opportunity to work with KiwiRail, and significant rail users in the region, to ensure the rail network is fit for purpose and high performing for the future.

There could also be opportunities, through this process, to increase the access to and use of rail, to further reduce heavy vehicle impacts on the roading network, especially focused in congested urban areas and around the Port of Tauranga. Current examples of future access opportunities include Rangiuru Business Park and Kawerau Container Terminal. This also includes protection of the corridors and infrastructure for any new services such as the re-introduction of passenger rail.
2.2.4 Influence central government to include rail planning and investment within the National Land Transport Fund and Programme development

• Influence central government and the New Zealand Transport Agency to look at future options of including all rail planning and investment priorities and decisions within the National Land Transport Programme development, or a similar, all of transport system model and approach.

• It is important as decision makers to be able to understand the full suite of land transport options to ensure that investment is made in the right mode to deliver the best customer and community benefits.

Future opportunity: Influence the integration of rail planning and investment

The Ministry of Transport is currently leading a Future of Rail Review, with support from the Treasury, the NZ Transport Agency and KiwiRail.

The Review is taking a strategic view of New Zealand’s rail network, within the wider transport system, including possible future planning and investment structures and operations.

It is important for the region to actively engage and participate in this Review to ensure any future changes reflect regional needs and aspirations.

2.2.5 Define customer values within multi-modal choices

• Work with customers and communities to determine the ‘values’ people have when making decisions about using, or wanting to use, multi-modal transport options in the Bay of Plenty i.e. pleasure, comfort, cost, time, access (including technology).

• Better understand what aspects of multi-modal options people value and would therefore seek to use (over their private vehicle).

• Use this insight and data to support future multi-modal planning and investment decisions for the region, (linked to the Urban Form and Transport Initiative (UFTI) project).

Future opportunity: Better understand customer values and insights

There are many factors that people consider when making transport choices.

More often than not these are about our wider values rather than being purely about a transport outcome such as getting a ‘quicker trip’.

By better understanding why people make certain travel decisions, and what they value and expect from that experience, will give a richer level of evidence to support decision making.

A short and succinct exercise could be undertaken to gain these valuable insights.
3.0 Bay of Plenty Passenger and Freight Rail Investigation 2019

The Bay of Plenty Regional Land Transport Plan 2018 (RLTP) makes provision for a Bay of Plenty Rail Study to explore the potential for increased use of the rail network for passengers and freight in the region.

A key driver for the study is the recent update to the Government Policy Statement on Land Transport 2018 (GPS), which states the intention to support existing and new inter-regional commuter rail services as well as the increased use of rail to move freight.

The GPS also supports accelerating the development of rapid transit where it is key to support development in major metropolitan areas.

This Bay of Plenty Passenger and Freight Rail Investigation is being undertaken in two phases.

- Phase 1 focused on improving the current understanding and updating evidence to support future planning and investment decision making.
- Phase 2 will look at what this could mean for a rapid transit system, primarily focused on Tauranga City.

3.1 Phase 1 Investigation

The Phase 1 Investigation reviewed current information, evidence and expertise to update the region’s understanding on:

- Traffic/freight on the rail lines in the Bay of Plenty (how much, where it’s going to and from);
- Capacity of the rail lines (at what point do they reach capacity);
- Projected future demand, particularly to and from the Port;
- Investments made in recent years to the upper North Island rail system and the benefits these delivered;
- Investments planned for (including current funding and timing) on the upper North Island rail system and projected benefits;
- Early learnings being found in the Hamilton to Auckland business case for passenger / freight rail and rapid transit;
- Possible constraints on growing rail usage (i.e. increasing the number of trains), both in and outside the region (e.g. connections to Auckland) including conflict between passenger and freight (both within Tauranga and between Tauranga and Auckland); and
- Source relevant international evidence with regard to passenger rail movements for a service to be considered economically/financially viable.

3.2 Stakeholders / Partners

The following stakeholders and partners were involved in the development of Phase 1:

- Local government authorities in the Bay of Plenty region
- KiwiRail
• Port of Tauranga
• NZ Transport Agency
• Interest groups including Freight Logistics Advisory Group (FLAG); Industrial Symbiosis Kawerau (ISK); Zespri/NZKGI; Sustainable Business Network and Greater Tauranga.
• SmartGrowth western Bay of Plenty (through the Urban Form and Transport Initiative (UFTI) workstream).

3.3 New Zealand Transport Agency Business Case Approach

A Point of Entry for the Phase 1 Investigation into Passenger and Freight Rail for the Bay of Plenty was submitted and approved by the NZ Transport Agency in April 2019.

This Phase 1 Report is intended to be used as a supporting strategic context for any future passenger and/or freight rail investigations, technical assessments or research for the region.

3.4 Bay of Plenty Rail Strategy 2007

A Bay of Plenty Rail Strategy was developed in 2007 to advance a vision for rail in the region.

The Strategy outlined opportunities for rail, both in the short and longer term. Part of the longer-term vision was to explore the use of rail for passenger transport, particularly in order to connect key settlements within the region.

Inter-regional rail connections between other key places (e.g. Hamilton, Auckland and Wellington) were also part of this vision.

The Strategy stated “the need for passenger transport will become increasingly important as the region grows. High levels of growth are forecasted for the western Bay of Plenty subregion and a number of new residential and commercial developments are planned in the area over the next 20 years. The SmartGrowth Strategy identifies a range of actions that require consideration and resolution in a shorter timeframe due to the continued growth that the western Bay sub-region is experiencing.”
4.0 National Strategy and Policy Settings

4.1 Government Policy Statement on Land Transport 2018 (GPS)¹¹

The Government Policy Statement on Land Transport 2018 (GPS) sets out the government’s priorities for expenditure from the National Land Transport Fund (NLTF) over the next 10 years. It sets out where the government will focus resources and how funding is allocated between activities such as road safety policing, state highways, local roads and public transport.

The GPS was reviewed in 2018 and includes four strategic priorities:

- Safety,
- Access,
- Environment, and
- Value for money.

Safety and access are the key strategic priorities for the Government and reflect the transport system that they desire. The new GPS signals a shift in government focus towards a more mode neutral approach to transport planning and investment.

4.1.1 Strategic Priority: Access

The GPS 2018:

- has a new focus that prioritises improving New Zealanders’ access to economic and social opportunities. The increased focus includes:
  - urban areas (cities and towns),
  - regional development that supports thriving regions, for example through the Provincial Growth Fund,
  - nationally important freight and tourism connections that are safe, efficient, resilient and minimise greenhouse gas emissions;
  - improving resilience of the land transport system by placing greater focus on resilience to climate change impacts.

- The increased focus on urban areas is to ensure that transport and land use planning reduces the need to travel by private motor vehicle (excluding commercial vehicles) by:
  - improving access by reducing the need to travel long distances to access opportunities like employment, education and recreation –
  - supporting a mode shift for trips in urban areas from private vehicles to more efficient, low cost modes like walking, cycling and public transport.

4.1.2 Rapid Transit Activity Class

The 2018 review of the GPS has seen an increased focus on rapid transit systems and rail in New Zealand including a new Rapid Transit Activity Class.

Public transport (especially rapid transit), walking and cycling can enable opportunities to shape the transport landscape to create more liveable cities. The GPS supports accelerating the development of

¹¹ https://www.transport.govt.nz/multi-modal/keystrategiesandplans/gpsonlandtransportfunding/
rapid transit where it is key to support major metropolitan development. This includes considering rapid transit options (e.g. busways and light rail infrastructure) in the major metropolitan areas such as is indicated in the Auckland Transport Alignment Project (ATAP).

The new rapid transit activity class is anticipated to invest about $4 billion over 10 years in busway and light rail infrastructure capable of moving large numbers of people. Forecast investment is about $468 million during the 2018-21 period.

The NZ Transport Agency will take a lead role in the delivery of this activity class, working in partnership with other key agencies. This includes establishing appropriate arrangements to plan fund, design, supervise, construct and maintain rapid transit networks and projects, including light rail.

**GPS 2018 Rail Funding**

While GPS 2018 makes provision for rail funding, the scope of this funding is very tight. GPS 2018 supports investment in:

- improving urban rail services for passengers accessing housing, major employment areas and major metropolitan areas. This applies particularly to areas where demand is outstripping capacity and reliability needs to be improved or there is a need to reduce conflict between freight and passenger trains.
- existing and new interregional commuter rail services, including the capital costs associated with the rolling stock to support housing and employment opportunities.

GPS 2018 also supports investment to support rail safety, including partnering with KiwiRail to upgrade level crossings.

**GPS 2018 Second Stage Review**

The Government has signalled a possible second stage review of GPS 2018. This will be limited to areas that require immediate actions including investment in rail, supported by the Future of Rail Study.

The second stage review will also look at developing local and central government agreements on transport’s role in the future development of major metropolitan areas such as Auckland, Wellington and Christchurch, including consideration of transport’s role as a place-maker and on future rapid transit options (light rail and dedicated bus routes).

In the meantime, the Ministry of Transport is also working on the next GPS 2021 with the intent to release at least 12 months prior to it taking effect.

### 4.2 Provincial Growth Fund (PGF)\(^2\)

The Government has signaled the Bay of Plenty region as a top priority for economic development.

The Provincial Growth Fund (PGF), established by the government in 2017, includes a commitment to invest $1 billion per annum over three years in regional economic development.

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The Bay of Plenty region has a number of projects underway or planned within this Fund. Further details of these are outlined in this Report.

4.3 Significant Government Reviews 2018 and 2019

At the time of developing this Phase 1 Report, there are two critical Reviews underway by the Government that will impact on the planning and investment of rail in New Zealand.

4.3.1 Future of Rail Review

The Future of Rail Review is being led by the Ministry of Transport, with support from the Treasury, the NZ Transport Agency and KiwiRail. The Review is taking a strategic view of New Zealand’s rail network, within the wider transport system, including possible future planning and investments structures and operations.

The government is currently engaged and reviewing work to date. Decisions and subsequent public release are likely in the first half of 2019.

4.3.2 Upper North Island Supply Chain Strategy Review

The Government is undertaking a review of the Upper North Island logistics and freight supply chain to ensure it is fit for purpose in the long term.

The Review will:

• guide the development and delivery of a freight and logistics strategy for the upper North Island including a feasibility study to explore moving the location of the Ports of Auckland, with serious consideration to be given to Northport.

• The work will also include priorities for investment in rail, roads and other supporting infrastructure, with the goal of creating a robust supply chain that delivers to New Zealand’s interest over the next 30 years.

The review is being led by an independent panel reporting to the government, supported by the Ministry of Transport, NZ Transport Agency and Ministry of Business Innovation and Employment.

The Bay of Plenty Regional Council sent a submission in March 2019 to the Independent Panel outlining opportunities, concerns and expectations of engagement on the early proposal.

Interim Report

An Interim Report was released by the Associate Minister of Transport on 27th April 2019.

The Report outlines the proposed approach to deliver an Upper North Island Supply Chain Strategy and reports on the findings of the initial investigations, stakeholder engagement and the key themes that have emerged to date.

It also outlines the plan to complete the Review, explore scenarios and present a strategy.

Common stakeholder views outlined in the report, pertinent to rail include:

- Unanimous support for a fully functioning rail system to the ports / ship side from those who offered an opinion.
- Freight forwarding community is largely agnostic to where imports arrive as long as they are supported with good transport infrastructure.
- That the Bay of Plenty and the Waikato have benefitted from rail infrastructure provided by Government at no capital cost to end users.
- The lack of rail infrastructure and port connectivity has been a brake on Northland’s economic development.
- There is universal interest in the cost of moving freight and that cost is a big driver of behaviour.
- Congestion is the number one problem for freight operators.
- There are problems in getting rail through Auckland.

The report states that “one consistent and overarching theme in the stakeholder comments was the need for a national, connected and well-functioning rail system. There was unanimous support from those who offered an opinion, including from representatives of the road transport and coastal shipping groups, for a fully functional rail freight system”.

The Report outlined that the following projects would be part of, but not limited to, further Review considerations, noting no investment costs or timings are included in the Report:

- New rail line and upgrades between North Auckland and Northport.
- Second rail line between Auckland and Tauranga.
- New inland port and subsequent freight corridor through west Auckland.
- Expanded or moved Southdown inland port.
- New mega-port in the Firth of Thames.
- Inland hubs for logs and exports within Northland with refurbished local rail lines.
- New Zealand dry dock.
- Electrification of rail services and alternative truck and rail machinery.

Two further reports are planned on the Review including a:

- June 2019 Report that will report on the evaluation of different options, and
- September 2019 Report that will set out final recommendations.
5.0 Regional Context

The Bay of Plenty lies in the north-east of the upper North Island and forms part of New Zealand’s ‘Golden Triangle’ where much of the nation’s economic and population growth is occurring.

The upper North Island is vital to the social and economic success of New Zealand.

Together, the Auckland, Northland, Waikato and Bay of Plenty regions are responsible for generating more than half of New Zealand’s GDP, housing more than half of New Zealand’s population and providing for the movement of more than half of New Zealand’s freight.

The Bay of Plenty is home to the Port of Tauranga, New Zealand’s largest export port. Economically, the Port is nationally and regionally significant handling 30% of the country’s imports and exports and contributing to the flow of 8.6% of GDP\(^1\).

Parts of the region have been experiencing rapid growth for decades which in turn has resulted in increased demand for travel that is beginning to significantly impact on core parts of the transport systems capacity and service levels.

5.1 Statistics New Zealand: Regional GDP Measures\(^1^5\)

Statistics New Zealand released the following regional summary Gross Domestic Product (GDP) data from the 2018 census in April 2019.

- The Bay of Plenty’s economy has increased 38.7% from 2013-2108 (national increase was 30.9%). The increase was driven by construction; agriculture; and rental, hiring, and real estate services.

- From 2013-18, the region’s share of national GDP rose 0.3%, to 5.6%, which equates to $15.8 billion to the economy.

- In 2016, Bay of Plenty’s GDP increased 8.8% the highest of all the regions. This was driven by increases in manufacturing; rental, hiring, and real estate services; and agriculture (primarily kiwifruit).

- In 2017, Bay of Plenty’s GDP increased 12.4%, the highest increase in GDP of all the regional economies for the second year in a row. This was driven by large increases in agriculture (dairy cattle farming and kiwifruit); construction; and rental, hiring, and real estate services.

- In 2018, Bay of Plenty’s GDP increased 6.2%, led by construction; manufacturing; and owner-occupied property operation.

\(^1\) Bay of Plenty Regional Land Transport Plan 2018
The Bay of Plenty Regional Land Transport Plan (RLTP) was adopted in June 2018. The Plan combines thinking from the regions’ Councils into a single strategic document for land transport investment.

A range of stakeholders submitted on the draft RLTP, during development, supporting greater investment in rail and proposed work to investigate wider use of the rail network. A significant number of submitters supported commuter rail for greater Tauranga / western Bay of Plenty, while a number also supported inter-regional passenger rail, along with better use of the rail network for freight.

In response, the RLTP committed to undertaking a rail study in 2018/19 to assess the feasibility of the rail network to provide for:

a) increased movement of freight by rail; and

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b) inter-regional passenger rail between the Bay of Plenty and Auckland.

An associated action which potentially overlaps with the rail study is to further explore the potential for rapid transit in the western Bay of Plenty sub region. This could also include consideration of heavy or light rail, and bus rapid transit options.

5.3 Regional Public Transport Plan

The Regional Public Transport Plan provides guidance and policies that direct the investment in public transport across the Bay of Plenty region. The Plan outlines intra-regional rapid transit or rail, noting that the current public transport network does not provide for rapid transit or passenger rail services, however, the opportunity exists to commence long term planning and investment that will allow this in the future.

It also outlines investment required to deliver on this would be significant and is unlikely to be supported by a standard economic evaluation, requiring a more holistic look at the connection between land use development and transport investment. Any investment in this area will require significant contribution and guidance from central government.

5.4 Regional Land Transport Plan Annual Report Card 2017/18

The Regional Land Transport Plan (RLTP) Annual Report Card stated for 2017/18, that the region experienced:

- Regional GDP increased by 8.8%
- 12,000 more vehicles on the road (mainly light commercial vehicles and cars)
- Increase in fatalities and serious injuries between 2016 and 2017, while the five year average trended upwards
- Fuel consumption continues to increase
- Annual number of trips on public transport per person continued to decline
- Freight volumes on the East Coast Main Trunk (ECMT) continue to increase
- Track quality on the East Coast Main Trunk rail line improved.

5.5 Western Bay of Plenty Public Transport Blueprint 2017

A Programme Business Case for a Western Bay of Plenty Public Transport Blueprint was developed in February 2017, supported by the NZ Transport Agency. A subsequent Detailed Business Case was developed in September 2017. Non bus public transport options, e.g. ferries and rail were not considered as part of the programme business case. Reasons noted were due to the bus based public transport being considered to have significant potential for growth without the need to invest in other public transport modes with higher operating and capital costs.

The report did note however that outside the 10-year Blueprint timeframe alternative public transport modes will likely be more feasible and could consequently be examined through further reviews of the Tauranga Programme Business Case which has a 30-year planning horizon.

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19 https://atlas.boprc.govt.nz/api/v1/edms/document/A3148682/content
20 https://atlas.boprc.govt.nz/api/v1/edms/document/A2787759/content
6.0 Bay of Plenty Sub-Regions

6.1 Western Bay of Plenty sub-region

The western Bay of Plenty sub-region has experienced rapid population growth since the 1950s.

The sub-regions population in 2013 was approximately 160,000\(^{21}\), with this predicted to double to 275,000 by 2051. Release of the 2018 Census data is expected to commence from April/May 2019.

The SmartGrowth Strategy 2013\(^{22}\) is the western Bay of Plenty’s spatial plan. It is a comprehensive, long term strategy which sets the strategic vision and direction for the growth and development of the sub-region.

The strategy has a 50 year horizon with a strong focus on the first 20 year planning period. It considers a range of environmental, social, economic and cultural matters and identifies short, medium and long term opportunities for ‘building the community’.

**Table: Population Projections for Tauranga City and Western Bay District\(^{23}\)**

<table>
<thead>
<tr>
<th></th>
<th>2011 (base)</th>
<th>2031</th>
<th>2051</th>
<th>2011-2051</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Western Bay of Plenty District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>45,380</td>
<td>59,718</td>
<td>74,147</td>
<td>28,767</td>
</tr>
<tr>
<td>Total Dwellings</td>
<td>19,782</td>
<td>26,257</td>
<td>32,722</td>
<td>12,940</td>
</tr>
<tr>
<td><strong>Tauranga City</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>114,720</td>
<td>157,110</td>
<td>199,430</td>
<td>84,710</td>
</tr>
<tr>
<td>Total Dwellings</td>
<td>48,783</td>
<td>70,017</td>
<td>91,469</td>
<td>42,686</td>
</tr>
<tr>
<td><strong>Total Subregion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>160,100</td>
<td>216,828</td>
<td>273,577</td>
<td>113,477</td>
</tr>
<tr>
<td>Total Dwellings</td>
<td>68,585</td>
<td>96,274</td>
<td>124,191</td>
<td>55,626</td>
</tr>
</tbody>
</table>

The successful integration of land use development and the transport system is at the centre of the SmartGrowth Strategy. To support this, an Urban Form and Transport Initiative (UFTI) has been established with the SmartGrowth partners to identify an integrated strategic approach for the development of the western Bay of Plenty that delivers the best possible outcomes.

The role of rail within the wider transport system will be further considered as part of this work.

6.1.1 SmartGrowth: Urban Form and Transport Initiative\(^{24}\)

The Urban Form and Transport Initiative (UFTI) is a collaborative project led by SmartGrowth and the New Zealand Transport Agency and involves Tauranga City Council, Western Bay of Plenty District Council, the Bay of Plenty Regional Council, iwi, and community leaders.

The western Bay of Plenty is one of the fastest growing regions in New Zealand and this growth is set to continue for the next 30 years. While this growth is positive for the sub-region and delivers diverse social and cultural benefits, the challenge faced is to ensure the urban development and transport infrastructure meets the needs of local communities.

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24 https://ufti.org.nz/
The partners have committed to developing an integrated, strategic and shared funding programme, with immediate and future priorities and investment opportunities in urban form, transport (including all modes), and other connected areas such as education and health.

Strategy development and planning are underway with a final report due by end 2019 / early 2020.

6.2 Eastern Bay of Plenty Sub-Region

The Eastern Bay sub-region includes the district areas of Whakatane, Kawerau and Opotiki.

Rail plays a significant freight role in the sub-region transporting logs, fertiliser, wood pulp, paper and cardboard from Murupara and Kawerau to the Port of Tauranga. It is estimated that the Eastern Bay of Plenty exports more than 33,000 containers per annum\(^{25}\), with the majority of these currently being on road.

There are a number of emerging industries and development opportunities underway in the subregion including Opotiki Aquaculture and Harbour Development; Kawerau Industrial Land Development and Container Terminal; high value horticulture and water bottling through Otakiri and Murupara.

Putauaki Industrial Land Development

Kawerau Putauaki Industrial Development (KPID) is a partnership project between Kawerau District Council, Putauaki Trust, Sequal Lumber, Kawerau CT Limited and KiwiRail. This is supported by a wider collaborative partnership called Industrial Symbiosis Kawerau (ISK), which includes a number of regional industries, business and services groups including Toi EDA, the Eastern Bay’s economic development agency.

KPID, located in Kawerau District, is focused on significantly improving the economic productivity of the region.

They are currently leading three specific projects:

- Kawerau Container Terminal Development, also includes construction of an 800m rail siding and related infrastructure;
- Putauaki Industrial Land Development, also includes construction of state highway and internal roading and related infrastructure; and
- Off-Highway Road Development, includes construction of internal roading infrastructure to link the Container Terminal to the wider industrial area and forestry industries.

The Putauaki Industrial Land Development is currently underway with stage 1 of the state highway infrastructure under construction. The Kawerau Container Terminal and Off-Highway Road Development projects are still in early development stages.

Kawerau Container Terminal

A feasibility study was undertaken by Scion Research Institute in 2016/17 to establish an inland container terminal in Kawerau, servicing the Eastern Bay of Plenty\(^{26}\). The idea behind the plan, is to

\(^{25}\) Kawerau Container Terminal: A Feasibility study from a Logistics Perspective, Scion, January 2017

\(^{26}\) Kawerau Container Terminal: A Feasibility study from a Logistics Perspective, Scion, January 2017
establish a symbiosis of stakeholders and industry, working together to reduce the costs to do business.

The Study found that there was likely to be sufficient volume from the wider Eastern Bay of Plenty region to justify regular rail services from Kawerau to the container yard at Port of Tauranga. International port logistics company ISO Limited was chosen as the preferred terminal operator in late 2017.

The development of the terminal includes the construction of an 800 metre rail siding with the majority of terminal cargo to be transported to ports and markets via rail. Investment for the siding is subject to a further Provincial Growth Fund (PGF) application.

**Emerging Industries in Eastern Bay with potential future rail links**

**Aquaculture**

Aquaculture in the Opotiki district is a strong emerging industry for the Bay of Plenty. An existing 3,800 hectare mussel farm is already established offshore from Opotiki and plans are underway for additional mussel farm and harbour development.

Expansion of the aquaculture industry in Opotiki is part of the overall industry strategy to grow to $1 billion in exports by 2025\(^\text{27}\). Currently all product is transported by road, however there could be future potential for product to go on rail including via the new Kawerau Container Terminal development.

**Dairy**

A new dairy factory is currently under construction and development in Kawerau. The dairy plant is being constructed on land owned by the Putauaki Trust and the majority of the milk will be supplied by Maori owned farms.

**High value horticulture**

Planned extensions of the region’s strong horticulture industry includes development of high value horticulture on Maori land in the Eastern Bay of Plenty i.e. gold kiwifruit, Miro berries and Manuka.

**Water Bottling**

Early planning is underway for water bottling ventures in the Eastern Bay. Nongfu Spring, a Chinese owned company, was recently consented to access up to 580 million litres of groundwater per year from the Otakiri aquifer. This development could generate up to 200 truck movements a day at full production. There are also early conversations around a further development near Murupara.

While both are still in early stages of development, these industries have significant potential for rail use and are of considerable interest to the envisaged future growth of the Kawerau Container Terminal and wider sub-region.

It is important that these emerging industries are well understood in the region including the transport system and operations required for success.

**Provincial Growth Fund – Eastern Bay of Plenty**

A number of key projects in the eastern Bay of Plenty have received investment via the Government’s Provincial Growth Fund (PGF).

\(^{27}\) Eastern Bay of Plenty: Regional Development Project, Stakeholder Strategies, 2018
These include:

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Lead Organisation(s)</th>
<th>PGF Funding (Stage 1)</th>
<th>Funding Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putauaki Industrial Land Development – Stage 1</td>
<td>Funding initial construction work for the Putauaki Industrial Hub.</td>
<td>Putauaki Trust</td>
<td>$2,000,000</td>
<td>Approved October 2018</td>
</tr>
<tr>
<td>Mussel Farming and Production Facility</td>
<td>Development of a sustainable mussel farming operation in Ōpōtiki</td>
<td>Whakatohea Mussels Opotiki Ltd</td>
<td>$19,850,000</td>
<td>Approved December 2018</td>
</tr>
<tr>
<td>Accelerating Aquaculture Developments in Whakatohea Rohe Moana</td>
<td>Research and planning exploring potential aquaculture projects</td>
<td>Whakatohea Maori Trust Board</td>
<td>$950,000</td>
<td>Approved December 2018</td>
</tr>
<tr>
<td>Ōpōtiki Harbour Development Project</td>
<td>First stage in Ōpōtiki Harbour redevelopment</td>
<td>Ōpōtiki District Council, Eastland Group Ltd, Bay of Plenty Regional Council</td>
<td>$750,000</td>
<td>Approved December 2018</td>
</tr>
<tr>
<td>Rail Freight Opportunities - Kawerau/Murupara</td>
<td>Funding of a study to look at options for creating an inland hub to connect exports from Murupara and Kawerau to rail.</td>
<td>KiwiRail</td>
<td>$250,000</td>
<td>Approved February 2018</td>
</tr>
</tbody>
</table>

### 6.3 Rotorua Sub-Region

Services on the Rotorua Branch line from Putaruru to Rotorua ceased in 2001 with the cancellation of the Geyserland Express.

The Rotorua Lakes Council has worked closely with KiwiRail to design and develop connecting shared paths and cycleways within parts of the rail corridor across the sub-region. In previous years KiwiRail leased the Rotorua Branch line (Putaruru - Koutu) to the Rotorua Ngongotaha Rail Trust for use as a tourism venture.

The sub-region has aspirations to enhance tourism opportunities and connections, between Auckland and Rotorua, through the use of rail (scenic trips and trails).

There are currently no formal plans or committed investment for reopening the Rotorua rail line, however, it is important, that the corridor is protected for future use, including multimodal and further tourism opportunities.

It is also important that any future transport system planning recognises the critical connections between central New Zealand to the Bay of Plenty region, Port of Tauranga and onto the upper North Island, including future expansion and investment in the rail network. Rotorua and the Eastern Bay of Plenty are key conduits for these connections.
7.0 Rail Context

The railway network in New Zealand consists of four main lines, seven secondary lines and numerous short branch lines in almost every region. It links all major urban centres except Nelson, Taupo, Queenstown, Whakatane and Gisborne. The network is owned and managed by KiwiRail\textsuperscript{28}.

New Zealand’s national rail network and services are primarily focused on freight, particularly bulk and imports and exports. A limited number of tourism focussed passenger services are also operated on some lines. Auckland and Wellington are the only two cities in the country to operate urban rail systems, both of which are currently being upgraded and expanded.

7.1 Bay of Plenty Rail Network

Rail plays a significant freight role in the Bay of Plenty region with a principal focus on the Port of Tauranga. Increasingly, the Port of Tauranga is being used as a gateway for the Auckland market, with shipping containers being railed to and from MetroPort, the Port of Tauranga’s inland terminal at south Auckland.

There is approximately 320 km of rail network in the Bay of Plenty, extending from Hamilton in the west to Taneatua and Murupara in the east\textsuperscript{29}. The major regional line is the East Coast Main Trunk (ECMT) which is 182 km long and runs through Hamilton and Tauranga to Kawerau. The unused portions of rail track in the region include Hawkens – Taneatua (26 km), and the Rotorua branch (48km).

There are currently no passenger rail services in the Bay of Plenty region.

\textit{Bay of Plenty Rail Network Map courtesy of KiwiRail.}

\textsuperscript{28} https://en.wikipedia.org/wiki/List_of_railway_lines_in_New_Zealand
\textsuperscript{29} KiwiRail data sets 2019.
The following table is a summary of freight (origin to destination) carried between Tauranga and key New Zealand centres.

<table>
<thead>
<tr>
<th>Rail Line</th>
<th>NTK per annum (Net tonnes per kilometre travelled 2017/18)</th>
<th>Primary Product(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whangarei – Tauranga</td>
<td>9,958,000</td>
<td>Wood and wood products.</td>
</tr>
<tr>
<td>Tauranga – Whangarei</td>
<td>162,427</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
<tr>
<td>Auckland – Tauranga</td>
<td>420,331,000</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
<tr>
<td>Tauranga – Auckland</td>
<td>377,745,000</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
<tr>
<td>Hamilton – Tauranga</td>
<td>65,381,000</td>
<td>Dairy</td>
</tr>
<tr>
<td>Tauranga – Hamilton</td>
<td>2,070,000</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
<tr>
<td>Rotorua – Tauranga</td>
<td>185,982,000</td>
<td>Wood and wood products.</td>
</tr>
<tr>
<td>Tauranga – Rotorua</td>
<td>131,680</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
<tr>
<td>Whakatane – Tauranga</td>
<td>81,682</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
<tr>
<td>Tauranga – Whakatane</td>
<td>1</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
<tr>
<td>Tokoroa – Tauranga</td>
<td>136,294,000</td>
<td>Wood and wood products.</td>
</tr>
<tr>
<td>Tauranga – Tokoroa</td>
<td>6,989,000</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
<tr>
<td>Tauranga – Tauranga</td>
<td>95,419,000</td>
<td>Wood and wood products.</td>
</tr>
<tr>
<td>Palmerston North – Tauranga</td>
<td>7,386,000</td>
<td>Dairy</td>
</tr>
<tr>
<td>Tauranga – Palmerston North</td>
<td>1,352,000</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
<tr>
<td>New Plymouth – Tauranga</td>
<td>5,112,000</td>
<td>Meat</td>
</tr>
<tr>
<td>Tauranga – New Plymouth</td>
<td>843,360</td>
<td>General freight (on behalf of freight forwarders).</td>
</tr>
</tbody>
</table>

Notes to Table
- Outlines current net tonnes of freight per kilometre travelled between key centres and Tauranga.
- Kawerau and Murupara freight is included in the Tauranga-Tauranga and Rotorua-Tauranga figures.
- Data is 2017/2018 financial year
- NTK is the sum of tonnes carried multiplied by distance travelled, excluding the weight of the wagons.
- KiwiRail data does not include specifics for products being moved for Freight Forwards.
- Total freight carried on the Bay of Plenty rail network in 2017/18 was 1.344 billion net tonnes per kilometre travelled.
8.0 KiwiRail

KiwiRail’s vision is to be ‘a trusted Kiwi owned logistics partner growing New Zealand’. KiwiRail owns and manages New Zealand’s rail network.

KiwiRail\[30\]:

- Help more than 34 million commuter trips per year
- Carry more than 1 million tourist passengers a year
- Connect 23 towns, cities and communities across New Zealand
- Move 18 million tonnes of freight per year
- Carry 16% of New Zealand’s total freight task
- Transport 25% of New Zealand’s exports
- Supported 20% passenger growth in Auckland over last two years

KiwiRail’s Half Year Highlights December 2018\[31\] included:

- 30% increase in domestic freight following the full reopening of the Main North Line
- 15% increase in forestry as the ‘wall of wood’ comes onstream and KiwiRail increases its log wagons fleet
- 8% increase in bulk freight
- 8% increase in tourism revenue on the’ Great Journeys of New Zealand’ rail and ferry services
- Delivery of 15 (DL Gen 2.3) locomotives and 235 wagons

8.1 Current Use and Capacity

The Bay of Plenty regions rail network currently carries approximately 1.344 billion net tonnes of freight per kilometer per annum.

The Bay of Plenty is serviced by the East Coast Main Trunk (ECMT) which is New Zealand’s’ busiest and most productive rail line.

The ECMT within the Bay of Plenty has the capacity to operate 12 (9 locomotive long) trains per day each way within the current infrastructure and operations. Currently the line is operating 23 trains of different configurations.

KiwiRail have confirmed that there is capacity for more services, for some time, within the ECMT before additional infrastructure investment is required.

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\[30\] https://www.kiwirail.co.nz/

\[31\] KiwiRail Half Year Report December 2018
8.2 Regional Rail Constraints

There are currently no significant rail constraints within the Bay of Plenty rail network.

Rail constraints that effect the region, primarily from an economic perspective, are currently contained within the Auckland rail network.

Addressing these constraints are part of the implementation of the Auckland Transport Alignment Project (ATAP) and wider KiwiRail work programmes.

This includes the following priority rail projects:

- Auckland City Rail Link (CRL); planned for completion in 2024.
- Auckland Third (Freight) Main (Westfield to Wiri); completion yet to be confirmed but likely by 2024.
- Auckland Light Rail (City to Centre to Māngere Line and the North-western Line); scheduled for completion between 2018-2028.
- There are also a number of level crossing upgrades and rail priority programmes either currently underway or planned.

There is a minor constraint with the Kaimai Tunnel if passenger rail services were to be introduced. Under rail regulations, tunnels used for passenger rail services require two forms of communication to be operating. The Kaimai Tunnel currently has only one form of communication. If passenger rail services were to be introduced, then the upgrade of the tunnel communications would be a requirement of the project. (Noting: a one off event that includes passenger rail trips through the tunnel can be mitigated by KiwiRail for that event only).

Future increases in freight and subsequent train lengths and rail use, as well as planned increases in passenger and metro rail services in Auckland and Hamilton, will place further pressure on the upper North Island rail network.

Areas that could face additional pressure include:

- No increase in the rail sidings that are able to be loaded/unloaded concurrently at both Port of Tauranga and Southdown. This will constrain future growth in the MetroPort programme.
- No planned extension of current passing loops or new passing loops to accommodate longer trains in both directions.
- Introduction of additional passenger services in Auckland and new passenger services to Hamilton (Papakura to Frankton).
- Any future extensions to the peak shut out periods within Auckland metro areas, which restricts access to and from Southdown.
8.3 KiwiRail Planning and Investment: Bay of Plenty Region

KiwiRail have an ongoing work programme for the Bay of Plenty rail network.

The following table\(^\text{32}\) outlines recent improvements in 2018/19 as well as planned improvements and maintenance for 2019/20.

**Recently Completed and Committed Investments**

<table>
<thead>
<tr>
<th>Planned Investments (2019/20)</th>
<th>Location</th>
<th>Total Cost</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaimai tunnel (ongoing)</td>
<td>Kaimai Ranges</td>
<td>$5 million (per annum)</td>
<td>Improve slab and tunnel conditions.</td>
</tr>
<tr>
<td>Level Crossing Upgrade</td>
<td>Hewletts Road (SH2)</td>
<td>$217,000 (2019/20)</td>
<td>Part of the Safer Roads Alliance programme.</td>
</tr>
<tr>
<td>Level Crossing Upgrade</td>
<td>Paengaroa (SH2)</td>
<td>$108,000 (2019/20)</td>
<td>Part of the Safer Roads Alliance programme.</td>
</tr>
<tr>
<td>Level Crossing Upgrade</td>
<td>Pongakawa School Road, Pongokawa (SH2)</td>
<td>$56,000 (2019/20)</td>
<td>Part of the Safer Roads Alliance programme.</td>
</tr>
<tr>
<td>Level Crossing Upgrade</td>
<td>Benner Road, Pongokawa (SH2)</td>
<td>$330,000 (2019/20)</td>
<td>Part of the Safer Roads Alliance programme.</td>
</tr>
<tr>
<td>Level Crossing Upgrade</td>
<td>Ohinepanea Road, Pongokawa (SH2)</td>
<td>$68,000 (2019/20)</td>
<td>Part of the Safer Roads Alliance programme.</td>
</tr>
<tr>
<td>Half Arm Barriers Installation</td>
<td>Collins Lane (Te Puke)</td>
<td>$23,000 (2019/20)</td>
<td>Safety.</td>
</tr>
<tr>
<td>Track: Rail Grinding</td>
<td>Planned to focus on ECMT in 2020. The previous grinding in this area was 2012.</td>
<td>$3.5 million (2019/20)</td>
<td>Maintenance.</td>
</tr>
<tr>
<td>Upper North Island Yard Stabilisation</td>
<td>Regional project, includes Kinleith, Mount Maunganui, Kawerau.</td>
<td>$1.1 million (2019/20)</td>
<td>Maintenance.</td>
</tr>
<tr>
<td>Steel Trusses – Viaduct Management</td>
<td>National project - Bridge 71 ECMT (Tauranga Harbour Rail Bridge) is planned for assessment in 2019.</td>
<td>$1.5 million (2019/20)</td>
<td>Maintenance.</td>
</tr>
</tbody>
</table>

**Notes to Table:**
- In the Kaimai Tunnel, the rails are fixed directly to what is called a ‘PACT’ slab. There is an ongoing project to improve the slab and tunnel conditions. The project has a year on year budget of $5 million.
- Pongakawa School works are completed.
- All track grinding in 2020 is expected to be on the ECMT.
The following graphs outline the maintenance operations and renewals expenditure over the last five years for the Bay of Plenty rail network.

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Note: most non-track budget expenditure are in signals and preventative maintenance.

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33 KiwiRail datasets and graphs 2019
9.0 Port of Tauranga

The Port of Tauranga is New Zealand’s biggest port both in terms of total cargo volume and container throughput. The Port handles 42% of New Zealand’s cargo and 43% of exports\(^\text{34}\).

In 2018/19 the Port volumes reached 24.5 million tonnes and managed 1.3 million TEUs.

The Port is overseen by Port of Tauranga Limited which is the parent company of a national network of partner companies and ports.

Port of Tauranga 2018 highlights include\(^\text{35}\):

- 10\(^{th}\) largest company on NZ Exchange (NZX) top 50 listed companies by market capital.
- 10.9% increase in revenue
- 13.7% increase in imports
- 8.2% increase in exports
- 8.9% increase in container volumes
- 23.3% increase in transshipments

9.1 MetroPort and other Port of Tauranga Investments

MetroPort Auckland, strategically located in Penrose, is a 7.67 hectare inland port owned by Port of Tauranga. MetroPort is serviced by both road and rail. 297,512 TEU\(^\text{36}\) of Port of Tauranga controlled cargo moved through the inland port in 2018. This in addition to KiwiRail’s own domestic cargo.

The Port of Tauranga currently run five to six 105 TEU return trains per day in each direction, providing a weekly capacity of approximately 6,000 TEUs with an option to activate additional services where required\(^\text{37}\).

The Port of Tauranga also holds investments in other New Zealand ports as well as stevedoring, marshalling and logistics companies. These include:

- Northport in Marsden Point, Northland
- Timaru Container Terminal
- PrimePort, Timaru
- PortConnect, Auckland
- CODA
- Quality Marshalling

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\(^{34}\) Port of Tauranga presentation 2019
\(^{35}\) Port of Tauranga Annual Report 2018
\(^{36}\) The twenty-foot equivalent unit (TEU) is an inexact unit of cargo capacity often used to describe the capacity of container ships and/or container terminals. (Wikipedia)
\(^{37}\) http://www.port-tauranga.co.nz/metroport/
9.2 Rail Use

The Port of Tauranga transports approximately 40% of imports and 50% of exports via rail\textsuperscript{39}. This is a significant amount compared to other New Zealand ports including the Ports of Auckland.

Transporting significant volumes of freight via the national rail network reduces heavy vehicle roading impacts.

However, it is noted that the Port of Tauranga only control part of the total cargo that utilises rail to and from the Port, this being the Metroport cargo. In addition to this volume, KiwiRail has commercial agreements with a number of other importers, exporters, shipping lines and cargo owners to provide rail transportation services to move cargo to and from the Port.

Currently 6 (approximately 700 metre length) trains run and return daily between Tauranga and Auckland carrying 106 TEUs. KiwiRail have advised the Port of Tauranga that the line can accommodate up to 12 trains (9 locomotives long) per day in both directions.

Any additional or new services planned for the rail network in the Bay of Plenty region would need to consider impacts on existing use of freight services and operations, including the Port of Tauranga.

\textsuperscript{38} Port of Tauranga Annual Report 2018
\textsuperscript{39} Port of Tauranga data 2016
9.3 Future Plans

The Port of Tauranga has long term plans to meet growth and grow its portfolio. The Port has capacity to expand both within the existing footprint and associated strategic land holdings.

The Port of Tauranga currently own 190 hectares for port operations. 150 hectares is in current use and 40 hectares is available for future developments.

There is also an additional 120 hectares, owned by Quayside Holdings in the Rangiuru Business Park, that could be used for future port operations.

One of the future proposals is to look at an extension of the Sulphur Point wharf to include further crane and container operations that could result in the Port being able to accommodate 2.8 – 3.0 million TEUs per annum (increase from 1.3million TEUs in 2018/19).

Photo courtesy of Port of Tauranga website.
10.0 Kiwifruit Industry

The kiwifruit industry is a major export earner for New Zealand and one of the biggest economic contributors to the Bay of Plenty region.

Recent highlights for the industry include:

- Sell into more than 50 different countries
- Deliver approximately 30% of the global kiwifruit volumes
- Manage approximately 13,500 hectares of orchard production. 83% of this is in the Bay of Plenty.
- Produced 144 million trays in 2018 (65 million gold kiwifruit; 79 million green kiwifruit).
- Contributed more than $1 billion into the Bay of Plenty economy in 2017/18.

10.1 Future Plans / Growth Projections

The industry is planning for significant growth including:

- Forecasts which indicate that by 2030, the industry could triple gross domestic product (GDP) contribution to over $6 billion and employ an additional 30,000 people.
- Contribution to gross domestic product (GDP) for Bay of Plenty will increase 135% by 2030 (from $867 million in 2016/17 to $2.04 billion).
- Growth is predominantly within existing growers expanding rather than new growers coming in.
- Growth will occur predominantly in the eastern side of the western Bay of Plenty and in the Eastern Bay of Plenty.
- The industry is projecting to produce 216 million trays in 2023/24 (144 million were produced in 2018).

10.2 Rail Use

Currently all kiwifruit product in the Bay of Plenty is transported internally by road.

With the projected growth over the next 10 – 15 years in the industry, it is going to be important for industry and transport decision makers to work closely together to ensure safe and efficient transport options are available and in use to cater for increased growth and transport demand.

[40] https://www.zespri.com/companyinformation/newsroom/kiwifruit-gdp-increase
11.0 Supporting Studies and Reports

A number of relevant studies and reports were researched for the Phase 1 Investigation Report. Summary examples are outlined below.

11.1 Bay of Plenty Rail Strategy 2007

The purpose of the Strategy was to advance a vision for rail in the region including outlining opportunities for rail, both in the short and longer term.

Part of the longer-term vision was to explore the use of rail for passenger transport, particularly in order to connect key settlements within the region.

Inter-regional rail connections between other key places (e.g. Hamilton, Auckland and Wellington) were also part of this vision.

The Regional Transport Committee (RTC) made a decision to withdraw the Bay of Plenty Rail Strategy as a standalone strategy following development of the Bay of Plenty Regional Land Transport Strategy in 2011.

11.2 Public Transport Viability Western Bay of Plenty, SmartGrowth (Booz Allen, 2002)

The purpose of the Report was to investigate the potential public transport demand for the Tauranga-WBoP sub-region including the likely demand for a best-case public transport scenario.

Key findings included:

- International experience has shown that relatively high passenger demand is required for a rail service to be 'viable' in economic or financial terms. A light rail service, for example, requires loadings of 5,000-10,000 passengers per hour in the peak direction to be viable.

- The standard view is that buses (on-street) are most economic up to something between 2000 and 5000 passengers/hour (peak direction) in a given corridor. Light rail requires much higher passenger loadings to be viable and would not be considered where low volumes were expected. When considering metro or suburban rail services, passenger loadings in the range of 15,000 - 20,000 passengers/hour are required.

- Evidence showed that no Australasian cities under 400,000 population have a rail service.

- The Tauranga / western BoP sub-region is not likely to have the patronage densities or demand to be able to sustain a rail service.

11.3 Western Bay of Plenty Public Transport Blueprint – Programme Business Case (Beca, February 2017)

The purpose of the Report was to guide investment in public transport services and capital improvement in the Tauranga City and Western Bay of Plenty (Western Bay) sub-region over a ten year period.
Key findings included:

- The region is experiencing rapid population growth which is leading to increased demand for travel that is in turn impacting on the level of service achieved on the road network. Travel time reliability is decreasing as congestion worsens (travel times and congestion levels are increasing).

- The current mode share of bus to car travel is approximately 5% in peak periods and less outside of peak times. In most cases bus journey times are considerably longer than travel by car and in many locations all day parking charges are less than the cost of a two way bus fare.

- Changes are necessary in order to make bus travel a more acceptable alternative to private car use and by doing so increase the mode share of bus travel, which will in turn assist in reducing congestion and improve the efficiency of the local transport network.

Non bus public transport options, e.g. ferries and rail were not considered as part of the programme business case. Reasons noted were due to the bus based public transport being considered to have significant potential for growth without the need to invest in other public transport modes with higher operating and capital costs.

11.4 Hamilton to Auckland Start-Up Passenger Rail Service 2018

The NZ Transport Agency approved a business case to trial the start-up of passenger rail services from Hamilton to Auckland in December 2018.

The business case was developed collaboratively by Waikato Regional Council, Hamilton City Council, Auckland Council, Waikato District Council, Auckland Transport, the NZ Transport Agency and KiwiRail.

The start-up service consists of a five year trial commencing in March 2020.

The NZ Transport Agency is currently working with the relevant local councils and KiwiRail to develop a pre-implementation plan.

**Services**

The startup service would run between Frankton in Hamilton and Papakura in south Auckland. From there passengers would transfer onto other transport services at an additional cost.

The service would commence as a weekday peak hour service with two services for each peak direction, and a single Saturday return service.

The service is planned to start with a four-carriage train which can carry 150 passengers each way and is estimated to take 88 minutes travel time, one way.

Initial stops will include Frankton, The Base at Rotokauri, Huntly and Papakura.

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41 https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12179111
42 Hamilton to Auckland Single Stage Business Case, November 2018
Patronage

Total projected passenger demand is estimated to be:

<table>
<thead>
<tr>
<th>Year</th>
<th>Weekday one way patronage</th>
<th>Total annual patronage (excludes Sunday and public holiday services)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>120</td>
<td>20,600</td>
</tr>
<tr>
<td>(part year March - June 2020)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>160</td>
<td>82,400</td>
</tr>
<tr>
<td>Year 3</td>
<td>200</td>
<td>103,000</td>
</tr>
</tbody>
</table>

Financials

The five-year trial is costed at approximately $78.2 million with $68.4 million invested from the NZ Transport Agency and $9.8m from local authorities.

Capital cost of the start-up service is estimated at $49.5 million, including 52% for locomotive and rolling stock-related and 48% station-related infrastructure.

Annual operating costs are estimated at $7.74 million once fully implemented post 2023.

Annual fare revenue is estimated at $1.56 million once fully implemented and projected to increase with patronage and future service enhancements.

The average fare paid by each patron will be $9.10 and will vary depending on the number of zones travelled. The one-way fare from Hamilton to Papakura will be $12.20 and from Huntly $7.80.

A separate ticket will need to be purchased for use of the connecting Auckland Transport metro service.

The benefit cost ratio within the business case for the NZ Transport Agency was 0.5.

Funding Assistance Rates from the National Land Transport Fund (NLTF) includes:

- 100% for rolling stock;
- 100% for track and platform work (that will become KiwiRail assets)
- 76% for other assets such as rail shelters
- Up to 75.5% for operating costs
- 51-52% for railway station lease and maintenance costs.
11.5 Auckland Rapid Transit Network Programme

Accelerating the development of Auckland’s rapid transit network is a Government priority with a key focus on unlocking housing and urban development opportunities as well as encouraging people to shift to public transport.

Rail plays a critical role in Auckland’s transport system, particularly in providing for travel to and from the CBD. Since Britomart (Auckland’s downtown station) opened in 2003, Auckland’s rail patronage has increased rapidly from 2.5 million trips per year to 13.9 million trips per year as at the end of June 2015.

There are a number of significant rapid transit network rail projects currently underway.

City Rail Link

The City Rail Link (CRL) is currently the largest transport infrastructure project ever to be undertaken in New Zealand.

The CRL is a 3.45km twin-tunnel underground rail link up to 42 metres below the city centre transforming the downtown Britomart Transport Centre into a two-way through-station that better connects the Auckland rail network

The CRL will extend the existing rail line underground through Britomart, to Albert, Vincent and Pitt Streets, cross beneath Karangahape Road and the Central Motorway Junction to Symonds Street and then rise to join the western line at Eden Terrace at the Mount Eden Station.

New rail transport growth statistics suggest that by 2035, CRL stations will need to cope with 54,000 passengers an hour at peak travel times.

The CRL is jointly funded by the Government and Auckland Council with a total project cost estimated at approximately $3.4b. It is expected to be fully operational by 2024.

City Centre to Māngere Light Rail Project

In April, the government announced plans for a rapid transport network in Auckland to meet the city’s transport needs and rapidly growing population. The City Centre to Māngere light rail is planned as part of the wider rapid transit network.

The project will combine transport and urban planning to provide housing and urban development along the future light rail corridor so that communities have better access to jobs, education and recreation.

The NZ Transport Agency is leading the procurement for the project supported by its partners Auckland Council, Auckland Transport and HLC. The project is currently in the early investigation phase.

City Centre to North West Light Rail Project

In April 2018, the updated Auckland Transport Alignment Project (ATAP) identified a rapid transit corridor for the City Centre to Northwest light rail line.

45 https://www.cityraillink.co.nz/what-is-crl/
The City Centre to Northwest light rail is planned as part of the wider rapid transit network alongside the City Centre to Mangere line. It will provide a critical connection for the Northwest communities. Investigations are at a very early stage. The NZ Transport Agency is currently developing the project business case.

11.6 Greater Christchurch Northern Rail Rapid Assessment (Aurecon, July 2014)\(^{48}\)

The purpose of the Study was to provide a rapid assessment of the feasibility and indicative costs of providing a passenger rail service between Christchurch and Rangiora as a short term option to help ease the immediate peak congestion issues on the northern corridor.

Key findings included:

- It was technically feasible to implement a short term passenger rail service on the Main North Rail line between Rangiora and Christchurch using the existing track and signals.
- The service was constrained by issues such as track availability, rolling stock availability, and station conditions. The need to support the service with bus feeder services to increase coverage would undermine some of the user benefits by adding to the total journey times for some passengers.
- None of the issues were noted as insurmountable but that careful analysis was required with regard to the costs and benefits of investing in a short-term service.

The decision makers, at the time of the final report, chose not to proceed with the service as the linear rail network was not well aligned to customer travel patterns, with only 10% of journeys to work being directly to the city centre.

11.7 Economic Linkages between New Zealand Cities: Final Report (Richard Paling, Kel Sanderson and John Williamson, May 2011)

The purpose of the report was to investigate the economic linkages between Auckland, Hamilton and Tauranga city-regions with the purpose of the research project to test for the emergence of a ‘city system’ between the three cities.

Key findings included:

- From a labour market perspective, Auckland, Hamilton and Tauranga possessed relatively insular economies, with a very low level of commuting between the three cities.
- For both commuting and business travel, the low flows are at least in part a reflection of the considerable travel times and distances between the three cities.
- From a freight perspective, important linkages existed between the three regions, with high freight flows between Auckland and Waikato and between Waikato and Bay of Plenty. For many of these commodities access to a port, either in Auckland or Tauranga is very important and hence good freight connections support primary economic activity in rural areas.

11.8 Upper North Island Freight Story 2013

The Upper North Island Strategic Alliance (UNISA), in partnership with Auckland Transport, the NZ Transport Agency and KiwiRail developed the Upper North Island Freight Story in 2013. The Story took a collective partnership approach within an upper North Island ‘freight lens’ to determine issues or areas that were limiting decision makers ability to ‘reduce the cost to do business in New Zealand’.

The partner organisations together with industry and freight operators identified the key critical issues and opportunities to help deliver freight efficiencies and created a shared evidence base to enable improved decision making.

One of the critical issues identified was Strategic Road and Rail Network Constraints. An evidence base was developed that identified the key constraints on the upper North Island strategic freight road and rail network limiting economic performance.

Rail constraints identified that impacted on the Bay of Plenty rail system included:

- Auckland North – South Rail Corridor: Auckland Eastern Line to Port (significant growth in public transport (PT) trains timetable will limit freight capacity including link to Ports of Auckland.)
- Inter-regional Rail Corridors: East Coast Main Trunk (ECMT) west of Tauranga - ECMT is single track, however completed crossing loops doubled route capacity to 4 trains/hour (up to 900m long).
- Inter-regional Rail Corridors: NIMT (north of Hamilton) - Te Kauwhata to Amokura single track.
- Tauranga Central Rail Corridor: Tauranga CBD / Port Strategic rail links through Tauranga urban area (strand level crossings) and Port rail capacity limited - amenity conflicts and reverse sensitivity as train movements increase and CBD development continues.

Relevant key constraints within the Auckland rail network, identified through the Freight Story, were included in the Auckland Transport Alignment Project (ATAP).

11.9 Light Rail in Australia

A number of Australian cities already operate or are embarking on light rail development and services (including trams).

These include:

- Sydney (2018 population of 5,230,000)
- Melbourne (2018 population of 4,936,000)
- Adelaide (2018 population of 1,348,000)
- Gold Coast (2018 population of 679,000)
- Canberra (2018 population of 457,500)

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49 https://www.unisa.nz/project/freight-story/
50 UNISA partners: Tauranga City Council, Bay of Plenty Regional Council, Hamilton City Council, Waikato Regional Council, Auckland Council, Whangarei District Council, Northland Regional Council
An Australia Light Rail Report\textsuperscript{51} outlined that their aim is to create a completely integrated transport system, where the light rail component plans to accommodate for an average passenger capacity of 10,000 – 28,000 people/per hour, with heavy rail accommodating for an average passenger capacity of 18,000 - 54,000 people per/hour.

11.10 Banff National Park and Calgary Mass Transit Study 2018, Canada

The purpose of the Study was to examine mass transit options as a way to reduce vehicle congestion along the Bow Valley corridor and in the Banff national park.

Key findings included:

- In 2018, average daily vehicle volume on the Trans-Canada Highway between Calgary and Banff was more than 22,000 vehicles per day, with summer peak daily volumes above 45,000 vehicles per day
- Bus services between Calgary and Lake Louise would have capital costs ranging from $8.1 million to $19.6 million and operating costs of $4.5 million to $5.8 million annually. Patronage was expected to be between 200,000 and 490,000 passengers a year, reducing the annual operating subsidy to about $2 million per year.
- Passenger train services would have a capital cost between $660 million to $680 million and an operating cost of $13.4 million to $14.3 million each year. Patronage was expected to be between 200,000 and 620,000 passengers annually, reducing the annual operating subsidy to about $8.1 million to $9.1 million per year.
- Overall costs would be too much for the municipalities, and any form of mass transit service in the region would require involvement from other orders of government.

### 12.0 Supporting References

#### 12.1 Strategy, Policy and Planning Settings

<table>
<thead>
<tr>
<th>Strategy, Policy or Plan</th>
<th>Summary and Links</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NATIONAL LEVEL</strong></td>
<td><strong>Government Policy Statement on Land Transport (GPS)</strong></td>
</tr>
<tr>
<td>The Government Policy Statement on Land Transport (GPS) sets out the government’s</td>
<td>prioritizes for expenditure from the National Land Transport Fund over the next 10 years. It sets out how funding is allocated between activities such as road safety policing, state highways, local roads and public transport.</td>
</tr>
<tr>
<td>priorities for expenditure from the National Land Transport Fund over the next 10 years.</td>
<td>The 2018 review of the GPS has seen an increased focus on rapid transit systems and rail in New Zealand including a new Rapid Transit Activity Class. This includes an increased focus in investment to support existing and new interregional commuter rail services as well as the increased use of rail to move freight.</td>
</tr>
<tr>
<td>It sets out how funding is allocated between activities such as road safety policing,</td>
<td>The GPS also supports accelerating the development of rapid transit where it is key to support development in major metropolitan areas.</td>
</tr>
<tr>
<td>state highways, local roads and public transport.</td>
<td>The GPS 2018 includes a new rapid transit activity class which anticipates investing about $4 billion over 10 years in busway and light rail infrastructure capable of moving large numbers of people. Forecast investment is about $468 million during the 2018-21 period.</td>
</tr>
<tr>
<td></td>
<td>The Government has signalled a possible second stage review of GPS 2018. This will be limited to areas that require immediate actions including investment in rail, supported by the Future of Rail Study.</td>
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<td></td>
<td>In the meantime, the Ministry of Transport is also working on the next GPS 2021 with the intent to release at least 12 months prior to it taking effect.</td>
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<td></td>
<td><strong>Provincial Growth Fund (PGF)</strong></td>
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<td>The Provincial Growth Fund (PGF) was established by the government in 2017 and includes a commitment to invest $1 billion per annum over three years in regional economic development. The Bay of Plenty was identified as one of the regions for early investment.</td>
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</tbody>
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<thead>
<tr>
<th><strong>Strategy, Policy or Plan</strong></th>
<th><strong>Summary and Links</strong></th>
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</thead>
</table>
| **Future of Rail Study**    | A number of PGF initiatives are either underway or planned for the Bay of Plenty region., including $250,000 to undertake a study looking at options for creating an inland hub to connect exports from Murupara and Kawerau to rail.  
| **KiwiRail**                | The Future of Rail Study is being led by the Ministry of Transport, with support from the Treasury, the NZ Transport Agency and KiwiRail.  
The Review is taking a strategic view of New Zealand’s rail network, within the wider transport system, including possible future planning and investments.  
The government is currently engaged and reviewing work to date. Decisions and subsequent public release are likely in the first half of 2019.  
**Link:** currently not publicly available. |
| **Upper North Island Supply Chain Strategy** | KiwiRail has been implementing an improvement programme, since being brought back into public ownership four years ago. This programme works to standardise assets, simplify the business and invest in their people to deliver improved productivity and lay the groundwork for an exciting future of growth.  
KiwiRail is currently developing a 10-year growth strategy, focused on gathering insights from current and potential customers into how disruption is changing their industries.  
The Plan will focus on finding sustainable solutions to customers’ needs, diversifying and growing market share, opening up new partnering opportunities and planning a network for the future.  
**Link:** [https://www.kiwirail.co.nz/](https://www.kiwirail.co.nz/) |
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<tbody>
<tr>
<td><strong>Bay of Plenty Passenger and Freight Rail Phase 1 Investigation Report May 2019</strong></td>
<td>The work will also include priorities for investment in rail, roads and other supporting infrastructure, with the goal of creating a robust supply chain that delivers to New Zealand’s interest over the next 30 years.</td>
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<tr>
<td></td>
<td>The review is being led by an independent panel reporting to the government, supported by the Ministry of Transport, NZ Transport Agency and Ministry of Business Innovation and Employment.</td>
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<tr>
<td></td>
<td>The Bay of Plenty Regional Council are currently developing their submission, and supporting subsequent partner submissions, on the early proposal.</td>
</tr>
<tr>
<td></td>
<td><strong>Interim report</strong></td>
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<td></td>
<td>An Interim Report was released by the Associate Minister of Transport on 27th April 2019.</td>
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<tr>
<td></td>
<td>The Report outlines the proposed approach to deliver an Upper North Island Supply Chain Strategy and reports on the findings of the initial investigations, stakeholder engagement and the key themes that have emerged to date. It also outlines the plan to complete the review, explore scenarios and present a strategy.</td>
</tr>
<tr>
<td></td>
<td>Two further reports are planned on the Review including a June 2019 Report that will report on the evaluation of different options, and a September 2019 Report that will set out final recommendations.</td>
</tr>
<tr>
<td><strong>National Land Transport Programme (NLTP) 2018 - 2021</strong></td>
<td>The National Land Transport Programme (NLTP) is a three-year programme that sets out how the NZ Transport Agency, working with its partners, invests national land transport funding to create a safer, more accessible, better connected and more resilient transport system to keep New Zealand moving.</td>
</tr>
<tr>
<td></td>
<td>The GPS 2018 includes a new rapid transit activity class to support further investment in busway and light rail infrastructure capable of moving large numbers of people. This new activity class has been introduced to enable ‘below track’ infrastructure improvements while the Future of Rail Review is undertaken by the Government.</td>
</tr>
<tr>
<td></td>
<td>Rapid transit is also a significant component of the Government’s stated direction for modal shift to public transport, which will have benefits for all users of the transport system.</td>
</tr>
</tbody>
</table>
## Strategy, Policy or Plan | Summary and Links
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**INTER-REGIONAL AND REGIONAL LEVEL** |  

### Regional Land Transport Plan 2018

The Bay of Plenty Regional Land Transport Plan (RLTP) was adopted in June 2018. The Plan combines thinking from the regions’ Councils into a single strategic document for land transport investment.

A range of stakeholders submitted on the draft RLTP, during development, supporting greater investment in rail and proposed work to investigate wider use of the rail network.

A substantial number of submitters supported commuter rail for greater Tauranga/Western Bay of Plenty, while a number also supported inter-regional passenger rail, along with better use of the rail network for freight.

In response, the RLTP commits to undertaking a rail study in 2018/19 to assess the feasibility of the rail network to provide for:

- c) increased movement of freight by rail; and
- d) inter-regional passenger rail between the Bay of Plenty and Auckland.

An associated action which potentially overlaps with the rail study is to further explore the potential for rapid transit in the western Bay of Plenty sub region. This could also include consideration of heavy or light rail options.


### Regional Public Transport Plan 2018

The Regional Public Transport Plan (the Plan) provides guidance and policies that direct the investment in public transport across the Bay of Plenty region.

The Plan outlines intra-regional rapid transit or rail, noting that the current public transport network does not provide for rapid transit or passenger rail services, however, the opportunity exists to commence long term planning and investment that will allow this in the future.

It also outlines investment required to deliver on this would be significant and is unlikely to be supported by a standard economic evaluation, requiring a more holistic look at the connection between land use development and transit investment.

Any investment in this area will require a significant contribution and guidance from central government.
### Strategy, Policy or Plan

<table>
<thead>
<tr>
<th>Bay of Plenty Rail Strategy 2007 (and supporting documents)</th>
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<tr>
<td>The Bay of Plenty Rail Strategy was developed to advance a vision for rail in the region. The Strategy outlined opportunities for rail, both in the short and longer term. Part of the longer-term vision was to explore the use of rail for passenger transport, particularly in order to connect key settlements within the region. Inter-regional rail connections between other key places (e.g. Hamilton, Auckland and Wellington) were also part of this vision. The Regional Transport Committee made a decision to withdraw the Bay of Plenty Rail Strategy as a standalone strategy following development of the Bay of Plenty Regional Land Transport Strategy in 2011.</td>
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<td>Link: available from the Bay of Plenty Regional Council</td>
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### Summary and Links

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<tr>
<th>Upper North Island Freight Story</th>
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<td>The Upper North Island Strategic Alliance (UNISA), in partnership with Auckland Transport, the NZ Transport Agency and KiwiRail developed the Upper North Island Freight Story in 2013. The Story took a collective partnership approach within an upper North Island ‘freight lens’ to determine issues or areas that were limiting decision makers ability to ‘reduce the cost to do business in New Zealand’. The partner organisations together with industry and freight operators identified the key critical issues and opportunities to help deliver freight efficiencies and created a shared evidence base to enable improved decision making. One of the critical issues identified was Strategic Road and Rail Network Constraints. An evidence base was developed that identified the key constraints on the upper North Island strategic freight road and rail network limiting economic performance. Rail constraints identified that impacted on the Bay of Plenty rail system included:</td>
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<td>- Auckland North – South Rail Corridor: Auckland Ester Line to Port (Significant growth in Public Transport (PT) trains timetable will limit freight capacity including link to Ports of Auckland.)</td>
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<td>- Inter-regional Rail Corridors: East Coast Main Trunk (ECMT) West of Tauranga - ECMT is single track, however completed crossing loops doubled route capacity to 4 trains/hour (up to 900m long).</td>
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| **Hamilton to Auckland Inter-Regional Passenger Rail** | The NZ Transport Agency approved a business case to trial the start-up of passenger rail services from Hamilton to Auckland in December 2018.  

The five-year trial is costed at approximately $78.2 million with $68.4m invested from the NZ Transport Agency and $9.8m from local authorities. The trial will test and identify benefits delivered through investment in public transport to “help manage growth and shape New Zealand’s towns and cities”.  

The service is planned to stop at Frankton and The Base in Rotokauri, then onto Huntly and stopping in Papakura in Auckland, where passengers could change on to the Auckland network. Future stops could include Te Kauwhata, Pokeno and Tuakau.  

The service would start with a four carriage train which can carry 150 passengers each way. The NZ Transport Agency is working with local Councils and KiwiRail to develop a pre-implementation plan.  

| **Ruakura Inland Port and Logistics Hub (Waikato)** | The Ruakura Inland Port, when complete, will stretch the length of Hamilton, from the start of Gordonton Road to Silverdale. It will eventually cover an area larger than Auckland’s CBD.  

Ruakura is a key hub along the East Coast Main Trunk (ECMT) railway line which connects directly to the Ports of Auckland and Tauranga. This stretch of rail carries more freight than any other line in the North Island.  

Construction has started for the first 6 hectares of stage one of the Inland Port, with an opening date 2019. The first stage of the Inland Port with the full 900m long siding is anticipated to be in place by 2021.  

Link: [https://www.ruakura.co.nz/](https://www.ruakura.co.nz/) |
<p>| <strong>Auckland Plan 2050</strong> | The Auckland Plan 2050 was adopted by Auckland Council in June 2018. |</p>
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| **Bay of Plenty Passenger and Freight Rail Phase 1 Investigation Report May 2019** | The Plan supports the need to investigate options for passenger rail services between Auckland, Hamilton and Tauranga looking at benefits of reducing travel times between Auckland and Hamilton to just over an hour and reduce times between Tauranga and Auckland to around two hours. It notes that for rail to be successful, it will require a substantial programme of investment that includes:  
• new, faster trains  
• completion of the City Rail Link to enable use of Britomart Station by regional trains  
• track upgrades within Auckland (including a third or fourth main line on busy sections of track) to separate fast inter-regional trains from commuter trains  
• rail electrification to (and potentially beyond) Pukekohe  
• track and station upgrades outside Auckland.  
| Auckland Transport Alignment Project (ATAP) 2018 | Auckland Transport Alignment Project (ATAP) was established in 2015 in response to concerns over Auckland’s long-term transport investment plans. The Project aligns the priorities of central government and Auckland Council towards a long-term strategic approach for the development of Auckland transport system. The Project looks at Auckland’s transport system over a 30-year period including an indicative package outlining the type and quantum of investment likely to be required to deliver this strategic approach. ATAP was reviewed and updated in 2018.  
Rail, passenger and freight, is an integral part of the Auckland Rapid Transit Network.  
Link: [https://transport.govt.nz/assets/Uploads/Land/Documents/7bbf7cd0db/ATAP2018.pdf](https://transport.govt.nz/assets/Uploads/Land/Documents/7bbf7cd0db/ATAP2018.pdf) |
<p>| Auckland Rapid Transit Network Programme | Accelerating the development of Auckland’s rapid transit network is a Government priority with a key focus on unlocking housing and urban development opportunities as well as encouraging people to shift to public transport. |</p>
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<td>Rail plays a critical role in Auckland’s transport system, particularly in providing for travel to and from the CBD. Since Britomart (Auckland’s downtown station) opened in 2003, Auckland’s rail patronage has increased rapidly from 2.5 million trips per year to 13.9 million trips per year as at the end of June 2015. There are a number of significant rapid transit network rail projects underway. <strong>City Rail Link (CRL)</strong> The City Rail Link (CRL) is currently the largest transport infrastructure project ever to be undertaken in New Zealand. The CRL is a 3.45km twin-tunnel underground rail link up to 42 metres below the city centre transforming the downtown Britomart Transport Centre into a two-way through-station that better connects the Auckland rail network. The CRL will extend the existing rail line underground through Britomart, to Albert, Vincent and Pitt Streets, cross beneath Karangahape Road and the Central Motorway Junction to Symonds Street and then rise to join the western line at Eden Terrace at the Mount Eden Station. New rail transport growth statistics suggest that by 2035, CRL stations will need to cope with 54,000 passengers an hour at peak travel times. The CRL is jointly funded by the Government and Auckland Council with a total project cost estimated at approximately $3.4b. It is expected to be fully operational by 2024. Link: <a href="https://www.cityraillink.co.nz/">https://www.cityraillink.co.nz/</a> <strong>City Centre to Māngere Light Rail Project (CC2M)</strong> In April, the government announced plans for a rapid transport network in Auckland to meet the city’s transport needs and rapidly growing population. The City Centre to Māngere light rail is planned as part of the wider rapid transit network. The project will combine transport and urban planning to provide housing and urban development along the future light rail corridor so that communities have better access to jobs, education and recreation. The Transport Agency is leading the procurement for the project supported by its partners Auckland Council, Auckland Transport and HLC. The project is currently in the early investigation phase.</td>
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### Strategy, Policy or Plan

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**City Centre to North West Light Rail Project (CC2NW)**

In April 2018, the updated Auckland Transport Alignment Project (ATAP) identified a rapid transit corridor for the City Centre to Northwest light rail line.

The City Centre to Northwest light rail is planned as part of the wider rapid transit network alongside the City Centre to Mangere line. It will provide a critical connection for the Northwest communities. Investigations are at a very early stage. The NZ Transport Agency is currently developing the project business case.


### SUB-REGIONAL LEVEL

**SmartGrowth Strategy**

- The SmartGrowth Strategy (2013) provides a comprehensive long-term approach for addressing growth pressures and providing strategic direction for the western Bay of Plenty sub-region.

- The Strategy aims to deliver a balanced approach to growth management; future land use; commercial and industrial land supply and sensible settlement planning.

- This spatial planning approach looks wider at land-use planning and growth management, taking into account impacts on economy, environmental, social and cultural wellbeing of communities.


**Rotorua Spatial Plan**

- The Rotorua Spatial Plan was adopted in August 2018.

- This Plan helps to plan how the city and district will grow, develop and change over a time horizon of 30+ years to deliver on Rotorua’s 2030 vision and goals.

- The aim of the spatial plan is to:
  - Provide one picture of where the district is heading and highlight significant and key areas for growth and change.
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<td><strong>Eastern Bay – Beyond Today Spatial Plan</strong></td>
<td>Beyond Today is the spatial plan (or ‘development plan’) for the Eastern Bay of Plenty. The Plan’s aim is to provide a clear vision for the Eastern Bay for where we want to be in the next 30-50 years and takes a strategic view to our challenges and responding to future changes. It sets the scene for the future of the economy, people and culture, environment, and infrastructure. Link: <a href="https://cdn.boprc.govt.nz/media/570986/eastern-bay-beyond-today-final-pdf.pdf">https://cdn.boprc.govt.nz/media/570986/eastern-bay-beyond-today-final-pdf.pdf</a></td>
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<tr>
<td><strong>Eastern Bay of Plenty Regional Development Project 2018</strong></td>
<td>In 2018, the Eastern Bay of Plenty Councils, in partnership with Bay of Plenty Regional Council, Western Bay of Plenty District Council and TOI EDA undertook a sub-regional development project to support planning and investment in the Eastern Bay, including the provision of the Provincial Growth Fund. The aim of the project was to provide Ministers and officials with an evidence based overview of the development opportunists and constraints facing the Eastern Bay. Rail plays a significant role in the economic productivity of the sub-region which is recognised within this project and other regional planning such as the Eastern Bay of Plenty Spatial Plan ‘Beyond Today’. Key areas signalled for rail investment and increased use in the sub-region are in Kawerau and Murupara. Link: currently not publicly available.</td>
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