

## Kaipara District Council

# Kaipara Water Transport Network & Wharves Feasibility Study / Programme Business Case

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# Kaipara District Council

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# 1 Executive Summary

This Kaipara Water Transport Network and Wharves Feasibility Study and Programme Business Case (PBC) seeks approval to:

- invest \$4 million of Provincial Growth Fund (PGF) allocation into priority wharf developments and tourism strategy development that will form the foundation of a water transport network.
- the priority wharf developments are the Dargaville Wharf pontoon & Pahi wharf renewals, new wharf at Pōuto Point, investigation of beach landing sites at Otamatea marae, Arapaoa marae and Oruawharo marae.
- invest approximately \$4.64 million in ongoing targeted development in marine facilities and asset management initiatives as part of a 30-year water transport network delivery programme.

This PBC will support increased economic, social and environmental resilience for the district as part of the broader Kaipara Kickstart programme. It also supports the strategic direction for Northland provided by the Tai Tokerau Economic Development Action Plan, the Maori Economic Development Strategy for Northland, the district's Long-Term Plan and numerous regional transport planning initiatives.

## 1.1 The case for change

As a district, Kaipara is lagging behind its neighbours and it needs to generate new sustainable economic activity to bring it back to its former strength.

The district has pockets of deep deprivation and its labour force (working population) is shrinking. There is a strong local desire to support initiatives that can support growth in jobs, retain youth and build local capability while nurturing the character and the health of the district.

Without financially viable and commercial tourism products, well promoted attractions and efficient transport connections, the Kaipara is seeing tourism spending and economic development opportunities pass it by in favour of other, more advanced districts. In order to unlock the district latent potential, the transport connections must be improved.

The once flourishing Kaipara water transport that connected the district to itself, Auckland and the world, has fallen into disrepair as the economic environment has changed. The business activity that underpinned the historical water travel have been lost and the Kaipara now needs to gradually rebuild its connection with the Harbour.

The district is now heavily dependent on travel by motorcar, which has led to significant driving times and growing isolation from Auckland and disconnection between the district's towns and its Ancestral Marae.

The health of the harbour is also declining and the spiritual connection for mana whenua is suffering. The people are seeking the opportunity to reconnect with the water and to help heal the harbour through an integrated approach to water and land management.

The district also contains significant levels of deprivation and its working population is shrinking. There is a strong local desire to support initiatives that can support growth in jobs, retain youth and build local capability while nurturing the character and the health of the district.

The small population and economy cannot support a water passenger transport network commercially. But through targeted wharf investment, improved management of marine

assets and a new tourism direction, the Kaipara can create a sustainable tourism and recreation focused water transport network.

Kaipara District Council itself does not have the funds to create this change, but the Provincial Growth Funded Kaipara Kickstart Programme provides the opportunity to make catalytic investment to progressively rebuild Kaipara's market offering and the water transport network. This report outlines how this can occur.

## 1.2 Finding a value for money solution

The investigations into potential solutions has been focused on considering what options can deliver against the investment objectives below identified through an investment logic mapping workshop held on 20 January 2020:

1. Improved connectivity to major centres, between marae and across the district.
2. Building Kaipara's unique value proposition.
3. Improved economic, social & environmental resilience.
4. Improved marine facility experiences through enhanced standards.

Through several stakeholder/partner workshops, industry interviews and benchmarking research, a wide range of investment options have been developed, evaluated and refined to provide a draft Preferred Way Forward for consideration.

The advice provided to the project team from industry experts emphasised the significant start-up costs and operational obligations for passenger ferry services, the commercial thresholds required to make them feasible and the potential for tourism to support progressive growth in water travel on the Kaipara Harbour.

### 1.2.1 Potential programme options

Within the potential scope of this proposal, the main programme options were identified by key stakeholders and partners at workshops held in January and February 2020. The potential programme options identified include:

1. *Do nothing (status quo)*
2. *Do Minimum*
3. *Local skills, real experiences, low investment*
4. *Targeted investments to develop a water transport network*
5. *Significant investment in marine and landside infrastructure & attractions*
6. *Fast connections, freight & land activation*
7. *All previous options plus Vehicular Ferry*

### 1.2.2 The preferred way forward

The programme options were evaluated against the investment objectives, business needs, costs, delivery time, risks and dependencies to determine the preferred approach.



The analysis and evaluation indicate that to deliver a feasible and sustainable water transport network, KDC and its partners should focus on a scalable, district water travel network focused on developing tourism, improving safety, building local skills, improving local connectivity and enhancing places. This approach is best presented by option 4 - Targeted investments to develop a water transport network. The diagram below shows where the proposed primary and secondary investments would occur.

This programme includes the following components:

Component	Inclusions	Delivery Timing	Capital Cost Estimate
<b>Primary Marine Facility Developments</b>	<b>Dargaville wharf upgrade, including:</b> <ul style="list-style-type: none"> <li>Upgrade of existing wharf</li> <li>New concrete pontoon</li> </ul> <b>Pahi wharf upgrade, including:</b> <ul style="list-style-type: none"> <li>Upgrade of existing jetty (new railings, replace any deficient elements)</li> <li>New concrete pontoon and associated gangway</li> <li>Sealed car park</li> </ul> <b>Pōuto Point wharf development, including:</b> <ul style="list-style-type: none"> <li>A new wharf structure</li> <li>Sealed track to wharf</li> <li>Metal carparking</li> </ul> <b>Improvement of Beach Landing Locations (further investigation through consultation period to tease out possibilities), including:</b> <ul style="list-style-type: none"> <li>Otamatea marae</li> <li>Arapaoa marae</li> <li>Oruawharo marae</li> </ul>	1-2 years	\$3.8m
<b>Management Interventions</b>	<ul style="list-style-type: none"> <li>Development of a Tourism Destination Management Plan and supporting tools</li> <li>Development of an agreed Marine Asset Management Plan and Operation Policy</li> <li>Progress land use change opportunities through Spatial Planning, including supporting development of campgrounds, residential subdivisions and new office/commercial space.</li> </ul>	1-2 years	\$200k for the Tourism Destination Mgmt Plan and implementation. Existing budgets for the Marine Asset Mgmt Plan and spatial planning.
<b>Secondary (progressive) network improvements</b>	<ul style="list-style-type: none"> <li>Minor upgrades to improve access and operations at Kelly's Bay</li> <li>Upgrade of boat ramp carpark, new toilets and reserve at Oneriri</li> </ul>	5-25 years	\$4.64m

Component	Inclusions	Delivery Timing	Capital Cost Estimate
	<ul style="list-style-type: none"> <li>Wharf and access road upgrades at Ruawai, Maungaturoto, Te Koporu and Tinopai.</li> </ul>		

This network would need to build progressively through growing existing charter services, and wharf based activities through to potential on-demand services, while working closely with tourism operators to define and leverage a distinct offering that embraces water travel and connects to land-based attractions.

### 1.2.3 Economic impacts

Economic impact analysis of the preferred programme completed by Market Economics has shown that the proposed investment in the District's wharves will provide a short-term economic impulse, generating economic impacts. But, the true value of the investment is that it will enable growth and development of latent visitor market opportunities.

Using a scenario approach, the analysis illustrates the potential economic impacts of lifting the visitor sector to be material, with a potential to add to the district's GDP. This potential lift is estimated at between \$5.8m and \$10.0m. But, due to the uncertainty in the potential outcomes, the uplift has a large spread between the scenarios between - \$4.7m to \$19.9m.

Regardless, of the uncertainty, the analysis shows that enabling the visitor sector will deliver positive impacts.

## 1.3 The delivery deal

It is proposed the KDC can leverage its new Procurement Strategy to use a partnership approach to deliver wharf upgrades and associated improvements through:

- engaging proven suppliers through the relevant pre-approved panel
- supporting local capability where it is available to develop local skills and support increased local employment
- providing plenty of notice to the market
- combining works packages to improve attractiveness
- sharing risk through early involvement.

## 1.4 Funding the programme

The high-level costs for the preferred programme are \$8,004,320 million in capital expenditure and \$636,901 in operational expenditure, resulting in an \$8,641,221 million investment over 30 years.

The preferred programme will firstly make use of the lead infrastructure funds provided by the PGF (\$4 million) to fund the primary developments in the Dargaville Wharf pontoon, Pahi wharf renewals and new wharf at Pōuto Point. Investigation of the potential for beach landing sites at Otamatea marae, Arapaoa marae and Oruawharo marae is also included to explore the possibility of water and marae based cultural tourism opportunities. The management interventions within this primary programme also includes the development of a Tourism Designation Management Plan to support the branding, promotion and destination management for water-based wharf locations and the land side tourism facilities.

It is proposed that the remainder of the programme is funded through a mix of external sources, including a mix of government and private investment. Several strategically aligned funding sources have been identified in the development of a Programme Business Case. Community and Iwi investment also has the potential to play a role, particularly where marine assets or adjacent landholdings are under community or Iwi ownership. Importantly, development of new or improved marine assets will result in increased operational costs for the Council which need to be factored into future budgets.

## **1.5 Making it happen**

KDC will leverage the governance arrangements established for the Kaipara Kickstart Programme, in addition to making use of its Project Management Office to deliver this programme and its targeted projects. Benefits will be managed at a Kaipara Kickstart programme level and assigned to internal owners to report on progress against agreed performance indicators on a 6-monthly basis as per the Programme Management Office processes.

To deliver this programme successfully, KDC and its partners will need to successfully manage significant changes in marine asset management, tourism and visitor sector growth and development and environmental management. KDC is already moving to address each of these areas with its partners and it is recommended that a change management plan be created to address the current state and the desired future outcomes.

The KDC Risk Management Framework will be applied to the preferred programme and it will leverage the risk management already occurring through the Programme Management Office.

## 2 The Strategic Case – making the Case for Change

### 2.1 Purpose and scope of this Feasibility Study

This study case considers the feasibility of investing in water-based transport on the Kaipara Harbour. The study's objectives are:

- a) To develop a strategic plan that creates a vision for water transport on the Kaipara Harbour.
- b) Investigation into a potential network that may include passenger, vehicle and freight transport.
- c) Identification of high value, priority wharf investments and the related land-based activities that would support this.

The desire to reinvigorate water-based transport forms one part of the Kaipara KickStart programme, which is explained further in section 2.1.4.

The Kaipara District Council is investigating the potential for passenger, freight and vehicle transport and identifying locations for infrastructure that will benefit Kaipara communities by reinstating wharf connections that once existed or creating new connections.

#### 2.1.1 Functional scope

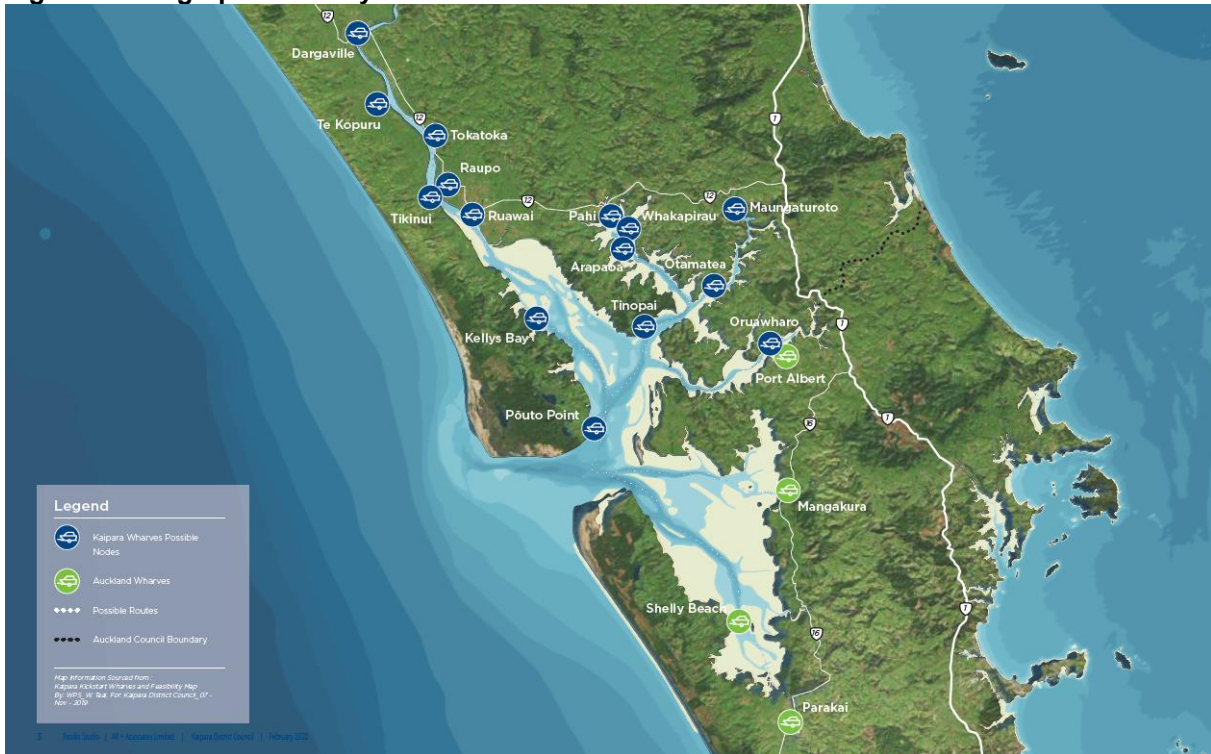
This study is focused on identifying an achievable water-based transport network for the district that supports its aspirations while ensuring it can be sustained using the resources of the council and its partners. It also includes a consideration of the landside developments that would be required to make this network successful. However, while it is supportive of many complimentary actions, the scope of this study does not include:

- Major road upgrades.
- Cycling facilities aside from minor facilities alongside wharf upgrades.
- Major environmental improvement programmes.

#### 2.1.2 Geographical scope

The map below demonstrates the area considered for this study, in addition to the sites suggested for closer investigation. This study also considers the nearby influence of Whangārei as the region's main economic centre.

**Figure 1: Geographical study area**



### 2.1.3 Kaipara Kickstart Programme background

Kaipara Kickstart is a programme aimed at lifting the district's economic performance so that it:

- creates employment
- lifts tourism activities
- increases kai (food) businesses (in horticulture and aquaculture)
- improves roads for more reliable routes and safer journeys
- increases wharf infrastructure for communities to connect and enjoy.

**Figure 2: Kaipara KickStart Strategic Outcomes**



The Kaipara KickStart programme currently has three pillars:

1. Roads
2. Kai for Kaipara, and
3. Kaipara Wharves.



The three interlocked projects – Kai (Growing the Kai in Kaipara), Wharves (Kaipara Moana Activation Plan) and Roads – are like the three legs of a stool. The step-change effect of the combination of these three projects is greater than the sum of its parts. These three initiatives have a collective investment fund of approximately \$28M and will benefit not only the communities within Kaipara but the wider Northland region.

Kaipara District Council is driving the Kaipara KickStart Programme with the support of the following key partners and investors:

- Ministry of Business, Innovation and Employment via the Provincial Growth Fund
- Northland Regional Council
- Northland Inc.
- Te Uri O Hau Settlement Trust
- Te Roroa Settlement Trust

## 2.2 Strategic Alignment

The proposed investment proposal aligns to the following Government/sectoral/regional/organisational policies, strategies and goals:

- Kaipara Kickstart Programme
- Tai Tokerau Northland Economic Action Plan
- He Tangata, He Whenua, He Oranga, the Maori Economic Development Strategy for Northland
- KDC Long Term Plan
- KDC Annual Plan
- KDC District Plan
- KDC Infrastructure Strategy & Asset Management Plan
- Kaipara District Spatial Plan
- Northland Journeys Tourism Strategy
- Aotearoa New Zealand Government Tourism Strategy
- Northland Land Transport Plan
- Northland Regional Policy Statement
- Multiple Kaipara District town's structure, placemaking and township plans
- Kaipara and Northland Cycling Strategies and action plans

## 2.3 Background and setting

### 2.3.1 Kaipara District

Kaipara District is in the rolling hills around the northern shores of the Kaipara Harbour, a large natural harbour opens to the Tasman Sea. Kaipara District Council shares management of the harbour with various other organisations, most notably Northland Regional Council (in the north) and Auckland Council to the south.

The triangular district stretches from a thinning of the Northland Peninsula south of Kaiwaka and Mangawhai in the southeast to the Waipoua Forest in the northwest. The District's

western boundary is defined by Ripiro Beach which stretches down Northland's west coast from Maunganui Bluff and the Waipoua Forest in the North, to Pōuto at the entrance to the Kaipara Harbour. The region is bisected by the Northern Wairoa River and its tributaries, which flow into the northern end of the Kaipara Harbour.

The Kaipara District covers around 3,200km<sup>2</sup> along the northern shores of the Kaipara harbour. According to the latest Census (2018), 22,500 people occupy the area, living in approximately 9,000 households. Despite making up 23% of Northland's area, Kaipara accounts for the smallest portion (13%) of Northland's population, with Whangārei District making up the largest proportion (51%), followed by Far North District (37%).

Kaipara has two main population centres at Dargaville and Mangawhai. A fifth (21%) of Kaipara's population resides in Dargaville and a fifth (21%) in Mangawhai and Mangawhai Rural. Maungaturoto and Kaiwaka act as secondary centres for the district. Kaipara Coastal accounts for a large share of the population (16%), but the catchment covers a very large area, stretching from Pōuto in the south, up the west coast to Waipoua in the North, implying a very low population density.

Kaipara District is located to the north of Auckland, New Zealand's largest economic centre. It forms part of the Northland region, which is historically, a lagging region. Several central government initiatives aiming to improve the economic (and social) performance of Northland are underway. Kaipara's location between Auckland and Whangārei, Northland's main economic centre, suggests that it should be able to capitalise on and capture a portion of the between-city flows, maximising local benefits.

## 2.4 Kaipara Harbour and its history

The Kaipara Harbour is New Zealand's largest estuarine ecosystem and is the receiving environment of a massive 640,000ha catchment that extends across the Auckland and Northland regions. The indigenous Māori people of the Kaipara, Ngāti Whātua, are spiritually and physically intertwined with their most sacred treasure – the Kaipara Harbour.

The harbour extends for some 60 kilometres (37 mi) from north to south. Several large arms extend into the interior of the peninsula at the northeast of the harbour, one of them ending near the town of Maungaturoto, only ten kilometres (6 mi) from the Pacific Ocean coast. The harbour has extensive catchments feeding five rivers and over a hundred streams, and includes large estuaries formed by the Wairoa, Otamatea, Oruawharo, Tauhoa (Channel) and Kaipara.

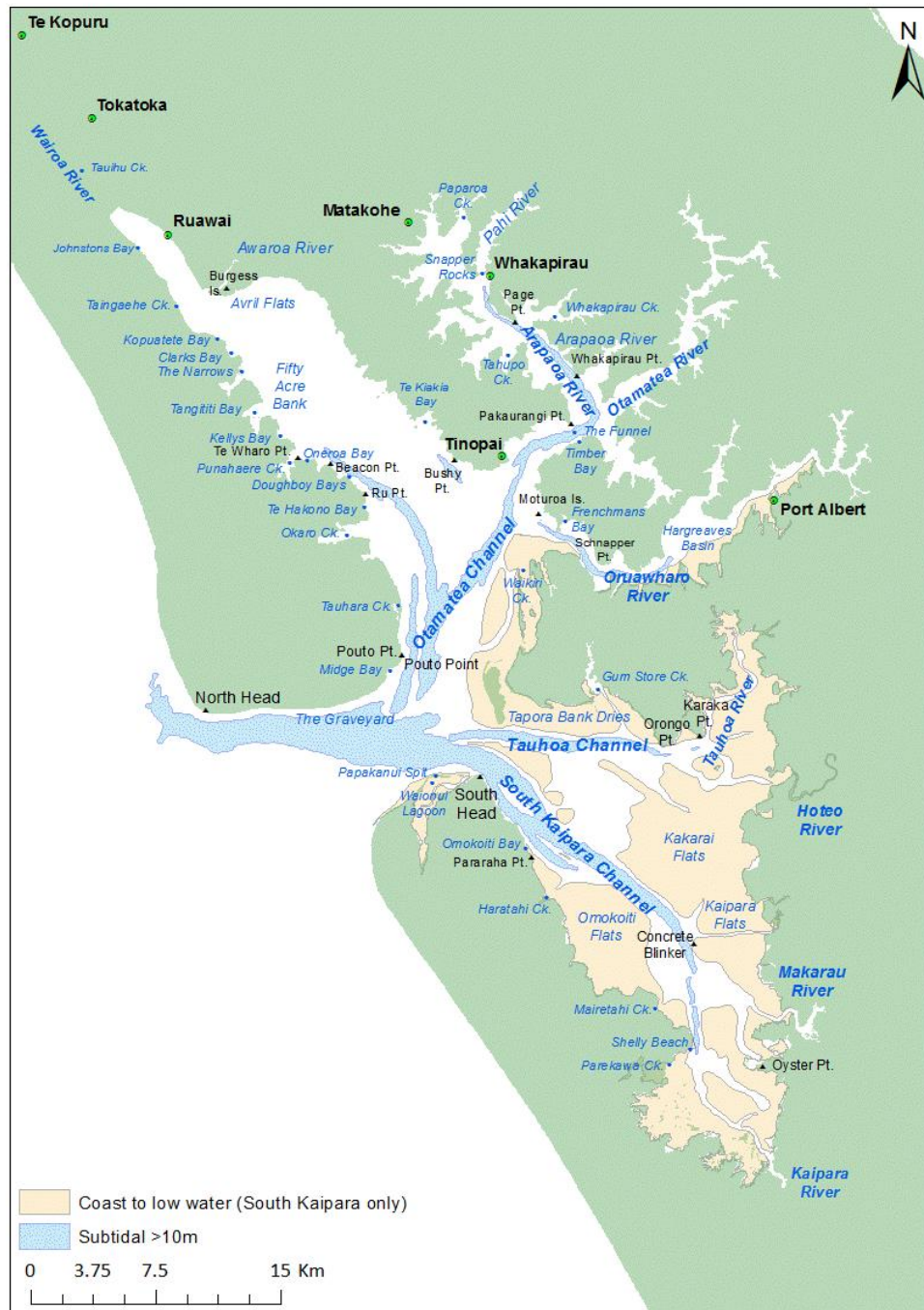
The Kaipara also contains some of the rarest ecosystems in New Zealand namely sand dune, seagrass, freshwater and estuarine wetland ecosystems. Evidence exists that the Kaipara Harbour plays a significant fisheries role in the wider west coast north island ecosystem as a nursery ground for key commercial and recreational species – snapper, grey mullet, flounder, white shark, hammerhead shark and rig.

Socially and economically, the Kaipara predominantly supports pastoral farming, agriculture and fisheries. It is governed by six government departments: Kaipara District Council, Whangārei District Council, Auckland Council, Northland Regional Council, Department of Conservation, and Ministry of Fisheries.

The harbour head is known as a hostile place. Big waves from the Tasman Sea break over large sandbanks about five metres below the surface, two to five kilometres from the shore. The sand in these sandbanks comes mainly from the Waikato River. Sand discharged from this river is transported northward by the prevailing coastal currents. Some of this sand is carried into the Kaipara harbour entrance, but mostly cycles out again and then continues

moving northwards along the west coast. The southern sandbanks at the entrance are constantly accumulating and releasing this sand. These treacherous sandbanks shift and change position and are known locally as the graveyard. The graveyard is responsible for more shipwrecks than any other place in New Zealand and for this reason, a lighthouse was built in 1884 on the northern arm of the entrance (Pōuto Peninsula).

**Figure 3: Map of the Kaipara Harbour and major channels (Source: IKHMG website)**



## 2.4.1 Kaipara Harbour Water Transport History

Water transport holds a special place in the history of Kaipara District. In fact, it was the primary mode for people and products for both Maori and early European settlers until the mid-1940's when the road that is now State Highway 1 was built over the Brynderwyn Hills.



There is a desire in the district to re-establish the water superhighways of the past in order to improve the district's economic and social resilience.

**Figure 4: Tokatoka wharf, northern Kaipara Harbour c 1880's Photo: Northern Advocate, Drummond Te Wake collection**



**Figure 5: Historical view of Pahi Hotel and Wharf c 1880's Photo: Northern Advocate, Drummond Te Wake collection**



As noted in a Local Democracy Article published on 28 January 2020, Kaipara's wharves and jetties provided the foundation for several Kaipara-based thriving industries<sup>1</sup>.

*Wharves and jetties were a critical part of early infrastructure for the many industries that operated on its shores. The harbour was an important transport link, in the absence of roads, for marae and later early European settlers who started arriving from the 1830s for the kauri timber trade.*

*Kaipara was New Zealand's largest single timber export port in the late 1800s and early 1900s, and an important contributor to the national economy. It was one of the country's major waterways, crowded with the tall spars of sailing ships laden with timber and steamers ferrying passengers around its waters. Northern Wairoa kauri was used to build cities including Wellington, Christchurch, Auckland, Sydney and Melbourne. Kauri gum was also traded as diggers from around the world came to the harbour.*

*Historical coastal sawmill settlements - with wharves for harbour transport access - were set up around the harbour at places in Northland including Tinopai, Batley, Matakoho, Pahi, Paparoa and Whakapirau.*

**Figure 6: Collecting kauri from Aoroa wharf, Kaipara Harbour, south of Dargaville in 1890s.  
Photo: Northern Advocate**



<sup>1</sup> <https://www.rnz.co.nz/news/ldr/408341/kaipara-wharves-4-point-95m-project-begins-construction>

## 2.5 Organisational overview

### 2.5.1 Kaipara District Council (KDC)

***The Council's Vision is: "Thriving communities working together".***

**The three community outcomes it aims to deliver are:**

1. A district with welcoming and strong communities
  - Assisting and supporting community involvement
  - Maintaining and improving infrastructure
  - Recognising and supporting achievement
2. A trusted Council making good decisions for the future
  - Making it simpler to work with us
  - Open, transparent and engaged with communities and business
  - Intent of lifting Kaipara's wellbeing
3. A district with plenty of active outdoor opportunities
  - Partnering with communities to develop sports and recreation facilities
  - Protecting and enhancing our natural assets and open space

## 2.6 Challenges for the District

### 2.6.1 Constrained resources

Given its small rating base and modest economic activity, Kaipara District Council is not able to fund significant infrastructure programmes without the support of government or external funding partners.

In addition to the low levels of financial capital, the District Council is also working hard to rebuild the required social capital or social licence required to gain the trust and support of its constituents following a four-year period of commissioner-led administration (2012-2016).

As described in the excerpt below from the New Zealand Auditor-General's Inquiry into the Mangawhai community wastewater scheme, this failed initiative had far-reaching impacts on the district and the need to rebuild the community's trust in the Council and its capability to deliver infrastructure is well recognised.

*"The overall costs are not just financial. They include a failed council, councillors who have been replaced with commissioners, the departure of a chief executive, a severely damaged relationship between the council and community, an organisation that has needed to be rebuilt, and much more".*

On 6 September 2012, commissioners were appointed by the Minister of Local Government to take over the governance of the Kaipara District Council and the firm focus of this 4-year administration was paying down debt and sustainable council operations. Under the guidance of the current Councillors and through the funding provided by the Provincial Growth Fund, there is an opportunity to engage productively with the community and invest in catalytic infrastructure to improve the prosperity of the district.

The small rating base means that it is difficult to increase spending without transferring additional funding load onto ratepayers.





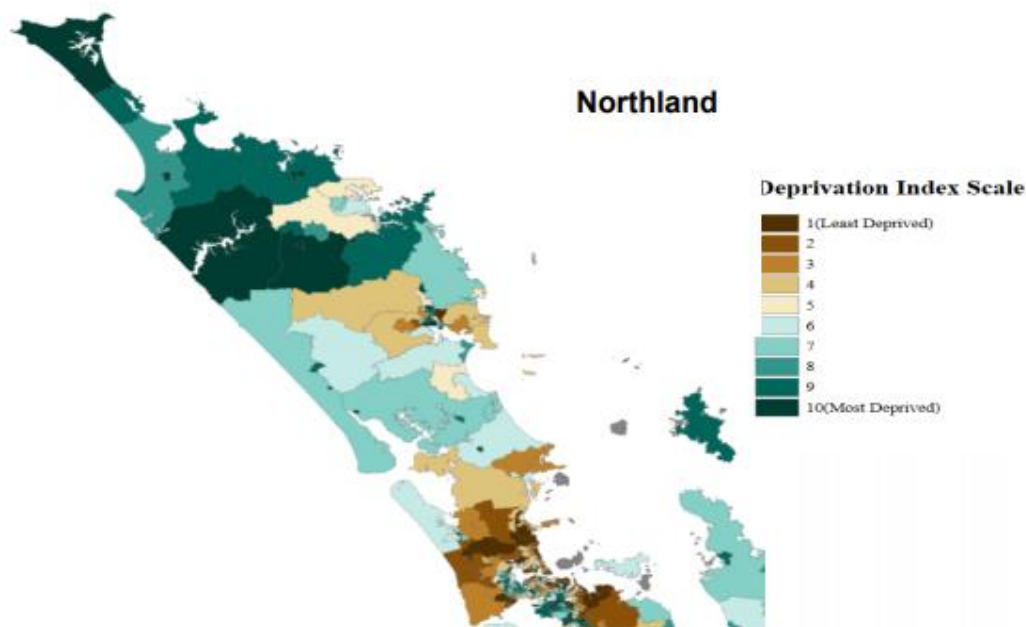
38% of population in 2043. Therefore, the level of available labour force expected to decrease and finding enough workers between 20 and 65 could restrict growth.

In 2018, Dargaville generated more than a third (37%) of the district's GDP. This proportion has been increasing steadily over the past 15 years, increasing from 34%. Mangawhai (including Mangawhai Rural) on the east coast also contributes a significant share (11%), up from 4% in 2003. Northwest Kaipara generated 23% of the district's GDP.

### 2.6.2.3 Deprivation

As noted in the 2015 KDC Environmental Scan, most of Kaipara scores between 8 and 9 on the Deprivation Index (a score of 10 means that the area is in the most deprived 10% of areas in New Zealand). The same scan noted that in 2014, about 46% of Northland's working age population derive some of their income from benefits compared to 37% across New Zealand as a whole, while only around 47% of Northland's working age population derived some of their personal income from wages or salaries compared to 57% across New Zealand as a whole.

**Figure 8: Deprivation Index scale (image: New Zealand Herald)**



### 2.6.2.4 Lack of tourism products and strategy

Currently, the district's visitor sector is under pressure, struggling to maintain its market share (against Northland) with the region growing faster than the district. This suggests that many local visitor experiences / products (especially those inland and in the west) may not been kept current or aligned to changing consumer demands. This has occurred while other Northland locations have grown (such as visitor hubs like Paihia).

The supply in visitor products are concentrated around Mangawhai. The analysis suggests that the visitor market has re-orientated, shifting employment from west to the eastern areas. For most visitors to Northland the western Kaipara lacks a strong experiential value proposition (in general it lacks experiences / products to pull large numbers of visitors off the main State Highway and to encourage them to stop).

To grow the visitor market in Kaipara requires planning and a co-ordinated approach. The transport infrastructure can enable such development, and the delivery should be aligned

with critical visitor markets, thresholds and milestones. Developing recognisable experiences / products, such as unique tourism offerings in Kaipara will be key to attracting visitors to the District. For example, the isolate and ruggedness of coastal Kaipara could be used as part of a visitor attraction with appropriately scaled wharf infrastructure supporting the roll-out. Some opportunities in the visitor market that could be unlocked by a wharf network, include:

- Slow tourism.
- Cultural tourism.
- Adventure tourism.

Developing the district wharves can provide the infrastructure unlocking opportunities, for private operators to develop recognisable (unique) tourism products, attracting more and or higher paying visitors to the western areas of Kaipara. However, it will be critical to apply a co-ordinated visitor strategy to activate the sector. Merely building (or upgrading) wharves will not result in a lift in visitor numbers. It is also important to remember that in areas of high deprivation small dispersed tourism gains can have significant impacts on the lives of individuals and families. Successful tourism in the western Kaipara is unlikely to be based on a high-volume visitor model.

### **2.6.3 Aging marine assets and mixed ownership**

A review of the Kaipara's marine assets has demonstrated that several sites have fallen into disrepair and the assets are owned and /or operated by a wide range of organisations. The combination of these two factors is acting as a huge constraint on collective improvement of the assets and the water transport operations and experience that they support.

An agreed integrated management approach is required to provide a consistent level of service for these assets, in addition to making decisions around which ones need to be invested in and what role they will play in a future network.

Given the council's limited budget, the decision to invest will be anchored in what can be reasonably maintained through ongoing operational budgets. While the drive to unlock the district is important, the long-term affordability of the investment (i.e. ongoing costs) is critical. Avoiding large sunk costs and not committing to large ongoing maintenance programmes is important in the face of the small ratepayer base.

### **2.6.4 Environmental impacts**

The Kaipara harbour has experienced significant environmental impacts in recent decades. According to the Kaipara Integrated Harbour Management Group, existing environmental issues include declining fish stocks, environmental effects of fishing, increasing land-based derived sedimentation and declining water quality; increasing resource use and development; unhealthy mauri and loss of biodiversity.

### **2.6.5 Climate change threats**

Given many of the district's settlements are in low lying or coastal areas, Kaipara stands to be heavily impacts by sea level rises resulting from a changing climate. There is a desire to proactively plan for infrastructure that can provide alternate access to settlements and across the district despite rising waters. Wharves and a water transport network can play a significant role in providing this resilience.

## 2.7 Economic context

Overall, the Kaipara District is missing out on economic opportunities and intervention is required to address a lagging economy. The District's potential has been constrained by geographic isolation and under investment. The district has been falling behind Northland and NZ with economic growth significantly slower than the regional and national growth rates.

Kaipara accounted for almost 10% of Northland's GDP in 2018, with the Whangarei District making up the bulk (61%). The remaining 29% is contributed by the Far North District. Kaipara's relative importance in the regional economy is declining. In 2003 Kaipara contributed 16% of Northland's GDP. While Kaipara's economy is growing, it is not keeping up with Northland.

The district is spatially dispersed, covering a large area. It has a modest population size and the economic activity concentrated in a small number of urban areas. There is a clear divide between the western and eastern settlements (see figure 7), with the growth gravitating towards the east, i.e. Mangawhai and surrounds. The growth is gravitating towards the areas with strong natural endowments and this trend is expected to continue. Over time, this will increase district inequalities and disparities.

**Table 2: GDP comparisons with Northland and NZ**

15 years (2003-2018)	Change in GDP	Change in Employment
<b>Kaipara</b>	+44%	+20%
<b>Northland</b>	+124%	+23%
<b>NZ</b>	+111%	+22%

In 2018, Dargaville generated more than a third (37%) of the district's GDP. This proportion has been increasing steadily over the past 15 years, increasing from 34%. Mangawhai (including Mangawhai Rural) on the east coast also contributes a significant share (11%), up from 4% in 2003. Northwest Kaipara generated 23% of the district's GDP.

The spatial distribution of economic activity mirrors the population patterns i.e. it is unevenly distributed; concentrated in the two main population centres.

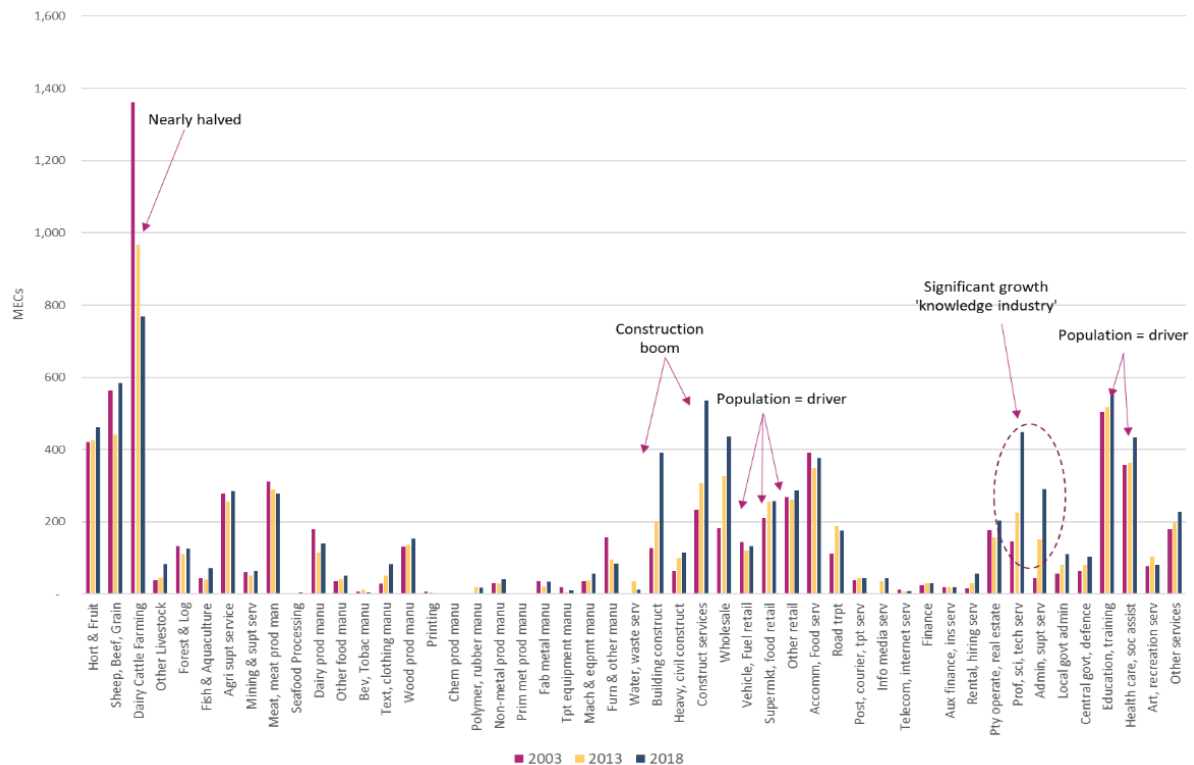
Official employment statistics reveal that over the past 15 years, local employment increased from around 7,350 Modified Employee Counts (MECs<sup>2</sup>) in 2003 to 8,800 in 2018. This equals a percentage shift of 19.7% or a compound growth rate of 1.2% p.a.

By comparison, over the same period, the rest of Northland's total employment expanded by 23.0% (1.4% p.a.) and New Zealand's total employment expanded by 21.5% (1.3% compound annual growth).

Again, this suggests employment in Kaipara is growing somewhat slower than Northland and the rest of NZ. But the growth rate differential is not as pronounced as for GDP suggesting that the district's productivity growth is lower.

<sup>2</sup> Modified Employment Count is the employment count from Stats NZ which is adjusted to include working proprietors.

**Figure 9: Trends in employment (2003,2013,2018)**



At a broad sector level (ANZSIC 1D) Agriculture, Forestry and Fishing is the largest sector, employing around 2,400 workers in 2018. Between 2003 and 2013 employment in this sector decreased by around 20%, bouncing back somewhat over the past five years, but still resulting in an overall fall of around 16% between 2003 and 2018. Dairy farming is responsible for the large decline in this sector, with employment nearly halving (-43%) between 2003 and 2018. While employment in most other sub-sectors grew, it was not enough to offset the large contraction in dairy farming.

Construction is the second largest employer, making up 12% of MECs in Kaipara (2018). Employment has more than doubled (+145%) over the past 15 years. This is consistent with the strong growth in 'construction activity and the investment in Mangawhai and Dargaville.

The spatial distribution of economic activity (excluding agriculture) is in the main urban areas of the district. Dargaville (31%), Mangawhai (12%) and Kaipara Coastal (12%) host the most, over half of the district's employees.

The figure suggests that the employment growth has been in the urbanised areas, with pockets of growth in rural areas. This (rural) growth has been associated with shifts in agricultural activity and development of new land-based farming activity. The catchments with the biggest change were:

- Kaipara Coastal -170,
- Ruawai-Matakohe -130,
- Mangawhai Rural 360,
- Dargaville 390, and
- Mangawhai 390.

One potential sector with potentially strong links to the wharf infrastructure and, economic development of Kaipara is tourism and the visitor market. The employment trends in visitor



related sectors such as accommodation and food services sector, suggest that the visitor economy in the western parts of Kaipara District is shrinking, while the visitor sector (using employment as a proxy<sup>3</sup>) in Mangawhai is growing. Table 3 shows the change in employment over the past 15 years in the visitor sector.

**Table 3: Employment in the Visitor Sector**

Catchment	Visitor Employment (MECs) 2018	Change in Visitor Sector employment 2003-2018
<b>Kaipara Coastal</b>	20	-10
<b>Mangawhai</b>	0	0
<b>Dargaville</b>	110	10
<b>Ruawai-Matakohe</b>	10	-10
<b>Otamatea (Kaipara District)</b>	10	0
<b>Kaiwaka</b>	20	-20
<b>Maungaturoto</b>	10	-10
<b>Mangawhai Rural</b>	10	0
<b>Mangawhai</b>	110	40
<b>Total</b>	300	0

Accommodation and food services are associated with the visitor sector. Kaipara's employment in this sector has been trending downward for the past 15 years or so. In 2003, 390 MECs<sup>4</sup> worked in the sector, and by 2018 this had fallen to 375 MECs.

It is worthwhile to mention, that Mangawhai has experienced significant growth in this sector, consistent with anecdotal evidence that it is becoming a holiday hotspot.

MBIE's Commercial Accommodation Monitor (CAM) confirms the district-wide downward trend in the sector. In 2001, CAM reported 27 accommodation providers in Kaipara, and by September 2019 it had fallen to 20. Arts and recreation have been stagnant, with limited employment growth since 2003. The sector includes attractions and activities that would attract visitors to the District.

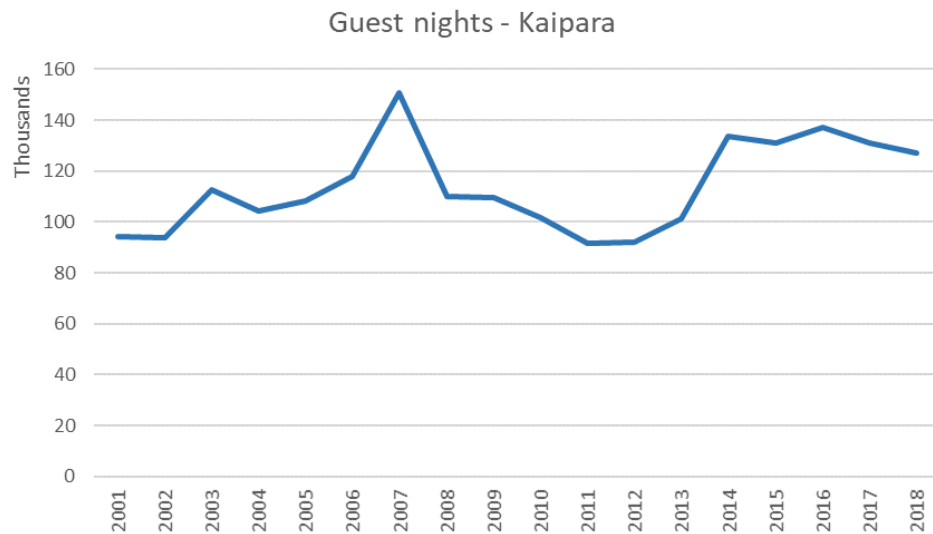
The Kaipara's visitor sector employment has remained relatively stable over the past 15-years. The change that did occur resulted in a spatial re-orientation of activity. The spatial shift was from rural Kaipara to the urban areas (i.e. Dargaville). Mangawhai captured 40 new visitor sector jobs.

Figures from the Commercial Accommodation Monitor reveal steady growth in local guest nights. Whangārei District and Far North both recorded strong growth since 2011 (i.e. post Global Financial Crises) in Far North. Kaipara experienced growth between 2011 and 2016, before slipping over the past two years.

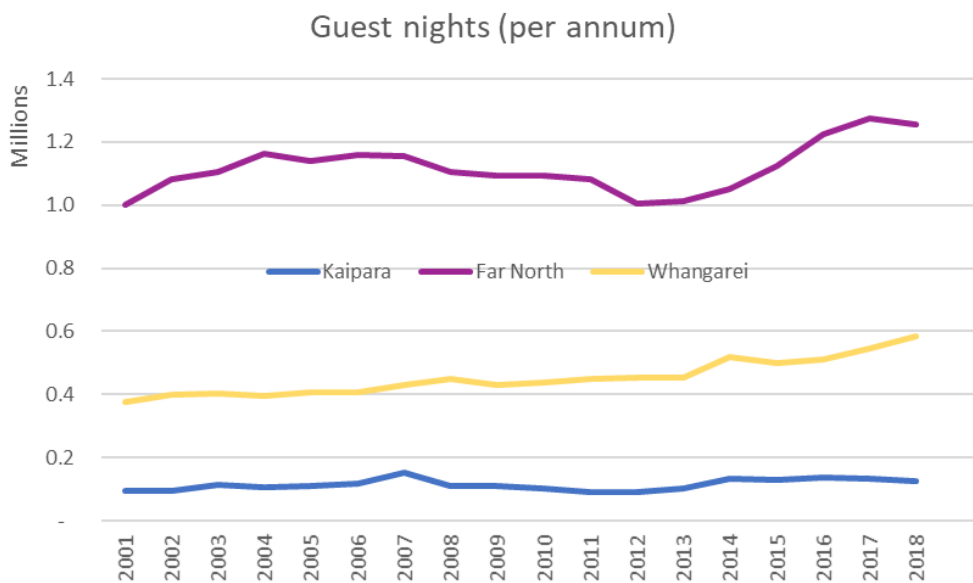
<sup>3</sup> We used accommodation, takeaway

<sup>4</sup> A Modified Employee Count (MEC) is the number of full-time and part-time employees as well as working proprietors on an annual basis.

**Figure 10: Kaipara guest nights 2001-2018**



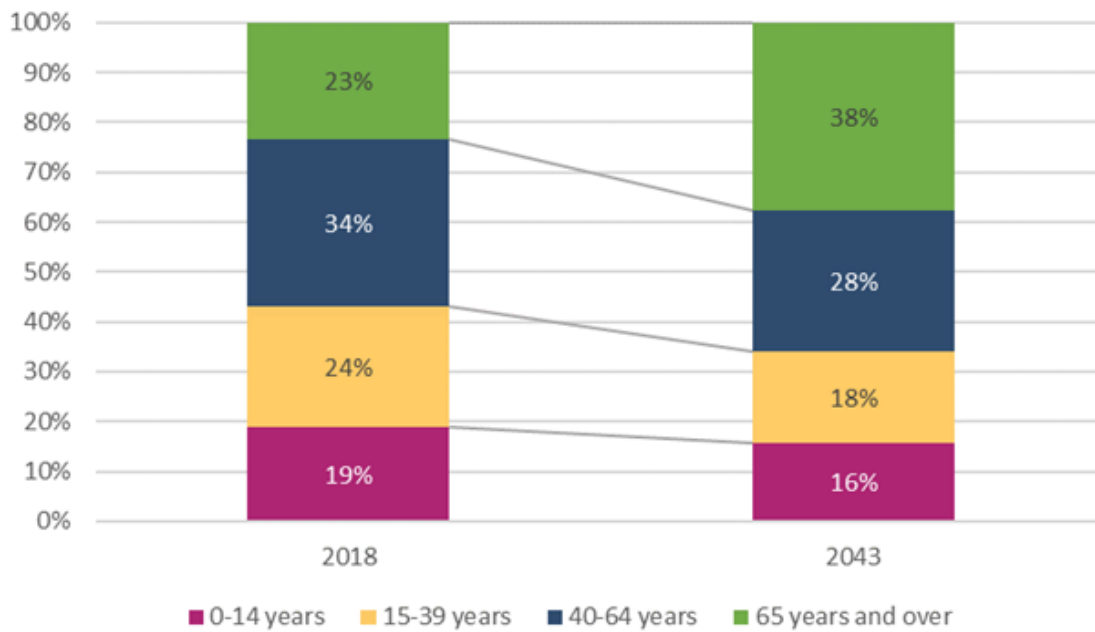
**Figure 11: Guest nights per annum**



Compared to the rest of the region, Kaipara's share of visitor activity has declined over the past 5 years or so. The share increased from 6.4% in 2001 to a maximum of 8.7% in 2007 and a second highest share of 7.8% in 2014. Since then, the share has declined steadily to sit at 6.5% currently.

### 2.7.1 Ageing population

Currently, 23% of Kaipara's population is over the age of 65 years (compared to 20% in the rest of Northland). The over 65s demographic are growing faster than other age cohorts - 38% of population in 2043. Therefore, the level of available labour force expected to decrease relative to the total population. A by-product of the ageing population is that it constrains the labour force (number of people available to work). It will also change how people interact with the transport system i.e. the demand for transport services and activities.



**Figure 12: Kaipara Population structure by broad cohort**

The population figures and growth outlook suggest that:

- Looking forward, most of the residential demand pressures will be around the Mangawhai area and, to a lesser extent, the rest of the Kaipara.
- The nature of the population will change, with an ageing population changing the types of demands placed on community amenities and assets. For example, the ageing population will lift the pressures on the local health services, requiring fast and reliable accessibility to these services.
- The rural areas of Kaipara<sup>5</sup> will see some growth and over 25 years, the population is expected to increase by 1,400. This growth is despite a decline in Maungaturoto and will account for 56% of the Kaipara's growth. The overall growth in the rural areas is only slightly higher than the anticipated growth around Mangawhai (1,400 vs 1,100), pointing to the concentrated growth that is occurring in the east.

<sup>5</sup> Excluding Dargaville and Mangawhai and Mangawhai Rural.

## 2.8 Transport context

### 2.8.1 Connections to Auckland

The Kaipara District shares borders with both the Whangārei District and Auckland, both of which contain Main Urban Areas (Whangārei and Auckland respectively) and are accessed by road from Kaipara. The Kaipara Moana spans across both Kaipara and Auckland, with close access to the Kaipara Moana from Helensville and Wellsford in Auckland.

### 2.8.2 Road Connections

Overall, the Kaipara district is heavily reliant on private vehicle transport to travel within the district and to nearby centres. State Highways 12, 14 and 1 provide access by road from within the Kaipara District to the neighbouring main urban areas. To access Auckland from the western part of the Kaipara District, reasonable routes by road all travel through Kaiwaka on SH1. Travel to and from Auckland can be subject to delay and journey time reliability issues, particularly at peak times.

To demonstrate accessibility by road across the district to nearby main urban areas, Abley Transportation Consultants we have conducted accessibility modelling, see Annex 4. Apart from the westernmost part of the district, much of Kaipara (58% of the population) is within 1.5 to 2 hours' drive of Albany, and Dargaville is just over 2 hours from Albany. Albany is used in the analysis in Auckland as it represents the upper edge of Auckland's continuous urban area. Travel times can be extrapolated to understand access to other parts of Auckland e.g. the city centre or the Airport.

Anticipated improvements on the road network that will improve travel to Auckland include:

- Extending the 4-lane motorway north to Warkworth on SH1, currently under construction.
- Addressing safety issues on SH1 from the Brynderwyns south to Te Hana
- Twin Coast Discovery Route business cases to support Northland's visitor economy

#### **Access to Kaipara Moana Wharves:**

- Most of the district has good access to the Kaipara Moana wharves (48% of population within 15mins drive of a wharf).
- However, if using water transport, the challenge of landside transport once at the destination wharf remains and issue for connecting across the district more widely.

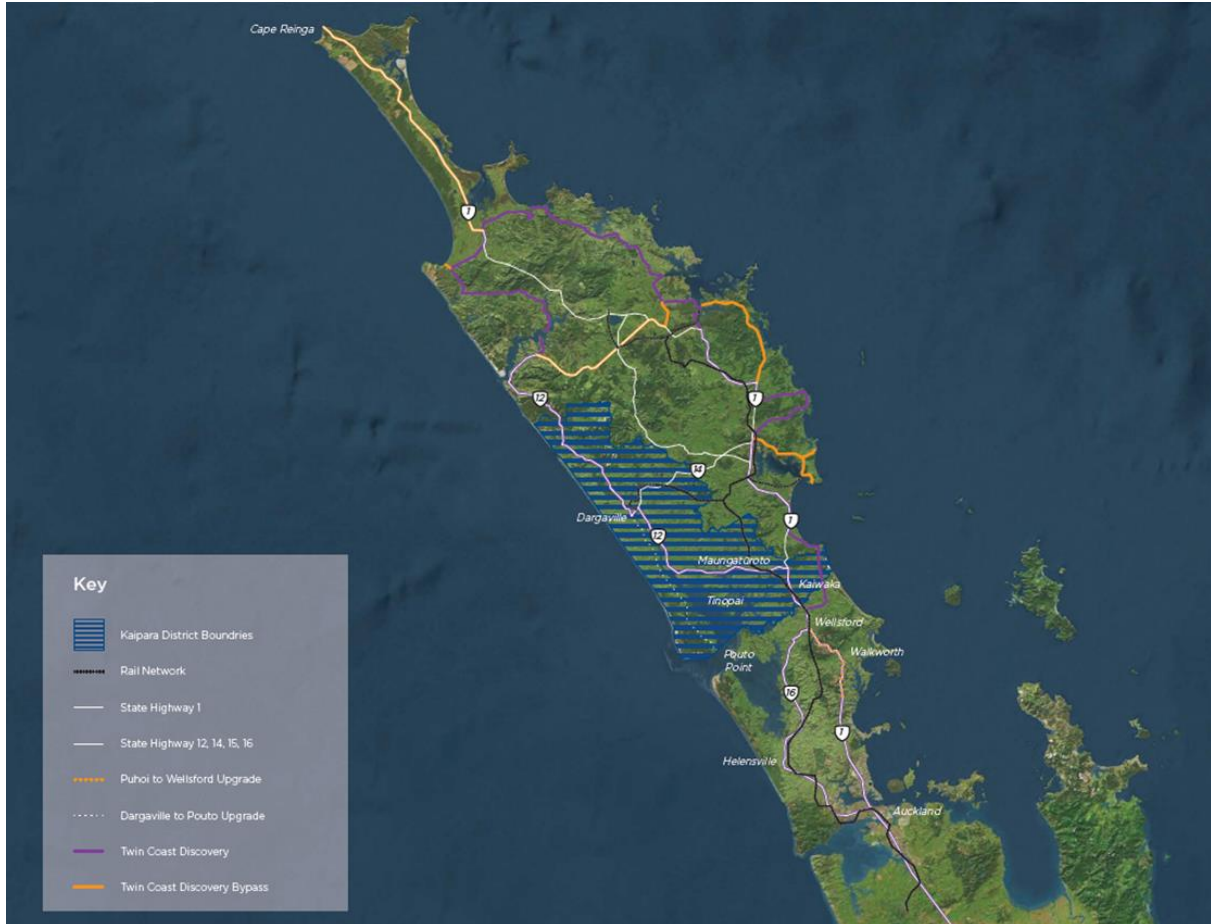
### 2.8.3 Rail Connections

Rail infrastructure (the North Auckland Line) also passes through the district running between Auckland and Whangarei, with a spur to Dargaville (currently closed). Currently a single weekday freight service operates on the North Auckland Line.

The Government has announced \$109.7 million from the Provincial Growth Fund (PGF) to be invested in Northland Rail. This investment includes \$94.8 million to improve line speeds between Whangarei and Auckland and bring rail infrastructure out of a state of managed decline. The investment will be targeted at freight between Auckland and Whangārei, however the Ministry of Transport's North Auckland Line business case signals consideration of re-opening the Dargaville spur in the medium-longer term. New rail investment is also set in the context of the potential to relocate Port of Auckland activities to Northport at Marsden

Point, near Whangarei. Improved rail infrastructure and a greater focus on Marsden Point would reduce demand for any potential water-freight services from Kaipara to Auckland.

Regular passenger rail services do not currently operate on the North Auckland Line, with Auckland public transport rail services terminating at Swanson. A passenger rail service to Helensville, at the south of Kaipara Moana, was trialled in 2008/09, however the service was cancelled due to low patronage and uncompetitive journey times.



**Figure 13: Transport routes in the Northland Region**

## 2.8.4 Water Transport

Currently a single operator (Kaipara Cruises) operates a vessel on the Kaipara Moana, including some routes connecting Kaipara District to Parakai north of Helensville. Existing cruise services include day trips, overnight trips and a ferry connection for cyclists completing the 'Missing Link' Heartland Ride. Note that the Kaipara Cruises services are targeted at tourism and do not operate as public transport services. Anecdotal evidence also suggests some cyclists are deterred from the Kaipara Missing Link trail due to the cost of chartering a boat. Some of Kaipara Cruises listed trips include:

- Helensville to Shelly Beach cruise (selected dates up to five times per month, 5 hours round trip, \$35 per person)
- Helensville to Dargaville cruise (selected dates up to two times per month, 2 days round trip, \$295 per person)
- Pōuto to Helensville as part of Missing Link Cycleway and Tour Aotearoa (multiple dates during Tour Aotearoa (February/March), 3 hours one-way, \$50 per person)
- Pahi River cruise (selected dates at selected times of year, 4 hours, \$35 per person)



- Day cruise charter (round trip Helensville via Dargaville or Dargaville via Helensville)

All cruises/services above are also available as charter services on other dates. It is understood that 'fast cat' services have previously established on the route between Kaipara and Auckland on Kaipara Moana. However, these business models have not been able to sustain a service long term.

Recreational water transport provides an enjoyable and efficient travel mode between Kaipara destinations e.g. on water it will take about 5 minutes between Pahi and Whakapirau, but by road the 23km trip takes around 30 minutes. However, these communities are very small and most larger communities such as Matakoho and Ruawai are well serviced by road connections. Given the small rate payer base and usually resident population it is unlikely that a water-based public transport system would be economically justifiable (based on population figures).

### 2.8.5 Connectivity within Kaipara District

The geography of the Kaipara District means that travel by road between certain areas can be time consuming, even if the areas are in relatively close proximity as the crow flies. Access, to economic and social opportunities, transport choice, and providing resilience is a key strategic priority in the 2018 Government Policy Statement on Land Transport (GPS). Accessibility analysis shows that while connecting between remote parts of the district is a challenge, the majority of the district has relatively low drive times to at least one of Kaipara's centres (Dargaville, Mangawhai, Kaiwaka or Maungaturoto), see Annex 4. The southern end of the Pōuto peninsula is the most remote part of the district across all accessibility analyses, however the population in the 60-90-minute drive time catchment is only 135 people based on 2018 census data. Tinopai is also relatively remote from the larger centres of Dargaville and Mangawhai.

### 2.8.6 Aging Population

The Kaipara District has an aging population. As the population ages accessibility and mobility needs will increase, with reduced ability to drive and accessibility requirements for infrastructure design. In order to service the local community, any wharf infrastructure should consider these needs as part of design.

### 2.8.7 Public Transport

Currently there is a single public transport service operating in Kaipara, a weekly bus service trial from Kaiwaka to Whangārei, via Mangawhai. The Regional Land Transport Plan (RLTP) notes the challenges of making a public transport service business case in rural areas and analysis conducted for this study demonstrates that districts with populations of less than 40,000 are rarely able to support regular public transport services, see Annex 4. Current trends in public transport also show some movement towards on-demand as opposed to timetabled services, particularly in lower-demand areas.

### 2.8.8 Walking and Cycling

The Kaipara district is renowned for its numerous walking tracks that showcase stunning natural landscapes. These include tracks in Waipoua Forest, Tounson Park, Kai Iwi Lakes, Mt Tutamoe, Baylys Beach, Tokatoka, Maungaraho Rock, Paparoa, and Mangawhai coastal environment. Alongside walking experiences, there is much potential to grow recreational and tourism-based cycling in the Kaipara District. Like many rural regions in Australia and New Zealand, the Northland Region has recognised the economic and social benefits that increased cycling facilities can bring.

The Kaipara Walking and Cycling Strategy (2017) has a vision to 'become a walking and cycling destination to support economic growth and provide transport and lifestyle choices.' The Kaipara district contains numerous picturesque walking tracks and two on road 'Heartland Rides', these are cycle trails that are advertised nationally alongside the New Zealand Cycle Trail. They are:

- Kauri Coast Cycleway – A 113km Heartland Ride from Rawene on the Hokianga Harbour to Dargaville. This route uses low volume roads and passes through Kauri forest and secluded coastal settlements.
- Missing Link Cycleway – A 118km Heartland Ride from Dargaville to Central Auckland with a segment by boat across Kaipara Moana from Pōuto to Parakai. It is understood that the increase in forestry vehicles on the Pōuto Peninsula is raising safety concerns for cyclists sharing the road. It is also understood that the cost of connecting across Kaipara Moana can be a deterrent for some cyclists on this route, where a charter service is required.

These Heartland rides also form part of the 'Tour Aotearoa' route that accommodates a bi-annual brevet event. In 2018, 500 people rode this event and in February 2020, 950 entrants had been recorded.

Kaipara District Council have identified the potential for cycle trails to be further supported by water transport, including the identification of Tinopai as a potential gateway. During the ILM workshop the potential for further cycle 'round-trips' in the district was also discussed, where water-transport would form a leg of the journey. Water transport to support cycle tourism is not uncommon in New Zealand with routes such as the Kaipara Missing Link, Mountains to Sea (bridge to nowhere) and Roxburgh Gorge Trail all relying on water transport for part of the route, see examples in Figure 14. Note that the example images shown utilise small vessels to offer this service.

**Figure 14: New Zealand examples of water transport for cycle tourism**



The Northland Cycling Implementation Plan (2019) seeks to share in the success of cycleways nationally citing MBIE's 2016 evaluation of the New Zealand Cycle Trails, which show strong and lasting returns from investment in regional trails: In 2015, there were approximately 1.3 million trail users, 13.5% were international visitors, and the overall benefits were \$3.55 for every \$1 invested. The Northland Cycling Implementation Plan (2019) seeks to benefit from a network effect of cycleways established across the region, not just individually by route or district. The map below shows the aspirations for regional trails in Northland.

[illegible]

Road safety is a concern in the Kaipara, and is identified in a number of strategies and documents including the Northland Primary Collectors Corridor Management Plan, considerations in the Twin Coast Discovery Route package to identify safe passing and overtaking opportunities and turning zones and issues raised in the Kaipara Walking and Cycling Strategy. A review of key road safety metrics across the district highlights issues, particularly on peninsula roads and in terms of the Infrastructure Risk Rating metric, see Annex 4.

- **Collective Safety Risk** – risk density measured as the number of fatal and serious casualties over a distance, e.g. deaths and serious injuries (DSI) per kilometre
- **Personal Safety Risk** – risk to the individual of fatal or serious casualties per million vehicle kilometres travelled on a link/corridor
- **Infrastructure Risk Rating (IRR)** –a proactive measure of risk based on land use and geometry. IRR aligns with personal risk but does not rely on (and is less sensitive to) crash history.

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have identified road safety issues. A large section of Pouto Road from Dargaville south is assessed as high personal risk and medium high collective risk. Tinopai Road has medium high personal risk and Petley Road, Bickerstaffe Road and a section of Pahi Road all have medium personal risk. In seeking to attract tourists to Kaipara Moana the suitability of roads for unfamiliar drivers needs to be considered. This is identified as general issue across Northland in the RLTP.

## **2.9 Implications for Kaipara Water Transport Network and Wharves**

This study takes a 30-year view of opportunities to develop wharf infrastructure to support water and wharf-based activities. Based on the transport context set out above and Annex 4 the implications for the following water-transport operations are considered in this section:

- Kaipara-Auckland ferry
- Water-based transport for local connectivity (i.e. public transport within the Kaipara)
- Water-based transport for tourism

### **2.9.1 Kaipara – Auckland Ferry**

Overall, the Kaipara district is heavily reliant on private vehicle transport to travel within the district and to nearby centres. Identified investment in state highways will support the safety and reliability of road journeys. However not all issues associated with road safety, unsealed roads and travel time reliability to Auckland will be resolved by this investment. Regardless, the majority of the Kaipara district has access to the northern extent of the continuous urban area in Auckland within c. 2 hours' drive time.

In addition to road transport, the Government has committed \$94.8million to upgrade the North Auckland Rail line. This will be targeted at freight between Auckland and Whangarei, however the Ministry of Transport's North Auckland Line business case signals consideration of re-opening the Dargaville spur in the medium-longer term. New rail investment is also set in the context of the potential to relocate Port of Auckland activities to Northport at Marsden Point, near Whangarei.

A ferry from the northern Kaipara Moana to Parakai was tabled as an option in stakeholder early workshops in this study. When considering ferry services for 'transport' (as opposed to a cruise) the competitiveness of travel times relative to the car need to be considered. Ferry travel time on this route is anticipated to be upwards of 2.5/3 hours plus waiting, loading and interchange penalty time.

On the basis of the current transport context, and potential for more freight activities to relocate to Northport, it would be difficult to develop a commercially viable Kaipara-Auckland ferry service. A key factor in this conclusion is inability for any ferry service to compete in terms of travel time relative to the private vehicle. The Kaipara population is also very low to support such a service currently. However, an existing cruise service operates on this route and is anticipated to continue to do so.

While travel time reliability on the road network to Auckland is a challenge, the ferry service may also face reliability issues related to weather and harbour conditions. Travel time reliability on the road network between Parakai and destinations in Auckland may also be an issue.

## 2.9.2 Water Based Transport for Local Connectivity

Currently there is a single public transport service operating in Kaipara, a weekly bus service trial from Kaiwaka to Whangarei, via Mangawhai. The RLTP notes the challenges of making a public transport service business case in rural areas and analysis conducted for this study demonstrates that districts with populations of less than 40,000 are rarely able to support regular public transport services. On this basis, in a district of 22,500, a water-based public transport service aimed at servicing local trips only is unlikely to be viable. However, there may be an opportunity for local public transport trips to supplement tourism demand for any services that establish.

Accessibility analysis highlights Pouto and Tinopai as remote areas of the district. These areas would likely benefit the most from shorter travel times offered by water-based transport to some destinations, however these remote areas contain lower populations and therefore would struggle to support regular public transport services. Any services to/from these areas would need to be dual purpose (e.g. local transport and tourism) to assist with commercial viability.

Current trends in public transport also show some movement towards on-demand as opposed to timetabled services, particularly in lower-demand areas, for example the Timaru 'MyWay' trial and global moves by Uber to implement car-pool services to fill gaps in public transport networks. If on-demand services in the form of 'water taxis' establish as part of tourism activities these may also serve local access needs. Kaipara District Council should monitor these opportunities going forward and work with operators if opportunities arise.

It is anticipated that subsidies may be required for locals using tourism services. If infrastructure and operators enable trips between population centres and key services, demand for local travel in the order of 25,000 trips per annum could be anticipated in the longer term. This estimate assumes access between multiple destinations in the district and development of activities at or near wharves.

## 2.9.3 Water Transport for Tourism

In addition to supporting cycle tourism, tourist water transport may include trips to picturesque, uniquely Kaipara destinations on the harbour that utilise small vessels. Transport benefits of encouraging tourists to use water transport to access key attractions may include:

- Road safety benefits due to fewer unfamiliar drivers on Kaipara's rural roads with high infrastructure risk ratings
- Travel time savings where destinations are quicker to reach by water transport. This may translate to increased demand due to reduced drive times.
- Benefits to locals who are also able to utilise services established primarily for tourism.

## 2.9.4 Conclusion

Overall, it is anticipated that across the 30-year view of this study water-based transport in the northern Kaipara Moana may expand from the current single-operator cruise offering. It is envisaged that this could occur through establishment of small charter operations that operate to transport tourists to destinations on the harbour, complete cycle trails and operate as on-demand water-taxis for local and tourist travel. Based on the current evidence it is unlikely that frequent timetabled public transport services within the Kaipara district or to Auckland will be viable within the horizons of this study.

From a transport perspective, wharf infrastructure recommended as part of this feasibility study will support water-based transport through:

- Reducing health and safety risks of tourists boarding vessels, particularly in rough sea conditions. This will support safeguarding the existing water-based tourism in the study area
- Increasing the ease of loading bicycles/luggage etc to support cycle trails and accommodation near wharves
- Ensuring accessibility requirements are accommodated for the aging population and those who are physically and/or mentally less able.

Transport benefits of encouraging tourists to use water transport to access key attractions may include:

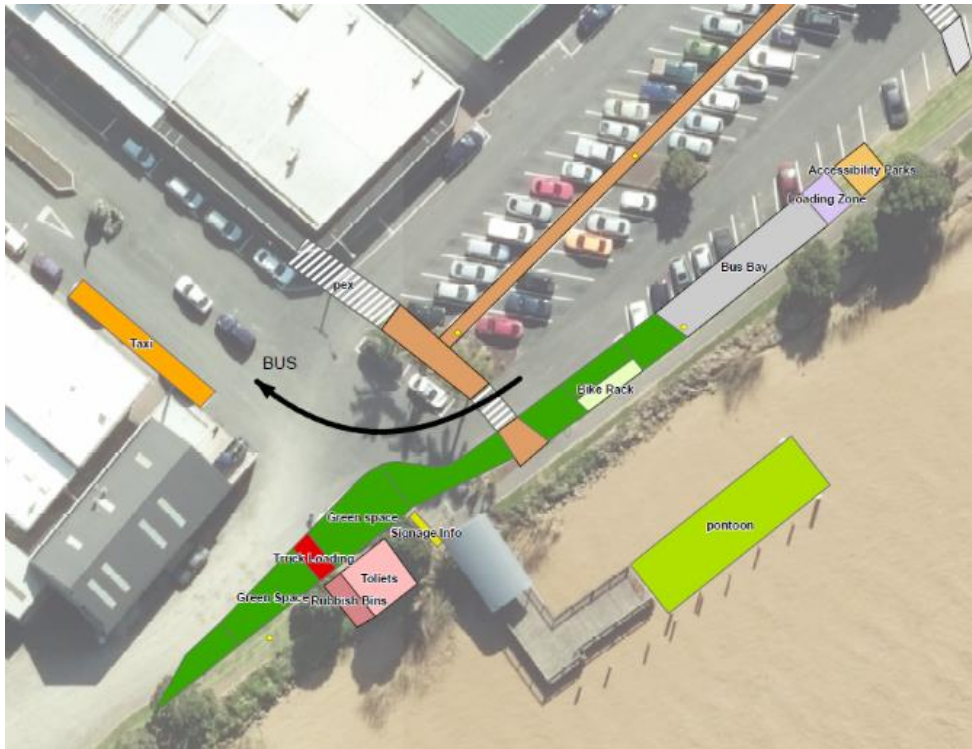
- Road safety benefits due to fewer unfamiliar drivers on Kaipara's rural roads with high infrastructure risk ratings
- Travel time savings where destinations are quicker to reach by water transport. This may translate to increased demand due to reduced drive times.
- Benefits to locals who are also able to utilise services established primarily for tourism. Note that subsidies for local trips may be required and these could be in the order of \$50-\$110 per trip based on the costs of water-based tourism services considered in this analysis. It is anticipated that in the order of 25,000 trips per annum could be attracted by a public transport service running on the Kaipara Moana in the longer term, however this will depend on origins and destinations served by the water transport operations.

### 2.9.5 Dargaville Wharf Upgrade

One of the projects under the Kaipara Kickstart Programme is the Dargaville Wharf. The Wharf Upgrade is PGF-funded and is the first infrastructure investment under the Kaipara Wharves project. It is anticipated that the existing wharf and new pontoon will be the 'hub' for a water-based activity on the Kaipara Moana.

The Dargaville Wharf Pontoon Upgrade Project is estimated to cost approximately \$395,600, with an estimated five (5) months to construct. The scope of the project includes upgrading the wharf through the addition of a new pontoon and supporting pylons and berthing dolphins. Some landside improvements have also been identified that may be developed later to support the activation of this wharf.

**Figure 16: Preliminary design for the Dargaville Wharf Pontoon Upgrade**



## 2.10 Tourism context and opportunities

### 2.10.1 The current state

Tourism is an untapped opportunity for the Kaipara region. While growth is occurring in tourism activities, it is occurring from a low base and there is much room to grow. Analysis from *Visitor Solutions* provided the following supply summary for this study.

#### 2.10.1.1 Physical Setting

Recreation and tourism opportunities and experiences on and around the Kaipara Moana stem primarily from the physical characteristics of the harbour and its tributaries. A second distinguishing experiential layer is added by the cultures and stories of the people living in the area.

The harbour is a large enclosed harbour/estuary complex on the north western coast of the North Island. By area, the Kaipara Moana is one of the largest harbours in the world. It covers 947 square kilometres at high tide, with 409 square kilometres exposed as mudflats and sandflats at low tide (refer main text Section 2.4: Figure 3 for map). It extends around 60km from the Pahi/Dargaville in the north to the Shelley Beach/Parakai/Helensville area in the south.

Basic wharf and jetty facilities located at these towns provide the primary recreational access points to the Harbour and an all-tides connection (subject to vessel draft). The Harbour also incorporates several large arms that extend into the interior of Northland and North Auckland, with numerous small settlements located near the shoreline. Some of these have (mostly small) launching ramps, wharves and jetties, although most are only usable subject to higher tides (and/or condition/maintenance).

The relatively shallow depth of most of the harbour combined with its large tidal flows represent key physical constraints to recreation activity. Only a few major tidal channels and tributary rivers are always accessible and navigable. Access to open water during the lower

tidal periods is impractical from much of the harbour's shoreline due to mudflats and mangroves.

Further out towards the deeper waters at the harbour mouth the sea conditions can be hazardous, with a very expansive and always-changing sandbar complex. Large swells, surf and tidal volumes can make harbour entry and exit practically challenging for any but the most capable vessels and crews. This area has become historically known as 'the graveyard' due to the numerous shipwrecks that have taken place there over the years.

The following content summarises the main recreation/tourism activities associated with Kaipara Harbour.

### **2.10.1.2 Fishing**

Fishing in the very tidal Kaipara Harbour is largely determined by the tides, the weather and the type of fishing experience sought. Opportunities for shallow water mudflat fishing and seafood gathering abound. Fishing the tidal flow channels when tides are in or out adds a further dimension while more extensive deeper water fishing is available at the harbour mouth and some of the deeper channels (for those using capable vessels). The presence of a sometimes-dangerous bar crossing does limit the offshore fishing opportunities, with high dependence on vessel crew experience and weather conditions.

There are numerous small slipways and boat ramps around the many arms and tributaries of the harbour, although the high tidal range limits the use of many. It also limits the practical availability of shore-based fishing options when tides are out (other than perhaps shellfish gathering or floundering).

While many fishing options are constrained at certain times, the harbour is a highly productive part of the marine ecosystem. Local knowledge gained from experience appears to be a key requirement for successful fishing on Kaipara Moana (finding the 'good spots' at different tide stages, knowing fish travel and feeding patterns, avoiding running aground and to safely handle conditions near the bar and in areas of high tidal flows). These requirements suggest that guided fishing experiences may be an important opportunity.

Currently however there are hardly any charter boat fishing operations. The only current fishing charter options found were:

- 'Kaipara Kat Fishing Charters' at Parakai/Shelly Beach – single vessel (only around 40min drive from Auckland to Parakai).
- 'Ali Kat Fishing Charters' at Parakai, Helensville which appears to have recently closed.
- A directory listing for 'Hanson's Harbour & Ocean Fishing' in Maungaturoto, but no online information.

Note: In the last five years there have been several fatalities associated with fishing charters on the Kaipara Moana.

### **2.10.1.3 Boating**

Boating use is highly dependent on the extent of navigable waterways. As discussed above the Kaipara's more sheltered waterways are often highly tidal, limiting easy navigation to the top of the tide. Most activity is associated with accessible tributary, channel areas and the mid and outer harbour. Different jetty, wharf, slipway, and beach launch options are available, but of variable quality.

There are a small number of commercial cruise services, including:



- 'Kaipara Cruises' at Parakai (Helensville) featuring a small number of cruise options (plus charter cruise options):
  - Half-day trip from Parakai (Helensville) to Shelly Beach,
  - Overnight return trip to Pahi (coach to Dargaville accommodation),
  - Bike shuttles from Pouto Point to Parakai (scheduled and charter, times subject to tides),
  - Sometimes short cruises around Pahi/Pahi River/Whakapirau.
- 'Port Dargaville Cruises' with a small 12m vessel cruising on the upper Wairoa River around Dargaville. Part of a joint operation also featuring rail cart journeys on a 30km unused line.

Note: The number of boating service providers has declined over recent years (with a recent example of closure being Ali Kat Charters in Parakai), as well as several ferry proposals evaluated and withdrawn.

Yachting and kayak/kayak-fishing is relatively rare given the harbour's physical constraints of exposed tidal mudflats and strong tidal flows. Smaller scale kayak/boat trips between some of the small settlements along some of the harbour's arm may be attractive (subject to any associated onshore experience offers being developed – e.g. historic sites, marae, other attractions such as the Kauri Museum at Matakoho). Some recreational kayaking clubs reported on small club trips that they had done that followed such a paddle, hop out and paddle type model. This could potentially be replicated commercially. A kayak hire option is available out of Dargaville, however little other commercial activity is evident.

#### **2.10.1.4 Biking**

Most larger towns in the area have small local cycle options but the highest profile cycling option in the Kaipara harbour area is the 'Kaipara Missing Link'. This is a section of the New Zealand Cycle trail route that travels south from Dargaville down the coastal Pouto Peninsula to Pouto, before crossing via a boat shuttle to Parakai. This connects the Northland and Auckland sections of the NZ Cycle Trail, and also Northland's Kauri Coast, Far North and Twin Coast 'Cycleways' to Auckland. The only notable boat shuttle is with Kaipara Cruises, which requires advance booking for a short scheduled-trip day season or for specially arranged pick-ups (also possible via other boat charters). However, cycling is a general growth area and more route initiatives around the District are anticipated.

**Other attractions** – miscellaneous examples

#### **Dargaville**

- Trounson Kauri Park - a DOC 'mainland island' 32km north of Dargaville with walks and camping featuring Kauri stands and seasonal night nature walks. The iconic Kauri sites in Waipoua Forest are located outside of Kaipara District another 30km past Trounson.
- Dargaville Museum – presenting a variety of local cultural and historic heritage stories, artefacts and displays.
- Miscellaneous Kauri attractions – a variety of kauri timber and gum-themed stores and sites in and around Dargaville.
- Kaipara Rail & Cruises – a small scale river cruise offer.

### **Kauri Museum**

- Located in the very small settlement of Matakoho, the Kauri Museum is a community museum and experience featuring the history of Kauri and settlement in Northland. It features stories of the Kauri Industry – both timber and gum with many displays of the industries, their equipment, life size dioramas and products from both timber and gum (including art).
- Access by boat is very limited at Matakoho itself, but it only a few kilometres to boat landing wharves/jetties at Dargaville and Pahi.

### **Gibbs Sculpture Farm (Note: Not in KDC)**

- Located around 10km North of Kaukapakapa on the eastern side of Kaipara Moana (around 1hr from Auckland), this attraction hosts the large-scale commissioned sculptures of many prominent artists in an open farmland/harbour setting. Gibbs Farm is a private property, open monthly by prior appointment only to artists, educational institutions, charities and the public. There is no fee for visiting Gibbs Farm but scheduled visiting times for bookings are limited.
- Located just a few km South is another smaller-scale sculpture garden and forest conservation track attraction – the 'Kaipara Coast Sculpture Gardens'. It is part of the Kaipara Coast Planet Centre and has a changing portfolio of displayed works.

### **Hot Spring Attractions (around Parakai) (Note: Not in KDC)**

- Parakai Springs and Palm Springs are two natural hot pools, wellness, picnic and water play attractions in Parakai

### **South Kaipara Horse Treks (Note: Not in KDC)**

- Half-day, Full day and Overnight Treks in the South Kaipara area, operating out of Helensville and including inland and coastal/beach areas from Muriwai up to South Head on the southern side of Kaipara Moana entrance.

### **Pouto Beach Driving**

- Road access to Pouto Point allows an option for beach driving back up towards Dargaville (4wd recommended) in the expansive sandy landscapes. DOC provides a brochure for this.
- It was noted that a previous tourism offering in this area (Pouto Sand Safaris) closed in recent years.

### **2.10.1.5 Current Demand Summary**

This briefly describes some high-level trends in potential domestic and international visitor catchments that may have a bearing on visitation within the Kaipara Moana area.

#### **Base Domestic Population Catchment**

Visitor attractions within the Kaipara area are very close to the bulk of New Zealand's domestic population. While the local population is not large it has been increasing. Growth is also reflected in wider areas around Northland and further afield across the Auckland, Waikato and Bay of Plenty Regions.

Taken together the cumulative Domestic base population catchment is approaching 2.5 million residents. Most residents in this Upper North Island domestic population are located between 2-4 hours' drive of sites in the Kaipara Moana area.

**Table 4: Recent Population totals and trends**

	Census 2006	Census 2018	Change 2006-18	% Change	Cum. pop (2018)
<b>Kaipara District</b>	18,135	22,869	4,734	26	22,869
<b>Far North/Whangarei Districts</b>	130,308	156,210	25,902	20	179,079
<b>Auckland Region</b>	1,304,958	1,571,718	266,760	20	1,727,928
<b>Waikato/Bay of Plenty Regions</b>	638,202	766,701	128,499	20	2,338,419

Source: Statistics New Zealand – Census 2018

Looking forward, Table 5 shows that this pattern of population growth is projected to continue at reduced growth rates locally. However, in Auckland and Waikato higher growth rates will be maintained. Overall, in the next 20 years the domestic population in this Upper North Island catchment is projected to increase to over 3 million.

**Table 5: Projected population totals and trends**

	Proj. Pop. 2023	Proj. Pop. 2043	Proj. change 2023-43	Projected % change	Proj. cum. pop (2043)
<b>Kaipara District</b>	23,600	25,200	1,600	7	25,200
<b>Far North/Whangarei Districts</b>	159,600	171,500	11,900	7	196,700
<b>Auckland Region</b>	1,859,300	2,326,200	466,900	25	2,497,700
<b>Waikato/Bay of Plenty Regions</b>	811,900	915,200	103,300	13	3,241,400

Source: Statistics New Zealand Projections – (Medium Series, 2013 base, 2018 Update)

While data for recreation participation preferences for the domestic population are only available in a high-level summary context, the Sport New Zealand Active New Zealand Survey found that Fishing was the 6<sup>th</sup> most highly reported sport or active recreation activity among Auckland Region<sup>6</sup> residents (after Walking; Swimming; Equipment-based exercise; Jogging/ running; and Cycling). Over 18% of all Aucklanders, representing over 200,000 individuals were estimated to be engaged in fishing. This proportion was estimated to be relatively highest among men (~28%), those aged 50-64 (~24%), Maori (28%) and people with higher levels of indicative socio-economic status (~24%).

The extent to which this current and projected population is converted into visits to the Kaipara area will vary at different sites (according to activity accessibility, quality, uniqueness, management and the relative attractiveness of the experience offer). Given the size of this potential domestic market, it would only require attractions / experiences to

<sup>6</sup> Active New Zealand data are only available at a Regional level here. Source: Sport and Active Recreation in the Lives of Auckland Adults: Results from the 2013/14 Active New Zealand Survey. Sport New Zealand and Auckland Council (2016). Wellington: Sport New Zealand.

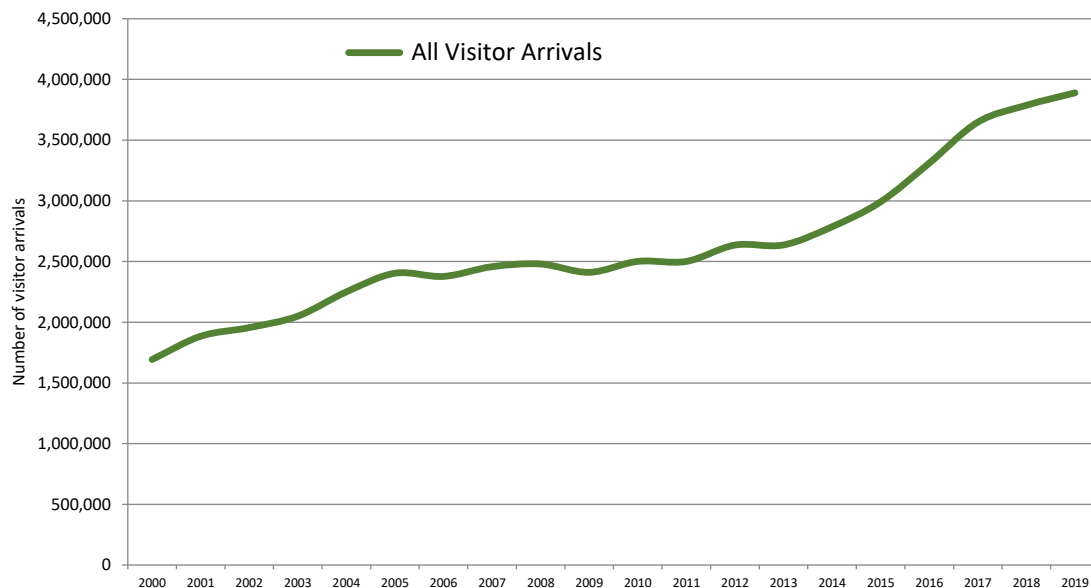


generate small percentage increases in visitation (increased visitor capture rates) to result in significant local impacts.

### Actual and Potential Visitor Catchments

While Domestic visitation is primarily based on the wider surrounding resident population, the base for any international visitor catchment is clearly arrivals into New Zealand. Figure 1 illustrates the well-established long-term trend of growth in overseas arrivals (before the Covid 19 pandemic). This has shown overall numeric growth of 130% over the last 20 years, 56% over the last 10 years and 30% over the last 5 years.

**Table 6: Visitor Arrivals into New Zealand**

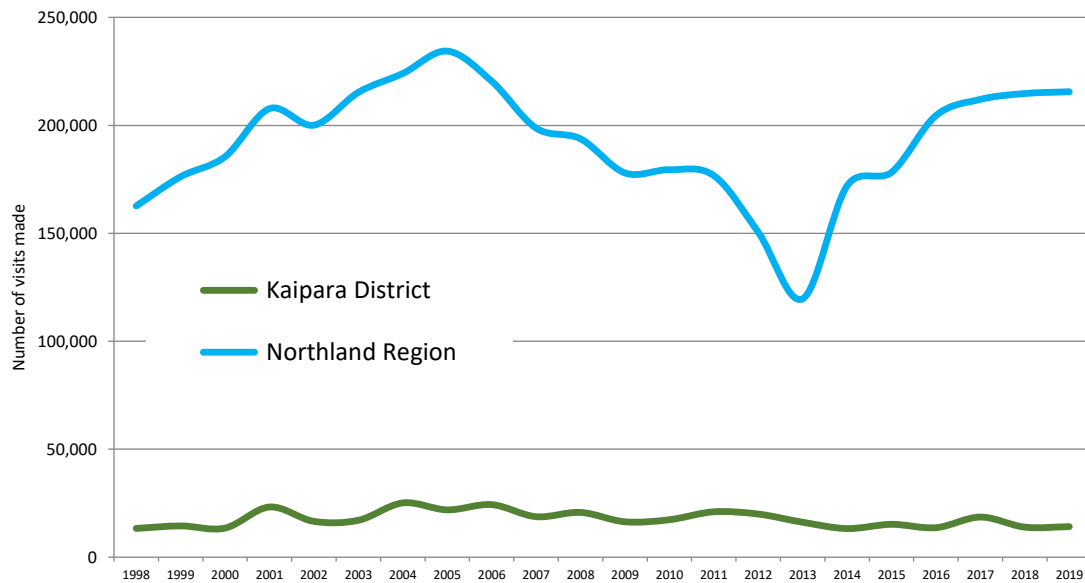


Source: Statistics New Zealand – Visitor Arrival Statistics (YE Jun)

These numbers are particularly significant because New Zealand's main tourism entry point is Auckland Airport. This is only approximately a 1-hour drive to Helensville (South Kaipara Moana) and a circa 3-hour drive to Dargaville (North Kaipara Moana). Over the year ending June 2019, Auckland Airport received around 1.31 million people making *holiday/vacation visits* to New Zealand. In addition, Auckland received around 211,000 cruise ship passenger arrivals in the year ending June 2018.

Looking more specifically at Holiday/Vacation visitor numbers to Kaipara District and the Northland Region, the figure below shows that this baseline growth is not being reflected locally. The pattern of such local area visits shows growth, decline and renewed growth for Northland (with a 21% increase over the last 5 years) and a largely steady, but very low level of overseas visitors for Kaipara District (with a -7% decline over the last 5 years). Despite the strong pattern of overall visitor growth to New Zealand, this is clearly not being reflected in visits to Kaipara District.

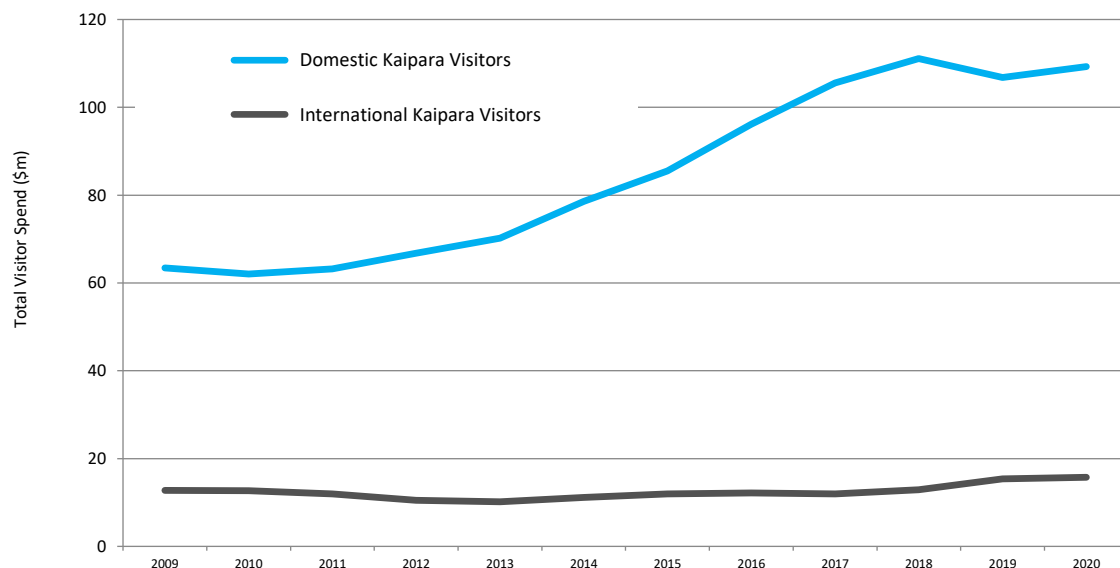
**Table 7: Overseas Holiday/Vacation Visits made in Kaipara District/Northland**



Source: Statistics New Zealand – International Visitor Survey – Places visited (RTO), YE Jun

This pattern is also reflected in the overall spend made by international and domestic visitors to Kaipara District. The figure below shows solid growth in visitor spend by domestic visitors over the last 10 years, but virtually no change for international visitors. This highlights the significance of domestic (out of district) visitors overall, and a relative decline in the capture of overseas visitors for Kaipara District over the last 10-15 years (given national visitor arrivals are growing strongly).

**Table 8: Domestic and International Visitor Spend – Kaipara District**



Source: Monthly Regional Tourism Estimates (MRTes), MBIE, YE Jan<sup>7</sup>

<sup>7</sup> Estimates based on non-resident card spending data, Ministry of Business, Innovation and Employment. Domestic Visitors are those whose card data indicates residence >40km away.

Overall, these data suggest that there will be low net overall growth in visitors to Kaipara District, with a small percentage increase in visits by the numerically much larger domestic market, and higher percentage increases in visits by the numerically very low overseas market<sup>8</sup>. In both domestic and overseas cases, growth has been less than has been evident for areas outside of Kaipara District. Looking forward and ‘all-else-being-equal’ this largely net ‘slow-growth’ pattern in visitor activity to Kaipara District was forecast to continue under Pre Covid19 conditions.

### 2.10.1.6 Potential Visitor Interests

Looking more specifically at the activity preference interests of visitors provides the opportunity to forecast what level of latent demand there may be for different types of potential visitor experience offers in future. These data are again pre Covid19 but do provide a historic indication of activity preference interests.

Based upon data from the New Zealand Visitor Activity Forecast<sup>9</sup>, Tables 9 and 10 summarises current potential domestic and international customer numbers and percentage proportions for different activity types in Kaipara District. It focusses on a selection of those activities typically associated with harbour and marine use, with those more likely applicable for Kaipara Harbour highlighted<sup>10</sup> and the rest in descending order of overall visitor interest level.

**Table 9: Domestic and International Visitor Spend – Kaipara District**

Activity types of interest to overnight visitors to Kaipara	No. of ‘interested’ International overnight visitors	No. of ‘interested’ Domestic overnight visitors	Total ‘interested’ overnight visitors
Scenic boat trip	<b>16,700</b>	<b>91,300</b>	<b>108,000</b>
Fishing ( <i>or Hunting</i> )	<b>3,500</b>	<b>52,300</b>	<b>55,800</b>
<i>Dolphins or whales</i>	13,800	101,600	115,400
<i>Seal or penguin colony</i>	17,700	85,600	103,300
<i>A marine park or marine reserve</i>	13,200	85,100	98,300
<i>Swimming/surfing</i>	16,100	75,600	91,700
<i>Rafting, canoeing, kayaking</i>	7,400	67,900	75,300
<i>Scuba diving or snorkelling</i>	3,000	54,600	57,600

<sup>8</sup> International visitors represent only around 10% of all visitors to Northland overall

<sup>9</sup> Economic Forecasters, Fresh Information, have prepared this forecast on behalf of New Zealand Trade and Enterprise (NZTE), Tourism New Zealand (TNZ) and the Ministry for Business Innovation and Employment (MBIE). It combines responses from the ‘activities-undertaken’ question data from the International Visitor Survey (IVS) and responses from the directly corresponding ‘activity-desired’ data categories from the Automobile Association Travel Monitor (AATM) to identify and project potential customer numbers for different activity-types/ experiences across different NZ regions. Refer to <https://freshinfo.shinyapps.io/NZVAF/> for outline of the methodology, assumptions and limitations behind these forecasts.

<sup>10</sup> The data sources for these forecasts referred to in the previous footnote did not include ‘fishing’ among the activity types listed. Other activity types include various outdoor recreation and cultural tourism activity offers.

**Table 10: Forecast Kaipara visitor percentages with marine activity interests (2020 estimates)**

Activity types of interest to overnight visitors to Kaipara	% of 'interested' International overnight visitors	% of 'interested' Domestic overnight visitors	Total % 'interested' overnight visitors
Scenic boat trip	50	28	30
Fishing ( <i>or Hunting</i> )	10	16	17
<b><i>Dolphins or whales</i></b>	41	31	32
<b><i>Seal or penguin colony</i></b>	53	26	29
<b><i>A marine park or marine reserve</i></b>	40	26	27
<b><i>Swimming/surfing</i></b>	48	23	25
<b><i>Rafting, canoeing, kayaking</i></b>	22	21	21
<b><i>Scuba diving or snorkelling</i></b>	9	17	16
<b>All Visitors to Kaipara (2020 estimate)</b>	(n=33,400)	(n=328,900)	(n=362,300)

These show that 'scenic boat trips' were the most highly rated potential experiences of interest among visitors who are staying overnight in Kaipara. This would suggest a high degree of latent demand for such scenic boat trip experiences. Such interest is notably higher among International visitors (50%) compared with Domestic (28%). Most other marine activities were also prominent interests for International visitors, particularly if they involved experiencing wildlife or protected marine areas.

Overall, Fishing – which seems the current main activity on the Kaipara Moana - was not indicated as being of very high interest overall compared with other marine activities, although the basic numbers interested among Domestic visitors were still notable (over 55,000). Interest in non-marine activities that could be associated with the Kaipara Moana and its surrounding areas and settlements<sup>11</sup> is set out above.

**Table 11: Forecast Kaipara visitor numbers with 'other' activity interests (2020 estimates)**

Activity types of interest to overnight visitors	No. of 'interested' International overnight visitors	No. of 'interested' Domestic overnight visitors	Total 'interested' overnight visitors
<b><i>Museums &amp; galleries</i></b>	22,300	98,400	120,700
<b><i>Hot pools</i></b>	16,200	102,400	118,600
<b><i>Day walk</i></b>	28,600	86,600	115,200
<b><i>Place of significance to Maori</i></b>	19,200	59,100	78,300

<sup>11</sup> An example selection (from available activity options) based on the physical setting of the wider Kaipara Harbour area communities and current attraction features (including South Kaipara e.g. Hot pools at Parakai)

<b>Health spa or day spa</b>	4,500	73,600	78,100
<b>Garden visit or flower show</b>	9,100	62,700	71,800
<b>Farm or orchard</b>	12,200	58,800	71,000
<b>See exhibition or creation of Maori art/crafts</b>	14,600	55,300	69,900
<b>Cycling</b>	5,600	60,600	66,200
<b>Maori traditional food</b>	5,600	59,800	65,400
<b>A live Maori performance</b>	6,300	50,500	56,800
<b>Horse riding/horse trekking</b>	1,600	53,500	55,100
<b>Quad biking, 4WD vehicle tour</b>	1,000	53,000	54,000
<b>Visit a marae</b>	12,800	40,400	53,200
<b>Experience a Maori tradition, such as storytelling</b>	5,300	42,200	47,500

**Table 12: Forecast Kaipara visitor percentages with ‘other activity’ interests (2020 estimates)**

<b>Activity types of interest to overnight visitors</b>	<b>International overnight visitors</b>	<b>Domestic overnight visitors</b>	<b>All overnight visitors</b>
<b>Museums &amp; galleries</b>	67	30	33
<b>Hot pools</b>	49	31	33
<b>Day walk</b>	86	26	32
<b>Place of significance to Maori</b>	57	18	22
<b>Health spa or day spa</b>	13	22	22
<b>Garden visit or flower show</b>	27	19	20
<b>Farm or orchard</b>	37	18	20
<b>See exhibition or creation of Maori art/crafts</b>	44	17	19
<b>Cycling</b>	17	18	18
<b>Maori traditional food</b>	17	18	18
<b>A live Maori performance</b>	19	15	16
<b>Horse riding/horse trekking</b>	5	16	15
<b>Quad biking, 4WD vehicle tour</b>	3	16	15
<b>Visit a marae</b>	38	12	15
<b>Experience a Maori tradition, such as storytelling</b>	16	13	13
<b>All Visitors to Kaipara (2020 estimate)</b>	(n=33,400)	(n=328,900)	(n=362,300)



Overall, in summary these New Zealand Activity Forecast figures also allow some comparative overall visitor proportions to be estimated. These include the following summary estimates:

- Of all overnight visitors to Northland, only 16% included overnight visits to Kaipara District. This was only 8% for International overnight visitors (17% for Domestic). So International visitors were considerably less likely to visit Kaipara, as is also reflected below.
- Of all overnight visitors to Kaipara only 9% were International (and 91% Domestic).
- Of all overnight visitors to Northland 17% were International (and 83% Domestic).

#### 2.10.1.7 Data Summary

- The limited current range of recreation and tourism opportunities in the Kaipara Moana is driven by a combination of:
  - physical setting as a large, shallow and extremely tidal 'drowned valley' harbour environment with extensive largely tidal arms and tributaries; with
  - surrounding terrestrial landscapes and land uses almost completely dominated by rural primary production; with
  - multiple historically small settlements located away from main regional transport routes; and
  - relatively low socioeconomic conditions and business development (both general and tourism-specific).
- However, should attractive recreation or tourism opportunities be better recognised or created in and around Kaipara Moana, there are:
  - very significant domestic and international population catchments within 1-4 hours' drive.
- In addition, there are:
  - already considerable visitor numbers to Northland, of whom only around 10% include visits to sites in Kaipara District; and
  - many of these existing (and potential) visitors to Northland and Kaipara have potential activity interests that include activity products/offers that could possibly be developed further in the Kaipara Moana setting (e.g. scenic boat trips/journeys, fishing, marine wildlife encounters/observation, Maori cultural experiences, cycling etc individually and in packages).
- The Kaipara Moana area appears to have features that could provide the basis for targeted appropriately scaled tourism development that incorporate the local physical, historic and social settings, including:
  - customised harbour/setting-appropriate marine activities,
  - kauri heritage (e.g. natural, cultural, extraction, art),
  - settlement heritage and cultures (e.g. pre/post European),
  - historic and contemporary Maori cultural heritage,

- It is also noted that given the small scale of the local population and economy, relatively small improvements in the range and scale of recreation and tourism products could create very locally significant gains.

## 2.10.2 Potential Development Opportunities

Even before the Covid19 pandemic the data indicated that the Kaipara District was best suited to domestic tourism and niche international visitor opportunities. The western Kaipara is unlikely to be an international or domestic visitor hub of any form. Regardless the potential exists to create niche tourism opportunities that can have a positive impact on local populations without the negatives associated with more mass tourism models.

Visitor Solutions studies suggest that in the west the Kaipara District position niche experiences around its areas of relative experiential strength (the harbour - especially the more sheltered estuarine environments, the landscape, the culture, history and people – and the activities they participate in such as fishing and biking). Many of the experience (especially those that are guided) will be blended and offer visitors a sample of several different types of experiences.

In most cases this would be suited to a low capital investment approach. For example, kayaks and small aluminium dinghies rather than large ferries and mini vans rather than large buses. We would envisage integrating with existing infrastructure wherever possible (such as Marae, existing cafes and bars, bike trails, heritage sites, and museums).

The overall approach would be one of that could be labelled “slow tourism” or “integrated community tourism”. It would be based on guided experiences and self-guided routes throughout the district. The routes could, in places, be facilitated by local operators (like the current ferry operator who takes Mountain Bikes across the harbour). Creating exploratory routes also enables locals to offer their services along the way (such as bike shops, cafes, guides, accommodation providers). This is common and well established in parts of Europe and elsewhere in the world.

Wharf infrastructure can be used to unlock some areas along the different routes while also acting as an attractor for niche interests and activities. For example, a wharf can serve as both a safe access for the existing ferry and (if well designed) as a safe fishing platform (for both visitors and the local community). Smaller jetties would enable all tide access to deeper estuarine channels for the likes of kayakers.

An example guided estuarine tour may include, launching kayaks in an arm of the harbour at high tide, traveling along viewing bird life, pulling in a set flounder or mullet net, stopping for a lunch of fresh fish cooked on an open fire, visiting a local marae, seeing a heritage site, paddling back to a jetty and disembarking before having a drink in a local bar or café. Such trips could be extended overnight with a camping, marae or motel accommodation option.

**The objective should be to try and keep visitors in the district for as long as possible.**

The development of touring routes that are integrated with experiences and infrastructure can also be attractive, especially to the domestic market. If done well such routes can also incorporate guided experiences. For example, self-guided mountain bikers can still link with the likes of guided kayak tours for a morning paddle so long as their bikes and equipment can be safeguarded. Routes need to be carefully planned and presented with the necessary support infrastructure to make them work economically for the local host communities.

## 2.11 Social and Cultural Context

AR & Associates' previous engagement with tangata whenua as part of the key urban areas spatial plan for Dargaville, Maungatūroto and Kaiwaka has revealed a strong sense from settlement iwi, hapū and marae representatives of encouraging whanau to return to the marae.

Much of the 24 marae that are in the Kaipara District surround the Kaipara Moana as it is their traditional portage route and food resource.

The themes of developing more papakainga housing, developing jobs and employment to retain young people and to attract whanau back from the cities have been constant messages at each hui attended.

The Waikāretu Marae & the Pōuto community engagement did reveal a prioritisation of where economic development and community development opportunities could be focused in the Pōuto Peninsula. The hui did show up some resistance on where investment in the Pōuto Peninsula should be applied. Most people were in favour of the sealing of Pōuto Road.

Most people wished to understand the type of wharf infrastructure and there were concerns that a car ferry option would make Pōuto Point more of a movement place than a destination.

The marae committee were very supportive of any initiative that offered the opportunity for long term employment opportunities and believed that any issues/risks with a wharf investment could be mitigated.

**Figure 17: Marae of the Kaipara map**



## 2.12 Stakeholder and Partner Engagement

Developing a successful water-based transport network on the Kaipara Moana will require significant collaboration between multiple groups, in addition to a strong sense of ownership from a range of partners and communities. For this reason, this Feasibility Study has drawn heavily from multiple engagements across the district and beyond. This study has also benefited from the integration of this project and the sub-regional spatial planning that has connected with many communities to best understand their local aspirations and what changes they would like to see in their areas.

The table below outlines the engagements completed to date and the planned engagement around the preferred water-based transport network and staging priorities.

**Table 13: Feasibility Study engagement activities**

Date	Engagement activities
19/01/20	<i>Waikāretu Marae &amp; the Pōuto community Purpose of the engagement was to continue the relationship and positive korero between Pōuto community, Waikāretu marae and Kaipara District Council, particularly about Kaipara Kickstart projects, spatial planning and how this relates to this community, the marae, the surrounding lands, waterways and its people.</i>
16/02/20	<i>Tinopai Community Event The purpose of this engagement was to discuss the opportunities that improved wharf infrastructure could have for Tinopai and what the community aspired for their place.</i>
17/02/20	<i>Paparoa Community Event The purpose of this engagement was to discover what land-based opportunities and aspirations were for any future upgrade of wharf infrastructure at Paparoa, Matakoho, Whakapirau, Mangatūroto, Ruawai and Pahi.</i>
18/02/20	<i>Wharf Advisory Group The purpose of this engagement was to test the options and preferred way forward with experienced marine and wharf operators.</i>
20/02/20	<i>KDC Elected Member Councillor Briefing This engagement provided an opportunity to share findings to date, discuss options and gain feedback on the preferred way forward.</i>
11/04/20	<i>Wharf Advisory Group Briefing This engagement provided an opportunity to share findings to date, discuss options and gain feedback on the preferred way forward.</i>
20/02/20	<i>KDC Elected Member Councillor Briefing This engagement provided an opportunity to discuss the draft feasibility study and the consultation document that will be used as the primary tool for the upcoming consultation phase.</i>
<i>Engagement is also planned to occur with the stakeholders from the locations and groups below using a pre-established database.</i>	
20/4-1/5	<i>Pouto/Kelly's Bay community</i>
20/4-1/5	<i>Pahi Boating Club/Whakapirau</i>
20/4-1/5	<i>Tinopai Residents and Ratepayers</i>
20/4-1/5	<i>Ruawai Boat Club &amp; Residents and Ratepayers</i>
20/4-1/5	<i>Terry Somers (Kaipara Cruises)</i>
20/4-1/5	<i>Potential tourism development stakeholders</i>
20/4-1/5	<i>Otamatea marae</i>
20/4-1/5	<i>Arapaoa marae</i>
20/4-1/5	<i>Waikāretu marae (link with the Pouto community session)</i>

Date	Engagement activities
20/4-1/5	Oruawharo marae

### 2.12.1 Consulting on the preferred way forward

Given the current and forecast COVID-19 restrictions, consultation around the preferred programme will need to occur at a distance and it will largely leverage digital channels. This is still being worked through, but at this stage it is expected to include contacting and providing a consultation document and online survey to the stakeholders from the locations, organisations and groups below using a pre-established database:

- Pouto/Kelly's Bay community
- Pahi Boating Club/Whakapirau
- Tinopai Residents and Ratepayers
- Ruawai Boat Club & Residents and Ratepayers
- Terry Somers (Kaipara Cruises)
- Potential tourism development stakeholders who have expressed an interest
- Otamatea marae
- Arapaoa marae
- Waikāretu marae
- Oruawharo marae.



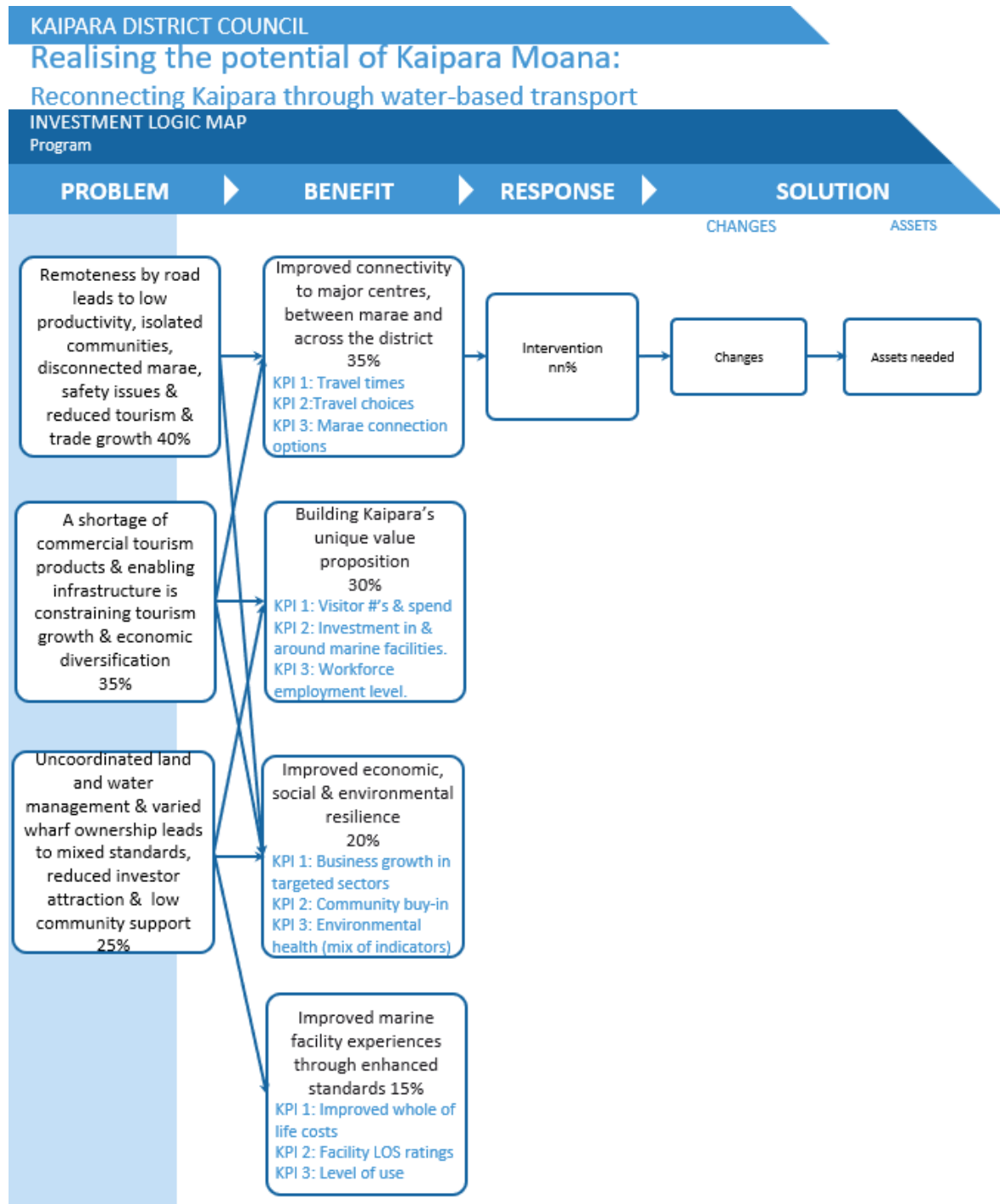
## 3 Investment Objectives, Existing Arrangements & Business Needs

### 3.1.1 Investment Objectives

A facilitated Investment Logic Mapping (ILM) workshops was held with key stakeholders in Pahi on 20 January 2020 to identify the existing problems and the targeted benefits expected from the investment.

After developing a list of 39 issues (see Annex 2), the group identified the problems, benefits and KPI's shown in the Investment Logic Map shown below.

**Figure 18: Programme Investment Logic Map**



The benefit statements developed will be used as the investment objectives and the associated measures will be tested and refined through the Programme Business Case. More detail on benefits management can be found in section 7.4 and a Benefits Outline is included as Annex 1.

### 3.1.2 Comparing the current and future state

The table below demonstrates the gap between the current and future state, which has been used as a guide for the development of the proposed longlist interventions and programme options.

**Table 14: Summary of the existing arrangements and business needs**

<b>Investment Objective One</b>	<b>Improved connectivity to major centres, between marae and across the district</b>
<b>Existing Arrangements</b>	There is no public transport available in the district and all residents and tourists have a heavy reliance on driving by road. Parts of the district are over 3 hours' drive to the outskirts of Auckland and many of the district's local roads are unsealed, reducing travel speed and increasing safety risks. The many peninsulas in the district create significant travel times between settlements, despite their proximity to each other by water, this includes travelling between Marae.
<b>Business Needs</b>	Improved connectivity and travel choices through creating opportunities to establish multi-modal transport choices. This may include re-establishing a water transport network and making the most of proposed cycling, rail and roading improvements that can connect with a multi-modal Kaipara transport network.
<b>Investment Objective Two</b>	<b>Building Kaipara's unique value proposition</b>
<b>Existing Arrangements</b>	Kaipara lacks defined tourism experiences /products and is losing tourism opportunities to adjacent, districts. A major constraint is the lack of a tourism or destination management strategy that can help private and public sectors to work together to develop, promote and integrate plans and products. There is a desire to support the Kaipara District in promoting its tourism experiences, but they are not defined nor available on a website or printed product to allow inter-district/region promotion. Appropriately scaled tourism opportunities with water-based components could represent an opportunity for the Kaipara District (see Annex 3).
<b>Business Needs</b>	Establishment of a Tourism/Destination Management Strategy that guides development of well defined, appropriately scaled and integrated commercial tourism products that leverage the unique water-based experiences.
<b>Investment Objective Three</b>	<b>Improved economic, social &amp; environmental resilience</b>
<b>Existing Arrangements</b>	Economically, the Kaipara district is lagging behind the rest of Northland and New Zealand despite its close proximity to Auckland. Unbalanced growth, reliance on traditional industries, a declining workforce and significant levels of deprivation are all challenges for the district. Socially, the district is struggling to retain youth and talent to increase prosperity and social cohesion. Additionally, the environmental health of the harbour is in decline and this is impacting the provider role it plays for the district and its spiritual role for the Mana Whenua.
<b>Business Needs</b>	Delivery of interventions to catalyse new and increased economic activity in the district as outlined in the Kaipara Kickstart programme. This includes

	development of a water transport network that can progressively support increased activity on and around the Kaipara Moana.
<b>Investment Objective Four</b>	<b>Improved marine facility experiences through enhanced standards</b>
<b>Existing Arrangements</b>	Kaipara's marine assets are aging following long periods of under or no investment and many are unsafe to use. Those that can be used are lacking the required features to support growth in water-based transport. Mixed ownership has led to varied levels of maintenance and mixed operational standards.
<b>Business Needs</b>	Improved and consistent marine asset standards that enable increased water transport, tourism experiences and coordinated management practices.

## 3.2 Main Risks

The most significant risks that might prevent, degrade or delay the achievement of the investment objectives are identified and analysed below. All risks will be monitored, managed and updated as the programme progresses.

**Table 15: Initial risk analysis**

	<b>Main Risks</b>	<b>Comments &amp; Risk Management Strategies (Mitigations)</b>
1	Lack of asset management plans that cover marine assets	Develop Asset Management Plans that include marine assets and agree management model to achieve a consistent level of service.
2	Availability of suppliers to meet construction timelines with Americas Cup activities heating up.	Provide early notice. Package up work to increase attractiveness. Engage early to increase ownership and share risk.
3	Resource/environment consent processes	Identify requirements early and commence process as soon as possible. Prioritise primary developments. Make use of exiting footprint and resource consents where possible.
4	Council do not approve the estimated maintenance costs for the rest of the \$4.0m investment.	Flag potential maintenance costs early. Minimise these as much as possible and investigate shared operations with community groups, such as the Pahi Fishing Club.
5	New infrastructure brings new environmental risks leading to KDC being seen as not being responsible with natural resources.	Currently the PGF only funds wharf infrastructure and not associated support facilities such as public toilet and parking. The wrapping up of the full cost of the upgrade needs to be considered to prevent any unnecessary negative environmental or community outcomes. KDC is also a member of the Kaipara Harbour Integrated Management Group that is charged with improving the state of the harbour. Liaising with this group on future environmental rehabilitation programmes such as native riparian planting and maintenance which will potentially utilise wharf infrastructure.
6	Engineering assessments indicate more investment required to complete work required than first thought.	The prioritisation of wharf upgrades according to a primary and secondary focus should be followed through for investment decisions. In addition, doing it well and doing it once should also be the ethos in the design briefing and funding decisions.
7	Ownership issues delay the projects and require additional	Council may not be able to incorporate all the wharf upgrades onto its balance sheet and be prepared to

	Main Risks	Comments & Risk Management Strategies (Mitigations)
	levels of decision and governance to make decisions, slowing things down.	take on the operational responsibility, especially if it is considerable distance from a nearby service centre. It could therefore be a case by case basis on whether Council takes on future maintenance and renewal responsibility, and whether a community group is better suited and equipped to deal with the ongoing operations.
8	Iwi engagement is not appropriate and damages relationships.	KDC has encouraged the project team to engage with the Kaipara Moana marae. Additional engagement has been organised with selected Kaipara marae in the consultation period to discuss opportunities.
10	KDC build the \$4.0m primary developments that has been funded as a platform for growth and nothing more happens – no further growth, no further developments occur that support investment. We build it and they don't come.	The investment in wharf infrastructure even if it does not attract a commercial operation immediately, does provide other benefits especially wellbeing, recreational and amenity values for the community. The catalytic investment in the primary locations also improves the health and safety of the existing commercial operations and provides an opportunity for any future operator to provide an alternative or similar offering to compete or compliment.
11	The district cannot support current ferry service provider or locate a new ferry service provider – doesn't make economic sense.	The establishment of smaller commercial enterprises that attempts to build slowly maybe the most viable option in the short to medium term. The operator may have to be flexible as a water taxi in the morning and fishing charter in the afternoon. If there is a need to service a future ferry commuter or tourism niche market, then this could be added to the already established services. This has been the development trend for other small marine markets like Mahurangi and Gulf Harbours.
13	Inappropriate expectations are set leading to a belief that a large scale, disproportionate water transport service will be delivered.	Be clear through early communications that the water transport system must be achievable and sustainable. This may mean starting small and growing progressively over time through water taxi/charter services.

### 3.3 Key constraints, dependencies and assumptions

- **Constraints** are limitations imposed on the investment proposal from the outset. These can include constraints on available resources.
- **Dependencies** are external influences on the success of the programme, where success is contingent on the future actions of others. Other initiatives may also depend on the actions of this programme.
- **Assumptions** are accepted as true or as certain to happen, without proof. If they are not certain to happen, they may be a risk.

The proposal is subject to the following constraints, dependencies, and assumptions.

**Table 16: Key constraints, dependencies and assumptions**

	Constraints	Notes
C1	Internal resourcing	There is limited internal resourcing to support this project and there is limited time to consult adequately with the many interested stakeholders and partners.
C2	Time	There is a very tight timeframe to complete this study and the priority physical works.
C3	Funding	There is a limited source of funding that can only support the top priority investments so the wider network development programme will require funding from other non-KDC sources. It is assumed that funding for the Destination Management Plan can be supported from this development programme and initial PGF allocation.
	Dependencies	Notes & Management strategies
D1	Upgrades of relevant Auckland wharves.	If a network to Auckland is envisaged in the future, the Auckland Council controlled wharves in Parakai, Shelley Beach, Port Albert and Mangakura will provide balance to the proposed developments in the North Kaipara Harbour, in addition to supporting increased charter operations and potentially supporting passenger transport connections from between Auckland and Kaipara District by water.
D2	Progression of proposed road and rail upgrades.	The proposed motorway and rail upgrades (see transport context in section 2.8) will provide the opportunity for eastern connections to support growth of the water transport network.
D3	Availability of future funds to support the programme	Delivery of the entire programme is dependent upon the availability of non-KDC funds.
	Assumptions	Notes & Management strategies
A1	Dargaville wharf upgrade	The proposed upgrade to the Dargaville wharf is assumed to be delivered as a first step in this programme.
A2	Kaipara Kickstart Roads upgrades	The planned roading upgrades within the Kaipara Kickstart programme are assumed to be completed in 2020 (outside of the sealing all the way to Pōuto, which is contingent upon a wharf development in that location).



## 4 The Economic Case – Exploring the Preferred Way Forward

The purpose of the economic case is to identify the preferred programme that optimises value for government and New Zealand.

This case includes:

- The context provided by early analysis and industry feedback.
- The process for option development and evaluation.
- The range of interventions considered for each aspect of the programme.
- The programme investment options created and the preferred way forward.
- An explanation of the preferred solution's components, timing and expected impacts.

### 4.1 Early feedback from industry, partners and stakeholders

Given the timing for development of this Feasibility Study is very tight, the project team sought to gain insights from industry experts and conduct initial technical analysis to provide some guidance on what is possible for the district. The stakeholders and partners consulted is shown below.

**Table 17: Water transport focused engagements**

Partner/Stakeholder	Focus
Fuller's	Ferry and charter operational requirements and commercial appetite to service the Kaipara.
Sealink	Ferry, car ferry, freight and charter operational requirements and commercial appetite to service the Kaipara.
Auckland Council	Appetite for supporting connecting ferry services and relevant land use plans at Parakai.
ATEED	Opportunities for promoting Kaipara tourism experiences through their website and tourism contacts.
KDC	Current marine facility condition, use, ownership and opportunities.
ILM Group	Broad perspectives on all Kaipara Moana issues and opportunities plus potential commercial, financial and management arrangements.
Ngati Whatua Nga Rimu O Kaipara (Malcolm Paterson & Shona Oliver)	Connection to southern Kaipara Marae and northwest Auckland tourism/cultural activities.
Kaipara Cruises Operator	Discussion of current operations and opportunities.
KDC Wharves Advisory Group	Discussion of potential upgrade sites, previous water transport operations and wider environmental considerations.

The two main themes from these discussions are shown below.

#### 4.1.1 A challenging operational and regulatory environment

Water transport operational representatives noted the significant operational compliance requirements for any new ferry operator, or for establishing a ferry service in a new location. Maritime New Zealand provides clear guidance on how passenger ferry operators need to demonstrate compliance with considerable safety and operational requirements. These standards apply to both the vessels and the infrastructure supporting the service.

Many ferry services utilise a subsidy or utilise a captured land development market to help fund their establishment and even ongoing operations.

These stakeholders also cited the challenge to gain and retain skilled operators to operate the service, which is particularly relevant given the navigational risks of the Kaipara Moana. The navigational challenges of the harbour, and the potential for weather conditions to impact on operating schedules mean that highly skilled operators are required, and water-based services may not be as reliable or as resilient as travel by road. The conditions also have an impact on the type of vessel that can be operated in this area.

It was noted on many occasions that for a ferry service to be successful, it must be competitive with car-based travel for the equivalent trip. In many cases, road-based travel is more cost and time competitive, in addition to being more reliable in all weather conditions than water-based travel. While there is a desire to support car-travel alternatives, the slow boat speeds required in areas such as Parakai mean that a boat trip from there to the Kaipara District may not be as efficient or reliable as a car when considered as a regular service.

There is also a reducing number of charter-based operations on the Kaipara Moana today, with operators reporting that in the year 2000 there were 11 small scale charter operators on the Kaipara Moana, and this has now reduced to 2. Fast cat ferries have been trialled between Auckland and the Kaipara District in the past (15-20 years ago) and they failed to attract the required numbers to make it a sustainable operation. At the time, a busload of passengers was required to substantiate each trip.

In summary, from the discussions held to date there appears to be little commercial desire to operate ferry services on the Kaipara Moana without significant subsidies, large increases in population and development of attractive and scalable tourism products.

#### 4.1.2 Inadequate economic drivers

Due to the low population within the district and a lack of defined commercial tourism products, the feedback from the commercial stakeholders interviewed was that they could not see a regular ferry service between Auckland and the Kaipara as being commercially viable. This stance reflects the analysis completed by Market Economics and Abley in assessing the current situation.

On top of this, the lack of public transport, low levels of accommodation and absence of commercial tourism bus operators means people can't really get around the district once they arrive (for now).

There is a desire to support Kaipara's growth in tourism activity, but this requires nurturing, development and promotion of tourism products. There is also a lot to compete with in the vicinity of Auckland and Kaipara does not have a defined niche.

## 4.2 Longlist Options Identification

The purpose of this section is to identify and assess as wide a range as possible of programme options that reflect key trade-offs for value for money, achieve the investment objectives and service requirements, and lie within the boundaries of the scope parameters.

Using the feedback provided from the industry and partner interviews, a range of options was developed under the following headings:

- What range of enabling infrastructure can be delivered.
- How it can be achieved (level of service).
- Who can deliver and operate it?
- When it can happen.
- How it can be funded.

Each of these options is evaluated against the project's Investment objectives (ILM benefits) and a standard set of Critical Success Factors (strategic fit, value for money, supplier capacity, affordability, achievability) to guide which elements should be carried through into development of programme investment options.

A wide range of options was generated by project team members at a facilitated options workshop held on 23 January 2020 and the ratings were tested further stakeholder discussions and engineering assessments. Under the five dimensions, stakeholders have identified a comprehensive long-list of in-scope options as follows.

**Table 18: Possible programme options classified by the five dimensions of choice**

Dimension	Description	Options within each Dimension
<b>Scope</b>	What infrastructure can be developed to deliver the required solutions?	<ol style="list-style-type: none"> <li>1. Do nothing.</li> <li>2. Improvement of tourism marketing and integrated management with no capital investment.</li> <li>3. Minor improvements to support beach landing vessels.</li> <li>4. Modular/targeted marine facility functional and safety improvements to support staged growth in use.</li> <li>5. Significant upgrades for priority passenger wharves, marine servicing facilities and supporting landside asset improvements.</li> <li>6. All the above plus facilities that can support freight and large passenger/vehicular ferries, marine servicing and increased residential populations.</li> <li>7. All the above plus aquaculture storage/distribution facilities, retail and commercial developments.</li> </ol>
<b>Service solution</b>	<b>How</b> can services be provided?	<ol style="list-style-type: none"> <li>1. Building on current service only.</li> <li>2. Integrated management and tourism promotion.</li> <li>3. Water taxis/expanded charter.</li> <li>4. District ferry service.</li> <li>5. Fast Cat plus ferry district services.</li> <li>6. Fast Cat, freight service plus district ferry services and vehicular ferry to multiple sites.</li> </ol>
<b>Service delivery</b>	<b>Who</b> can deliver the services?	<ol style="list-style-type: none"> <li>1. KDC sole delivery.</li> <li>2. Joint Venture.</li> <li>3. Community/Iwi only.</li> <li>4. External Provider only.</li> </ol>

Dimension	Description	Options within each Dimension
<b>Implementation</b>	<b>When</b> can services be delivered?	<ol style="list-style-type: none"> <li>1. Staged.</li> <li>2. All at once.</li> </ol>
<b>Funding</b>	How can it be funded?	<ol style="list-style-type: none"> <li>1. KDC only</li> <li>2. KDC using grants</li> <li>3. KDC, grants, Iwi/community investment</li> <li>4. Private investment only.</li> </ol>

#### 4.2.1 Water transport service level options

With regards to the type of water transport service the district could enable through investing in marine infrastructure, the project team considered a wide range of options ranging from the existing arrangements to very ambitious, large scale operations.

The table below outlines the options considered and the high-level pros and cons of each.

**Table 19: Water transport service level early considerations**

Type	Positives	Risks and negatives
Expanded charter services	Easily deployed, especially if beach landing vessels are used.	Coverage and accessibility will remain low, potentially offering little for locals.
Water Taxi	Relatively easily deployed, especially if beach landing vessels are used.	Requires establishment of a new operator, upgraded marine facilities and substantial demand.
Cross river car barge	Can provide improved travel times across the district.	Requires establishment of a new operator, upgraded marine facilities and substantial demand. Historically this service has been underpinned by the need to connect industrial sites and their customers, so this type demand would need to be replicated to make it feasible.
District ferry (on-demand to commercial operation)	Provides a local alternative to driving for locals, tourists and between Marae.	Typically require a subsidy to operate + higher population density than what is forecast in the Kaipara.
Passenger Ferry connections to Auckland (smaller vessel)	Provides an option for tourists, commuters and locals that don't want to drive.	Estimated travel times are no faster than driving and rely on local buses or cars to travel around the district. Requires a large vessel to safely cross the Harbour.
Freight connections	Often done in collaboration with passenger services, has the potential to support the growth of new agriculture, horticulture and aquaculture activities.	Requires significant marine facilities and significant vessels. Demonstrating greater cost efficiency than road transport will be a challenge.
Fast Cat	Can provide a fast journey competitive with car travel.	Requires a significant population base and large tourist demand to justify investments into vessels, infrastructure, resources, etc.
Vehicular ferry	Can provide the opportunity for tourists to travel the district by car once they arrive.	Requires significant marine facilities and significant vessels. Demonstrating greater cost and time efficiency than road transport will be a challenge.



## 4.3 Network node location options

The diagram below shows the locations that were considered as potential sites for network nodes. Other sites, such as Oneriri and Batley were also considered as the discussions progressed.

**Figure 19: Location options considered**



Each of these sites were evaluated based on their ability to deliver on investment objectives (connectivity improvement, unique value, economic and social resilience, improved marine facility experiences) in addition to their performance against the Critical Success Factors (strategic fit, value for money, supplier capacity, affordability, achievability).

The project team also consulted with the Council established Wharves Advisory Group, the KDC Councillors and several community groups to understand what their priority sites would be and what rationale supported that.

### 4.3.1 Engineering Assessments

An engineering assessment of potential wharf investment sites was completed in February 2020. This assessment considered what would be required to improve the standard or marine structures to facilitate targeted uses, such as supporting charter, passenger ferry or car ferry operations. This assessment was completed by WPS and it is attached as Annex 7. The scope for this study is included below.

*Kaipara District Council (KDC) asked WSP to perform condition assessments of several marine structures in the Kaipara Harbour. These structures are either wharves, jetties or boat ramps. This was to allow for the estimating of upgrade costs of these sites to be able to handle one or more of a passenger ferries, car ferry, oyster boat and/or charter boat.*

*The sites that were visited, and their proposed requirements are noted below:*



1. Te Koporu – To be upgraded to allow for passenger ferry operations.
2. Tikinui – To be upgraded to allow for a car ferry operation.
3. Ruawai Raupo – To be upgraded to allow for a car ferry operation
4. Ruawai – To be upgraded to allow for passenger ferry/charter operations.
5. Tinopai – To be upgraded to allow for passenger ferry/charter operations.
6. Pahi – To be upgraded to allow for passenger ferry/ oyster boat/charter operations.
7. Maungaturoto – To be upgraded to allow for passenger ferry/charter operations.
8. Whakapirau – To be upgraded to allow for passenger ferry/ oyster boat/charter operations.

Other sites have also been considered by the project team in coordination with KDC staff.

#### 4.3.1.1 Rough order cost estimates

On top of the recommendations for the sites in the WSP site engineering assessments (Annex 7), the cost estimates for upgrading facilities at these 8 locations is shown below.

These costs allow for the recommended site and asset improvements, in addition to design fees, establishment, and other ancillary works necessary to complete the projects.

Given that this is a high-level estimate with several unknowns, a margin of error equal to +/- 30% is deemed appropriate.

**Table 20: Summary of estimates**

Site	Estimate	Contingency	Final Estimate
Te Koporu	\$667,500	30%	\$867,750
Tikinui	\$1,140,000	30%	\$1,482,000
Ruawai Raupo	\$915,000	30%	\$1,189,500
Ruawai	\$484,500	30%	\$629,850
Tinopai	\$682,500	30%	\$887,250
Pahi	\$522,000	30%	\$678,600
Maungaturoto	\$187,500	30%	\$243,750
Whakapirau	\$634,500	30%	\$824,850

#### 4.3.2 Raupo – Tikinui car ferry investigation

The project team were requested to investigate the feasibility of re-establishing the vehicle ferry service that connected Tikinui with Raupo. As noted in the WSP report (Annex 7), a car ferry was once in operation between Tikinui and Raupo from the mid 1930's to the middle of the 20th Century. The Tikinui-Raupo service was much valued by the community as it saved the round trip through Dargaville. Foot passengers, cars and trucks carrying road metal, stock, and farm supplies were all transported safely from one side of the river to the other.

The WSP marine condition assessment found that both Raupo and Tikinui need significant investment to enable safe and productive operation to support this service, in addition to continuing to support recreational operations and some small-scale commercial fishing (eels) operations. As shown in the cost estimates above, the estimated costs for the site marine facilities alone (including car parks and access road improvements) exceeds \$2.5 million. This represents a very significant investment for the district. On top of this, it is anticipated that a new operator would need to be subsidised to make this prospect feasible in its initial operations.

As the lead adviser on transport planning for the project, Abley have completed a strategic review of what would be required to make a car ferry feasible in today's environment. It is noted that the historical operation of this ferry was underpinned by the regular movement of goods between production sites and to district customers. Sadly, this type of activity is no longer present in the Kaipara District today and therefore demand would need to come in other forms to make the service viable for a private operator.

#### **4.3.3 Significant investments versus 'light touch' improvements across multiple sites**

The project team also considered whether the initial \$4 million in PGF funds would be better spent at many sites versus completing significant upgrades on a few core sites.

This analysis has been explored through contrasting programme options 3 and 4. The key consideration in this analysis is understanding how much needs to be invested to deliver an upgrade that can cater for the desired range of uses.

There is certainly value in coordinating and supporting activities such as beach landings to provide a fast-tracked network of sites that can support tourism activities, with Marae-based experiences being a standout opportunity.

But this must be done in coordination with wharf upgrades to suitably lift the standard of facility high enough to attract more recreational, charter and water taxi services while meeting the required health and safety requirements. The project team's discussions with current operators helped to clarify what the Maritime New Zealand requirements would be significant for a new operator and as a general rule, marine facilities that support new water transport services would need to cater for all abilities and meet a number of accessibility standards.

#### 4.3.4 Upgrade location assessment summary

The project team evaluated each site through the longlist criteria and then combined this with the feedback from the engineering assessments to provide the following summary of site ratings their level of priority in the delivery programme.

**Table 21: Water transport network node assessment summary**

Location	Performance against investment objectives	Performance against critical success factors	Potential issues or risks	Potential benefits	Estimated costs or cost range	Level of priority
<b>Dargaville</b>	High	High	This site could be better connected with bus and pedestrian / cycle connections.	Supports increased activity while supporting larger vessels and improving access.	\$395,600	High
<b>Pahi</b>	High	High	Requires negotiation with the Pahi Fishing Club who wish to upgrade their Clubrooms and join up with the Pahi Community Hall.	Supports increased activity while supporting larger vessels and improving access.	\$864,320	High
<b>Pōuto</b>	High	Medium – High (subject to safety of the site)	Previous wharves at this site have been damaged by storms. Fast moving water creates safety risks at previous site.	Improves safety of current operations, supports growth in tourism activities especially cycle tourism. May support development of local land for residential and agricultural use.	\$1,809,120	High
<b>Mangatūroto</b>	Medium	Low-medium	Very constrained by tide and railway bridge height.	Can support local recreation, kayaking and smaller boats. Also supports the spatial focus on growing this town and small craft node	\$342,500	Medium
<b>Whakapirau</b>	Medium	Low	Constrained by lengthy road access from State Highway. Small settlement that has no commercial activities or community desire for development.	Support water taxi operations, complements nearby (possible) visitor accommodation development	\$824,850	Low

Location	Performance against investment objectives	Performance against critical success factors	Potential issues or risks	Potential benefits	Estimated costs or cost range	Level of priority
<b>Tinopai</b>	Low-Medium	Medium	A challenging wharf for smaller boats in inclement weather conditions. Very exposed location.	Can play a role in regenerating the peninsula. With a pontoon may better service a range of vessels. May have potential to support Kai freight in the future.	\$1,114,700	Medium
<b>Kelly's Bay</b>	Medium	Medium	Access road is constrained and may be affected by erosion.	Supports a range of activity today. Deep ramp, calm area, can play a backup role to Pōuto for access to that peninsula.	\$ 50,000	Low
<b>Matakohe</b>	Low	Low	Very tidal, would require a very long wharf.	Provides a connection to the Kauri Museum (reliant on a bus or car pickup)	N/A	Discounted
<b>Otamatea</b>	Low	Medium	Would service a very small area, very little infrastructure in place.	Connect with Ancestral Marae, church may be a feature for weddings.	To be confirmed	Medium
<b>Batley</b>	Low	Medium	Would service a very small area, very little infrastructure in place.	Connect with Ancestral Marae, may support cultural experience trip.	To be confirmed	Medium
<b>Oneriri</b>	Low	Low	Very isolated and motorway upgrade will bring cars close, reducing its competitive advantage.	Potential to support visitor accommodation, connect with Kaiwaka rail head in the future.	\$600,000	Low
<b>Ruawai</b>	Medium	Medium	Does not currently enable tourism activity outside of game charter fishing	Improves safety of current operations, close to state highway, close to Dargaville, connects with planned cycle trail to Dargaville, supports a range of use today, supported by good parking and amenities plus freedom camping area.	\$805,820	Medium
<b>Te Koporu</b>	Low	Low	Close to Dargaville. Significant investment, brand new wharf required. Could be a positive community asset.	May provide a level of resilience in major flood events	\$1,091,300	Low

Location	Performance against investment objectives	Performance against critical success factors	Potential issues or risks	Potential benefits	Estimated costs or cost range	Level of priority
<b>Oruawhoro</b>	Low	Medium	Very close to Port Albert wharf, wharf would need to be over 150m to act as an effective wharf, beach landing preferred.	Connects with ancestral marae. May support beach landings in conjunction with Port Albert operations.	To be confirmed	Very low
<b>Topuni</b>	Low	Low	Very tide affected access.	May support a future eastern connection.	To be confirmed	Discounted
<b>Arapaoa</b>	Low	Medium	Close to Pahi so it would need to differentiate its role. Services a very small area.	Connects with ancestral marae, may support an authentic cultural experience tour.	To be confirmed	Low
<b>Tokatoka</b>	Medium	Low	Unsafe road access and can be affected by strong tidal movements. Poor standard of wharf and car park.	Connects with Tokatoka mountain walk and pub. May be part of a scenic trip from Dargaville.	N/A	Low
<b>Raupo</b>	Low	Low	Requires significant investment to meet safety standards. Constrained by access/parking areas.	Low numbers predicted shows a cross river ferry to be not viable.	\$1,189,500	Discounted
<b>Tikinui</b>	Low	Low	Requires significant investment to meet safety standards. Constrained by access/parking areas.	Low numbers predicted shows a cross river ferry to be not viable.	\$1,482,000	Discounted



## 4.4 Longlist Options Evaluation

In addition to the location assessment outcomes above, the longlist options assessment provided clear guidance on what elements could be carried through to become part of programme investment options.

The analysis of the longlist options provided a strong indication of the optimal scale and function for the water transport network and the infrastructure, locations and management interventions that would need to support this. Larger scale service options (such as regular Fast Cat ferry services to Auckland, large scale freight and vehicular ferry) and their required infrastructure were mostly discounted due to the scale of passengers and freight required to make them commercially feasible and the operational costs that the council would need to take on to maintain the assets. Even when a 30-year horizon was considered, the forecast district growth levels and economic trends did not substantiate a regular large-scale passenger, freight or vehicular ferry service.

A staged delivery was preferred due to the lack of funding and capability to deliver the network all at once and it was recognised the programme requires funding from several partners due to KDC's very limited budgets. The table below includes the rankings for each area and a more detailed version is included as Annex 8.

**Table 22: Infrastructure scope options ranking**

Status Quo	Status Quo - Do Nothing
Do Minimum	Small scale charter or hire using current facilities and beach landing vessels
Shortlist - less ambitious	Minor improvements to support beach landing vessels
Shortlist - Preferred	Modular marine facility functional and safety improvements to support staged growth in use
Shortlist - more ambitious	Significant upgrades for priority passenger wharves, marine servicing facilities and supporting landside asset improvements
Most Ambitious	SC 5 + facilities that can support freight and large passenger/vehicular ferries and increased residential populations

**Table 23: Service solution options ranking**

Status Quo	Status Quo - Do Nothing
Do Minimum	Building on current service
Shortlist - less ambitious	Integrated management and tourism promotion
Shortlist - Preferred	Water taxis/expanded charter
Shortlist - more ambitious	District ferry service
Most Ambitious	Fast Cat plus ferry district services (this option and higher-level options were later discounted due to assumed lack of commercial feasibility and the scale of operational cost burden for the council).

**Table 24: Service Delivery Options ranking**

Status Quo	Status Quo - Do Nothing
Do Minimum	KDC sole delivery
Shortlist - less ambitious	Community/lwi only
Shortlist - Preferred	Joint Venture
Shortlist - more ambitious	External Provider only
Most Ambitious	Nil

**Table 25: Funding Options ranking**

Status Quo	Status Quo - Do Nothing
Do Minimum	KDC only (discounted)
Shortlist - less ambitious	KDC and grants
Shortlist - Preferred	KDC, grants plus community and lwi investment
Shortlist - more ambitious	Joint venture PPP
Most Ambitious	Private investment only

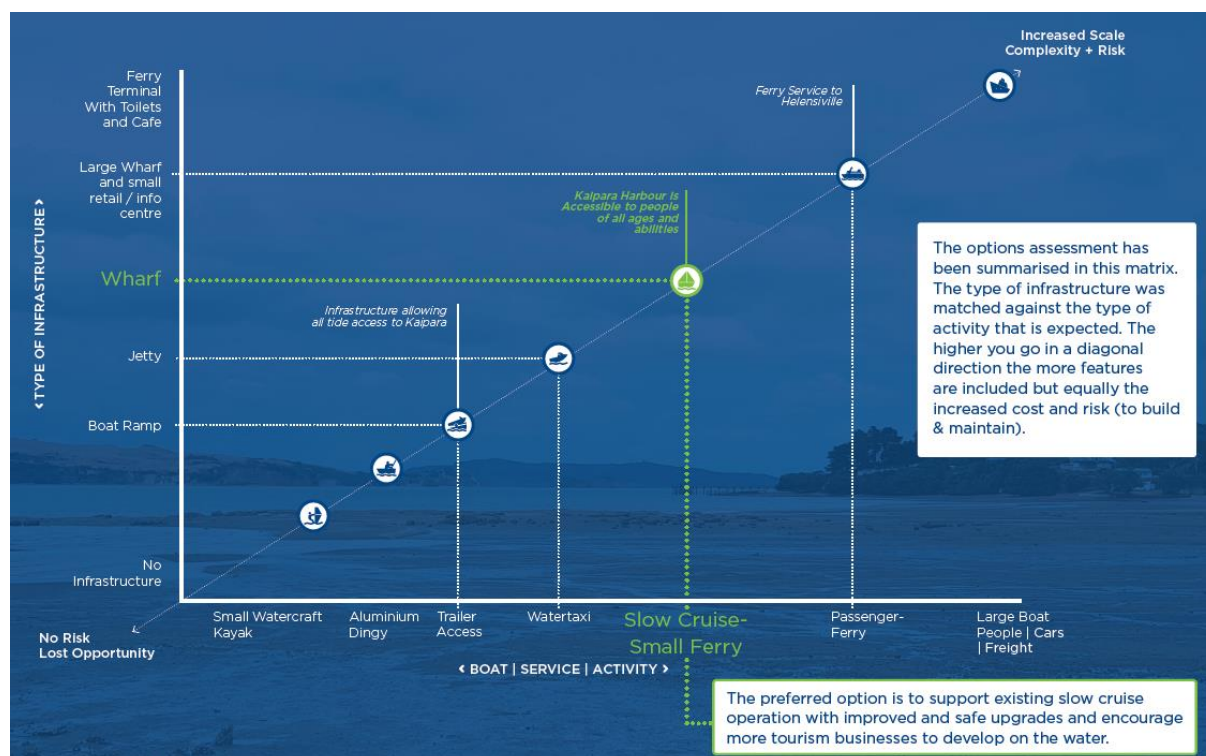
## 4.5 Programme Investment Options Development

The longlist assessment provided a structured view on what should be included in programme investment options. Using these outputs, the project team created a set of seven potential investment programme options.

These options are called programmes because each one has a mix of interventions that align with a level of ambition around the water transport network and its enabling infrastructure.

The diagram below provides a visual representation of how the infrastructure requirements can be aligned with the level of aspiration for the water transport network, while recognising that the cost, risk and complexity increase with the scale of the operation.

**Figure 20: Network scale and infrastructure requirements matrix (Source: Consultation Document)**



The programme investment options, and their inclusions and attributes are shown below.

**Table 26: Summary of each option and their attributes**

<b>Option 1: Status quo – do nothing</b>	
Option description	This option includes: <ul style="list-style-type: none"> <li>Supporting continued operation of Kaipara Cruises.</li> <li>Meeting required marine asset management requirements.</li> </ul>
Advantages	The main advantages are: <ul style="list-style-type: none"> <li>This option generates very low new risk and is very achievable.</li> </ul>
Disadvantages	The main disadvantages are: <ul style="list-style-type: none"> <li>It does not mitigate existing risks or provide any new value.</li> </ul>
Costs	No additional costs outside of existing operational budgets.
Benefits	Nil.
Conclusion	This option would provide little benefit to the district and has rated poorly against the investment objectives and business needs. It is recommended that this option be considered only as a value for money comparison with the preferred way forward. This option will not progress.

<b>Option 2: Do minimum – Dargaville Upgrade plus management interventions</b>	
Option description	This option includes: <ul style="list-style-type: none"> <li>Completing the Dargaville wharf upgrade.</li> <li>Development of a destination marketing strategy, tourism website.</li> <li>Development of level of service agreements and operating framework for marine facilities across the district and grant funding for required improvements.</li> </ul>

<b>Option 2: Do minimum – Dargaville Upgrade plus management interventions</b>	
Advantages	This option is very achievable, and work is underway to address much of this already. This option would provide a good foundation for achievement of the investment objectives through the management and tourism interventions and upgrading of Dargaville wharf as a hub.
Disadvantages	But this action alone will not support a water transport network and it does not take full advantage of the Provincial Growth Funding to support establishment of a core water transport network. It does not go far enough to catalyse increased water transport activity as more sites need to be improved to provide more options and at least a district network to support a diversity of tourism options.
Costs	Approximately \$689,357 (not including landside improvements at Dargaville)
Benefits	<ul style="list-style-type: none"> <li>The Dargaville wharf can support increased activity and may help attract more operators to use it as a hub.</li> <li>The marine asset management and tourism strategy interventions provide momentum and a platform for development of the district's unique offering.</li> </ul>
Conclusion	This option will be progressed as a value for money comparison only.

<b>Option 3: Local skills, real experiences, low investment</b>	
Option description	<p>This option includes all actions from option 2, plus:</p> <ul style="list-style-type: none"> <li>Beach landing focus – minor upgrades to enable expanded charter/taxi services. Potential sites include Otamatea, Arapaoa, Kelly's Bay.</li> <li>Development of targeted slow-tourism experiences.</li> <li>Establishing campgrounds in underutilised land near marine facilities.</li> <li>Develop a local skills base to resource this.</li> <li>This includes establishing connections between Marae to encourage tourism and social connections.</li> <li>Requires meeting regulatory and start-up requirements/costs.</li> </ul>
Advantages	<p>The main advantages are:</p> <ul style="list-style-type: none"> <li>The low level of investment required.</li> <li>The emphasis on local skills and capability development</li> <li>Facilitates tourism product development such as campgrounds and mountain bike trails</li> </ul>
Disadvantages	<p>The main disadvantages are:</p> <ul style="list-style-type: none"> <li>The emphasis on marketing and management interventions without the enabling infrastructure may lead to poor experiences and lost tourism opportunities.</li> </ul>
Costs	Approximately \$1,089 million
Benefits	<ul style="list-style-type: none"> <li>Some improved connectivity</li> <li>Supports a small amount of increased business and tourism activity</li> <li>Small uplift in marine asset standards</li> </ul>
Conclusion	Progress this option for further investigation as the less ambitious option.

<b>Option 4: Targeted investments to develop a water transport network</b>	
Option description	<p>This option includes all actions from option 3, plus:</p> <ul style="list-style-type: none"> <li>Upgrades to the following primary sites: Dargaville, Pahi and Pouto</li> </ul>

<b>Option 4: Targeted investments to develop a water transport network</b>	
	<ul style="list-style-type: none"> <li>• New wharf at Pōuto</li> <li>• Followed by staged upgrades to the wharves at Mangatūroto &amp; Ruawai</li> <li>• Other nodes will be activated/improved as activity grows, such as Tinopai, Te Kopuru, Oneriri and Kelly's Bay.</li> <li>• Small scale commercial and residential land developments at primary sites to support business and population growth.</li> <li>• Assumes upgrades to Auckland Council wharves to enable extension of northern Kaipara network.</li> <li>• Investigation into cycling connections and MTB park development.</li> </ul>
Advantages	This option generates positive momentum while delivering against all the investment objectives. The balance of management/marketing interventions and leading infrastructure developments allows the district to progressively build activity while maintaining manageable operational cost levels.
Disadvantages	This option only develops a few sites in the first 12 months, and this will constrain the growth of the tourism activity that requires a wharf site.
Costs	\$8.6 million
Benefits	<ul style="list-style-type: none"> <li>• Improved connectivity</li> <li>• Supports increased business and tourism activity</li> <li>• Some uplift in marine asset standards</li> <li>• Potential to support population increase</li> </ul>
Conclusion	Progress this option for further investigation as the preferred programme.

<b>Option 5: Significant investment in marine and landside infrastructure &amp; attractions</b>	
Option description	All initiatives from 4, plus: <ul style="list-style-type: none"> <li>• Major upgrades of wharves and amenities to support freight and larger ferries.</li> <li>• Marine servicing facilities in one hub, land rezoning to support expanded residential.</li> <li>• Medium scale commercial and residential land developments to support business and population growth.</li> <li>• Utility upgrades.</li> <li>• Cycling connections and MTB park development.</li> </ul>
Advantages	The main advantages are: <ul style="list-style-type: none"> <li>• This option would provide significant value to the district and it would go a long way towards creating a destination with a variety of business opportunities.</li> </ul>
Disadvantages	The main disadvantages are: <ul style="list-style-type: none"> <li>• At this stage it is not achievable due to the scale of the capital investment and the ongoing operational expenditure required to maintain the required assets. The setting is also not suitable to attract the level of investment required to achieve this.</li> </ul>
Costs	Estimated based on current figures to be \$15-\$25 million range
Benefits	<ul style="list-style-type: none"> <li>• Improved connectivity</li> <li>• Increased business and tourism activity</li> <li>• Significant uplift in marine asset standards</li> <li>• Potential population increase</li> </ul>



	<ul style="list-style-type: none"> <li>Potential freight movement to and from Auckland and beyond</li> </ul>
Conclusion	Progress this option for further investigation as the more ambitious option.

#### Option 6: Fast connections, freight & land activation

Option description	All initiatives from 5, plus: <ul style="list-style-type: none"> <li>establishment of a fast cat ferry service to Parakai</li> <li>freight handling facilities,</li> <li>larger scale marine servicing</li> <li>further land development to increase population base and commercial office supply.</li> </ul>
Advantages	This option would provide significant value to the district and it would go a long way towards creating a destination with a variety of business opportunities.
Disadvantages	At this stage it is not achievable due to the scale of the capital investment and the ongoing operational expenditure required to maintain the required assets. The setting is also not suitable to attract the level of investment required to achieve this.
Costs	Estimated based on current figures to be \$30-\$40 million
Benefits	<ul style="list-style-type: none"> <li>Improved connectivity</li> <li>Significant uplift in marine asset standards</li> <li>Increased business and tourism activity</li> <li>Potential population increase</li> <li>Potential freight movement to and from Auckland and beyond</li> </ul>
Conclusion	This option will not progress.

#### Option 7: Fast connections, freight & land activation + Vehicular Ferry

Option description	All initiatives from 6, plus: <ul style="list-style-type: none"> <li>Vehicle ferry connections to multiple sites.</li> <li>Associated landside access and parking improvements.</li> </ul>
Advantages	The main advantages are: <ul style="list-style-type: none"> <li>Improved connectivity</li> <li>Significant uplift in marine asset standards</li> <li>Increased business and tourism activity</li> <li>Potential population increase</li> <li>Potential freight movement to and from Auckland and beyond</li> </ul>
Disadvantages	The main disadvantages are: <ul style="list-style-type: none"> <li>It is entirely disproportionate to the needs, population and financial capability of the district</li> </ul>
Costs	Estimated based on current figures to be \$40-\$50 million
Benefits	<ul style="list-style-type: none"> <li>Improved connectivity</li> <li>Significant uplift in marine asset standards</li> <li>Increased business and tourism activity</li> <li>Potential population increase</li> <li>Potential freight movement to and from Auckland and beyond</li> </ul>
Conclusion	This option will not progress.

## 4.6 Programme Investment Options Assessment

Programme options were developed for comparison and evaluation through a Multi-Criteria Analysis. The criteria used to evaluate and rank the options included:

- Performance against Programme Investment objectives.
- Engineering Assessments and rough order costs for targeted wharves and associated landside facilities.
- Delivery timeframes.
- Risk ratings.
- Performance against PGF Objectives/business needs.
- Dependencies.

### 4.6.1 Assessment process

The programme options assessment was completed through a three-stage process, as shown below:

1. Project Team objective assessment against criteria through multiple meetings in early-mid February.
2. Wharves Advisory Group feedback on the evaluation in 19 February 2020.
3. An Elected Member workshop on 20 February 2020 to discuss findings to date and the option inclusions and ranking.

## 4.7 The Recommended Preferred Way Forward

This multi-stage assessment process indicates that to deliver a feasible and sustainable water transport network, KDC and its partners should focus on a scalable, district water transport network focused on developing tourism, improving safety, building local skills, improving local connectivity and enhancing places.

This network would need to build progressively through growing existing charter services, supporting growth of on-demand services and working closely with tourism operators to define and leverage a distinct offering that embraces water transport while connecting well with land-based attractions.

While Fast cat ferries, freight and vehicular ferry connections to Auckland have been discussed (and trialled) in the past, the challenging marine conditions, lack of population density and inability to compete with travel by road indicate that this type of investment could not be justified, nor deemed to be commercially attractive.

The Multi Criteria Analysis demonstrated that Programme **Option 4: Targeted investments to develop a water transport network** performed best across a range of criteria, while aligning with the anecdotal guidance provided by the industry operators and the Wharves Advisory Group with regards to an achievable and sustainable approach.

To provide balance and a value for money approach, the options below will be considered in further investigations:

- Option 2: Do minimum – as a benchmark for comparison
- Option 3: Local skills, real experiences, low investment – as a benchmark involving reduced investment
- Option 5: Significant investment in marine and landside infrastructure and attractions – as a comparison against higher investment and risk levels.

## 4.8 Profiling the preferred option

### 4.8.1 Primary developments

The following primary developments are recommended to improve the wharf facilities available in the district, support growth in charter and tourism services, while opening up wider economic opportunities in their respective areas (such as connection to potential cycling routes/parks, connection with Kai projects and aquaculture opportunities).

#### 4.8.1.1 Dargaville Wharf Upgrade

This study has confirmed that Dargaville is a logical first investment in the activation of water travel for the district. The design and delivery of this upgrade is underway, and the further investments outlined below will use Dargaville as a catalyst for building further activity. The upgrade also has close alignment with both the Dargaville Township Improvement Plan (NZTA) and the spatial planning direction for Dargaville outlined in the key moves for the Dargaville Town Centre below. The scope of the project is the upgrade of the wharf. The primary purpose of the Dargaville Wharf is to serve as the ferry transport hub for the district. The targeted development is estimated to cost \$395,600.

Kaipara Wharves & Water Transport Feasibility Study

#### 6 | THE PREFERRED OPTION

##### Dargaville

#### Key

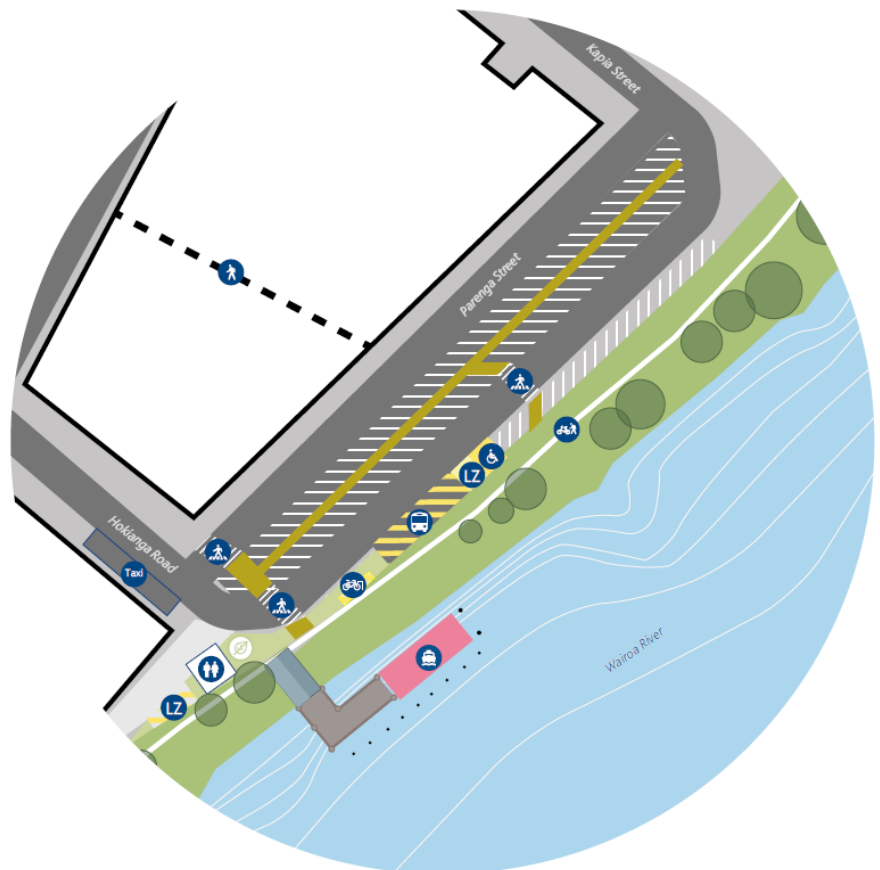
- Pedestrian Access
- Accessibility Parking
- Pedestrian Crossing
- Public Conveniences
- Taxi Stand
- Bus Parking
- Loading Zone
- Bike Rack
- Pontoon Addition to Wharf
- Walking/Cycle Path
- New Green Space

#### Notes

- this preferred option is a combination of this study and the Dargaville Spatial Plan town centre key move.

- design is indicative and still requires a future parking study to guide town centre parking provision.

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**Figure 21: Dargaville Preferred Option (Source: Consultation Document)**

#### 4.8.1.2 Pahi Wharf upgrade

There has been a wharf at Pahi since 1881. The current Pahi wharf was opened in 1987. It was built and is maintained by the Pahi Regatta Club (previously Otamatea Regatta Club, also known as Pahi Boating & Fishing Club).

The Pahi Wharf represents a great investment opportunity. It already supports a range of water activities, it is well positioned in the network, it is managed by a very enthusiastic club and it is supported by great landside facilities, including ample parking, accommodation and potential bus connection areas.

The proposed upgrades at Pahi include:

- Upgrade existing jetty (new railings, replace any deficient elements)
- New concrete pontoon and associated gangway
- Sealing of the car park.

It is proposed that the Pahi Wharf upgrade occur as a priority in 2020/21. The estimated rough order cost for this upgrade is \$864,320. The proposed wharf upgrade design would need to consider Pahi Fishing Club's clubrooms upgrade and associated landside improvements.

Kaipara Wharves & Water Transport Feasibility Study

## 6 | THE PREFERRED OPTION

### Pahi

#### Key

- Trailer Parking
- Boat Ramp
- Wharf & Jetty Access
- Stepped Landing

#### Notes

Preferred option includes:

- Upgrade existing timber wharf (new railings, replace any deficient elements)
- New concrete pontoon and associated aluminium gangway
- Sealed car park



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**Figure 22: Pahi Preferred Option (Source: Consultation Document)**

### 4.8.1.3 Pōuto Wharf

Pōuto represents another strong opportunity for unlocking the potential of the Kaipara Moana. Historically, Pōuto Point has been a very important site for water travel on the Kaipara Moana. Today, a new wharf at Pōuto has the potential to unlock new tourism opportunities, support residential and agricultural land development in the area and improve the safety of the charter boat drop offs and pick-ups that occur there today.

The Pōuto wharf is proposed to cater for charter/tourist vessels, fishing and recreation. The capability to cater for freight movements and larger vessel should be considered further in the detailed design.

Recent investigations completed by WSP have identified three potential locations for a wharf at Pōuto. In each option, the wharf structure is required to be of a substantial length based

on the tidal nature of the area. The pros and cons for each are outlined in the diagram below. The preferred site is estimated to cost \$1,809,120. This site is still under investigation and this figure may be revised in the coming months.

Health and safety concerns have been raised by a member of the Wharves Advisory Group with the high tidal flows and any people visiting the area and potentially using a proposed Pōuto Point wharf for jumping into the sea. WSP have advised the following information in relation to their and KDC's legal obligations to designing and constructing a wharf at this location:

**WSP's obligations:**

*Section 39(2) of the Health & safety at Work Act 2015 ('the Act') requires a designer of any structure to ensure the structure is safe for use for the purpose it was designed. The obligation does not extend to ensure the structure is safe for use for an improper purpose (such as unauthorised jumping off the wharf).*

**KDC's obligations:**

*KDC is obliged to ensure that the wharf is safe for its workers and other people who are entitled to use the wharf. However, KDC (being a person who manages or is in control of a workplace) does not owe a duty to protect the health and safety of any person who is at that workplace **for an unlawful purpose**. (Refer section 37(2) of the Act).*

*For these reasons, we believe that:*

- WSP does not have a duty to design the wharf to ensure the safety of those not using it for legitimate and lawful purposes.*
- The Council does not have an additional obligation to ensure that the wharf is safe for people using it for unlawful purposes.*
- Having said that, WSP should design and KDC should ensure there are sufficient barricades, signage and other facilities to prevent falls.*

This information is now being checked with Council's legal advisors to ensure that Council's legal responsibilities are being adhered to and the known risks can be managed.

**Figure 23: Pōuto Point Wharf Preferred Option (Source: Consultation Document)**

Kaipara Wharves & Water Transport Feasibility Study

**6 | THE PREFERRED OPTION**

**Pōuto**

**Key**

- Boat Ramp
- Wharf & Jetty Access
- Pedestrian Access Option
- Turning Bay | Drop off Zone

Site	Pro	Con
1	<ul style="list-style-type: none"> <li>Very good Existing Access</li> <li>Existing legal "paper" road beach access.</li> <li>Very good parking close</li> <li>Existing public amenities and toilet</li> <li>Site near level</li> <li>Close to beach attractions</li> <li>Functional for present</li> <li>Close to deep water</li> </ul>	<ul style="list-style-type: none"> <li>Visual impact</li> <li>Exposure</li> <li>Strong currents</li> </ul>
2	<ul style="list-style-type: none"> <li>Sheltered from wind</li> <li>Away from Fisherman's rock</li> <li>Close to Pōuto Point</li> </ul>	<ul style="list-style-type: none"> <li>2 land purchases</li> <li>Vehicle access not viable</li> <li>Cliff very steep walking track or stairs</li> <li>Very high cost</li> </ul>
3	<ul style="list-style-type: none"> <li>Less visual impact</li> <li>Remote away from Fisherman's rock</li> </ul>	<ul style="list-style-type: none"> <li>1 land purchase</li> <li>Wharf 4X longer than option 1</li> <li>Vehicle access difficult</li> <li>Reclamation planning risks</li> <li>Cost of reclamation</li> <li>Steep walking track</li> <li>Distant from Pōuto Point</li> <li>High cost</li> </ul>





**Figure 24: Tiritiri Matangi Wharf - example of a long wharf (see Pouto Wharf options 2 & 3)**



#### **4.8.1.4 Formalisation of beach landing opportunities**

In addition to the wharf developments highlighted above, several interventions are proposed to formalise and activate several beach landing locations to support new tourism and charter opportunities. These interventions include the development of tie up facilities, signage, mobile ramps and establishment of informal walkways for the following sites:

- Otamatea
- Arapaoa
- Oruawharo

At this stage, \$400,000 is suggested to be allocated for this works in the programme costs but this figure should be tested and validated further through more specific investigations.

**Figure 25: Beach landing operations in the Abel Tasman National Park**



#### 4.8.2 Short term management interventions

Management interventions are required to ensure that marine facility investments are enabled through improved asset management practices and development of attractive and well positioned tourism products to build interest in and activity on the Kaipara Moana. The proposed interventions are outlined below.

##### 4.8.2.1 Development of a Tourism Destination Management Plan and supporting tools

To ensure that the District can make the most of the proposed primary wharf investments, while building the Kaipara's unique value proposition, it is proposed that a Destination Management Plan (DMP) be developed. This plan should:

- identify the commercial opportunities for the district
- include action plan to make them happen
- inform the development of a tourism website, social media platform and supporting collateral to promote the area
- investigate the value in funding a resource to drive its delivery.

This plan should include the investigation of cycling opportunities as noted in the preferred programme. The DMP is estimated to cost \$50,000, the development of the proposed marketing tools is estimated to cost \$70,000 and if proposed, a resource to deliver this plan for an initial 12 months is estimated to cost \$80,000. The cost of this plan and implementation is proposed to be found from any cost savings of the Wharves feasibility study investigation stage (which currently has an underspend), unallocated funds from the primary network improvements and any future government funding applications.

##### 4.8.2.2 Development of an agreed Marine Asset Management Plan and Operation Policy

KDC are well underway in development of Asset Management Plans that include marine assets. This work is set to include development of an Operational Policy to inform the required management of the district's marine assets. This has and should continue to place safety of current and proposed operations at the forefront, in addition to the ability to fund and sustainably maintain the district's marine assets. An integrated management approach will be critical to ensure that the targeted improved marine facility experiences that underpin tourism activities can be realised. To complete this work, KDC may need to engage an appropriate professional services engineering firm to identify an agreed approach and coordinate regular inspections to ensure the levels of service are being met. The cost of this policy is expected to be found within existing and future KDC operational budgets.

##### 4.8.2.3 Progress land use change opportunities through Spatial Planning

The spatial planning currently underway in the Kaipara District has the potential to support (and be supported by) targeted investments in wharf infrastructure (and the activity that this can bring). It will be important to schedule and deliver the proposed land use changes that can play this role in coordination with this programme. Specific opportunities include:

- Unlocking new residential opportunities near wharf sites.
- Activating retail or commercial opportunities.
- Investigating and developing proposals to open new cycling trails, kayak routes or Mountain Bike parks. This may be captured in the Destination Management Plan.

With larger population catchments signalled in the 30-year key urban areas spatial plan (Dargaville, Maungaturoto and Kaiwaka), the opportunity to operate viable water-based businesses increases.

The cost of the spatial planning and District Plan changes is expected to be found within existing and future operational budgets.

#### 4.8.3 Schedule for priority actions

The PGF funding agreement requires KDC to move at pace to investigate feasibility, consult with the community, agree the primary improvements and deliver physical works. The Programme Steering Group consistent message is for no delays and that the Programme Management Office is to move pace to deliver each stage. To do this, the physical works for the primary developments will need to move very quickly, over the next 1-2 years. A programme will be established within this business case to show the key steps and milestones. It is equally as important to align and progress quickly the short-term management interventions to ensure the required strategies, promotion, policies and procedures are ready to receive and optimise the condition and value of the new assets.

#### 4.8.4 Secondary staged developments

To further develop the water travel network for the Kaipara District, the following wharf developments may be delivered over a longer term and in coordination with new tourism offerings. These sites should be revisited following the delivery of the Primary developments with a view to confirm the highest value opportunities based on results achieved from the initial investments.

This aspect of the programme includes a potential investment of approximately \$3 million. An investment of this size will not provide a positive return to the district at this stage, but it has the potential to support increased water travel activity, support revitalisation of settlements and provide improved access during flood events.

**Table 27: Secondary developments costs and staging**

Wharf Site	Proposed Upgrades	Timing	Cost estimates
<b>Kelly's Bay</b>	<ul style="list-style-type: none"> <li>Minor upgrades to improve access and parking areas plus boat tie up facilities alongside the ramp.</li> </ul>	5-10 years	\$50,000
<b>Oneriri</b>	<ul style="list-style-type: none"> <li>Minor upgrades (ramp or beach access) to attract more recreational use and provide a future connection to the Kaiwaka rail head. Including reserve upgrade, parking, lighting and toilet and boat ramp.</li> </ul>	3-6 years	\$600,000
<b>Ruawai</b>	<ul style="list-style-type: none"> <li>Upgrade existing jetty (new railings, replace any deficient elements).</li> <li>New concrete pontoon and associated gangway.</li> <li>Sealing of the car park.</li> </ul>	5-10 years	\$805,820
<b>Maungatūroto</b>	<ul style="list-style-type: none"> <li>Upgrade existing jetty (new railings and construct lower deck).</li> </ul>	5-10 years	\$342,500



Wharf Site	Proposed Upgrades	Timing	Cost estimates
	<ul style="list-style-type: none"> <li>Sealed car park.</li> </ul>		
<b>Te Kopuru</b>	<ul style="list-style-type: none"> <li>New jetty.</li> <li>New concrete pontoon and associated gangway.</li> <li>Sealing of the car park</li> <li>Construction of passing bays on access road.</li> </ul>	10-15 years	\$1,091,300
<b>Tinopai</b>	<ul style="list-style-type: none"> <li>Upgrade existing jetty (replace any deficient elements and drive additional piles).</li> <li>New concrete pontoon and associated gangway.</li> <li>Sealing of the car park.</li> </ul>	15-20 years	\$1,114,700
		<b>Total</b>	<b>\$4,004,320</b>

**Figure 26: The Preferred Option for Primary and Secondary Network Locations (Source: Consultation Document)**



## 4.9 Indicative economic impacts of the preferred option

Investing the District's wharf infrastructure, with a view to support local economic development, will lift local business activity. The size of this lift is outlined below using economic metrics like GDP and employment. The analysis covers two distinct parts:

- The one-off impacts associated with the construction phase, and
- The ongoing impacts arising from a lift in the visitor sector.

The section presents a short summary of the assumptions and background information used to estimate the economic impacts. The economic impacts were estimated using a Multi-Regional Input-Output model with three specific regions and 106 sectors. The following three regions:

- Kaipara District,
- Rest of Northland region, and
- Rest of New Zealand.

The model reflects the supply chain effects<sup>12</sup> and how the economic transactions flow through the economy. The impacts arise as the additional (new) activity takes place, and then ripples through the economy. We have estimated the 'direct and indirect impacts', as well as the 'induced impacts'. These are defined as follows:

- **'Direct and indirect impacts'** – when a visitor (or business) spends (new) money in the local economy, then the economy responds by firstly increasing (or decreasing) activities supplying the goods and services, needed to address that initial demand. This is the direct effect. All firms supplying the businesses responding to the initial spending, adjust their outputs, stimulating further rounds of impacts, and so forth. Further (flow on) rounds of activity are needed to meet the extra demand and these rounds are called the indirect impacts.
- **The induced impacts:** As businesses respond to the economic change (the direct and indirect impacts explained above), they use additional workers (by increasing staffing hours, employing more people or working overtime). This leads to a lift in salary and wage payments to households, i.e. more salaries and wages paid to workers in return for their labour. Businesses also take additional profits as operating surpluses increase – this is partially returned to households through dividends paid to business owners or investors. As households spend their returns or earnings, another round of effects is created (i.e. household spending). These are termed induced impacts.
- The **'total impact'** reflects the sum of the direct, indirect and induced impacts.

Only the total impacts are reported. The impacts are distributed over time, and the Discounted Cashflow Analysis is used to translate the future values (impacts) into one \$-figure. Three different discount rates<sup>13</sup> are used to show the potential spread of impacts.

<sup>12</sup> Sometimes referred to as multiplier effects; we do not use multiplier to estimate the impacts as this can misrepresent the impacts.

<sup>13</sup> The following rates were used: 4%, 6% and 8% discount rates. This is in-line with the rates outlined by the NZ Treasury.



#### 4.9.1 Key Assumptions

The economic flow on impacts of the wharves project are estimated using a scenario approach. Crucially, this impact assessment looks at the economic impacts using GDP, employment and income as metrics. The assessment covers actual transactions i.e. where money flows through the economy – it is not a cost benefit analysis<sup>14</sup>. Both the one-off and ongoing impacts are assessed. The one-off impacts are associated with the capital spending on the wharves; these are non-recurring capital spending. The ongoing impacts relate to the shift in the local economic landscape. As part of the project process, the potential to use the investment to unlock the visitor market was identified as a key driver. A detailed visitor sector strategic plan (or similar) will be developed. The ongoing effects of lifting the visitor sector and the additional spending attracted to the district were modelled. The level of increase or the specific type of activity that will generate the lift are unknown. A simple approach to estimate the potential lift in visitor spending, and the flow on economic impacts, is used. This is outlined below.

#### 4.9.2 One-off impacts – capital spending

The spending on renewing and recapitalising the wharves throughout the district is estimated at \$8m and this will be spread out over 30 years or so. The table below shows the estimated budget.

**Table 28: Capital spending**

Item	\$'m
Dargaville Pontoon	\$0.40
Pahi Wharf Renewals	\$0.86
New Pouto Wharf	\$1.81
Beach landings - consenting	\$0.40
Contingency on Primary network	\$0.33
Destination Tourism Strategy	\$0.20
Oneriri ramp and reserve	\$0.60
Ruawai Wharf upgrade	\$0.81
Maungaturoto pontoon	\$0.34
Te Koporu wharf upgrade	\$1.09
Kelly's Bay access upgrades	\$0.05
Tinopai Wharf Renewals	\$1.11
<b>TOTAL CAPEX</b>	<b>\$8.00</b>

The estimated spending was allocated to different economic sectors to illustrate how the spending will impact the local economy (i.e. the first round of impacts). The capital spending was allocated to the following economic sectors:

- Non-residential building construction,
- Heavy and civil engineering construction,
- Construction services,
- Scientific, architectural and engineering services, and
- Legal and accounting services.

This spending forms the basis for estimating the one-off impacts.

<sup>14</sup> A CBA cover non-market values as well as market values. A CBA is beyond the scope of this assessment.

### 4.9.3 Ongoing impacts – visitor market

The second set of impact are ongoing in nature and relate to the lift in spending associated with ‘new’ visitors coming into the district. This is the spending that is attributed to the investments. In other words, this is the lift in visitor spending would not have happened without the catalyst investment.

Preparing a firm estimate of the increase in visitor spending is challenging because the specific visitor product to develop must still be identified. A scenario approach is used to illustrate the economic impacts as a range (instead of a single figure). Therefore, the ongoing impacts are indicative at best. It is meant to illustrate the potential scale of the impacts.

Visitor spending, as reported by MBIE, formed the starting point of the scenarios. Both domestic and international spending were reviewed, and the existing spending levels were estimated. The spending levels were estimated as follows:

- Domestic
  - Day visitor \$70/visitor
  - Overnight \$198/visitor
- International
  - Day visitor \$82/visitor
  - Overnight \$280/visitor

Total spending is estimated at \$109.2m for domestic visitors and \$15.7m for international visitors. The spending is allocated to standard sectors (or tourist products), including:

- Accommodation services,
- Cultural, recreation, and gambling services,
- Food and beverage serving services,
- Other passenger transport,
- Other tourism products,
- Retail sales - alcohol, food, and beverages,
- Retail sales - fuel and other automotive products, and
- Retail sales – other.

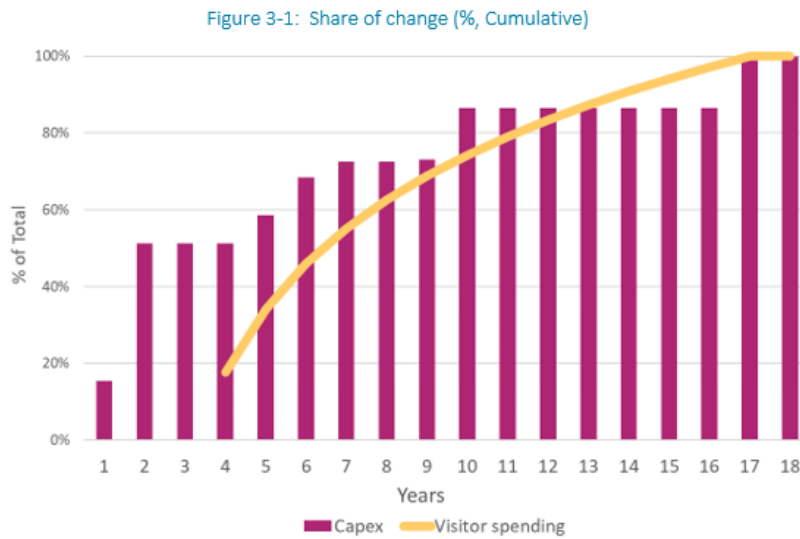
Three scenarios were modelled. The scenarios reflect different increases in visitor spending that is unlocked by the wharf investments. The level of increase is arbitrary and will need additional work to refine. The scenarios reflect:

- A 2% lift in visitor spending due to the wharf investment – this equals an additional visitor spending of \$2.5m/y.
- A 2.5% lift visitor spending due to the wharf investment – this equals an additional visitor spending of \$3.1m/y.
- A 5% lift visitor spending due to the wharf investment – this equals an additional visitor spending of \$6.2m/y.

The scenarios assume that the lift in spending is directly associated with (unlocked or facilitated by) the wharf investment and the associated tourism development activities.

In terms of the timing, i.e. when the lift in spending occurs, we have assumed that the lift will broadly track the investment profile with a lag during the initial years. Figure 27 shows the share of the total change (e.g. 2% lift or the share of the total capex budget) that will be spent over time.

**Figure 27: Share of change (% Cumulative)**



Investment in the wharves will take place from year 1 (year 1 = 2021), with several step-increases over time. The visitor spending will lag the capex for the first 10 years or so.

Considering the high-level assumptions underpinning the economic assessment, an update would be needed once the visitor sector development plan has been developed. Until such time, the economic impacts outlined in this report are indicative at best.

#### 4.9.4 One-off impacts from wharf upgrades

The construction and wharf investment programme span more than a decade, with most of the activity (based on capital expenditure) in years 3 to 5. Subsequently, the capex has intermittent peaks as wharves are upgraded/refreshed. The last of the scheduled construction project is the Tinopai wharf renewals, set to occur in Year 15. Table 29: Total GDP impact (one-off activity)

summarises the Total GDP impacts of the construction programme. These totals reflect the sum of the direct, indirect and induced impacts, across three geographical areas.

**Table 29: Total GDP impact (one-off activity)**

	4.0%	6.0%	8.0%
	\$'million		
<b>Kaipara District</b>	2.1	1.9	1.8
<b>Rest of Northland</b>	1.6	1.5	1.4
<b>Rest of New Zealand</b>	3.8	3.5	3.3
<b>Total</b>	7.5	7.0	6.6

The total GDP impacts associated with the construction activity are expected to range between \$6.6m and \$7.5m. The mid-point is \$7m, and the range reflects the different discount rates.

Spatially, most of the economic impacts (GDP) are felt across the rest of New Zealand (the area that includes Auckland). This reflects the supply chain effects, because construction companies are based elsewhere (i.e. outside of Northland) and large parts of construction supply chains flow back to Auckland where the building materials are manufactured. Regardless, a sizeable share (30%) of the economic impact will be felt in the Kaipara District as well as the rest of Northland (Whangarei). It is important to see the size of the local

impact in context. Currently, the district's GDP is in the order of \$949m<sup>15</sup>. This suggests that at the peak of construction activity will add 0.2% to the district's GDP.

Based on the known relationships between economic output and employment, the number of jobs associated with the estimated level of activity is estimated. At the peak of the construction and set-up phase, approximately:

- 8 jobs are supported within the District,
- 9 in the rest of Northland and
- 12 across the rest of NZ.

It is acknowledged that the timing depends on the input assumptions (\$ spending), construction timeline, sequencing and so forth. Looking across the overall project cycle, the investments will support a total of:

- 22 job-years<sup>16</sup> across the District,
- 26 job-years across the rest of the region,
- 35 job-years across the rest of NZ.

The effects of ongoing activity are described in the next section.

#### 4.9.5 Impacts from a lift in Visitor sector

In addition to the one-off impacts, it is believed that the investment will support and facilitate growth in the local visitor sector. While the specific scale and timing of such a lift are uncertain, the scenario analysis illustrates that the potential range of impacts. The lift in the visitor sector spending, and impacts, lag the infrastructure spending. So, these impacts are expected to occur in future and start at a low rate before ramping up over 15 years. The lift in visitor activity starts in Year 4, increases over time, and peaks from Year 17, onwards when the visitor development initiatives become mainstream.

As expected, the impacts associated with the ongoing (operational) activity are considerably larger than the capex impacts. The present value of ongoing impacts is estimated at between \$5.8m and \$10.0m (Table 30) for the 2.5% increase scenario.

Most of the GDP impacts will be felt locally, in Kaipara District with 51% felt in the district. This compares well against the 16% in the rest of Northland and 33% in the rest of NZ. This suggests that the 67% (two thirds) of the impacts will be felt in Northland region – one of NZ's economically lagging districts.

**Table 30: Total GDP (ongoing activity)**

	4.0%	6.0%	8.0%
	\$'million		
<b>Kaipara District</b>	<b>10.0</b>	<b>7.6</b>	<b>5.8</b>
<b>Rest of Northland</b>	3.1	2.3	1.8
<b>Rest of New Zealand</b>	6.5	4.9	3.8
<b>Total</b>	<b>19.5</b>	<b>14.8</b>	<b>11.4</b>

<sup>15</sup> Based on Infometrics information but adjusted to 2019 \$values (vs Infometrics data that is for 2010 values).

<sup>16</sup> The analysis runs at a 'per year' basis. In year x, the spending supports y-number of jobs, but those jobs are one-offs and end when that year's spending is completed. Then in year x+1, additional spending takes place, supporting another round of jobs. Summing all these annual jobs shows how many job-years are supported.

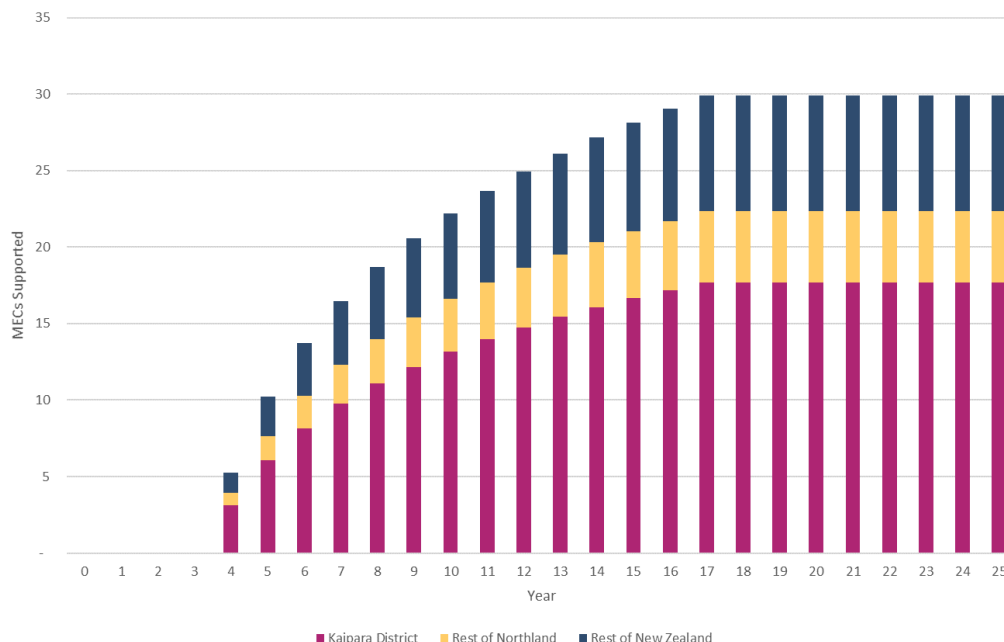
Looking at the other scenarios, the GDP impacts will range as follows:

- 2% Scenario \$4.7m - \$8.0m,
- 5% Scenario \$11.7m - \$19.9m.

Once operational, the annual (maximum) addition GDP that will be felt in the district is estimated at \$1.0m, ranging between \$800,000 and \$2.0m.

In addition to GDP impacts, the lift will also support additional employment in visitor sector businesses as well as the rest of the economy. Spatially, the employment impacts are concentrated in the district (see Figure 28) which shows the employment impacts over time. Ongoing impacts are concentrated in Kaipara District, i.e. 60%<sup>17</sup> of the employment impacts are felt within the District. This is to be expected, considering most of the ongoing visitor activity related to the wharves occur within the district, for example buying lunch as a local café, accommodation, and so forth.

**Figure 28: Total employment supported by ongoing activity**



The visitor activity related to wharf operations will generate a material levels of new activity throughout the economy. In turn, this will require labour (workers) to complete the work<sup>18</sup>. Similar to the construction phase, existing relationships between economic output and employment is utilised to estimate the number of jobs associated with the new spending and the flow on effects. At full operation (around Year 17), approximately 30 jobs are supported through NZ. More than half (18) of these are within the District, five throughout the rest of Northland, and the remaining 8 jobs in the rest of New Zealand. This equals a lift of 0.2% on current employment levels.

<sup>17</sup> Under 6% discount rate setting.

<sup>18</sup> This assumes that there is enough capacity in the local market i.e. there are workers available. Business will use technology and other means to address capacity constraints where labour is not available. Including productivity change will lower the employment effects presented.



#### 4.9.6 Income effects

Expanding the visitor sector in Kaipara District will deliver a range of economic impacts. Income is a part of GDP, so it is possible to estimate how much income is returned to households. The level of income returned to households is a proxy for some social impacts. The social implications of lifting household income are reasonably well known, i.e. alleviating poverty and providing households with opportunities that would not be available otherwise.

During set-up and construction, the income returned to households will total between \$2.4m and \$2.8m across the whole of the country. Between \$700,000 and \$800,000 of that will be returned to Kaipara households.

In terms of the ongoing impact, the lift in visitor spending stimulates additional activity in both the local and wider economy. More staff is employed<sup>19</sup> by both local businesses as well as businesses in the supply chain, across the rest of Northland and rest of New Zealand. These businesses pay salaries and wages to workers. The businesses also return a portion of surplus to owners through dividends.

Over the assessment period, around \$3.0m (ranging between \$2.3m and \$4.0m) are returned to Kaipara households in the form of salaries and wages, with a further \$780,000 to households in the rest of Northland, and \$1.7m to households across the rest of New Zealand. The scale of remuneration in Kaipara increases from around \$70,000 in the first year of operation (Year 4), to over \$400,000 per annum once fully operational. Once fully operational, \$100,000 and \$230,000 are returned to households across Northland and the rest of New Zealand, respectively, each year.

A key point to emphasise is that the largest portion of the income effects are associated with the ongoing activities and is returned to Kaipara households. The ongoing visitor activity continually add to the income distributed.

#### 4.9.7 Concluding remarks

The proposed investment in the District's wharves will provide a short-term economic impulse, generating economic impacts. But the true value of the investment is that it will enable growth and development of latent visitor market opportunities. The specific details, nature, scope and timing of the visitor market development are still unknown. Using a scenario approach, the analysis illustrates the potential economic impacts of lifting the visitor sector to be material, with a potential to add to the district's GDP. This potential lift is estimated at between \$5.8m and \$10.0m. But, due to the uncertainty in the potential outcomes, there is a large spread between the scenarios - \$4.7m to \$19.9m. Regardless, of the uncertainty, the analysis shows that enabling the visitor sector will deliver positive impacts.

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<sup>19</sup> Or businesses require workers to work longer hours. Nevertheless, businesses pay for the additional labour.

## 5 Commercial Case

### 5.1 Procurement Strategy

KDC has recently established a Procurement Strategy which will guide the procurement activities required to deliver this programme. This strategy will be supported by the recent establishment of a Services Panel that will enable KDC in moving quickly to engage with suppliers that have demonstrated the required level of capability and compliance to support Council in the required areas.

The KDC Procurement Strategy includes a focus on engaging positively with local capability, forming positive partnerships with suppliers and providing early notice to ensure supplier readiness. Where possible social procurement weightings may be applied to support the competitiveness of local suppliers, however, the economic analysis completed to date indicates that local capacity may be an issue.

KDC will also recognise and apply the procurement requirements stipulated by its funding partners. As the primary funder of the primary developments, the Provincial Growth Fund stipulates that a review of the Council's procurement process must be completed to ensure it complies with MBIE requirements. This review has been completed and the KDC Procurement Strategy will be applied to this programme.

The procurement applied to the recent Dargaville Pontoon upgrade planning can serve as a benchmark for future activities of a similar nature. This procurement has involved development of a Procurement Management Plan that recommended a targeted tender process with a closed supplier base. The following process is proposed to deliver this programme through a set of agreed projects:

- A scoped project with a budget is provided to the assets team.
- A procurement plan is created.
- This is used to engage a supplier.
- Contracts are developed for a short form agreement under delegated authority (subject to the spend level).
- A contract management plan is developed and applied to the delivery of the design or construction (or both).
- Physical works are managed internally or in partnership with an external engineer's representative.

### 5.2 Required services

Goods and services will be required to complete design, planning and construction of the agreed developments. Professional services will also be required to support the management interventions proposed within the preferred programme. A high-level list of these products and services is included below:

**Table 31: Required products and services**

Product or service area	Details
Environmental and cultural impact assessments	Assessment of impacts for each of the proposed network sites to inform design, engagement and consenting.
Engineering and Design	<ul style="list-style-type: none"> <li>• Engineering assessments</li> </ul>

Product or service area	Details
	<ul style="list-style-type: none"> <li>Quantity surveying</li> <li>Design development</li> </ul>
Planning and legal	<ul style="list-style-type: none"> <li>Consenting management</li> <li>Marine facility ownership advice</li> <li>Integrated planning</li> </ul>
Business case development	Development of business cases for major upgrades.
Destination Marketing and Tourism	<ul style="list-style-type: none"> <li>Strategy development</li> <li>Product development</li> <li>Marketing channel/tool development and operation</li> </ul>
Construction of new facilities	Construction activities as outlined in the preferred programme.
Project Management	Project Management support in delivering the agreed upgrades.
Marine facility products	<p>The exact detail will be confirmed for each project in the detailed scoping for each development. As a general summary, this may include:</p> <ul style="list-style-type: none"> <li>Wharf structural elements</li> <li>Berthing dolphins</li> <li>Pontoons</li> <li>Ramps</li> <li>Gangways</li> <li>Toilets</li> <li>Signs</li> </ul>

Further detail on the specific goods and services required in each tranche will be defined in the respective business case.

### 5.2.1 Packaging of work

Where possible, packages of work may be bundled together to provide greater attractiveness to the market and shared risk management in the delivery of the agreed works package. While this will support attraction of larger suppliers, the impact of this approach on smaller, local suppliers should be considered.

Through this approach, KDC may benefit from rolling the design and construction services together or engaging an expert consultant to complete the design and support the procurement of the construction contractor. Given KDC has limited resources, it is likely that engaging external support for the required procurement activities will provide efficiency benefits for the council. Utilising an Early Contractor Involvement (ECI) approach would be recommended to develop knowledge quickly, refine the proposed solution and share risk during the design and development phases.

## 5.3 Market Capability

In accordance with the KDC Procurement Strategy, there is an intent to source local capability to deliver these services from local suppliers. It is acknowledged that there may not be available supplier capability within the Kaipara District and hence there will be a need to engage with Auckland and broader Northland Region-based suppliers to provide the required products and services.

The project team have noted the pressure that the developments associated with the America's Cup will put pressure on this sector. KDC has already signalled to the market, via the Contractor's Federation, that it will be looking for marine development specialists in the near future. Providing plenty of forward notice will be critical to ensure availability pressures do not have an impact on contractor's prospective prices.

## **5.4 Contract provisions**

The contract procurements and key procurement milestones will be determined for each procurement required. The general approach to be applied includes engaging a lead contractor to deliver a range of activities aligned with their expertise and negotiating a fixed price or upper limiting sum to deliver the agreed package.

## **5.5 Potential for risk sharing**

There is potential to share risks through the procurement process by engaging with the market early and bundling packages and phases to provide shared ownership in planning and delivery. There is also potential for risk sharing in operation of the assets through an agreed marine asset operating model which encourages private, iwi and community owners to apply a consistent standard for the district's marine assets. This model will be underpinned by a Kaipara District Marine Facility Management Policy and will need to be explored further in the Programme Business Case.

## **5.6 Planning and Consenting Management**

All the recommended developments and activities within the preferred programme will require environmental and cultural impacts assessments to inform consenting requirements. Where possible, developments will occur in the footprint of existing consents in order to help streamline the programme's primary (short term) elements. It is assumed that consents may be required in situations where beach landings are encouraged ahead of investing in new infrastructure. Given such arrangements may increase activity and have an impact on the seabed, impacts will need to be understood and adequately managed.

It is recommended that a specialist is engaged to complete these assessments and provide advice on the required consents and the process to obtain these. In some cases, new consents may add significant time to the delivery programme.

Further information about the consenting requirements is attached as Annex 10.

## 6 Financial Case

The purpose of this section is to set out the Programme financial implications of the preferred programme. Note that more detailed analysis of the financial case will occur in the Detailed Business Case stage for each project or tranche in the programme.

### 6.1 Capital Cost Summary

The estimated costs for the primary sites are listed below. These costs are proposed to be met through the \$4 million funding allocated from the Provincial Growth Fund. This funding is proposed to be used as a catalyst to deliver lead infrastructure, from which a long-term water transport network and associated economic stimulus can be developed.

The cost for rest of the 30-year programme outlined in this proposal is listed as \$4.2 million. But, as the details need to be agreed, this will be better defined through the development of the Programme Business Case by the end of April 2020.

### 6.2 Financial impacts

#### 6.2.1 Capital costs

The preferred 30-year programme capital costs are \$8,004,320. The breakdown is shown below.

Development	Capital cost
Dargaville Pontoon	\$ 395,600
Pahi Wharf Renewals	\$ 864,320
New Pouto Wharf	\$1,809,120
Beach landings	\$ 400,000
Primary Network contingency	\$ 330,960
Destination Management Plan & implementation	\$ 200,000
Oneriri ramp and reserve	\$ 600,000
Ruawai Wharf upgrade	\$ 805,820
Maungaturoto pontoon	\$ 342,500
Te Koporū wharf upgrade	\$1,091,300
Kelly's Bay access upgrades	\$ 50,000
Tinopai Wharf Renewals	\$1,114,700
<b>TOTAL CAPEX</b>	<b>\$8,004,320</b>

#### 6.2.2 Operational costs

Operational costs have been detailed in the table below. Operational costs are focused on maintaining the improved marine assets included in this programme. These operational costs have been developed using the assumption that asset depreciation will not be funded through this programme. The maintenance costs outlined below demonstrate the type of activities required to maintain marine facilities and their typical costs per year.



**Table 32: Typical marine infrastructure maintenance activities and costs**

Maintenance activity	Overall cost	Yearly investment
<b>Water blast boards every 3 years</b>	\$1000 per wash	\$333
<b>3 monthly contractor inspections</b>	\$100 per inspection	\$400
<b>Structural inspection &amp; report</b>	\$500 per wharf	\$500
<b>Maintenance from recommendations in structural engineer's report</b>	\$2000 per wharf per year estimate	\$2,000
<b>Maintenance costs per wharf per year</b>		<b>\$3,233</b>

These operational costs have been applied against the following marine assets:

- Dargaville Pontoon
- Pahi Wharf Renewals
- New Pouto Wharf
- Beach landings
- Oneriri ramp and reserve
- Ruawai Wharf upgrade
- Maungaturoto pontoon
- Te Koporu wharf upgrade
- Kelly's Bay access upgrades
- Tinopai Wharf Renewals

Over the life of the programme (30 years) and through applying these assumed costs, the estimated operational cost overall is \$636,901.

### 6.2.3 Cash flows

The anticipated cash flows for the investment proposal over the life of the programme are set out in the table below.

**Table 33: Anticipated cash flows**

\$millions	Years					
	0-2	3-5	6-10	11-20	21-30	Total
<b>Preferred Way Forward: Targeted investment to establish a water transport network</b>						
<b>Capital</b>	4,000,000	600,000	2,289,620	1,114,700		8,004,320
<b>Operating</b>	9,699	32,330	96,990	239,242	258,640	636,901
<b>Total</b>	4,009,699	632,330	2,386,610	1,353,942	258,640	<b>8,641,221</b>
<b>Funded by:</b>						
<b>Existing Revenue (Rates)</b>	9,699	32,330	96,990	239,242	258,640	636,901
<b>Extra Capital (PGF or other external sources)</b>	4,000,000	600,000	2,289,620	1,114,700	0	8,004,320
<b>Total</b>	4,009,699	632,330	2,386,610	1,353,942	258,640	<b>8,641,221</b>

## 6.3 Current funding requirements and recommendations

The PGF require specific and separate accounting for each project while maintaining a link to the Kickstart Programme. This PGF funding is not payable until completion of the agreed asset build and therefore funding needs to be identified for agreed projects through internal budgets or short-term borrowing. It is recommended fund flow analysis is completed as part of establishing the programme, in accordance with KDC Programme Management Office practices. This level of granularity will support a better cash flow for KDC and can minimize the length of time and level of dollars KDC will be providing prior to PGF reimbursement.

## 6.4 Identifying revenue streams

Traditionally the marine facilities in the Kaipara District have drawn very little revenue. While fees are collected by some groups or clubs in the form of donations, they do not provide nearly enough funds to finance major upgrades or significant maintenance. The legal parameters applying to marine facilities do not permit the marine facility owner/operators to ask for payment for their use. That's why donations are requested and community boat clubs request fees from their members.

To ensure the proposed marine facility developments can be sustained into the future, it will be important for the asset owners to develop well informed use fees in coordination with current and potential commercial users. An agreed fee structure that can be applied to different types of users' needs to be investigated further as part of the development of improved marine asset management plans. This should demonstrate a clear difference between local recreational users with smaller vessels versus larger tour operators with larger vessels, higher numbers of passengers and paying passengers. Tie up fees for commercial operators conducting tours or fishing trips can be incorporated into their ticket prices and this needs to be modelled in a way that provides the required funds for maintenance while not

pushing the ticket price to a level that is off-putting for potential customers. Once agreed, any new introduction of fees will need to be captured and reflected in the KDC schedule of Fees and Charges.

## 6.5 Funding sources

### 6.5.1 Current Funding Arrangements

The Provincial Growth Fund allocated through the Kaipara Kickstart programme will be provided to the Council on successful completion of the agreed projects, including the wharf upgrades. The payment from the PGF occurs immediately and via an approved funding agreement, The Kaipara Kickstart Programme is primarily funded from the PGF.

### 6.5.2 Future funding options

Potential funding sources	Relevance to this project
Future iterations of the Provincial Growth Fund likely to be named Provincial Development Fund (for COVID 19 recovery)	The Provincial Growth Fund has been focused on helping regions like the Kaipara to grow sustainably through unlocking new opportunities. It is proposed that once approved by KDC, this programme is discussed with MBIE as a proposal to fund more of the proposed water transport network and the supporting initiatives.
Tourism Infrastructure Fund	Given the preferred programme and water transport network contains a heavy tourism focus, it makes sense to develop funding proposals focused on targeted projects that will provide significant tourism benefit. These projects should be investigated further in the Programme Business Case and subsequent project business cases.
Regional Land Transport Fund	The water transport network for the Kaipara can play a role in supporting a shift away from car-based travel, particularly where the network can be developed in such a way that connects to proposed rail upgrades and connections through Northland as well as new bike trails. The staging for development of eastern connections that can connect with rail or even capture tourists from state highway routes should be coordinated to ensure the timing is optimal to develop in line with these inter-modal opportunities maturing.
Private, Iwi or Community investment	<p>Given the varied ownership of the current marine assets, adjacent land and nearby land, it makes sense for KDC to work with community and Iwi leaders to identify joint investment opportunities that can provide clear benefits to each party. This is particularly relevant to areas where community or Iwi owned land can be developed based on the new or improved wharf, bringing more activity to the area.</p> <p>Community fundraising has led to several wharf developments in the past in locations such as Maungaturoto, Tinopai, Pahi and Ruawai. Council can assist this process through the consenting and grants seed funding.</p>

Potential funding sources	Relevance to this project
Development contributions	KDC would benefit from identifying how their development contributions policies can capture funding that contribute to improved marine facilities and associated public amenities. This will be particularly relevant where a new marine asset demonstrates an ability to bring new value and activity to an area relevant to a certain development.
Industry contributions	Existing or future industries may become contributors to investment in the water transport network where it is shown to provide value to their operations. This may be the case for new marine facilities that can support small scale freight movement on the water (ahead of more significant, preferably private investment), or where a cross harbour or river car ferry helps to support bulk movement of material such as timber.

## 7 Management Case

The purpose of the management case is to describe the arrangements that will be put in place for the successful delivery of the programme and its constituent projects, both to ensure successful delivery and to manage programme risks.

### 7.1 Programme management strategy and framework

#### 7.1.1 Governance, structure and reporting arrangements

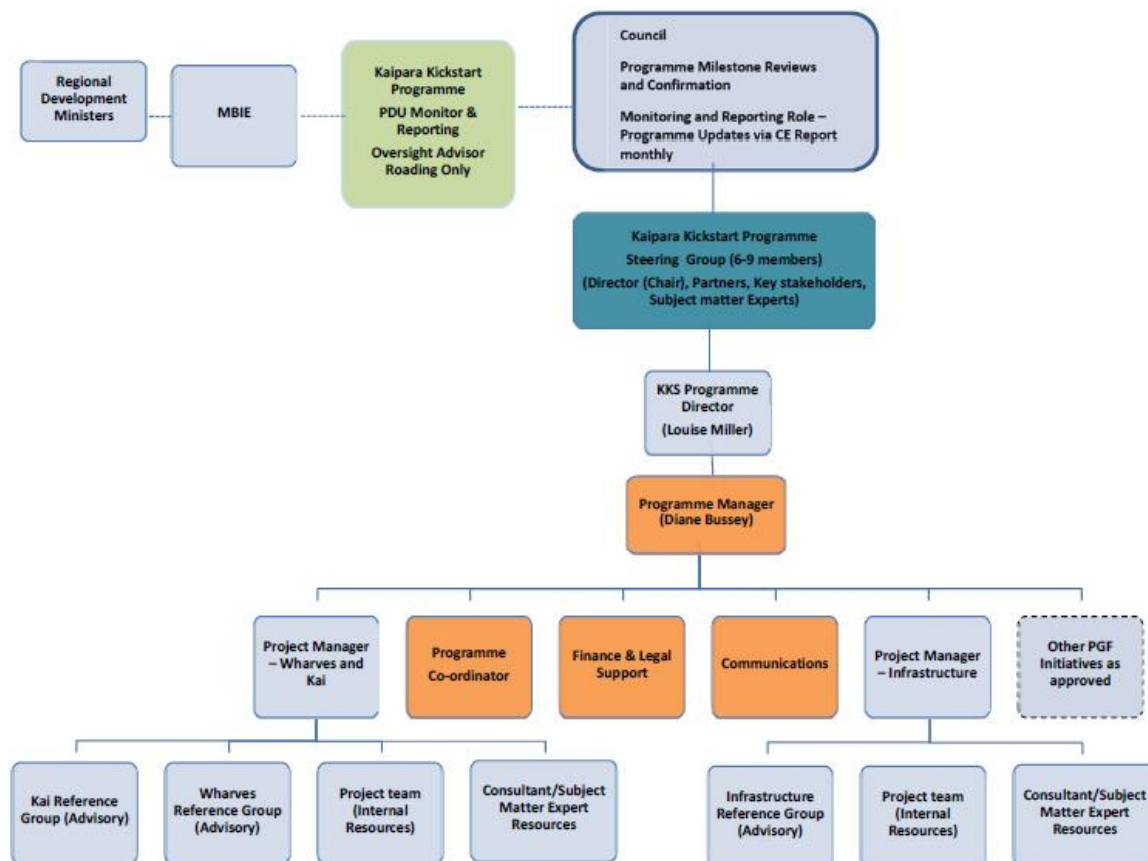
KDC has recently established a Programme Management Office (PMO) to provide strategic oversight of planning and delivery of projects of significant budget and risks. This programme will be supervised by the PMO and delivered through the KDC Infrastructure Team in coordination with the Kickstart Programme Manager.

The Programme Steering Group (PSG) is proposed to provide governance, with the established Wharves Advisory Group will continue to provide advice and recommendations which are then presented to PSG for approval/direction. Items approved by the PSG may progress to discussion with Elected Members, depending on the matter.

As the programme progresses these arrangements may be reviewed and amended, particularly after the PGF funding is spent.

The diagram below demonstrates the current governance and structural arrangements.

**Figure 29: Current governance and structural arrangements**





### 7.1.1.1 Programme reporting arrangements

Reporting on delivery of this programme is proposed to occur through the Kaipara Kickstart framework in the short term. The ongoing reporting arrangements will be investigated further and confirmed as the programme is agreed.

### 7.1.1.2 Key roles and responsibilities

A summary of key programme roles and description of responsibilities is shown below.

The physical works components of the Programme Business Case are included within the original scope for the Kaipara KickStart programme. This programme has an approved programme management plan that describes how each programme management component will be managed, including resources, risks, finances and communication and engagement. The Kaipara KickStart programme is supported by the Programme Management Office within KDC. As required the management practices for the Kaipara KickStart programme are expected to be reviewed and revised in alignment with development of standard programme/project practices for KDC programme/project delivery.

## 7.2 Outline programme plan

A high-level outline of potential delivery timings has been included in section 4.8 for discussion. Once the preferred programme is agreed, a Detailed Business Case will be confirmed with MBIE to enable draw down the first tranche of Kaipara Kickstart primary priority upgrades (totalling \$4m). A Kaipara Kickstart programme plan will be updated from the Detailed Business Case findings.

## 7.3 Organisational change management

To deliver this programme successfully, some significant changes will need to be managed, as shown below.

**Table 34: Organisational Change Management approach**

Critical organisational changes	Change Management Approach
Tourism product and strategy	Engage actively to support existing and new tourism business experiences by: <ul style="list-style-type: none"> <li>facilitate tourism groups to drive collaboration and marketing effort</li> <li>develop a Tourism Destination Management Plan</li> <li>establish a Kaipara District Tourism Website to host content and link in with other regional tourism offerings</li> </ul>
Marine Asset Management and Operations	Continue development of a new Asset Management Plan that covers marine assets. Work with the varied wharf owners to define an achievable level of service, consenting arrangement and identify a transition schedule to achieve this.
Environmental Management	Work with the IKHMG to identify the objectives that this programme can contribute to and agree how developments and future operating practices will contribute positively to these.

Critical organisational changes	Change Management Approach
Embracing multi-modal travel	Work with regional transport partners to identify the targeted mode shifts required and identify how a progressive implementation of a water transport network can contribute to this.

## 7.4 Benefits realisation management

Strategic outcomes and benefits will be tracked at programme level using measurable benefits with an agreed baseline and a clear linkage to project/programme contributions.

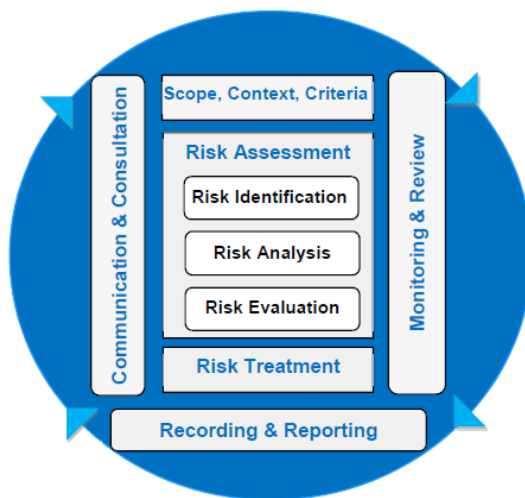
A benefit register and initial outline Benefits Realisation Plan will be completed in coordination with the Kaipara Kickstart benefits realisation approach. An initial benefits map is included as Annex 1.

## 7.5 Risk Management

A Risk Management Strategy & Framework has recently been developed and implemented within KDC. This will be utilised to track and manage risks for this project and the wider Kickstart programme. The KDC Risk Management Process included in this framework is shown below.

**Figure 30: KDC Risk Management Process**

*ISO 31000:2018 Risk Management Process*



A Programme Risk Register is in development and this will integrate with the KDC Corporate Risk register.

## 8 Annexes

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## 8.1 Annex 1: Benefits outline

**Table 35: Primary benefits**

Benefit name & description	Indicator & description	Baseline data source	Who Benefits?	Monetisable or non-monetisable?	Direct or Indirect?
Improved connectivity to major centres, between marae and across the district	Reduced travel times	Abley transport assessment	Local Community, Business and Tourists	Monetisable	Direct
	Increased travel choices	Abley transport assessment	Local Community, Business and Tourists	Non - Monetisable	Direct
	Non-car Marae connection options	Abley transport assessment	Marae communities and invited guests	Non - Monetisable	Direct
Building Kaipara's unique value proposition	Increased Visitor numbers and spend	Visitor solutions market assessment	Kaipara economy and local community	Monetisable	Direct
	Investment in and around marine facilities	KDC data	Kaipara economy and local community	Monetisable	Direct
	Workforce employment level	Market economics economic assessment	Kaipara economy and local community	Monetisable	Indirect
Improved economic, social & environmental resilience	Business growth in targeted sectors	Market economics economic assessment	Kaipara economy and local community	Monetisable	Indirect
	Community buy-in	Community sentiment survey	KDC	Non - Monetisable	Indirect

Benefit name & description	Indicator & description	Baseline data source	Who Benefits?	Monetisable or non-monetisable?	Direct or Indirect?
	Environmental health (mix of indicators)	KHIMG data	Local Community, Business and Tourists	Monetisable	Indirect
Improved marine facility experiences through enhanced standards	Improved whole of life costs	KDC data	KDC	Monetisable	Direct
	Facility LOS ratings	KDC data	Local Community, Business and Tourists	Non - Monetisable	Direct
	Level of use	KDC data	KDC, Local Community, Business and Tourists	Non - Monetisable	Direct



## 8.2 Annex 2: ILM Issues list and activities brainstorm list

### Kaipara Water Transport Network & Wharves Feasibility Study

#### Investment Logic Mapping Workshop

20/01/2020 Pahi Boating Club, Pahi

#### Facilitator

- Ben Smith - Pure Activation

#### Investors

- Kaipara District Mayor – Jason Smith
- Kaipara District Deputy Mayor – Anna Curnow
- MBIE - Vibeke Wright

#### Informed Participants

- Northland Inc – Vaughan Cooper, GM Infrastructure Investments
- Te Roroa – Snow Tane, GM
- Kaipara Harbour Integrated Management Group – Willie Wright, Programme Manager
- Northland Transport Alliance – Chris Powell, Transport Planning Manager
- Transport – Michael Paine, Northland Regional Council
- Northland Inc - Tourism/Accommodation – Denis Callesen – Director
- Kaipara District Council - Jim Sefton, Programme Sponsor rep
- Kaipara District Council - Diane Bussey, Kaipara Kickstart Programme Manager
- AR & Associates -Programme Manager - Gavin Flynn
- AR & Associates - Land Use Planner – Rakad Jaffer
- Abley Transportation – Transport Planner - Courtney Groundwater
- Abley Transportation – Transport Planner - Ruby Kim
- Market Economics – Analyst – Tilly Erasmus
- Northland Inc – Selina Kunac

Issue number	Issue	ILM Problem/s
1	<i>Current wharf stock has uncertain and variable ownership – leading to lack of integrated management</i>	2
2	<i>There is zero budget for maintaining wharves</i>	1

Issue number	Issue	ILM Problem/s
3	<i>In the absence of a Kaipara Harbour Port Authority, the governance of this area has been lacking</i>	3
4	<i>A sense of ownership can contribute to defensiveness around development of wharves in coastal communities</i>	2
5	<i>Support for change is not universal – some may prefer to maintain things as they are</i>	3
6	<i>There is a need to better manage and discuss the potential impacts of change</i>	3
7	<i>There is an opportunity to use varied feedback to focus potential developments</i>	3
8	<i>While many locals are willing to progress, some may wish to preserve the traditional character of Kaipara communities</i>	3
9	<i>People can't see the connections between the wharf and land-based opportunities</i>	3
10	<i>Our geography creates limitations for land-based transport</i>	1
11	<i>Sea level rise as a result of climate change – 250km<sup>2</sup> of land that will disappear under sea in Kaipara Moana</i>	3
12	<i>This will lead to the need to consider water-based transport as an alternative</i>	1,3
13	<i>Public expectations may not align with what is planned and delivered</i>	3
14	<i>Increased activity may drive increased maintenance for transport assets (roads)</i>	1
15	<i>The lack of water-based transport system leads to higher use and dependency on roads</i>	1
16	<i>The current transport network cannot operate sustainably to support future growth</i>	1
17	<i>Currently, tourism is imbalanced and geographical + seasonal distribution is skewed away from Kaipara</i>	3
18	<i>Inside the Kaipara Harbour there is a constellation of significant places that is not supported by a network strategy</i>	1,3
19	<i>There is a need to reconnect marae with the water and with each other</i>	3
20	<i>There is a need to create and ensure a social license</i>	3
21	<i>Kaipara lacks the joined-up approach to tourism products that can compete with other areas</i>	2
22	<i>There are few commissionable tourism products</i>	2
23	<i>There is very little visitor accommodation</i>	2

Issue number	Issue	ILM Problem/s
24	<i>The current transport network cannot support evolving agricultural industries</i>	1
25	<i>Increased activity on the Harbour will require increased management of biodiversity</i>	3
26	<i>A lack of coordinated transport and economic development planning may create risks for the harbour</i>	3
27	<i>The lack of water-based transport system may be constraining trade opportunities</i>	2
28	<i>We need an agreed level of service for the relevant facilities</i>	3
29	<i>Linkage of land-based district plan and regional plan with wharf developments may cause challenges</i>	3
30	<i>There needs to be a holistic view of functional interfaces between land and water</i>	3
31	<i>The current wharf view is discrete, and they are isolated/separate from each other</i>	2
32	<i>There is a lack of social cohesion in considering the future of the wharves</i>	3
33	<i>Town development has occurred in isolation from the wharves</i>	3
34	<i>There may be issues with the capacity of the wastewater utilities to support wharf and town development."</i>	3
35	<i>There are unsatisfactory amenities at wharf sites</i>	2
36	<i>Community may want to focus on other investments</i>	3
37	<i>There is no public transport connecting these communities</i>	1,3
38	<i>Young people leave the District due to lack of educational and work opportunities</i>	1,2,3

The following tables show the ideas created from a brainstorming idea exercise with the ILM attendees to show the possibilities of what a wharf upgrade could bring to an area on the Kaipara Moana.

<i>Description of Commercial Activities</i>	<i>Where</i>	<i>Organisation</i>
Fish and Chip Shop	On wharf or beside	Private business
Winery outlets	Close to the wharf or village	Private business
Horse treks / Buggy rides	Leaving from the wharf site	Private business
Café / Restaurant	On wharf or beside	Private business

Retail	On wharf or beside	Private business
Art and Craft / Food Market	On wharf or beside	Private business
Art Gallery	On wharf or beside	Private business
Under water observatory	Below wharf	Private business
Star Gazing at Night	On wharf or beside	Private business
Salt-Water Pool	Beside wharf	Private business
Chocolate Factory	On wharf or beside	Private business
Oyster & Mussel Bar	On wharf or beside	Private business
Boat, Bike, Kayak, Jet ski, Hire	Beside wharf	Private business
Eco-tourism operator	Beside wharf	Private business
Scenic Flights	Leaving from the wharf site	Private business
Float Planes	Leaving from the wharf site	Private business
Paragliding	Leaving from the wharf site	Private business
Charter Fishing	Leaving from the wharf site	Private business
Cultural experiences	Leaving from the wharf site	Private business
Transport services	Leaving from the wharf site	Private business
Adventure Park	Leaving from the wharf site	Private business
Boat Restaurant or Hotel	Leaving from the wharf site	Private business
ATM	On wharf or beside	Private business
Disposal barges	Leaving from the wharf site	Private business
Marine services – cleaning & servicing	Close to the wharf or village	Private business
Wedding venue	Close to the wharf or village	Private business
Clink n Collect drop off	Close to the wharf or village	Private business
Disposal Barges	Close to the wharf or village	Private business

<i>Description of Wharf Services</i>	<i>Where</i>	<i>Organisation</i>
Carbon neutral PT network & infrastructure	TBD	Joint venture
Biosecurity control measures	On wharf or beside	NRC
Coastguard	On wharf or beside	Coastguard
Cultural arrival point	On wharf or beside	Marae, hapū and iwi
Boat ramp	Beside wharf	Private or KDC
Carparking	Beside wharf	Private or KDC
Walking and Cycle Trails - waymarked	Beside wharf	KDC or DOC
Bombing spot	On or beside wharf	Private of KDC
Interpretation panels – educational, cultural, community, history	On or beside wharf	KDC, DOC, iwi, other
BBQ areas, shade, seating, showers, public toilet, lighting	Beside wharf	KDC
Freedom camping	Beside wharf	KDC or LINZ
Information centre	On or beside wharf	
Fuel depot	On or beside wharf	
Recycling Station	Beside wharf	
Playground	Beside wharf	
Outdoor wellness area	Beside wharf	
Able access facilities	Beside wharf	
Recycle station	Beside wharf	
Moorings	Near wharf	

<i>Description of auxiliary ideas</i>	<i>Where</i>	<i>Organisation</i>
Apartments over water		
Retirement village		
Multi-sport events		
School educational options		
Visitor Accommodation – camping, glamping, other		
Inter-agency hub	e.g. Tinopai	Fire, CD, St Johns, Coastguard



<i>Description of auxiliary ideas</i>	<i>Where</i>	<i>Organisation</i>
Augmented reality		
Kaipara Moana link to Matakohē and Dargaville museums		
Sculpture park		
Concerts on the wharf (boat and reserve audience)		
Festivals		
Houseboats		

### **8.3 Annex 3: Kaipara Moana Tourism Opportunities**

Large file - available on request.

## 8.4 Annex 4: Abley Transport Baseline and implications

Large file - available on request.

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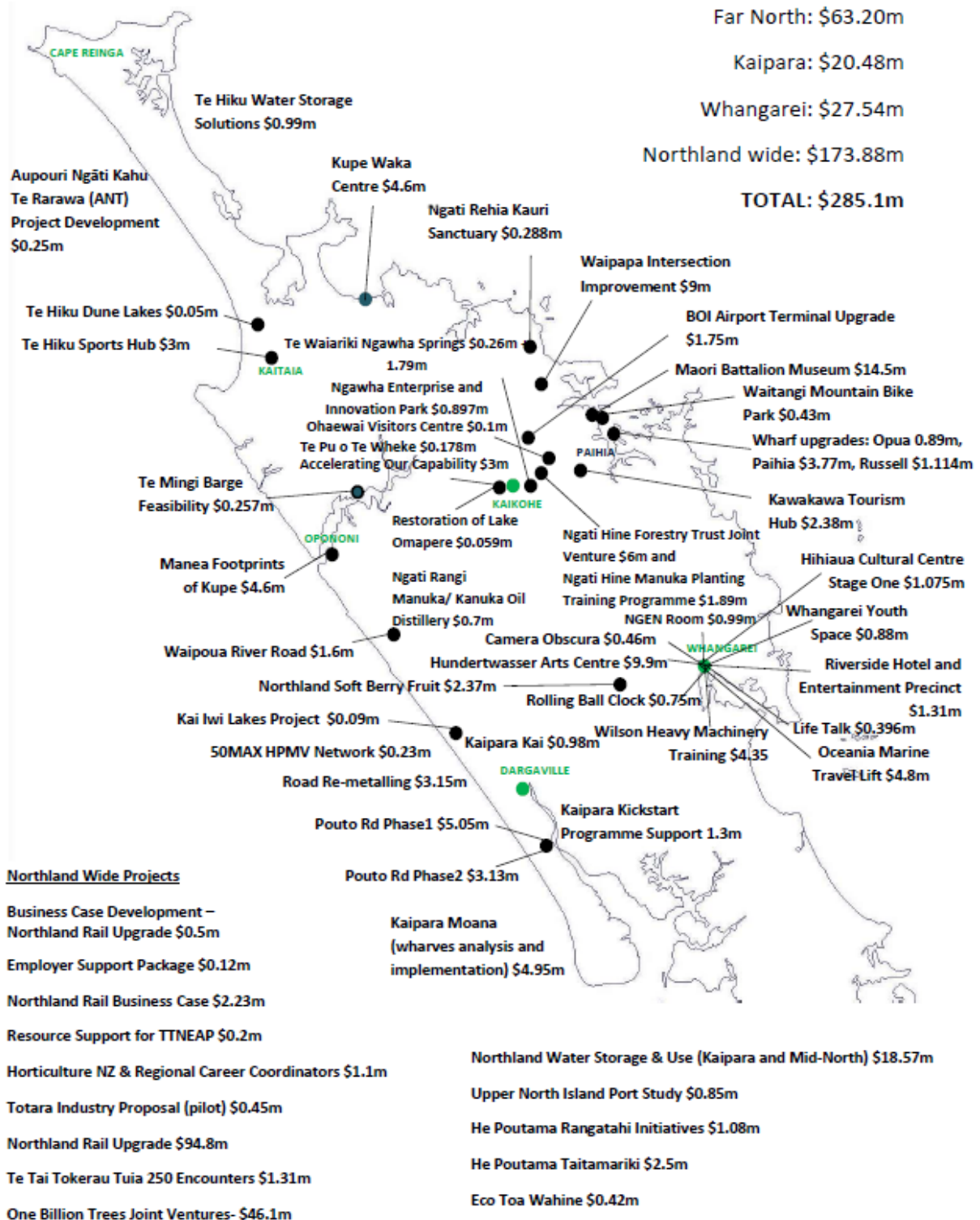
**8.5 Annex 5: Multi – Criteria Analysis Evaluation of Programme Investment Options**

Large file - available on request.

## 8.6 Annex 6: Northland PGF Projects

### Northland PGF Announcements

(as at November 2019)





## **8.7 Annex 7: KDC Marine Asset Condition Assessments (WSP)**

Large file - available on request.

## **8.8 Annex 8: Longlist Options Assessment**

Large file - available on request.

## **8.9 Annex 9: Market Scoping Study (Market Economics)**

Large file - available on request.

## **8.10 Annex 10: Kaipara Wharves Consenting Considerations**

Available on request.