Chapter 4 | Functions and Services of Kaipara Settlements



3 | Function & Services of Kaipara Settlements

This map shows the settlements and villages within the Kaipara District and their relationship with each other and to centres outside the district boundary. The district has large expanses of rural landscape and only a few key urban areas. The pattern of settlement has historically developed around the harbour and along the State Highway network. The densest cluster of settlements are around the Kaipara Harbour area of the district, this reflects their accessibility to road, rail and water transport. Growth and development in these southern settlements has also been influenced by their proximity to Auckland and the roading improvements that have or are being made between Auckland, Kaipara and more widely Northland, making commuting a more viable option for residents. Currently the fastest growing settlement in Kaipara is Mangawhai, located on the east coast.

Legend



Regional Centre



Key Urban Centre



Service Town



Local Village



Rural Hinterland and Coastal Settlement

Rail line



State Highway



3 | Function & Services of Settlements

This district-wide spatial plan provides an opportunity to ensure the variety of settlements in the Kaipara District have the facilities, services and resources for its residents to have healthy and affordable lifestyles to keep connected locally and nationally (physically, socially, spiritually, or virtually) to each other, to work and to enjoy the environment. In order to facilitate this opportunity the function and purpose of the existing settlements needs to be identified and their roles described.

Depending on what type of settlement, village, town or urban centres, the services provided will be different and some of these services and functions will be interconnected between settlements, villages and towns that are nearby each other.

Catagorising towns and villages according to their function and type of services they provide is a useful tool to understand the role of these communities in a local context and help to identify elements and areas that may benefit or be equipped to manage future growth.

These categories are as follows;

Key Urban Centres_

Towns that service nearly all of the needs of residents and businesses over large parts of the district, including areas outside the local authority boundary. This is where you find local services such as banks, council facilities, medical services, and the primary place for employment (other than rural activities).

For Kaipara, these centres are Mangawhai, Dargaville, Maungatūroto, and Kaiwaka. The Key Urban Areas Spatial Plan has been developed in conjunction with this district-wide spatial planto inform the District Plan review. It provides direction for future development in Dargaville, Maungatūroto, and Kaiwaka.

Service Towns_

Towns that service most of the needs of residents and businesses within medium-sized parts of the district. They are usually located in-between the key urban centres or in areas where they service crossregional communities. This is where schools and, to a lesser extent than in the Kev Urban Centres, medical services and wider range of retail shops are available to residents and the surrounding rural-based population. These are usually set up with full service of infrastructure - wastewater, water supply, and access to public transport between other towns or centres. Service Towns usually have a majority of 'usual resident population', which helps sustain a community feeling throughout the year.

Local Villages_

Larger-scale rural and coastal settlements that service some of the needs of residents and a few businesses in small parts of the district, including residents in the Rural Hinterland and more remote Coastal Settlements. They are usually located within a reasonable driving distance of a key urban centre or a service town, and may or may not have better provision of infrastructure than Rural and Coastal Settlements such as reticulated wastewater and water infrastructure. The local market, in many instances seasonal markets, is a popular destination on the weekends for residents and visitors.

Rural and Coastal Settlements_

Places that service only the basic needs of residents living in the most remote places, people who are completely isolated, or in very small groups, these are generally within driving distance from key urban centres or service towns. Generally, there is limited, if any, offer of public transport to these settlements. Therefore, residents rely on private or shared vehicles to meet their transportation needs. Like the Local Villages, the population of these settlements can be more transient, meaning the usual population numbers are fairly low in comparison to seasonal population numbers over the holiday periods.

3 | Function & Services of Settlements DRAFT/WORK IN PROGRESS

Unknown

KEY Yes O No Limited O Proposed New Proposed Upgrade Existing **Settlement Hard Infrastructure** Soft # Occupied Dwell-ings Infrastructure Schools (P)rimary (S)econdary Water Reticulation Stormwater Reticulation StreetLights Community Centre **Playground** Population Broadband Access to Tertiary Education Businesses Public Transport Mobile Coverage Footpath Sports Facilities Reserves RailLine Waste Water **Key Urban Centres** 4,794 1,818 PS Dargaville 1,269 PS Maungatūroto 2.139 10+ Kaiwaka Mangawhai **Service Towns** Paparoa Ruāwai Te Kōpuru Kaihū **Local Villages** 偷 • Matakohe Baylys Beach Pahi 1-5 Tinopai • Whakapirau **Rural Hinterland & Coastal Settlements** Kellys Bay • • • Poutō Point Unknown • Glinks Gully • • Tangiteroria Tangowahine • Unknown Unknown Hakaru

Maunganui Bluff

Omamari

Unknown

Chapter 5 | Economic, Social & Cultural Context



1 | Economic Context

In comparison with nearby districts (Whangarei, Northland), or indeed, with the country at large, Kaipara's economy is missing out. Its potential is constrained by geographic isolation and underinvestment. To demonstrate, Kaipara accounted for almost 10% of Northland's GDP in 2018 - Whangarei District contributed 61%, and the Far North District contributed the remaining 29%.

There has been some employment growth in Kaipara, focused mainly within its urbanised areas, with pockets of growth in rural areas. Rural growth is associated with shifts in agricultural activity and development of new land-based farming activity.

The catchments with the biggest change in employment were:

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

Tourism is an untapped opportunity for Kaipara. While there has been growth in the tourism industry, there is still plenty of room to grow. Many of Kaipara's coastal settlements have basic wharf, jetty and boat launching facilities which provide primary recreational access points to the harbour. However, a prominent constraint for these facilities are the nature of the harbour itself - the relatively shallow depth of most of the harbour, as well as its strong tidal flows, present the key physical constraints for recreational activity upon the harbour. During lower tidal

periods, access to open water is inhibited due to the prominence of mudflats and mangroves.

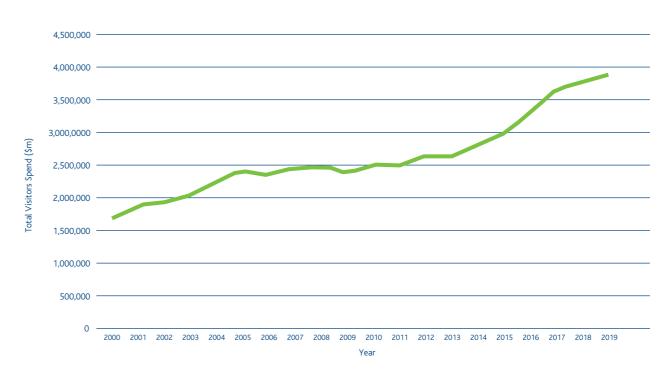
Furthermore, sea conditions can become hazardous in deeper waters. This combination of factors may explain the limited tourism ventures which make use of the harbour. Currently, there are only a handful of fishing charter operations, and few commercial cruise services as well. Generally speaking, activities relating to yachting and kayaking are uncommon, given the exposed tidal mudflats and strong tidal flows. There is potential to facilitate small kavak or boat trips between Kaipara's coastal / harbourside settlements along with on-shore experiences (e.g. historic sites marae and other attractions such as Matakohe's Kauri Museum).

The Kaipara Missing Link is a section of the New Zealand Cycle Trail, which travels south from Dargaville through the Poutō Peninsula, where a boat ferries cyclists from Poutō Point to Parakai. Cycling presents a growth area - more route initiatives are currently being developed, while more are also anticipated around the district.

Overseas visitation also presents an opportunity for Kaipara. Figure 1 below shows the consistent increase in visitor arrivals to New Zealand over the past few years. These figures are important when considering that Auckland Airport is New Zealand's main tourism entry point. Albeit affected currently due to the Covid-19 global pandemic. in time international tourism is expected to grow again. On the meantime - Kaipara can build on the domestic tourism continuing to attract an increasing number of New Zealanders to play, visit and stay a while in the district.

For example, 60% of the Kauri Museum's clientele in Matakohe are from foreign visitors (pre-COVID-19). However, the increase in New Zealand visitor numbers has not vet translated into higher holiday / vacation numbers in Kaipara. While Northland as a whole has seen an overall increase in local area visits of 21%, Kaipara has declined 7% over the last five years. Overall, visitor growth in New Zealand is therefore not being reflected in visits to Kaipara. However this is expected to continue to change over the next 2-3 years with higher visitor numbers reported by local businesses over the winter school holidays unaffected by Alert Level restrictions.





Source: Statistics New Zealand - Visitor Arrival Statistics (YE June)

1 | Economic Context

Figure 2 below shows that capture of the foreign market has been largely unsuccessful, while showing that the domestic market is an important contributer to tourism in Kaipara.

- 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).

The limited range of tourism opportunities in Kaipara is driven by a combination of the following factors:

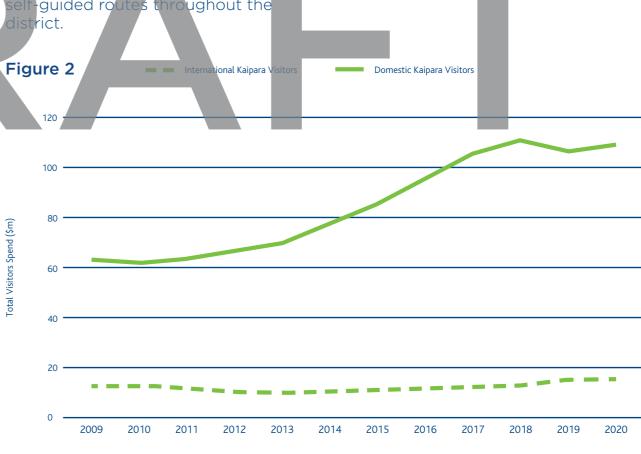
- The physical setting of the harbour, which is large and shallow, with turbulent tide patterns. It also has large tidal arms and tributaries.
- Surrounding terrestrial landscapes and land- uses are dominated by rural primary production.
- Many small settlements are located away from main regional transport routes.
- Relatively low socioeconomic conditions and business development (both generally and tourism-specific).

Notwithstanding, there are still opportunities which can be capitalised on if tourism becomes a better recognised industry in Kaipara, including:

- Significant domestic and international population catchments within 1 - 4 hours' drive.
- There are already significant visitor numbers to Northland, though only 10% include visits to Kaipara.
- Many existing and potential visitors to Northland and Kaipara have potential activity interests which are compatible with what can be offered in Kaipara e.g. scenic boat trips/journeys, fishing, marine wildlife encounters observation, Maori cultural experiences, cycling and cycling., etc.).
- Kaipara has features which could provide the basis for tourism ventures which incorporate the local physical, historic and social settings, including:
 - Customised harbour / settingappropriate marine activities
 - Kauri heritage e.g. natural, cultural, extraction, and art
 - Settlement heritage and cultures
 - 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 tourism industry can result in locally significant gains.

Data indicates (pre-COVID-19 pandemic) that Kaipara is best suited for domestic tourism, along with niche international visitor opportunities. However, the western Kaipara is unlikely to become a visitor hub of any form. The greatest potential for tourism in western Kaipara relates to its areas with strong experiential opportunities. This includes the harbour, the landscape, culture, history and people. The overall approach could be labelled "slow tourism" or "integrated community tourism", pased on guided experiences or self-guided routes throughout the

These routes could be facilitated by local operators, while enabling an offering of services along the way, such as bike shops, cafés, quides and accommodation providers. To this end, wharf infrastructure can unlock areas while attracting niche interests and activities.



Source: Monthly Regional Tourism Estimates (MRTEs), MBIE, YE Jan⁷

Oct 2020 | DRAFT | REV A

Visitors Spend (\$m)

2 | Social Context

In Kaipara, the over-65 cohort is the fastest growing out of other age cohorts, comprising 23% of Kaipara's population (compared to 20% for the rest of Northland). This is expected to increase to 38% of the population by 2043. This is expected to correspond with a decrease in the labour force.

There has been observed a spatial reorientation of activity in the past 15 years, resulting in movement from Kaipara's rural areas to its urban areas (i.e. Dargaville).

It is anticipated that the rural areas of Kaipara will see growth, with the population expected to increase by 1,400 over the next 25 years, accounting for 56% of growth

in Kaipara. This is only slightly higher than growth anticipated in Mangawhai exclusively (1,100), indicating the concentration of growth towards the east in Kaipara.

Many of Kaipara's rural settlements are popular retirement destinations, such as Paparoa, Kellys Bay and Ruāwai.

Table 1 below shows that the local Kaipara population is quite small, but it is increasing.

Around 18% of Aucklanders, or 200,000 people are estimated to be engaged in fishing. This presents a possibility of converting Auckland's growing population into local visits to Kaipara. Given the size of this potential market, capturing even a small proportion of the population for visits can result in significant benefits for the district.

iqure 4 ensus Change Cim. pop Census % Change 018 2006-18 2006 (2018)**Caipara District** 22.869 22.869 4.734 Far North / Whangarei 130.308 156.210 25.902 20 179,079 **Districts Auckland Regions** 1,304,958 1.571.718 1,727,928 266,760 20 Waikato/Bay of Plenty 638.202 766.701 128.499 20 2.338.419 Regions

Source: Statistics New Zealand - Census 2018

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

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

Figure 3

100%					
90%	23%				
80%				38%	
70%					
	34%				
60%	34%				
50%				28%	
40%					
30%	24%			18%	
20%					
10%	19%			16%	
0%					
	2018			2043	
	0-14 years	15-39 years	40-64 years	65 years and over	

Source: TBC

3 | Cultural Context

This map shows the marae that represent the families, sub-tribes and tribes of the Kaipara. From Waipoua to Poutō along the west coast, crossing the Kaipara Harbour to Oruawharo. From Oruawharo to Mangawhai on the east coast. From Mangawhai to Tangiterōria and back to Waipoua. They form the boundary walls of the Kaipara District Council. It also includes maunga, landscapes, portage routes and places that are significant to local Mana Whenua and other residents of Kaipara.

We note that this is not an exhaustive representation of cultural matters in the Kaipara.

Legend



Marae



Maunga



Trees / Forest of Significance



Waka Landing



Portage



Maori Land Parcels



3 | Cultural Landscape of Kaipara

THERE ARE 24 MARAE WITHIN THE KAIPARA DISTRICT.

| Part B - Chapter 3 - North Kaipara

Pananawe Marae Te Roroa

Matatina Marae

Te Roroa

Waikara Marae

Te Roroa

Waikaraka Marae

Te Roroa

Tama Te Ua Ua Marae

Te Runanga o Ngāti Whātua

Ahikiwi Marae

Te Runanga o Ngāti Whātua

Taita Marae

Te Runanga o Ngāti Whātua

Tirarau Marae

Ngāpuhi; Te Runanga o Ngāti Whātua | Part B - Chapters 4 & 5

- Central Kaipara, West Coast

+Poutō Peninsula

Te Houhanga O Rongo Marae

Te Roroa; Te Kuihi; Te Runanga o Ngāti Whātua

Ōtūrei Marae

Te Uri o Hau

Kāpehu Marae

Ngāti Kahu

Waikāretu Marae

Te Uri o Hau

Rīpia Marae

Te Uri o Hau

Naumai Marae

Te Uri o Hau

Parirau Marae

Te Uri o Hau

Waihaua Marae

Te Uri o Hau

| Part B - Chapter 6

- Kaipara Harbour + East Coast

Te Pounga Marae

Te Uri o Hau

Oruawharo Marae

Te Uri o Hau

Otamatea Marae

Te Uri o Hau

Waiotea Marae

Te Uri o Hau

Ngatai Whakarongorua Marae

Te Uri o Hau

Te Kowhai Marae

Te Uri o Hau

Rawhitiroa Marae

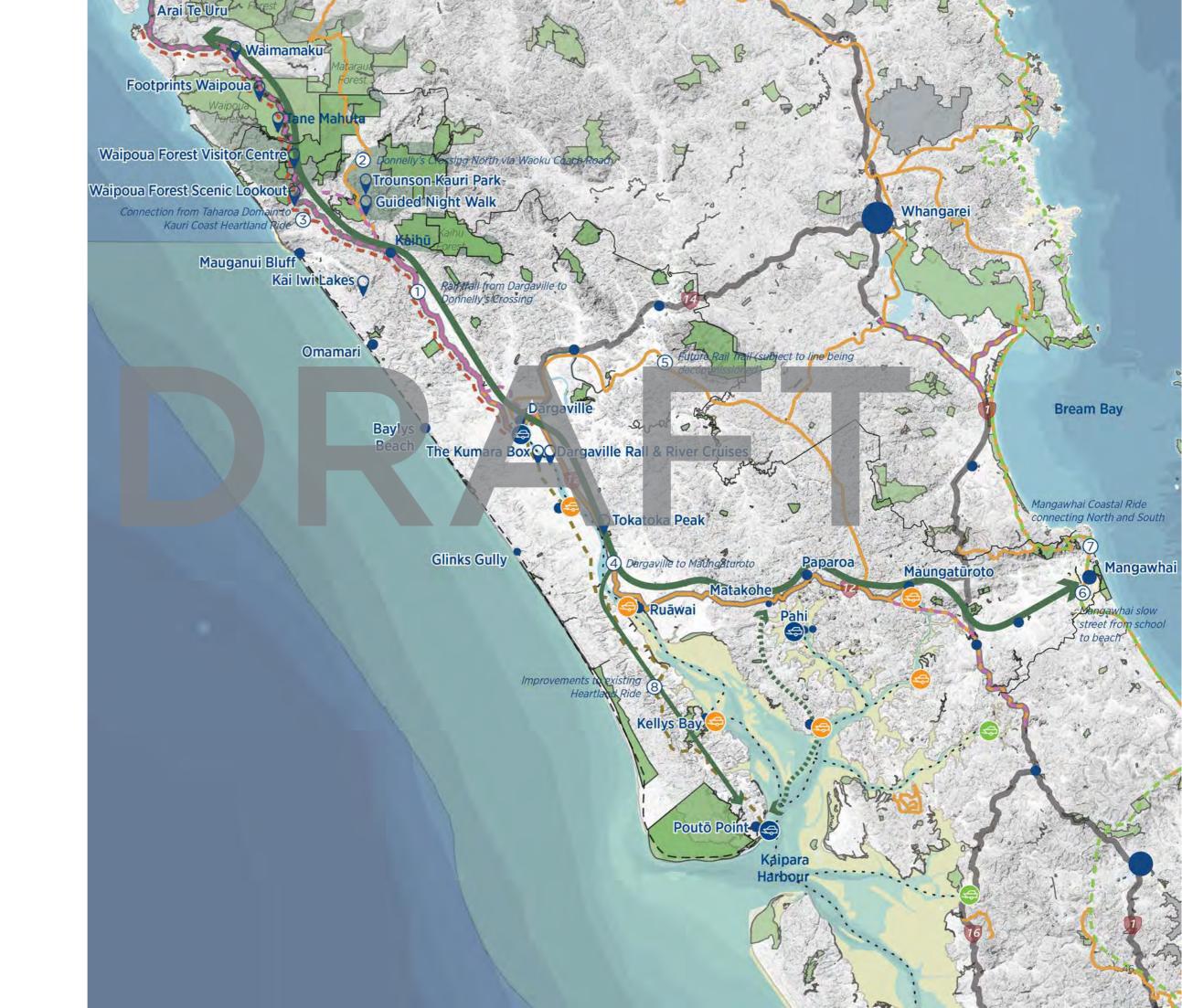
Te Uri o Hau

The following marae is not shown on the map

Waiohou Marae



3 | Recreation



State Highway



Forest



Point of Interest

1

Key District Projects

Existing Biking & Cycling Trail

Twin Coast Cycle Trail

Kauri Coast Cycleway

•••• Kaipara Harbour Missing Link

Te Araroa Trail

•••• Kaihu Rail Cycle Trail

Aspirational Regional Cycle Trail
Framework



Primary Network Improvement



Secondary Network Improvement



Auckland Wharves

Chapter 6 | Transport



3 | Transport

This map shows the various transport options available and their locations within Kaipara. Although some of the infrastructure may not currently be in use, Kaipara is fortunate to have some solid foundations supporting movement through the district.

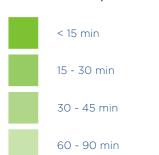
Legend

- Settlement
- State Highway
- Train stop
- Boat ramp
- Wharf
 - Beach Access

Existing Biking & Cycling Trail

- Twin Coast Cycle Trail
- Kauri Coast Cycleway
- Kaipara Harbour Missing Link
- Te Araroa Trail
 - Aspirational Regional Cycle Trail Framework
- **Key District Projets**

Drive Time to Kaipara Centre





There are three main State Highways (SH) that feed into and through the district which provide good vehicle connections between Kaipara and the main regional centres of Whangārei and Auckland.

SH1 links Kaipara to Auckland and will have a huge influence on the accessibility of the area once the proposed alignment improvements are completed over the coming years.

State Highways 12 and 14 provide a loop network through the district that is used for the movement of freight, local commuters, and tourism.

SH12 is part of the Twin Coast Discovery Route (TCDR) and is the only western route into Northland. It passes through areas of rich cultural history and naturally beautiful landscapes. Work is currently underway to discover ways that the TCDR can attract more visitors to experience Kaipara and Northlands west coast.

SH14 crosses the district and provides a strong commercial link between Dargaville and Whangārei and Marsden Point port.

Looking more closely - and beyond the State Highways network - the Kaipara District is serviced by a vast array of 'local roads', some of which are gravel or narrow carriageway rural roads standard. These local roads connect the wider Kaipara District with Whangārei via an intricate existing local roads network - providing for a well connected

district overall for those who know the area - whereby "all roads lead to Whangārei".

Vehicles, motorbikes, and bicycles movement is also possible along the extensive west coast beach of Ripiro, between Maunganui Bluff in the north travelling south to the mouth of the Kaipara Harbour at Poutō Peninsula. There are four main vehicle access points along the coast at the popular coastal village of Baylys Beach and at the established settlements of Maunganui Beach, Omamari, and Poutō Point. Throughout the spatial planning engagement process, we have heard from various communities who wish to restrict or prohibit vehicle access on the beach - or simply better managed overall. This is a matter to be considered further as Kaipara residents balance recreational. commuting, and business needs with an area's amenity, cultural values, and environmental protection and enhancement aspirations for the district as a whole.

Historically, Kaipara was well connected through rail infrastructure. Although mainly used for freight purposes, these rail lines linked Auckland to Northland via the Kaipara. In 2019, the Central Government announced that further investment for the North Auckland Line is planned, which will provide some interesting opportunities for the Kaipara District. Some of these opportunities are captured in the spatial plan for the Key Urban Areas of Maungatūroto and Kaiwaka in particular - with the introduction

of the 'Rail Village' business park centred around the rail station and State Highway 12 at Maungatūroto.

Other branch lines such as the Dargaville (closed in 2014) and Donnellys Crossing (closed in 1959) are in managed decline. The Dargaville branch line is currently used as a rail cart tourist attraction. The heavy rail line extends from Whangārei to Tangowahine and there may be plans to invest in that infrastructure to establish a forestry related rail freight route between these two areas.

The Kaipara Harbour and Wairoa River have provided Kaipara the unique opportunity to move through the southern part of the district via boat. Although this form of transport was more utilised historically, there is potential to strengthen or reintroduce wharves in some harbour and river locations (Kaipara Water Transport Feasibility Study).

Kaipara was once populated by many wharves and jetties around its coastal settlements, which were the foundation for Kaipara's early industries. In the absence of roads, the harbour was an important transport link for marae, and subsequently for European settlers who arrived throughout the 19th century for the kauri timber trade. Until the early 20th century, the harbour was populated with sailing ships carrying timber and steamers carrying passengers around the district. Prominent coastal milling settlements which emerged include Tinopai, Matakohe, Pāhi, Paparoa

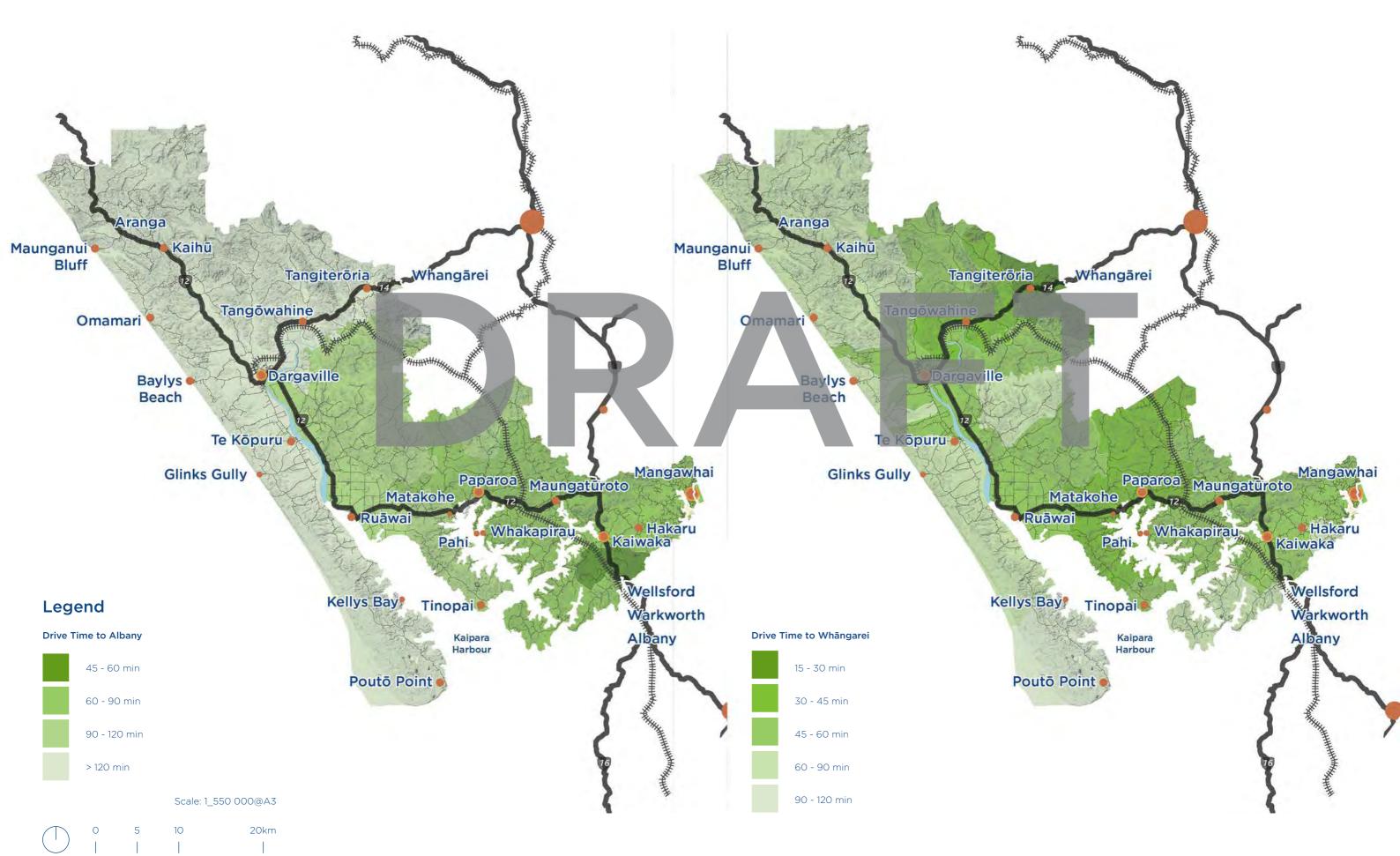
and Whakapirau. Recreational water transport provides an enjoyable and efficient travel mode between settlements. For example, a trip via water would take 5 minutes between Pāhi and Whakapirau, where it would take 30 minutes over 23km via road. Nevertheless, there is little impetus for establishing a waterbased public transport system; these communities tend to be quite small. with small usual resident populations. Moreover, those larger communities, such as Matakohe or Ruāwai, are well-serviced by road connections anyway.

The geography of Kaipara means that travel by road can often be quite long between some of the district's more remote settlements. However, the majority of the district still has relatively low drive times to at least one major centre (Dargaville, Maungatūroto, Kaiwaka or Mangawhai).

The Kaipara Harbour offers opportunities for fishing, including for guided fishing experiences. Currently, there are few fishing charters - these opportunities could be expanded upon.

There are also a number of existing and proposed regional walking and cycling routes that meander through and around Kaipara.

3 | Transport



Chapter 7 | Infrastructure Strategy



1 | Overview

The Kaipara Infrastructure Strategy sets out how KDC will prioritise investment into its infrastructure assets over the next thirty years. Spatial planning must go hand-inhand with infrastructure planning such that Kaipara's communities are safe and resourced to be vibrant, healthy and caring places.

Kaipara's Infrastructure Strategy 2020 comprises of four Key Programme responses: Northland to Auckland Corridor North Kaipara Agricultural Delta Ancient Kauri Coast Building Resilience

Collectively, these Key Programmes seek to respond to Kaipara's infrastructural challenges and external trends which affect the district, while also identifying who Council will collaborate with to achieve programme goals.

Key Programme 1: Northland to Auckland Corridor Programme

The New Zealand Government has recently approved and commenced several multi-million dollar upgrades to transport infrastructure between Auckland and Whangārei. This includes the renewal of the North Auckland Trunk Rail line, the Puhoi to Warkworth motorway extension, and a four-lane State Highway from Whangārei south to the Port Marsden turnoff.

Key Programme 2: North Kaipara Agricultural Delta

The North Kaipara Agricultural Delta programme seeks to protect highly productive land through increased stopbank protection. This would enable the high value horticulture conversions where there is a reliable water source or via the water storage projects proposed in the Te Kopuru rural area. This in turn, creates the necessary demand for the creation of new zoning in Dargaville to allow for businesses associated with processing and value add products. The Council has partnered with Northland Regional Council and the Provincial Growth Unit to progress several water storage projects to realise the potential of this area and stimulate jobs in the agricultural and horticultural sectors.

A6.3 Key Programme 3: Ancient Kauri Coast

The Ancient Kauri Coast route was developed by Northland Inc to promote travellers to seek out an alternative to the established State Highway 1 tourism route. It is the beginning of telling the Kaipara District's heritage story and showcasing the many special places that both domestic and international visitors are invited to discover.

A6.4 Key Programme 4: Building Resilience

Increasing resilience in the asset network programme recognises Council's core responsibilities in managing its assets efficiently and effectively but also in how it plans for climate change events and how these assets could be impacted.

3 | What are our Infrastructure Challenges?

Balancing How to Fund New Infrastructure

As identified in the District-wide Spatial Plan, Kaipara will need to plan the provision of appropriate infrastructure for the various towns and villages in the district. Infrastructure investment will be particularly required in the Key Urban Centres. This map shows graphically the level of population change expected in Kaipara s key urban areas over the next 30 years.

Legend

Settlements / Town Centre

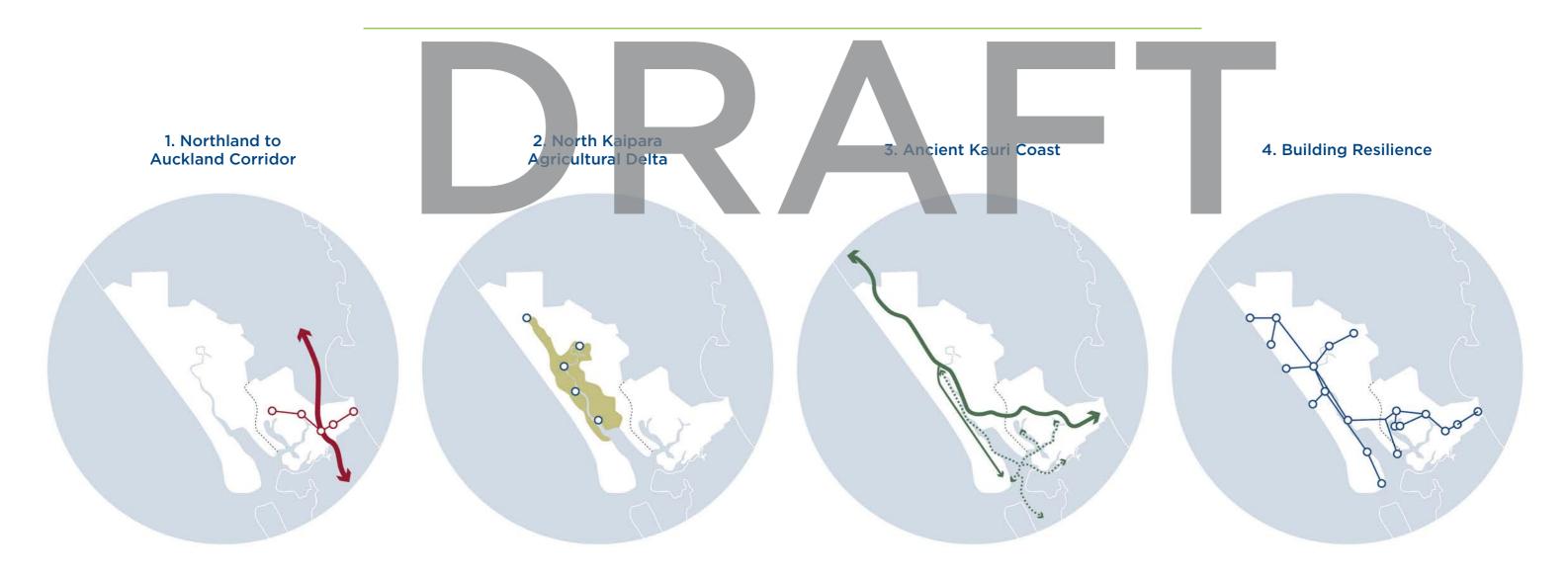
Key Urban Areas

- 1000 people
- 2000 people
- 5000 people
- 30 years projected growth



3 | Our Opportunities -Introducing the Four Key Programme

In response to the infrastructure challenges and external trends affecting the Kaipara District, four strategic programmes have been developed to prioritise and coordinate significant infrastructure improvements. This approach will also inform who Council will collaborate with to achieve the programme goals.



3 | Key Programme 1: Northland to Auckland Corridor Programmes

This map depicts the area of influence that this programme could have over the planning and infrastructure coordination for this corridor.

Legend

Kaipara District Boundary

O Town Centre

Key Urban Area

Rail line

State Highway

Puhoi to Warkworth SH1 upgrades

 Indcative route for northen mortorway extension to Wellesford

Auckland to Northland Corridor

Secondary connection to Mangawhai

Train Stop

Boat Ramp/Wharf

Recreation/Mountain Biking

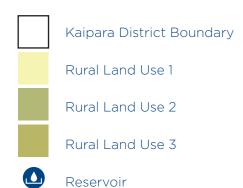
NOTE
The size of the centres are based on the population size



3 | Key Programme 2: North Kaipara **Agricultural Delta Programme**

This map depicts the extent of the agricultural delta, where the proposed water storage projects and potential irrigation area could develop and towns it encaptures.

Legend











Land Use Capability (LUC)

- 1_Highly suitable for cultivated cropping, vineyards and berry fields, pasture, tree crops or production forestry with minimal physical limitations for arable use. (None in the Kaipara District Area)
- 2_Suitable for many cultivated cropping, vineyards and berry fields, pasture, tree crops or production forestry with slight physical limitations for arable use.
- 3_Suitable for cultivated cropping, vineyards and berry fields, pasture, tree crops or production forestry with moderate physical limitations to arable use.



3 | Key Programme 3: Ancient Kauri Coast Programme

This map depicts the extent of the Ancient Kauri Coast programme, supporting the existing travel route from east coast to west coast showcasing the historic and distinctive places of interest.

Legend

State Highway



Forest



Point of Interest



Key District Projects

Existing Biking & Cycling Trail

■■■■ Twin Coast Cycle Trail

******** Kauri Coast Cycleway

■■■■ Kaipara Harbour Missing Link

■■■■ Te Araroa Trail

■■■■ Kaihu Rail Cycle Trail

Aspirational Regional Cycle Trail
Framework



Primary Network Improvement



Secondary Network Improvement



Auckland Wharves



3 | Key Programme 4: **Building Resilience into** our Asset Network

This map depicts the Kaipara towns, villages and settlements connected through infrastructure that form the essential network which the community relies upon to live, work and play.

Legend



Town Centre

Building Resilience



3 | How the Programmes Come Together

This maps depicts how the programmes come together and intersection with each other, at key junction points and the interrelationship with Kaipara's neighbouring districts.

Legend



North Agricultural Delta

Northland to Auckland Corridor

Settlement impacted by the corridor

→ Ancient Kauri Coast

Resilience Programme

→ Northern Water Network



3 | Activity Areas

Transport
Water Supply
Waster Water
Stormwater
Flood Protection
Waster Management



3 | Activity Management Strategy - Transport

Kaipara's roading network is made up of roads that serve different purposes and are broken up by roading classification called One Network Road Classification (ONRC). The adjacent map shows the breakdown of the Kaipara roading network.

The ONRC considers the needs of all road users, be they motorists, cyclists or pedestrians. It gives road users more consistency and certainty about what standard and services to expect on the national road network, including the most appropriate safety features.

Legend



National Road

--- Regional Road

— Arterial Road

Primary Collector /Secondary Collector /Access Road



3 | Activity Management Strategy - Water Supply

Figure #. Locations of Kaipara District s five community water schemes

Legend

Location of Community
Water Schemes



3 | Activity Management Strategy - Wastewater

Figure #. Kaipara District Six Wastewater Schemes

Legend

Location of Wastewater
Schemes



3 | Activity Management Strategy - Stormwater

Figure # - Location of Stormwater Schemes

Legend

Location of Stormwater
Schemes



3 | Activity Management Strategy - Waste Minimisation

Figure # - Location of KDC Closed Landfill sites and Transfer Stations

Legend



Closed Landfill





3 | Activity Management **Strategy - Flood Protection and Land** Drainage

Figure # - Land Drainage Districts in Kaipara

Legend

Kaipara District Boundary Drainage Catchment 1 Kaihū 17 Aratapu Village 2 Awakino Valley 18 Kopuru Swamp 3 Tangowahine Valley 19 *Tatarariki 1, 2 & 3* 4 Otiria Whakahara 5 Tangowahine 1 & 2 21 Green Hill 6 Okaka 22 Koremoa 7 Hoanga 23 Tikinui 8 Awakino Point 24 Te Hapai 9 Dargaville 25 Owairangi 10 Mangatara 26 Taingaehe 27 Okorako 11 Oruariki 12 Hore Hore 28 Waimamaku 13 Notorious 29 Raupo 14 Aratapu Swamp 30 Okaro

31 Waikere



16 Mititai

15 Arapohue 1 & 2