

Check list for Respondents

Task	✓
1. Complete all sections of the Response Form.	✓
2. Delete all 'supplier tip' boxes from the Response Form.	✓
3. Remove all yellow highlight from the Response Form.	✓
4. Arrange for the declaration to be signed.	✓
5. Prepare your Registration for electronic submission by creating a final soft copy file.	✓
6. Arrange for the Registration to be submitted electronically before the Deadline for ROIs.	✓
7. Submit your digital plan in the form of the attached Digital Enablement Plan template, or other existing plan.	X (to be done by Sept.18)



Registration Response Form

In response to the Registrations of Interest – Support

Seeking information and commitments from local authorities in support
of:

- Ultra-Fast Broadband 2
- Rural Broadband Initiative 2
- Mobile Black Spot Fund

Date of this Registration: June 30, 2015

1. About the Respondent

Our profile

This is a Registration of interest by Waikato District Council (the Respondent) alone to supply the Requirements.

Item	Detail
Local authority name:	Waikato District Council
Physical address:	15 Galileo St, Ngaruawahia 3720
Postal address:	Private Bag 544, Ngaruawahia 3742
Website:	www.waikatodistrict.govt.nz

Our Point of Contact

Item	Detail
Contact person:	Clive Morgan
Position:	Economic Development Manager
Phone number:	07 824 8633
Mobile number:	+64272179221
Email address:	Clive.Morgan@waidc.govt.nz

2. Response to the Requirements

Questions relating to the ROI Requirements

1. Programme(s) you are interested/able to support
<ul style="list-style-type: none">• Ultra-Fast Broadband 2• Rural Broadband Initiative 2• Mobile Black Spot Fund

Overview of the Waikato District

Waikato District is uniquely placed between the two large urban masses of Auckland and Hamilton. The district lies within the northern growth corridor between these two cities along State Highway 1. Significant national investment is underway which will make all three areas better connected, facilitating the movement of both goods and people.

The district includes the major towns of Huntly, Ngaruawahia, Raglan, Te Kauwhata and Tuakau. Smaller settlements include Gordonton, Matangi, Tamahere, Meremere, Port Waikato and Pokeno. The district had 63,381 usual residents as at the 2013 Census. This was an increase of 5,796 people,

or 10.1 per cent, since the 2006 Census. The population of the district is projected to double in the next 50 years.

The Waikato is synonymous with agriculture and, in particular, food production. Blessed with fertile land, and (traditionally) water availability, Waikato District has long had strong dairy, sheep and beef, and commercial vegetable growing industries and a deep pool of agricultural skills. This is reflected not just in the number of farming enterprises but in the research and agribusiness facilities located within or near the district¹.

Similarly, for more than 100 years the mining of the District's substantial coal resource has been a mainstay of the central Waikato District economy. More recently electricity generation, initially at Meremere, then at the Huntly thermal stations and more recently still at Te Uku Wind Farm, has been another major contributor to the district economy.

These three industries continue to be a huge part of the District economy today contributing around \$1 billion of a \$2.1 billion dollar economy.

Waikato has a historical comparative advantage in agriculture, mining and electricity, but the District's future economic growth relies on capitalising on other advantages including, in particular, its attractive location for residential development and its strategic importance as a corridor and hub for freight and logistics.

Agriculture and food production in the Waikato is a mature industry with limited growth potential (requiring transformational investment in irrigation and/or intensive hothouse horticulture). The electricity and mining sectors are in a similar position. Wind farming has potential, indeed the District's second wind farm (Hauauru ma raki) has been consented, but a significant fall in demand means construction of this, or any other new, project is likely to be a medium rather than short-term prospect.

By contrast, the construction, transport and warehousing sectors are recording double-digit growth rates and real estate services and manufacturing are also showing strong growth, reflecting high rates of population growth. Growth in these sectors reflects the fact that the Waikato District is already the fifth most populous district in New Zealand and sustained population growth is expected due to both substantial net inward migration and natural increase².

There are also natural assets and qualities in the District that are largely untapped. Capitalising on the Waikato River, on an often overlooked treasure trove of natural heritage³, on a rich history of Maori culture and tradition (including being the capital of the Kingitanga movement) and as an origin/destination point of the soon to be completed Waikato River cycleway (Te Awa) and walkways, offers exciting opportunities for recreation and cultural-based tourism and visitor attraction.

¹ These include the DairyNZ headquarters and the Livestock Improvement Corporation (LIC), both based in Newstead, as well as CRIs AgResearch and Plant and Food Research just across the 'border' at Ruakura (and AgResearch's Hill Country research station at Whatawhata).

² Refer 'Baseline and Stochastic Population Projections for the Territorial Authorities of the Waikato Region 2013-2063, National Institute of Demographic and Economic Analysis, University of Waikato

³ Including the internationally renowned Whangamarino wetlands, the Hakarimata Ranges (and walkways), Mt Karioi, and Raglan coast.

In short, our district is in transition. The Council is currently developing a Draft District Development Strategy (2015) and a Draft Economic Development Strategy (2015) to respond to these economic and demographic shifts. Achieving better broadband connectivity across the district is considered a critical enabling infrastructure for both residential and business growth.

The Waikato District Development Strategy

The Waikato District Development Strategy (commenced in 2014 and currently under development) specifically addresses the Waikato District's response to growth opportunities and challenges initially expressed in Future Proof⁴. The strategy identifies three key issues that will influence population and economic growth in the district, which are:

- the increasing growth pressure from outside the district
- continued improvements to transport corridors
- the economic influence of the 'Golden Triangle' (Auckland, Hamilton, Tauranga)

Rates of growth in the Waikato District are increasing and the population is expected to significantly increase over the next 10 years (refer Table 1).

Table 1: Waikato District projected growth 2015-25

Projected Changes in Population and Land Use ⁷			
	2015	2025	Change
Estimated Population	67,396	76,090	8,694
Estimated Dwellings ⁸	24,191	29,430	5,239
Estimated Urban: Rural population mix	47:53	49:51	

Source: WDC Draft LTP 2015-25

Growth is expected to occur particularly in:

- North Waikato due to the proximity to Auckland, changes to the Auckland unitary plan to facilitate housing stock increases and intensification, completion of the Waikato expressway, and other proposed developments; and
- Hamilton fringe areas due to high demand for properties and increased subdivision in the country living and rural areas within 20km of Hamilton.

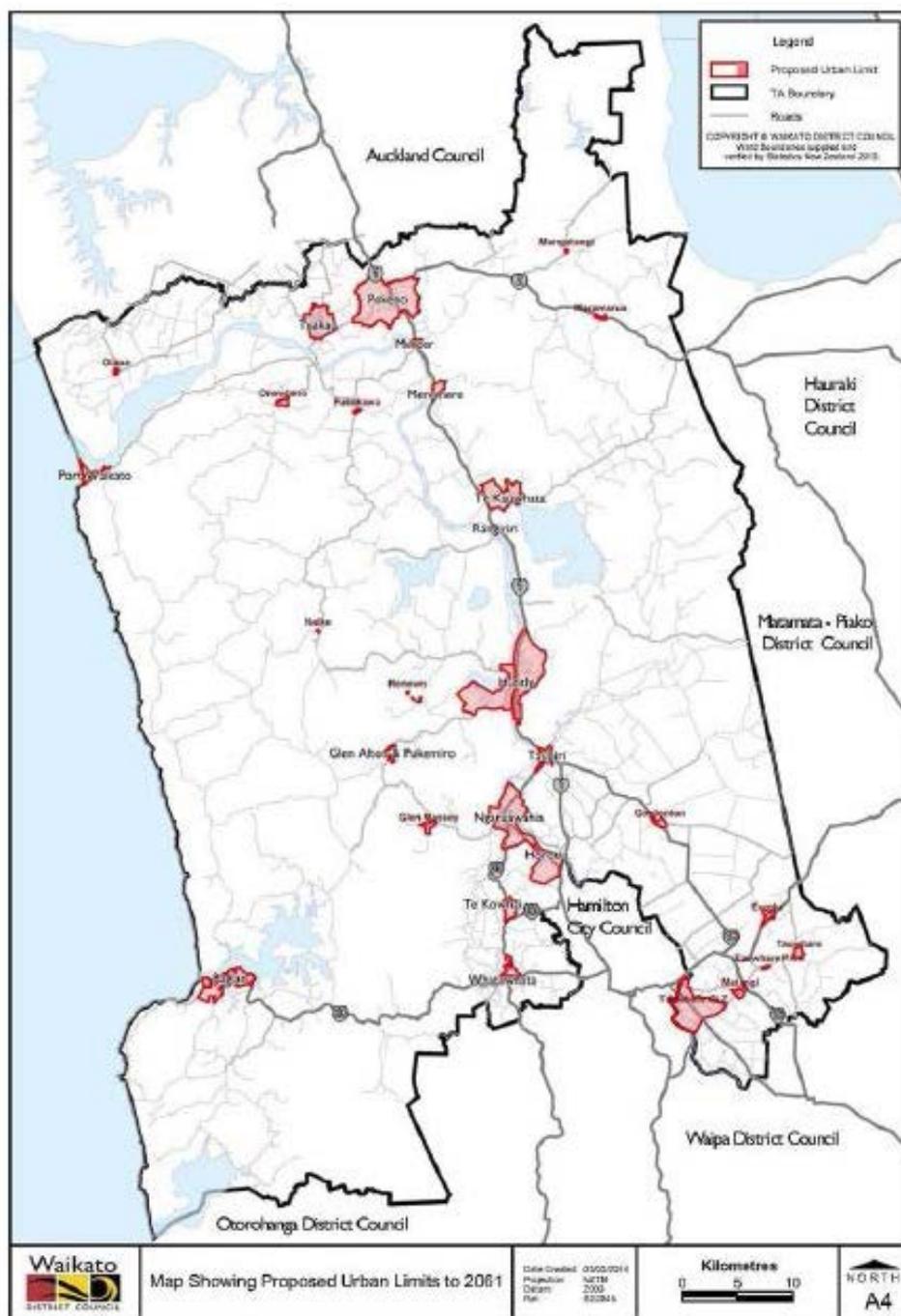
The District Development Strategy looks to grow and revitalise towns and villages in order to maximise infrastructure use, reduce traffic congestion and promote local jobs. At the same time it ensures the productive potential of rural land is protected.

⁴ 'Future Proof' is a sub-regional growth strategy developed with our partners: Hamilton City Council, Waikato Regional Council, Waipa District Council, Matamata Piako District Council, Tangata Whenua, and New Zealand Transport Agency (NZTA). The Future Proof' strategy was updated in 2012 to take account of the reorganisation of Auckland Council (which resulted in the addition of the Onewhero, Awaroa Ki Tuakau Wards and the extension of the Whangamarino Ward to our district).

The Council's Long Term Plan 2015-25 recognises specific areas of growth and provides for network and community infrastructure to ensure that growth is sustainable and affordable over the period of the Long Term Plan and beyond.

Significant residential growth is planned for Tamahere, Te Kauwhata, Tuakau and Pokeno, while industrial growth is focused around Horotiu, Tuakau and Pokeno (refer Figure 1). Structure Plans have been developed or started for some of our towns to better plan and co-ordinate how these towns and their surrounding areas expand. These plans also give a greater level of certainty to developers and local communities about the future settlement patterns for their towns.

Figure 1: Waikato District (proposed urban limits to 2061)



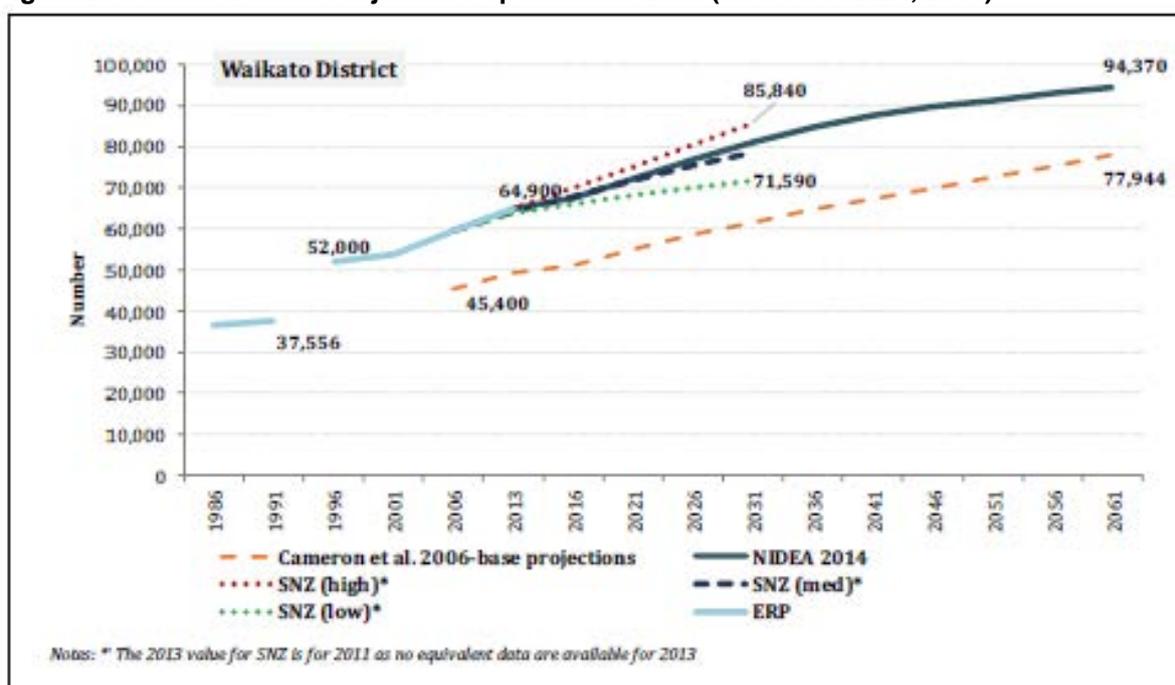
Source: WDC Draft LTP 2015-25

Residential Growth

In 2014, population projections based on 2013 census information were updated for Waikato District in '2014 Review of Demographic, Households and Labour Force Projections for the Future Proof Sub-Region for the Period 2013 – 2063' by the University of Waikato, National Institute of Demographic and Economic Analysis (NIDEA).

Figure 2 shows the population projections for the Waikato District over the next 30 year period. The growth rate between 2015 and 2045 is expected to be higher than previous rates.

Figure 2: Waikato District Projection Population to 2061 (Source: NIDEA, 2014)

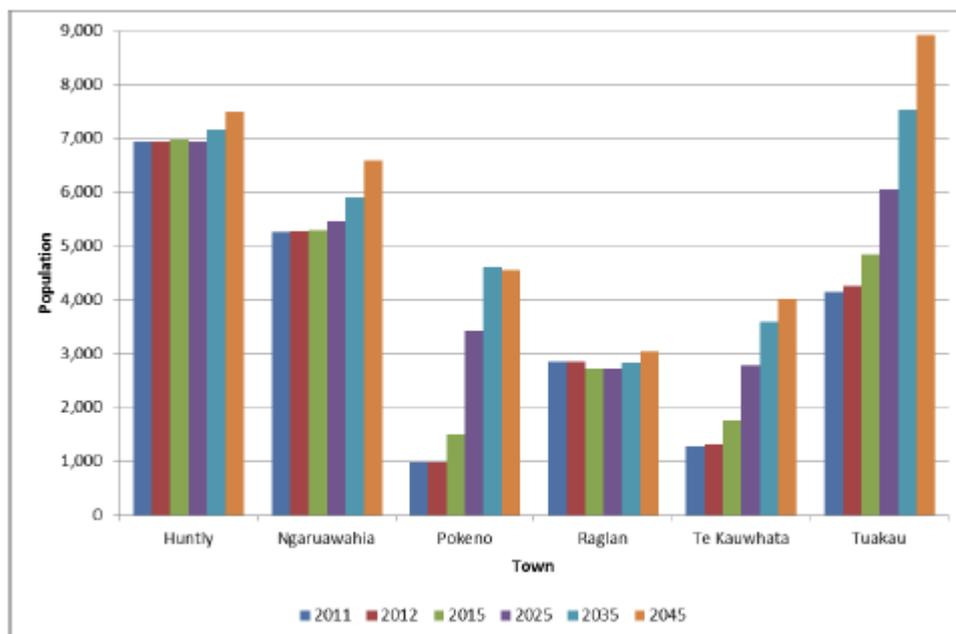


Source: WDC Draft LTP 2015-25

While the NIDEA report provides predictions at a district wide level, the Waikato population model forecasts population change for towns and villages within the Waikato District. The Waikato District population is projected to be 88,448 by 2045. Note Statistics NZ's high projection suggests the District's population could reach 85,000 within a shorter period of only 18 years.

Figure 3 shows the council's projections for the urban towns of the District to 2045. The highest growth is currently being experienced and is predicted to continue in the northern urban areas of Tuakau, Pokeno and Te Kauwhata.

Figure 3: Waikato District Population Projection Larger Towns (Source: Waikato District Council, 2014)



Source: WDC Draft LTP 2015-25

The highest rates of growth in villages and rural communities are expected in Horotiu, Tamahere Country Living Zone (CLZ), Te Kowhai, Matangi, Whatawhata and Port Waikato.

Industrial Growth

The Waikato District is predominantly a rural area with only a very small proportion of land zoned for industrial use. Council has significant industrial zoned areas for development in Horotiu, Pokeno, and Tuakau, and local serving industrial zones in Huntly and Te Kauwhata.

The Waikato District Draft Economic Development Strategy

The following have been identified in the Draft Economic Development Strategy (2015) as the opportunities and challenges for the Waikato District presented by projected residential and industrial growth⁵.

Opportunities and strengths

- An excellent location for movement of goods to main population centres and ports⁶. Key freight routes include the Waikato Expressway, State Highway 2 and Main Trunk Railway. These same routes provide easy access to Auckland (including the International Airport), Hamilton, and Tauranga.

⁵ Open Waikato: Invest, Visit, Live - *A Refresh of the Waikato District Economic Development Road Map, Volume 1 – Background*

⁶ Between them, the Ports of Auckland and Tauranga account for 60% of New Zealand's container trade. Together the Ports of Auckland, the Port of Tauranga and the Auckland International airport account for 62% of all New Zealand trade (by value).

- Northern Waikato towns are experiencing rapid growth as a result of Auckland spillover and current constraints on accommodating growth in Auckland’s southern sector (i.e. the Franklin local board area).
- Low comparative land values and competitive labour costs. Industrial and commercial land and property values are typically half that of the southern Auckland industrial and commercial areas. Average earnings are a little higher than in the Auckland south area reflecting a higher average level of education and a higher proportion of employees in managerial positions.
- Potential for short stay tourism growth as a result of proximity to airports and high volumes of tourist flow-through traffic. About 2.6 million international visitors arrived in New Zealand in 2013 – 2.2 million of them arrived via Auckland International Airport – a mere 40 minutes from the District’s northern boundary. Despite that, only 45,000 international visitors are currently estimated to visit the District. Many tens of thousands pass through the District visiting other North Island destinations.
- An existing comparative advantage in mining, agriculture and agricultural support services and resulting pool of associated skills as well as training and research facilities.
- Strong demand for primary sector processing. The Council has fielded numerous enquiries over recent years regarding potential sites for dairy processing and, to a more limited extent, meat processing and other food related industry.
- Good accessibility to local tertiary institutes: Waikato University and Wintec (Hamilton) as well as AUT and MIT campuses in Manukau ensuring that a pool of relevantly qualified local employees is available and business relevant research can be sourced and undertaken locally.
- A landscape relatively safe from natural hazards. It is geologically stable with known fault lines running well to the east (through the Bay of Plenty); sufficiently distant to be unaffected by the Auckland and central north island volcanic fields; and has no east coast coastline with its attendant risk of storm surge and tsunamis. This hazard-benign environment can be attractive to industries that need safe and secure sites for long-term centralised data storage and communication facilities.

Challenges

- Both the Waikato Regional Economic Development Strategy and the Draft Hamilton and Waikato Visitor Strategy identify a generally poor image and branding of the district and wider region.
- Uneven population growth, with central Waikato district towns stagnant compared to strong growth to the south and, more particularly the north.
- Emerging resource constraints, particularly water, limiting the ability to accommodate further “wet industry” (just the industry that is otherwise attracted to the District).
- A lack of a broad and compelling tourism product range and a similar lack of quality accommodation (particularly in key destinations such as Raglan).
- No ultra-fast broadband roll out currently planned for main towns.
- A range of structural issues with the local economy including:
 - *Low diversification*: An economy heavily dependent on the mining, agricultural and electricity sectors which are mature and currently suffering from low commodity prices.
 - *Low levels of knowledge intensive employment* and a corresponding low skill workforce. The proportion of the workforce employed in highly skilled jobs in 2014

was 19% compared with 32% for New Zealand as a whole. The District is below average in terms of the proportion of the workforce with a formal education.

- *Low GDP per capita* (only about 65% of the national average). This reflects a relatively high rate of residents not in the workforce.

Areas of focus for achieving growth

The following have been identified in the Draft Economic Development Strategy (2015) as the primary areas of focus for achieving economic growth in the Waikato District. All of these, particularly excellence in council service delivery, would be enhanced and enabled through access to quality broadband services across the district:

A. Population attraction

There is a continued effort to promote population growth through catering for, and servicing, residential development, to grow the local market and provide impetus to local business growth.

In the year ending June 2014 the District population grew by 2.2%. Only Auckland and the earthquake-recovering Canterbury districts of Waimakiriri and Selwyn grew at a faster rate.

B. Building a skilled workforce

A second underpinning focus is on ensuring there is an appropriately sized and skilled labour force available to meet the needs of existing and new industry.

C. Excellence in council service delivery

The third underpinning area of focus relates to Council itself and how it interacts with business and investment opportunities. This includes the way it plans for and provides infrastructure, the way it manages its regulatory functions (particularly its land use planning functions under the Resource Management Act) and its external communications.

Excellence in council service delivery and underpinning core activity	<p>Council as a business friendly organisation</p> <ul style="list-style-type: none"> • Establish an economic development grants policy and fund to assist locally-led initiatives to contribute to the above strategic focus areas • Work with Waikato Tainui iwi on economic development initiatives of mutual interest, including encouraging Waikato Tainui to appoint an economic development manager as a point of liaison with the Council on development matters. • Protect and enhance business-zoned areas and business improvement districts through structure plans, public open space and streetscape-amenity projects • Ensure an economic development lens is applied to planning and implementation of council infrastructure and community facilities projects • Ensure the district plan review: <ul style="list-style-type: none"> i. Explores innovative ways to: <ul style="list-style-type: none"> - contain land use planning strategies that maintain flexibility to respond to market demand (including potential industry clusters) - anticipate likely development/bulk and location needs in industrial and business zones and develop provisions that enable that development with minimal
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consenting requirements.

- ii. Is subject to an audit against economic development priorities prior to public notification.**

Marketing and information provision

- **Develop and implement an Open Waikato marketing and communication strategy**
- **Maintain and enrich the Open Waikato website as a “front window” to promote the district as a good place to invest, visit and live. Enrichment of site to include information on the District’s competitive strengths (e.g. business land and labour costs, residential property costs, infrastructure capacity and quality, transport/freight time and cost).**

Broadband

- **Advocate for quality broadband infrastructure (ultra-fast broadband, rural-broadband initiative and VDSL) and support its take-up by businesses in the district.**

Cross-border collaboration

- **Work with public and private sector groups in the Auckland and Waikato regions on sector and business development initiatives of advantage to the district.**

The Contribution of Digital Technology to Economic Development

Digital technology is vital for Waikato District businesses and communities to operate more efficiently in the future. Fast, accessible broadband is key to the ability to access rich content and connections to the national and international economy. Only then can the whole district engage in becoming a truly digital and skilled community by using the tools and opportunities that digital technology offers.

Waikato District Council recognises that local government has an important role in helping to link the investment in broadband and the uptake of the applications it enables, with the businesses and people in their communities. The council is committed to playing a leadership role to help the district fully seize the opportunities it currently faces, and is developing its Digital Enablement Plan based on a vision to be “the most digitally connected district in New Zealand”.

The Role for Waikato District Council

The council has various roles applicable to ‘digital enablement’ of the community - as service provider, regulator, funder, leader, facilitator, advocate, educator and coordinator.

The council has the ability within these roles to influence the following:

- Improved online local government service delivery and engagement
- Minimising and reducing the digital divide
- Overcoming barriers and costs for installation
- Encouraging broadband demand and demand aggregation
- ‘Communications reach’ with local residents and businesses
- Economic impact

The Role of Iwi in Facilitating Economic and Social Development in Waikato District

Almost 25% of the District's population identify as Maori (mana whenua or mataawaka).

Whakatupuranga 2050 is the Waikato-Tainui 50 year iwi development plan. It includes a strategic objective of "self-sufficient Waikato-Tainui marae". One of the priorities is that marae whanau are able to access affordable, reliable, high speed broadband, which is adequate to meet their current and future requirements. Broadband is recognized as enabling access to a wide range of economic and educational opportunities, and as critical for economic, social and cultural development.

Marae are becoming 21st century community facilities in their unique way. Marae are used for a wide range of whanau and tribal activities and also typically host a wide range of community groups, schools etc. For example, there are over 30 poukai held across Waikato-Tainui marae annually, attended by over 300 people. Other events, such as tangi, bring large groups to the marae for a number of days. Marae are sustained by local whanau, typically having papakainga housing and other community facilities such as kohanga reo close by.

Most Waikato-Tainui marae are rural, and have no or limited internet access. An average of around 1,000 Waikato-Tainui tribal members affiliate to each of the 68 marae, many of which are in Waikato District. Marae whanau are expected to be heavy users of internet services. Internet access at marae will enable marae executives and whanau to utilise web based services such as internet banking, online accounting, social media for promoting community events, email databases and so on. Waikato-Tainui are currently assessing the feasibility of a marae web-portal where marae development resources can be shared. The efficacy of such tools is dependent on internet access.

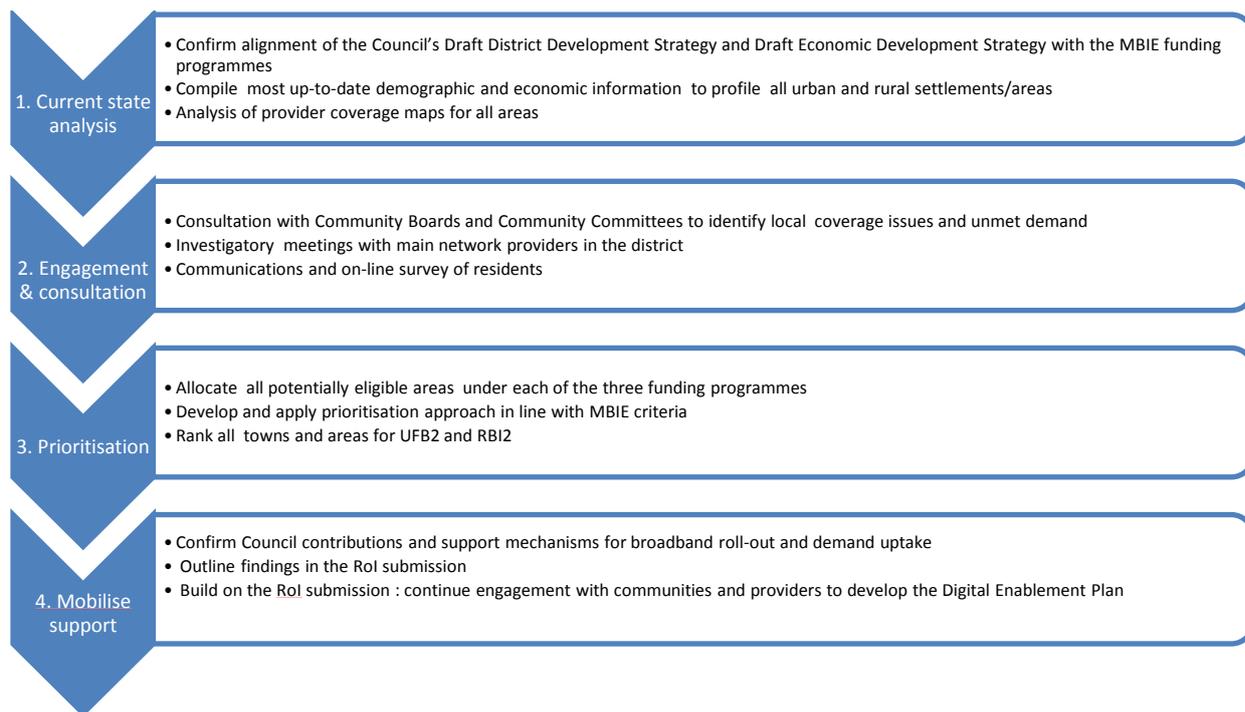
Internet access at rural marae will help make marae attractive venues for community, tribal or economic (e.g. cultural tourism, training) activities. It will also encourage whanau involvement in marae activities, especially by young people.

Refer Attachment A for letter from Waikato-Tainui.

Waikato District Council approach to developing the Rol

The Waikato District Council has taken the following steps in developing the Registration of Interest:

1. Analysis of the current-state
2. Engagement and consultation with the community and main providers
3. Prioritisation of UFB2 and RBI2 Candidate areas
4. Mobilise Support



Methodology for data collection and prioritisation – UFB2

The methodology for data collection/profiling and prioritising urban candidate areas is described below.

Prioritising UFB2 Locations – ROI Criteria

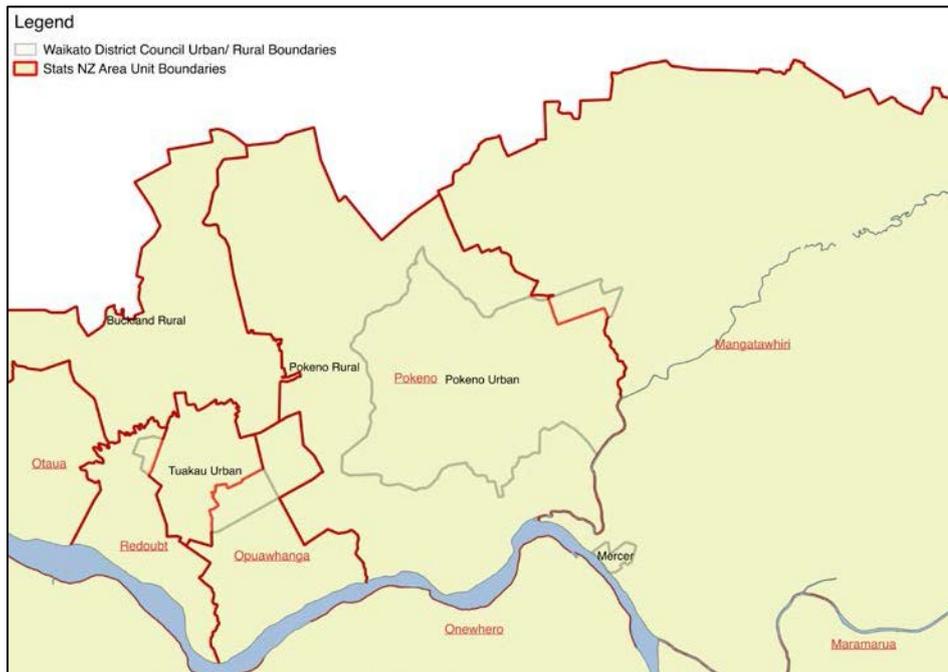
Data for prioritising the towns in Waikato District for UFB2 has been sourced according to the following:

- a. 2014 Populations, 2021 Projected Populations, 2014 Household Numbers and 2014 Household Density have been sourced, compiled and/ or calculated using Waikato District Council Area Unit (AU) data.⁷ This dataset 'splits' each AU into a 'rural' and 'urban' component, as shown in Figure 1.

While the ROI requests data using the 2013 Census Meshblock Dataset, the WDC data has been preferred for two reasons. Firstly, the Urban portion of the AU most closely reflects the boundaries of the actual 'town' that is being proposed for UFB2. Secondly, the Urban portion, in most cases, encloses the 50kmph roads requested in the ROI. This is important because, when considering the 2021 Projected Population criterion, these figures most closely align with WDC planning for population increases. It also reflects the likelihood that the 50kmph zone may increase to accommodate new suburbs and residential developments with a 50kmph speed limit. It should also be noted that 2014 Household Density calculations have been done in QGIS, again using the WDC data for 2014 Household numbers and the land area of the Urban zone.

⁷See <https://www.waikatodistrict.govt.nz/The-Waikato/People.aspx#population>

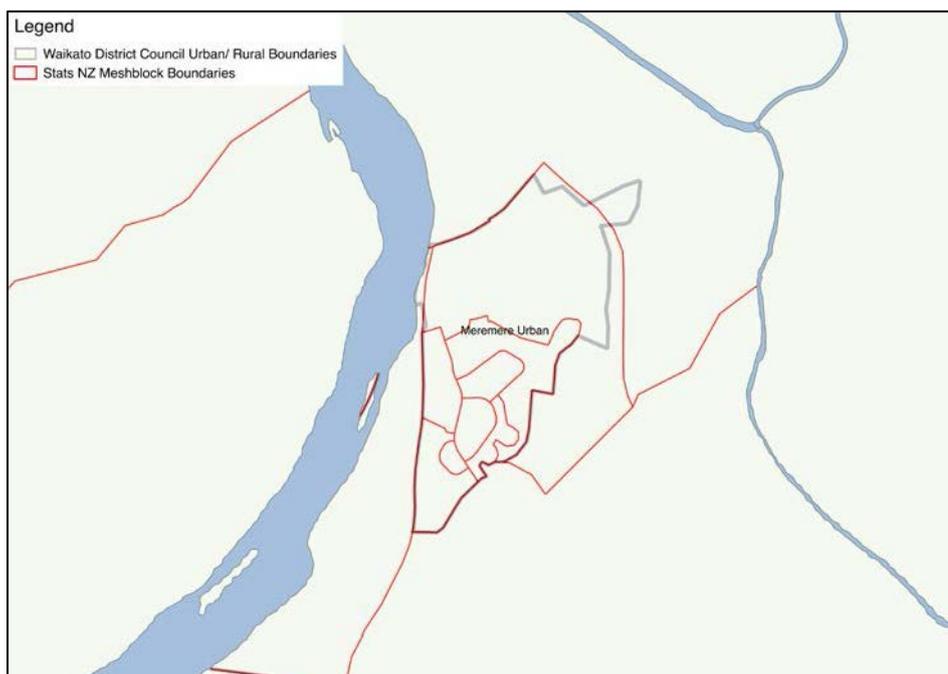
Figure 1: Waikato District Council defined Area Units (AU) urban/rural split



- b. 2013 Median Income and 2013 Access to Internet data has been derived from the 2013 Census Meshblock Dataset.⁸ It should be noted that the SNZ Meshblocks do not cleanly align with the urban portion of the AU, as shown in Figure 2.

Where this is the case, a 'best-fit' approach has been used, with calculations of median income and internet access for each town calculated using all meshblocks that are 'crossed' by the boundaries of the WDC AU Urban zone.

Figure 2: Waikato District Council defined Urban AU compared to Stats NZ meshblock



⁸See <http://www.stats.govt.nz/Census/2013-census/data-tables/meshblock-dataset.aspx>

- c. 2014 Business and Employee Counts have been sourced from the Stats NZ Business Frame.⁹ The limitation of this data is that it is available only for the AU as a whole. The main impact of this limitation is on business and employee counts for Port Waikato and the Tamahere Countryside Living Zone (CLZ) areas, as they are both contained within larger (Stats NZ) AU's – Onewhero and Tamahere-Tauwhare respectively. To estimate business and employee counts for Port Waikato and Tamahere CLZ, the number of jobs as a proportion of the entire AU has been calculated using workplace address data from the 2013 Meshblock Dataset (using only meshblocks that are enclosed by, or crossed by, the WDC boundaries for these two areas). This proportionality has then been applied to the Business Count numbers to give an estimated number of businesses for Port Waikato and Tamahere CLZ.
- d. Some of the criteria outlined in the ROI have been excluded from the prioritisation process. GDP data for example is available from Stats NZ only at the Regional Council level (and estimates are not available at a meshblock level).
- e. The fourteen UFB candidates were ranked highest (score of 1) to lowest (score of 14) for each of the ROI criteria. A final score and ranking was calculated through adding together the individual criteria scores.

Prioritising UFB2 Locations – Additional criteria and scoring

A number of additional criteria have been used for prioritising the towns for UFB2. These are:

- a. Unoccupied Dwelling Counts – sourced from Stats NZ 2013 Census Data. Unoccupied Dwelling Counts provide a 'proxy' for temporary residents, particularly in holiday destination towns such as Port Waikato and Raglan. Such dwellings indicate a level of unmet demand that is not recorded in census data on population, internet access and household income (which are based on usual residence).
- b. Whether the town/area has a Library located within it. Libraries are important community hubs for accessing information, including the accessing of online council services.
- c. Visitor Numbers – using recorded i-SITE data and other sources. International and domestic tourists represent an additional and significant source of demand for broadband services in particular parts of the district. They are increasingly using broadband to arrange accommodation and obtain information on visitor attractions directly, or via an i-SITE¹⁰.
- d. The number of marae that are located within the town and wider area. As explained above internet access at rural marae is necessary to help make marae functional and attractive venues for community, tribal and economic activities.

⁹See

http://www.stats.govt.nz/browse_for_stats/businesses/business_characteristics/BusinessDemographyStatistics_HOTPFeb14.aspx

¹⁰ Tourism New Zealand has identified the value of lifting connectivity for tourism experiences:

- 68% of visitors travel to NZ with a smartphone, however only 28% are connected while here (source: MBIE international visitor survey)
- A mobile user participates in 8% more activities, and spends 9% more than non-smartphone users (source: MBIE international visitor survey)
- 78% of leisure travellers have downloaded a travel related app (source: Google travel study June 2014)
- 50% of Facebook users say they are inspired to visit a destination after seeing a friend's photo uploaded to Facebook (source: Facebook).

- e. The presence of any Health Facilities in the Town/Area.
- f. The amount of vacant zoned Industrial Land available as an indicator of future economic growth potential.

Each of these additional criteria were given a 'low' (score of 15), 'medium' (score of 10) or 'high' (score of 5) rating for each area. Table 1 shows how each of these criteria have been grouped and scored accordingly.

Table 1: UFB additional criteria for social and economic factors

Criteria	Score		
	High (5)	Medium (10)	Low (15)
Industrial Land	>50 hectares	<50 hectares	None or only minor area available
Library	Yes	N/A	No
Health Facilities	Yes	N/A	No
Visitor Numbers	>30,000	10,000 - 30,000	<10,000
Number of Marae	>4	2-4	0-1
Unoccupied Dwellings	>200	100-200	<100

Methodology for data collection and prioritisation – RBI2

The methodology for data collection/profiling and prioritising rural candidate areas is described below.

Prioritising RBI2 Locations – ROI Criteria

Data sources for prioritising RBI2 locations are identical to those used for UFB2 prioritisation, with two important exceptions.

- a. 2014 Population and Household Numbers, and 2021 Projected Population, are based on the WDC AU 'Rural' zone. All other ROI criteria have been calculated using the same sources and methods outlined in the methodology for UFB2¹¹.
- b. The quality of broadband coverage in a particular AU has been taken from the NZRS Rural Service Address dataset¹² for UFB and RBI planning. Areas with broadband quality less than 5mbps have been extracted in map form and shown in Section 4 below.

It should also be noted that 2013 Median Income and Internet Access calculations were done using only those meshblocks excluded from the UFB2 calculations. There is therefore no 'double counting' of meshblocks as being contained within both RBI2 and UFB2 areas.

¹¹ Note that as the ROI does not require density to be included as a criterion for RBI2 it is not calculated for RBI2 candidate areas.

¹² See <https://data.nzrs.net.nz/set/1830-rural-service-addresses-rbi-ufb-planning/>

Prioritising RBI2 Locations – Additional Criteria

While all additional criteria relating to social and economic factors used for UFB2 prioritisation were applied in the RBI2 prioritisation process, it is noted that several of the additional criteria do not exist in rural areas (e.g. industrial land, libraries).

Community Engagement

Community Boards and Community Committees

Community Board members are elected to look after local interests and to be a link between the community and the Council. Community boards do not cover the entire area of the Waikato District. The Council has established five community boards comprising: Huntly, Ngaruawahia, Raglan, Taupiri, and Onewhero-Tuakau. Community Committees are also set up by the Council to deal with local issues specifically in the townships of Meremere, Te Kauwhata, and Tamahere ward, along with the North East Waikato Committee which covers Mangatawhiri, Mangatangi and Maramarua.

All of the District's Community Boards and Community Committees are keen to support improvements in broadband/mobile coverage and performance and encourage its uptake by their communities. Several Board/Committee members have previously been involved in advocacy to providers to address specific local issues. Community Boards and Community Committees have been engaged in the RoI process during May-June 2015. They raised the following key points in respect to current broadband and mobile levels of service in their areas.

Table 1: Key broadband and mobile issues identified by Waikato District Community Boards and Community Committees (May-June 2015).

Community	Issue	Relevant MBIE programme
Ngaruawahia	<p>Enjoys connectivity to Hamilton through transport links and residents and workforce, and is a junction for tourists heading south from Auckland, and/or west to Raglan.</p> <p>Location of the council's central office with growing demand for broadband connectivity. Free wifi is available to library users.</p> <p>Poor broadband coverage exists around the perimeter of the town (e.g. particularly to the west, north-east and south-east). These areas appear to lie outside Chorus's existing copper network.</p>	UFB
Huntly	<p>Noted significant demand for housing now arising and attributable to Aucklanders seeking more affordable options. Subdivision development in Russell St. underway and cannot be built fast enough.</p> <p>Free wifi is available to library users. Public plaza currently being planned for Garden Place will attract public and visitor use – could benefit visitors if it has wifi access.</p> <p>Believe some areas of Huntly currently get 20mbps and others get 1-5 mbps. Huntly South has poor coverage. Don't think old copper wire network working well.</p>	UFB
	Road from Glen Afton into town is a blackspot	MBS

Raglan	<p>Noted importance of holiday homes and campgrounds etc. and surrounds as source of unmet broadband demand. Library is a high use facility (estimate 68,000 visitors per annum seek to use wifi outside the library)</p> <p>Poor speeds accessible in several parts of Raglan. Previous involvement with providers to pursue improved service levels, particularly for tourist oriented businesses experiencing growth. The Raglan Community Board and the Raglan Chamber of Commerce joined forces to run a community survey on current broadband levels of service. Refer Raglan Community case study below.</p>	UFB and RBI
	Issues with mobile coverage in Whale Bay, Bridal Veil Falls (tourist destination) and Te Uku areas	MBS
Onewhero-Tauaku	<p>Note high inter-connectedness of workforce of North Waikato and Auckland South (Franklin) areas. Raises expectations of broadband being similar at work and home for both areas.</p> <p>Significant subdivision activity occurring (residential and industrial).</p>	UFB
	<p>Identified patchy mobile coverage and less than 5mbps speed in rural areas outside Tuakau (e.g. Pukekawa, Port Waikato)</p> <p>Noted importance of holiday homes and campgrounds etc. in Port Waikato and surrounds as source of unmet broadband demand. Peak summer population in Port Waikato can reach 4-5 times usual residents.</p> <p>Noted high visitor use of the Te Akau Sports complex and Nikau Caves tourist destination, and the road network from south of Tuakau to SH22 is a popular tourist route (e.g. motorcycle clubs, campervans) and is used as a detour from SH1 in event of major accidents.</p>	RBI and MBS
Te Kauwhata	<p>Tabled previous email correspondence from residents and businesses with Chorus, Spark and Vodafone over coverage issues in Maramarua, Mangatawhiri and areas close to Te Kauwhata town.</p> <p>Noted correspondence from Green Valley Dairies Milk Processing Factory (206 Bell Rd.) with Spark /Chorus, which highlights long-running issues with faults and disruption to telecommunications in this area in recent years, as well as poor mobile coverage.</p> <p>Suggestion that a better located cell-tower or a higher existing tower would resolve some issues in Te Kauwhata town.</p> <p>Noted recent subdivision approvals in vicinity of Vineyard Rd, Traverse Rd., Swan Rd. and Scott Rd.</p>	UFB and RBI

	(mainly outside the 50kmph zone which will need to be extended).	
	Identified mobile blackspots on Vineyard, Eastfield, Waeranga, Kopuku and Okaeria (Maramarua Forest) Roads. Noted TK –Waerenga Rd is used as a detour when SH1 or SH2 are blocked due to accidents, and that many campervans/tourists visit the town, lakes and surrounding area.	MBS
Taupiri	Local mobile coverage inconsistent.	UFB, RBI and MBS
Meremere	Local mobile coverage is poor and inconsistent. Mobile coverage on island block road inconsistent and often poor or completely drops out. This was identified as a safety concern due to remoteness.	UFB, RBI and MBS
Tamahere-Tauwhare	<p>Suggest population in the Tamahere Countryside Living Zone area is higher than the 2013 Census figure and District Council 2014 estimate; based on 1,600 lots with an average of say 2.2-3.0 persons. Many residents are in medical occupations and have high unmet demand for broadband. Also experience long waiting-list to connect to existing fixed wire services.</p> <p>Doubt speeds in the area reach 5mbps. Confirmed poor speeds/coverage available in the surrounding rural area. Chorus not allowing new subdivisions to connect to their copper network due to capacity constraints. New developments have to install fibre at significant cost.</p> <p>A new village commercial hub is planned to be built in the next 5 years.</p> <p>Also refer attached letter from the Tamahere Community Committee.</p>	UFB and RBI

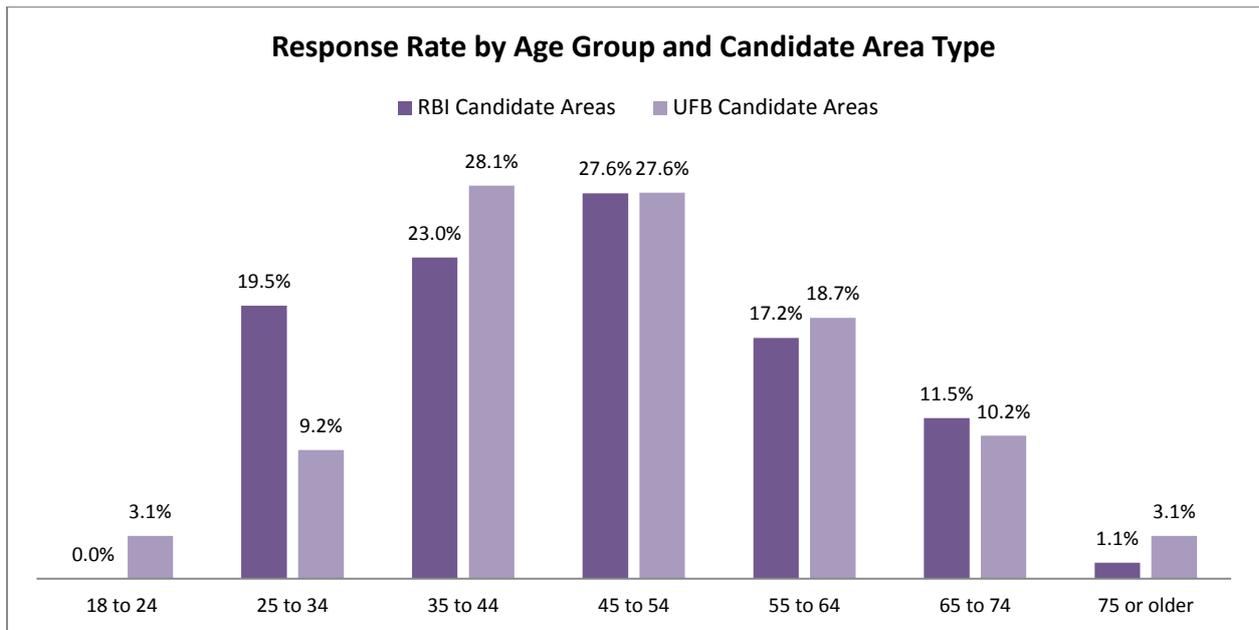
Community Consultation Survey

The Waikato District Council conducted a survey of residents on internet access, quality and use in May/ June 2015. The survey was run using Survey Monkey and contained six questions. There were 546 Responses. 397 of these came from towns that are in the list of candidate areas being put forward for UFB2 in the RoI. 89 responses came from RBI2 candidate areas or towns. 60 responses were from towns outside of the district boundary, and as such have been excluded from further analysis.

Area	Responses
Not in WDC Area	60
RBI2 Candidate Areas	89
UFB2 Candidate Areas	397
Total Responses	546

Of those who provided a response to the question on age, over half came from people aged 35-44 or 45-54, those most likely to be in the position of ordering and paying for internet services in the household. The fewest responses came from people aged 18-24 or 75 or older, perhaps a reflection of engagement with council services in the case of the younger age group, and the lower internet access associated with older age groups. Interestingly, the rate of response from people aged 25-34 in RBI2 Candidate Areas was over twice as high than in UFB2 Candidate Areas.

Age Group	RBI2 Candidate Areas	Percentage RBI2	UFB2 Candidate Areas	Percentage UFB2
18 to 24	0	0.0%	12	3.1%
25 to 34	17	19.5%	36	9.2%
35 to 44	20	23.0%	110	28.1%
45 to 54	24	27.6%	108	27.6%
55 to 64	15	17.2%	73	18.7%
65 to 74	10	11.5%	40	10.2%
75 or older	1	1.1%	12	3.1%



Broadband Access and Quality

Respondents were asked about the quality of their broadband access and service. Only 8.1% of respondents in RBI2 Candidate Areas and 14.1% in UFB2 Candidate Areas rate their current broadband service as suiting their needs. 12.8% of respondents in RBI2 Candidate Areas, and 6.9% in UFB2 Candidate Areas, said they had no broadband access at all. The overwhelming majority of people across the district, nearly 80%, said their broadband access could be better.

Broadband Access	RBI2 Candidate Areas	Percentage RBI2	UFB2 Candidate Areas	Percentage UFB2
No Broadband Access	11	12.8%	27	6.9%
Could Be Better	68	79.1%	309	79.0%
Suits My Needs	7	8.1%	55	14.1%

People who said they had no broadband access, or suggested it could be better, were able to provide further comments on their response. The following is a selection of respondent comments that are reflective of the type and range of comments:

'No Broadband Access' Comments

RBI2 Candidate Areas

"Only have dial up. As no line of sight to nearest tower"(RBI2 Candidate Area respondent, Pukekawa)

“We have tried a modem a couple of times with no luck currently use hot spot on iPhones but that is not ideal for long term” (RBI2 Candidate Area respondent, Gordonton)

“Wireless internet with Farmside is not reliable. Most days it is too slow to load a single webpage. It's impossible to keep in touch with family and friends that live far away from me as Skype just freezes up. I have moved to a new area so I need to use google maps to find places I need to go to but the internet is too slow to load it.” (RBI2 Candidate Area respondent, Waerenga)

UFB2 Candidate Areas

“We live only 6km from town and have NO access to broadband other than by satellite” (UFB2 Candidate Area respondent, Huntly)

“We're currently building a new home. Current availability at the address is ADSL 2 according to Chorus. We're moving from fast, reliable VDSL which has been great for internet TV” (UFB2 Candidate Area respondent, Tamahere)

“We have tried to get broadband and had chorus check. They tell us we are too far from the closest 'box' which is at Glen Massey. Because we are also outside cell phone reception we are unable to get broadband through that. We are forced to pay for Farmside which does work but they charge us a fortune for it and impose terrible penalties if we go over the limit.” (UFB2 Candidate Area respondent, Ngaruawahia)

‘Could Be Better’ Comments

RBI2 Candidate Areas

“We run a web based business at home and the speeds that we get are not very good compared to other parts of the country. It also goes down quite regularly so we have to have a backup connection to enable continuity of service for our business.” (RBI2 Candidate Area respondent, Eureka)

“Terrible in the evenings. 200kb. Can't use it most nights. Sometimes slow during the day. I work from home and run a community website, it can be very frustrating.” (RBI2 Candidate Area respondent, Gordonton)

“Is as slow as dial up and is always dropping out. One minute it works then for the next hour or so it doesn't. Complaints to provider always end in me being told our exchange or something is archaic and needs updating. But we still have to pay for no service” (RBI2 Candidate Area respondent, Te Akau)

“Our internet speed can vary depending on the time of day and usage by others on the road. Sometimes it drops away altogether and I have to ring Spark to check the line. At the moment our speed is dictated by the old copper wires that our internet uses so our capacity is very limited.” (RBI2 Candidate Area respondent, Glen Massey)

UFB2 Candidate Areas

"ADSL is just available at the lowest level acceptable (Chorus). VDSL is said to be available on searches but Chorus Techs have established that this is too far from exchange and too slow (not viable therefore not available). Telephone line clarity is always poor in the area. Chorus Techs have commented that the copper lines from bottom of Matangi Road hill (Cambridge/Morrinsville Road end) to just past Assisi Home in particular are very poor quality but no work will be done to improve copper network or no additional closer exchanges added due to fibre network replacement. The new fibre network is established only a few hundred meters down the road with a main junction box at the intersection at Silverdale Road. Personally I operate a business with a number of increasingly cloud based focused programs and the speed and reliability of the internet has become a major hindrance with reduced productivity. Although this is a fairly densely populated area (Dalbeth Place/Polar Lane etc.) with what I imagine a sizeable rates demand by WDC and a number of professionals using the internet for business and professional use, it has historically been overlooked due to its location at the City/District Council boundary, in my experience as a resident for the last few decades. Unfortunately mobile reception is poor and my attempts at line of sight options for internet etc. are also not viable to address this shortfall. With a number of new dwellings underway and planned in the near future the burden on the current system will shortly increase. I am certain a fibre connection to the existing junction box literally several hundred meters away would be greatly welcomed by the local community with a good uptake rate." (UFB2 Candidate Area respondent, Matangi)

"It is slow and cuts in and out at times, particularly when the weather is bad." (UFB2 Candidate Area respondent, Port Waikato)

"I work from home and the internet is essential for this. Internet speeds limit how I do my work (software development). I use a lot of cloud-based services but I find services that provide teleconferencing are barely adequate at the best of times. Broadband is reliable but slow." (UFB2 Candidate Area respondent, Raglan)

"According to the Chorus website we are in the >5mbps area. We get this during low demand times such as 10am, but in the evening it drops significantly, sometimes to under 1. We have complained at length to our isp but they say it is not their fault. If it doesn't improve we will be forced to move house. This is a quote from Chorus ; "The experience you get is subject to some factors which is worth bearing in mind. This includes distance from the exchange or cabinet, home wiring, age of your computer, operating system, your modem and broadband plan." We have done everything possible to make sure it not our fault so it all seems to come down to Chorus. If electricity providers were only able to provide 240v during low demand periods there would be an outcry. So there should be with this truly hideous service we receive from Chorus. Strangely there is no discount of price to compensate for the periods when the service is clearly not fit for purpose." (UFB2 Candidate Area respondent, Tamahere)

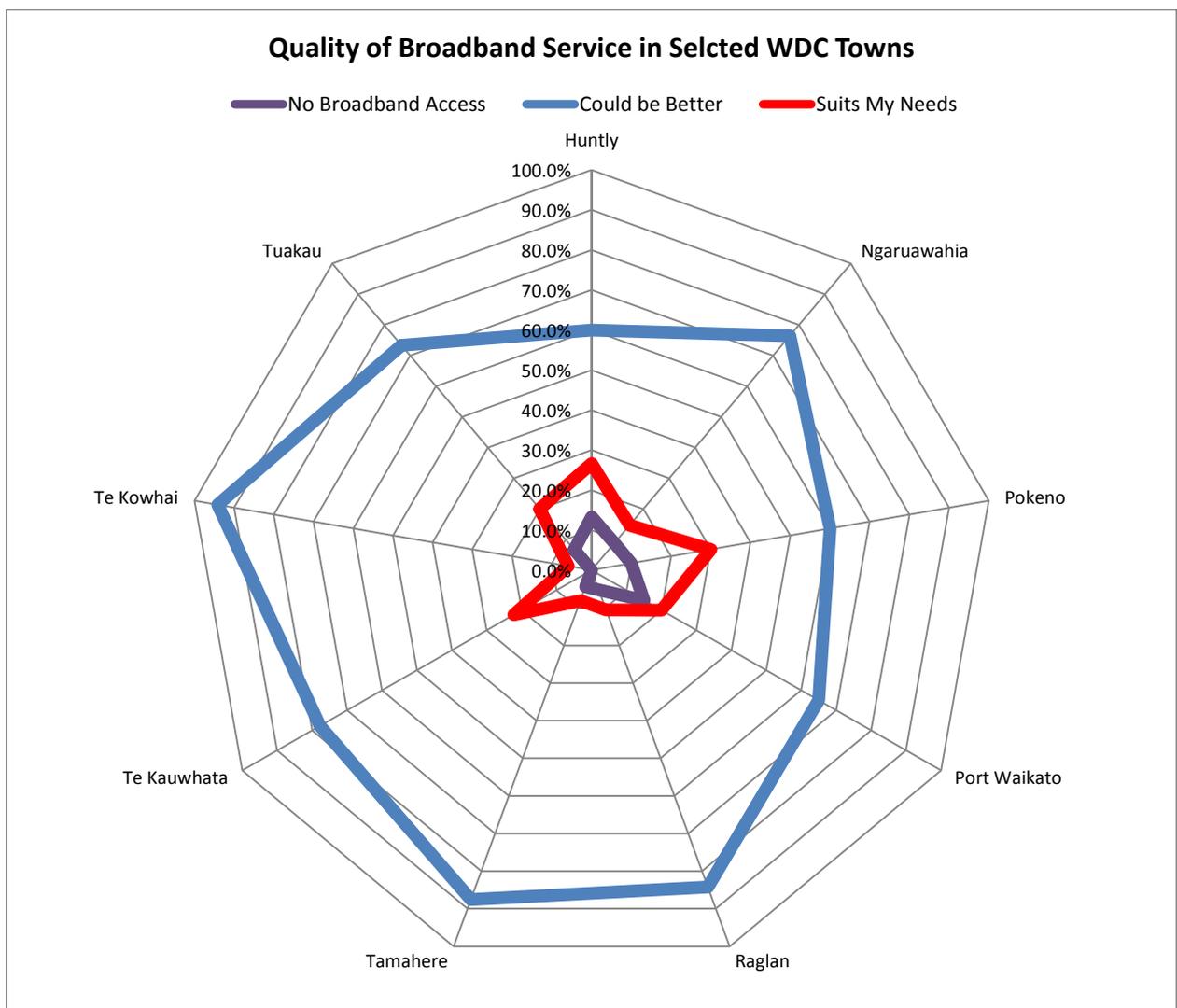
"It is noticeably slower than what we were able to get in Auckland, have been told the line noise spans between 8 and 12 so can't get vdsl. Both adults living in the home use the computer for work, high speed gaming, and streaming video through sites such as netflix on multiple devices for both adults and kids, homework and so on. It often cuts out, not for long periods, but enough to interrupt whatever we're doing, and we've only been here 3 weeks! The service is OK, not amazing." (UFB2 Candidate Area respondent, Te Kauwhata)

"I am a Solution Architect for a Software Development company and work from home several days per week. The nature of my job means that reliable internet service is fundamental to my ability to do my job. Between about 8am to 3pm on school days my service is fairly reliable although slow (around 3Mb/s download). From 3pm onwards my service becomes very unreliable and performing basic tasks can become impossible. This means that I have to structure my work day around school hours. During school holidays I have to instead travel to Auckland to work. I currently have an ADSL connection through Snap. I am unable to access ADSL2+ or VDSL services. I use about 100GB of

data per month which makes all of the RBI2 plans on the market cost prohibitive.” (UFB2 Candidate Area respondent, Te Kowhai)

Broadband Service in Individual Towns¹³

The self-reported satisfaction with broadband services varies across different towns. For example, people in Te Kowhai (94.1%), Tamahere (87.6%) and Raglan (84.2%) are more likely to say their broadband services ‘could be better’ than people in Huntly (60%), Pokeno (60%) and Port Waikato (65%). The latter three towns also have the highest number of people with either ‘no broadband access’, as well as the highest percentage of people who find the services ‘suit my needs’.

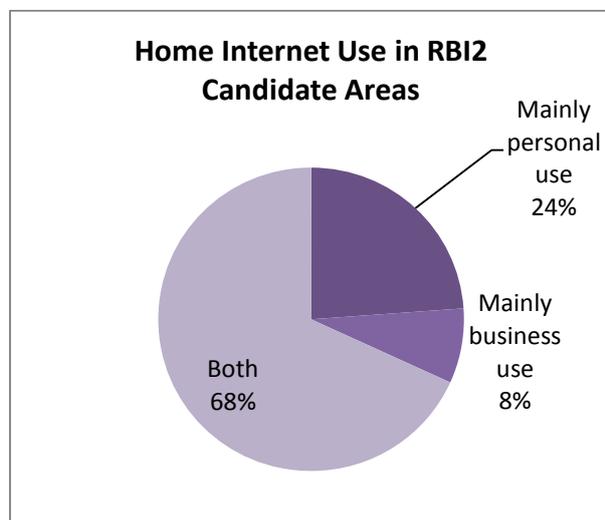


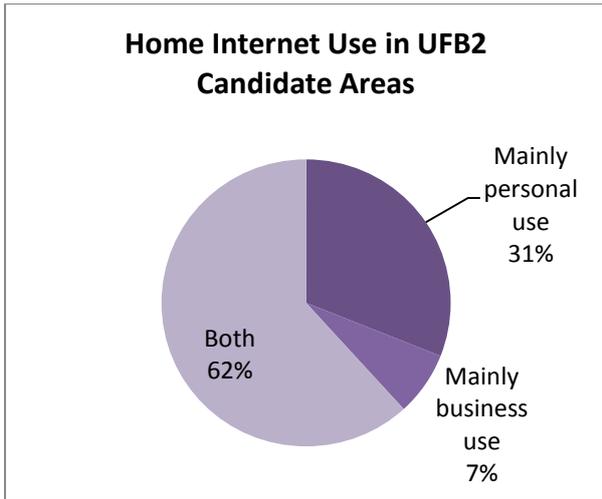
¹³ Only towns that had more than 20 responses are included here.

Main Purpose of Home Internet Usage

Respondents were asked if they used the internet at home mainly for personal use, mainly for business use, or both. A majority of respondents in the district use the internet at home for both personal and business purposes (62.9%), although this is about 7% higher in RBI2 Candidate Areas than UFB2 Candidate Areas.

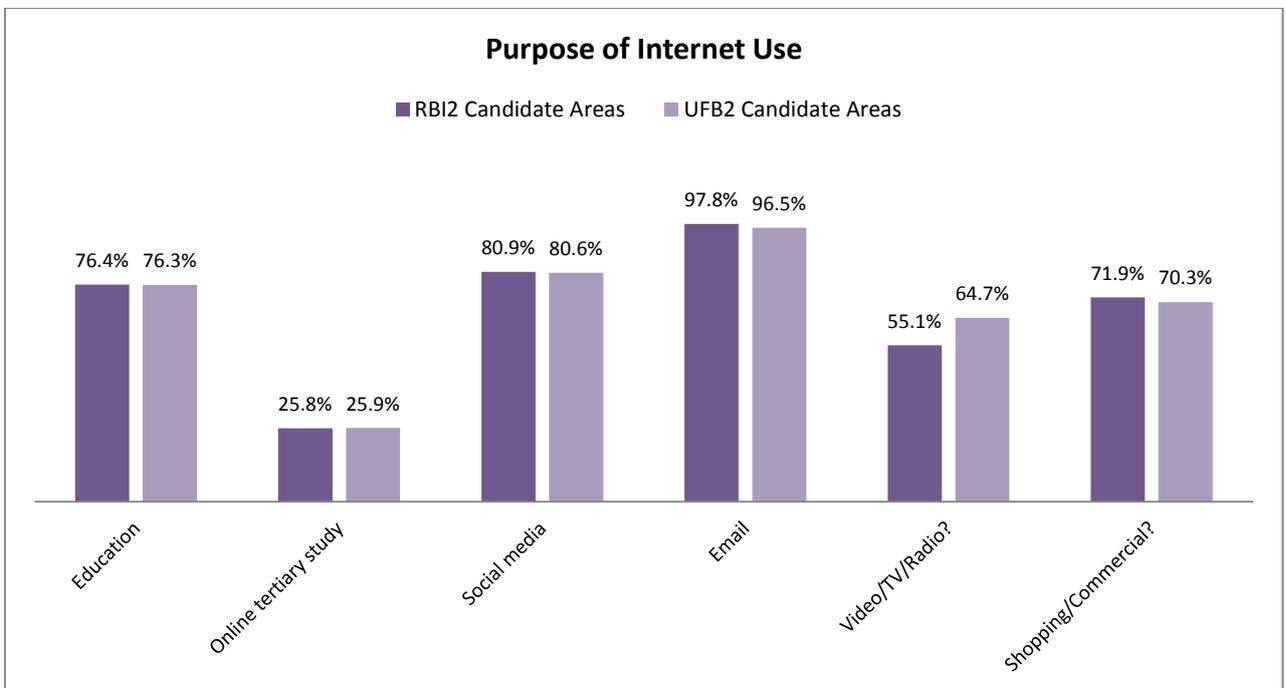
Area Type	Mainly Personal Use	Percentage Personal Use	Mainly Business Use	Percentage Business Use	Both Personal and Business	Percentage Using For Both
RBI2 Candidate Areas	21	23.9%	7	8.0%	60	68.2%
UFB2 Candidate Areas	125	31.0%	29	7.2%	249	61.8%
Total WDC Area	146	29.7%	36	7.3%	309	62.9%





Purpose of Broadband Use

Respondents were asked whether they used a range of internet services, including education, online tertiary study, social media, email, online video/ TV and radio, or shopping and commercial purposes. More than one option could be selected. The pattern of internet use is broadly similar across the UFB2 and RBI2 Candidate Areas. The main difference is the lower usage of online video/ TV and radio services in RBI2 Candidate Areas (55.1% versus 64.7% in UFB2 Areas), perhaps reflecting the poorer quality and speed of broadband services in rural areas.



Speed of Internet Services in Individual Towns

Unfortunately there were not sufficient numbers of respondents who used the speed-test application to provide comprehensive information on the speed of internet connections across the district. The following comments refer to a mix of RBI2 and UFB2 candidate areas.

“We run a web based business at home and the speeds that we get are not very good compared to other parts of the country. It also goes down quite regularly so we have to have a backup connection to enable continuity of service for our business.” (Eureka)

“Normal broadband via telephone is not available here...ph exchange too old. Via either satellite or wifi...both expensive and max 10 or 30 Gb available” (Glen Murray)

“Reasonable during the day (about 7Mb/s) but sometimes slows right down (200Kb/s) in evenings.” (Gordonton)

“Had quite a few problems with our internet connection, Quite slow at times, chorus says they can't do anything to make the line better as it is the old copper wire.” (Horotiu)

“Very slow. Have complained to telecom but they say until upgrade it's as good as it gets. Very frustrating. Children unable to complete online homework as download speed very slow and cuts out all the time.” (Huntly)

“Absolutely Abysmal Extremely Slow and unreliable. We have noticed a drop in speed over last year- We wonder if this has something to do with the Pokeno development nearby. And the poor exchange is not coping?” (Mangatawhiri)

“ADSL is just available at the lowest level acceptable (Chorus). VDSL is said to be available on searches but Chorus Techs have established that this is too far from exchange and too slow (not viable therefore not available). Telephone line clarity is always poor in the area. Chorus Techs have commented that the copper lines from bottom of Matangi Road hill (Cambridge/Morrinsville Road end) to just past Assisi Home in particular are very poor quality but no work will be done to improve copper network or no additional closer exchanges added due to fibre network replacement. The new fibre network is established only a few hundred meters down the road with a main junction box at the intersection at Silverdale Road. Personally I operate a business with a number of increasingly cloud based focused programs and the speed and reliability of the internet has become a major hindrance with reduced productivity. Although this is a fairly densely populated area (Dalbeth Place/Polar Lane etc.) with what I imagine a sizeable rates demand by WDC and a number of professionals using the internet for business and professional use, it has historically been overlooked due to its location at the City/District Council boundary, in my experience as a resident for the last few decades. Unfortunately mobile reception is poor and my attempts at line of sight options for internet etc. are also not viable to address this shortfall. With a number of new dwellings underway and planned in the near future the burden on the current system will shortly increase. I am certain a fibre connection to the existing junction box literally several hundred meters away would be greatly welcomed by the local community with a good uptake rate.” (Matangi)

“I work from home so I am using the internet 24/7 almost. On my street, my current ISP has said I am only eligible for ADSL broadband (which I currently use) and just recently VDSL (the reviews I've seen for this are average). Eagerly waiting and anticipating when fibre becomes available on my street or

better still, in my town. It would greatly improve my access to the internet, for personal use as my household is connecting to streaming sites but more so for my home business as it is all online.” (Ngaruawahia)

“Our only option is ADSL or expensive satellite. Currently we are hooked up to ADSL but seldom get speeds over 500 kbps due to the distance from the exchange and the aging copper network we are on. Even talking on our land line can be difficult with excessive crackling noise.” (Onewhero)

“Slow by comparison to what’s available in "Town". Unreliable, been at this address 18 mths and have had issues with connectivity (being dropped) and speed (less than 1 mbps) at times” (Pokeno)

“Not particularly fast (between 54 - 100) and often cuts out.” (Port Waikato)

“The internet connection is the principle piece of infrastructure that allows me and others to work effectively from home. Speed during times of peak demand currently drops off significantly. Improved speed during peak times would improve our productivity, by reducing time to access, and edit and save work to our company server, based in Hamilton.” (Raglan)

“I can’t even load and watch a youtube video with constant breaks and loading interruptions. What took me 4 mins in Melbourne takes me about 45 mins here, it’s frustrating and time consuming” (Rangiriri)

“It’s so slow compared to where we used to live in Auckland. We notice when there’s a lot of demand in the area because it becomes really difficult to do anything because it’s so slow. We used to use Apple TV but it’s impractical here. It affects our teenagers’ ability to reliably use the Internet at home for their school work. They have fibre at school but can’t stay and do all their work there.” (Tamahere)

“Is as slow as dial up and is always dropping out. One minute it works then for the next hour or so it doesn’t. Complaints to provider always end in me being told our exchange or something is archaic and needs updating. But we still have to pay for no service!” (Te Akau)

“Faster the better. I regularly work from home and remotely access network licenses to run 3d modelling software and large files via a VPN connection. We also regularly stream movies” (Te Kauwhata)

“Fluctuates between dial up speed and slow broadband on a daily basis. Drops out as well, no consistency of service” (Te Kowhai)

“Slow and drops off ALL the time. Not able to be very efficient when I work from home. I work in marketing so view a lot of artwork and digital files and it is so slow it drives me crazy” (Tuakau)

“Downloading is very slow and the connection often unstable; flickers and disconnects” (Waerenga)

Community Case Studies:

Raglan

The Raglan Community Board and several private and public sector organisations in the area have been actively seeking improvements in broadband levels of service in Raglan. Refer Attachment B 'Connect Raglan' for 'business cases' from Raglan Surfing School, Wainui Environmental Engineers, Met Ocean, The NZ Fire Service and Freecruit Ltd.

In addition a community group has been convened to work on education, training and employment pathways in Raglan. The group has identified three themes in terms of barriers to attracting qualified residents and/or new business start-ups in Raglan. Ultra-fast broadband is seen as a key enabler, together with better quality housing and skills training opportunities.

Te Kowhai

The Te Kowhai community has taken direct action to remedy the performance of broadband service in their area. The majority of residents in Te Kowhai use copper based internet services. Speeds fluctuate but can be not much better than dial up speeds. Some households also have coverage from an RBI tower in Bedford Road, a Lightwire tower on the other side of the Waipa River, and other towers from other providers (Wanna and Satlan).

Several months ago a group of residents conducted a survey of residents to determine their satisfaction with existing services. They also commissioned a study of the current state and potential benefits of improvements in broadband performance.

The group identified a major issue being the Chorus link between Hamilton and the Te Kowhai telephone exchange. They began agitating for an improvement and Chorus agreed to upgrade the exchange.

The residents were willing to make a direct funding contribution to Chorus's costs for the exchange upgrade although Chorus has funded the majority of the work itself. Residents report that download speeds have recently increased from less than 1mbps to up to 20 mbps, and there has also been a reduction in mobile blackspots in the area.

The upgrade might spur greater uptake of services such as video streaming which might cause issues further down the track. The residents intention is to call a community meeting after June 2015 and invite internet service providers to attend and provide advice to residents about the benefits of their broadband service options. The group also intends to wait several months and rerun surveys to gauge both the then level of service and if there has been a shift in the ways people access the internet.

For the reasons above Te Kowhai is included in the council's recommendations for funding under the UFB2 programme, and not under the RBI2 programme.

UFB2 programme

Final Prioritisation of UFB2 Areas

Table 1 shows the final UFB2 list of candidate towns/areas in the District together with the requested ROI statistics. Table 2 then shows the prioritised areas together with their respective scores generated by the ROI primary criteria and additional criteria.

Table 1: UFB2 Candidate Area Statistics

Area	2014 Population	2021 Population	2014 Households	2014 Household Density (pskm)	2013 Median Income	2013 Internet Access	2014 Business Numbers	2014 Employee Numbers
Huntly	7031	6945	2516	187	\$42,106	44.6%	443	2080
Tuakau	4765	5572	1674	278	\$49,694	51.4%	261	580
Raglan	2749	2725	1194	200	\$46,737	64.6%	310	390
Ngaruawahia	5320	5377	1809	152	\$49,432	55.5%	251	980
Tamahere- CLZ	2538	2913	860	74	\$124,800	89.0%	326	525
Te Kauwhata	1694	2369	653	99	\$57,564	67.1%	139	410
Pokeno	1313	2679	462	23	\$76,380	82.4%	305	380
Horotiu	587	621	218	35	\$86,757	80.1%	54	770
Matangi	471	526	164	236	\$82,100	83.9%	281	400
Port Waikato	944	986	353	31	\$43,350	69.2%	48	63
Te Kowhai	658	731	242	131	\$71,233	83.8%	163	200
Whatawhata	369	420	127	88	\$89,050	79.8%	265	210
Meremere	496	530	161	128	\$39,400	21.2%	8	9
Taupiri	445	441	175	101	\$52,400	39.5%	48	110

Table 2: Waikato District prioritised UFB2 candidate areas

Rank	Area	ROI Criteria Score	Additional Criteria Score	Overall Score
1	Huntly	34	50	84
2	Tuakau	40	55	95
3	Raglan	47	50	97
4	Ngaruawahia	42	65	107
5	Tamahere-CLZ	34	85	119
6	Te Kauwhata	59	70	129
7	Pokeno	56	80	136
8	Horotiu	64	80	144
9	Matangi	56	90	146
10	Port Waikato	81	65	146
11	Te Kowhai	62	90	152
12	Whatawhata	76	90	166
13	Meremere	98	80	178
14	Taupiri	91	90	181

Refer Attachment D for data on additional criteria.

The following section provides brief profiles of each candidate town.

Huntly

Huntly is one hour's drive from central Auckland and 25 minutes from Hamilton. It lies adjacent to the Waikato River and boasts several lakes and parks with picturesque walkways, all surrounded by rich farmland.

The area has a long history of coal mining. Both open cast and underground mines have operated in Huntly and still do, providing valuable employment and economic input. Much the coal is shipped to New Zealand Steel at Glenbrook in Auckland.

Land Supply:

Vacant Capacity (ha):

Industrial – 34 ha,

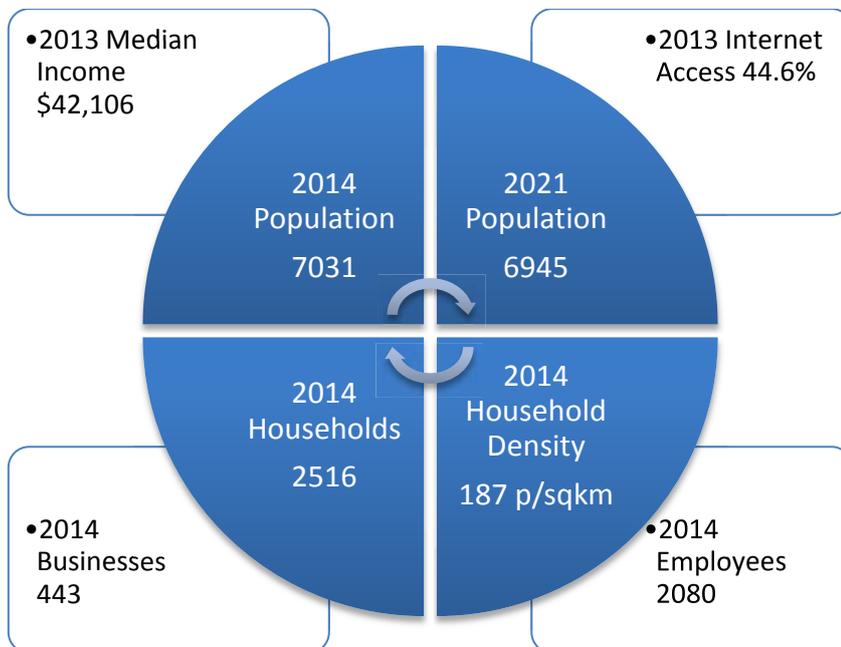
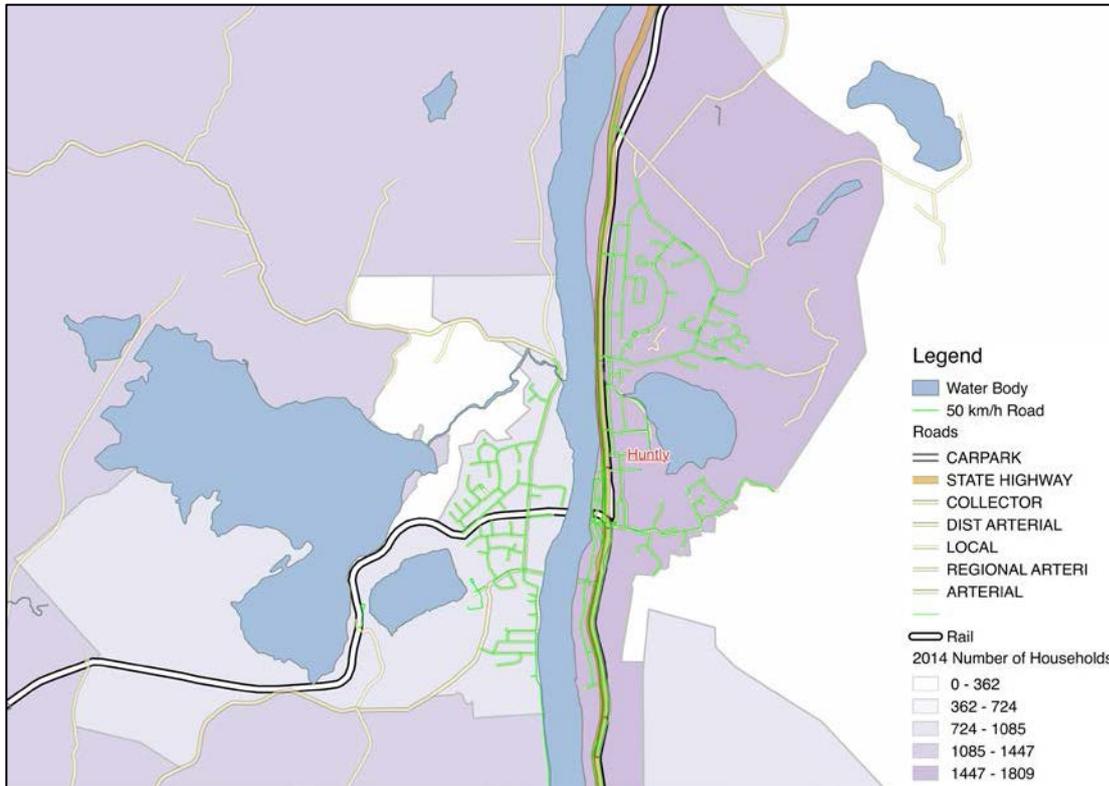
Commercial – 0.3 ha

Residential: Huntly offers excellent housing, and despite its proximity to both Auckland and Hamilton, remains very affordable. New subdivision activity is underway.

Healthcare Facilities

There is a range of local health services available including:

- Huntly East Medical Centre
- Hakanoa Health Centre
- Huntly West Medical Centre



Tuakau

Tuakau is a town that offers a slower pace of life while being very close to New Zealand's largest city, Auckland. The Waikato Expressway is 10 minutes away, meaning the city of Tauranga is just two hours' drive to the east while Hamilton, New Zealand's largest inland city, is only 60 minutes south. Tuakau has experienced higher than average growth rates over the last decade and it is anticipated that the population may almost double by 2031. Based on that, a number of infrastructural improvements are planned for the town to cope with growth.

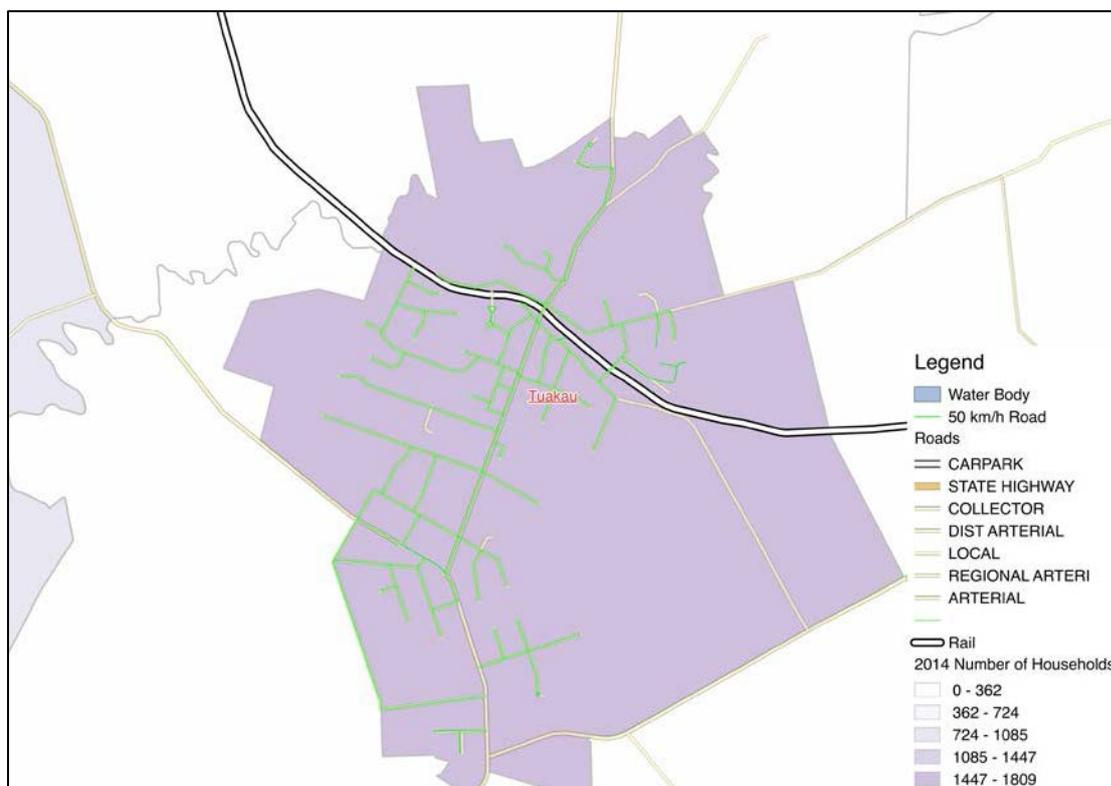
Land Supply

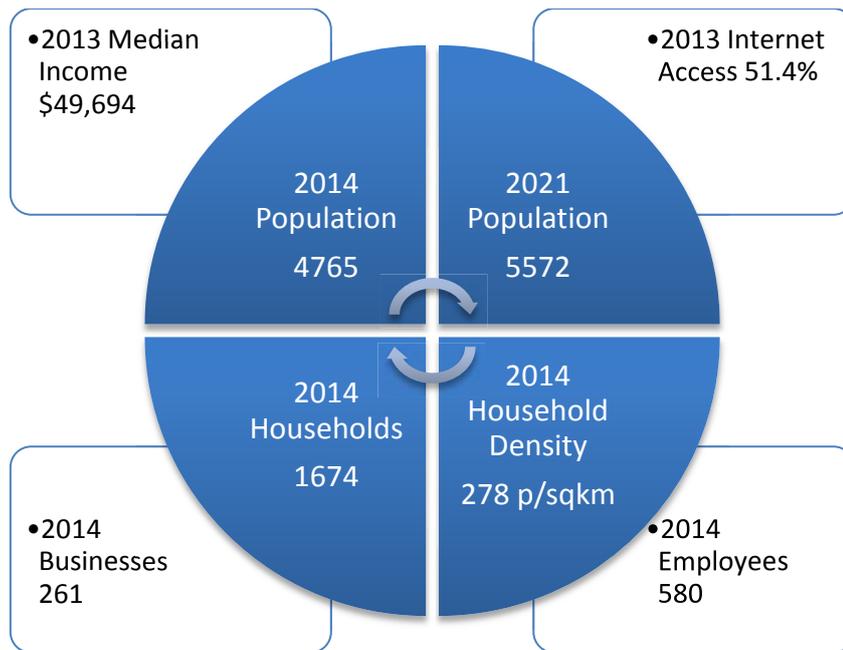
The availability and affordable cost of industrial and residential land and housing makes Tuakau a very attractive place for investment. There are 99 hectares of land in the south-east of Tuakau which is zoned Industrial and 17ha of land zoned industrial services. The industrial zone provides for manufacturing, processing, assembling, storage, distribution and wholesale activities. The industrial services zone provides for businesses that support the industrial zone, as well as small-scale manufacturing, processing, assembling, storage, distribution and wholesale activities.

A number of properties are available for residential development. In addition, a number of large residential-zoned properties are currently being used for market gardening, but have not yet been subdivided and released for sale on the open market.

Healthcare Facilities

Tuakau Health Care offers general practice services. An after-hours emergency service is available in Pukekohe (Pukekohe Family Health Care) just 10km away.





Raglan

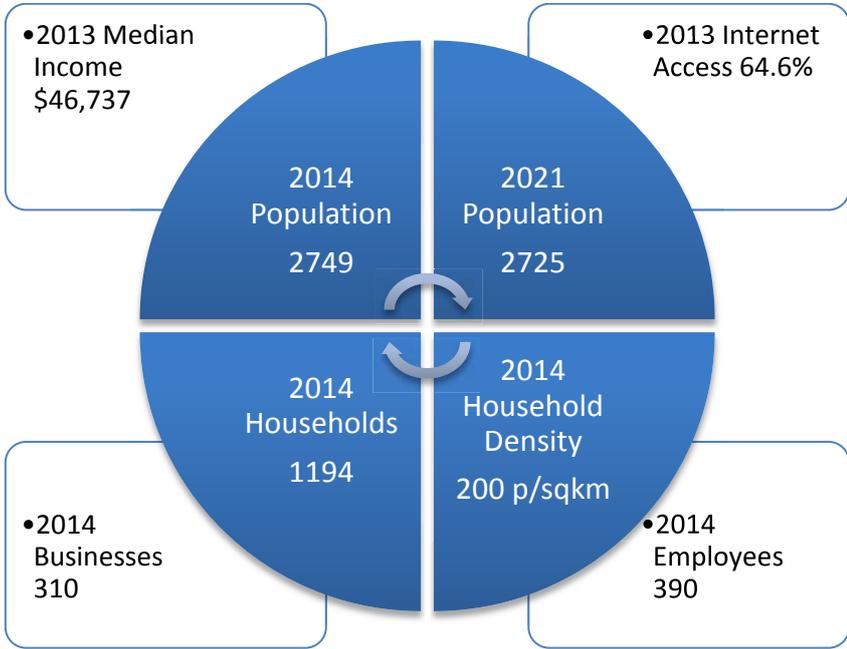
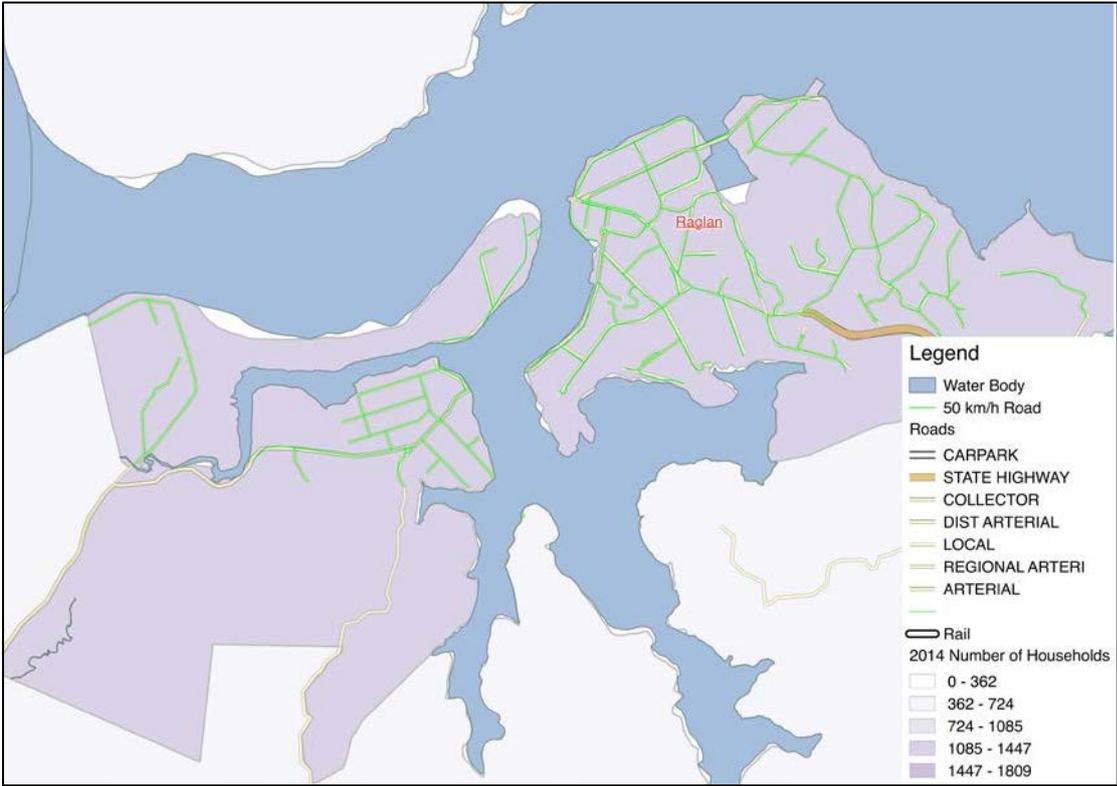
Raglan is a township on Waikato’s west coast with three surf beaches on its doorstep and an outstanding natural harbour. The town’s landscape, surf waves and atmosphere make it a very popular destination for artists, surfers and holidaymakers. The population grows by 300-400 per cent during summer. Also refer Raglan Community case study in Section 1.0.

Land Supply

Three hectares of industrial land is currently available in Raglan for development. There is currently a proposal to rezone 13 additional properties near the Raglan central business district from residential to business.

Healthcare Facilities

West Coast Health Clinic, Te Kohao Health, Raglan Dental Clinic



Ngaruawahia

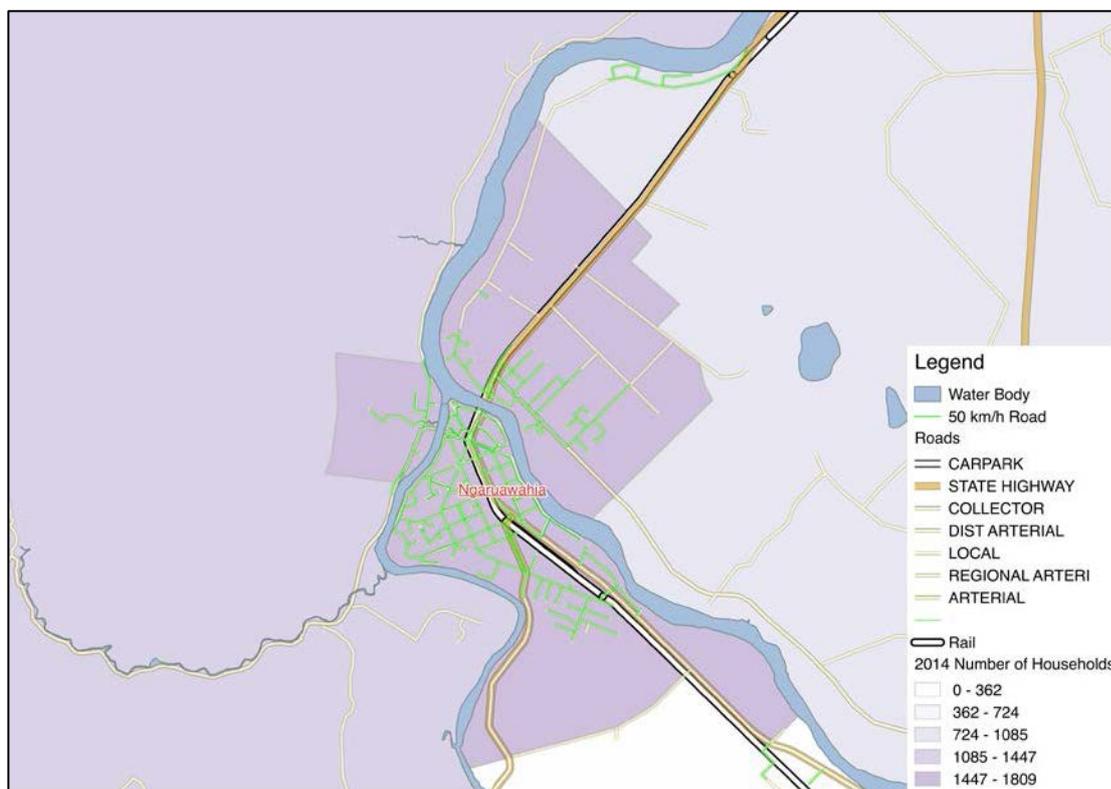
Ngaruawahia is situated a short drive on the Waikato Expressway, north of Hamilton, at the base of the Hakarimata Ranges at the confluence of the Waikato and Waipa Rivers. Ngaruawahia is home to Turangawaewae Marae. This is a nationally significant marae and is the headquarters for the Māori King Movement (Te Kingitanga). The marae grounds host the official residence and reception centre of the head of the Kingitanga - currently the Māori King, Tuheitia Paki.

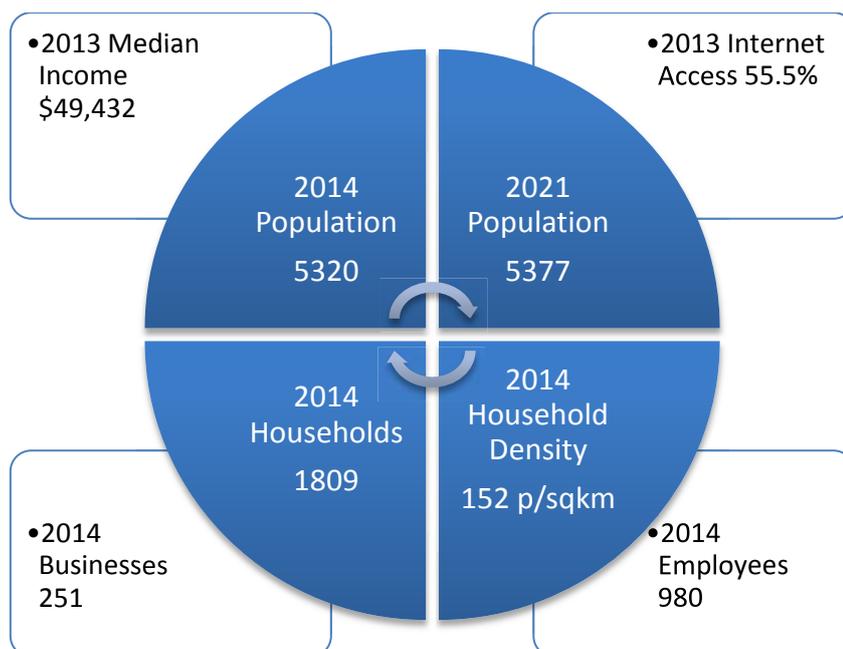
Land Supply

There is still some industrial land available at Ngaruawahia and the town is within 5km of the new Northgate Business Park in Horotiu.

Healthcare Facilities

There are two local health facilities in Ngaruawahia: the Ngaruawahia Medical Centre and Ngaruawahia Health Centre.





Tamahere CLZ

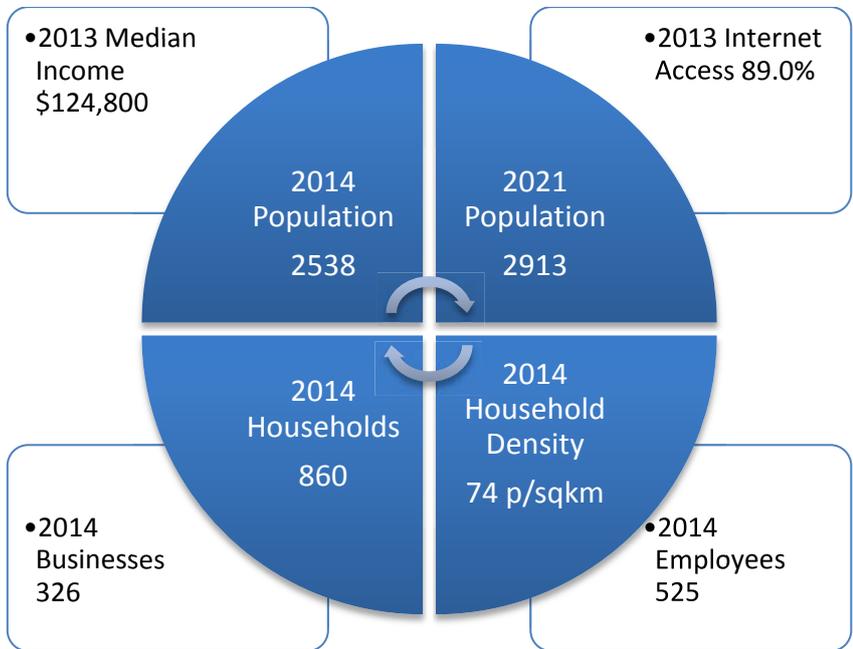
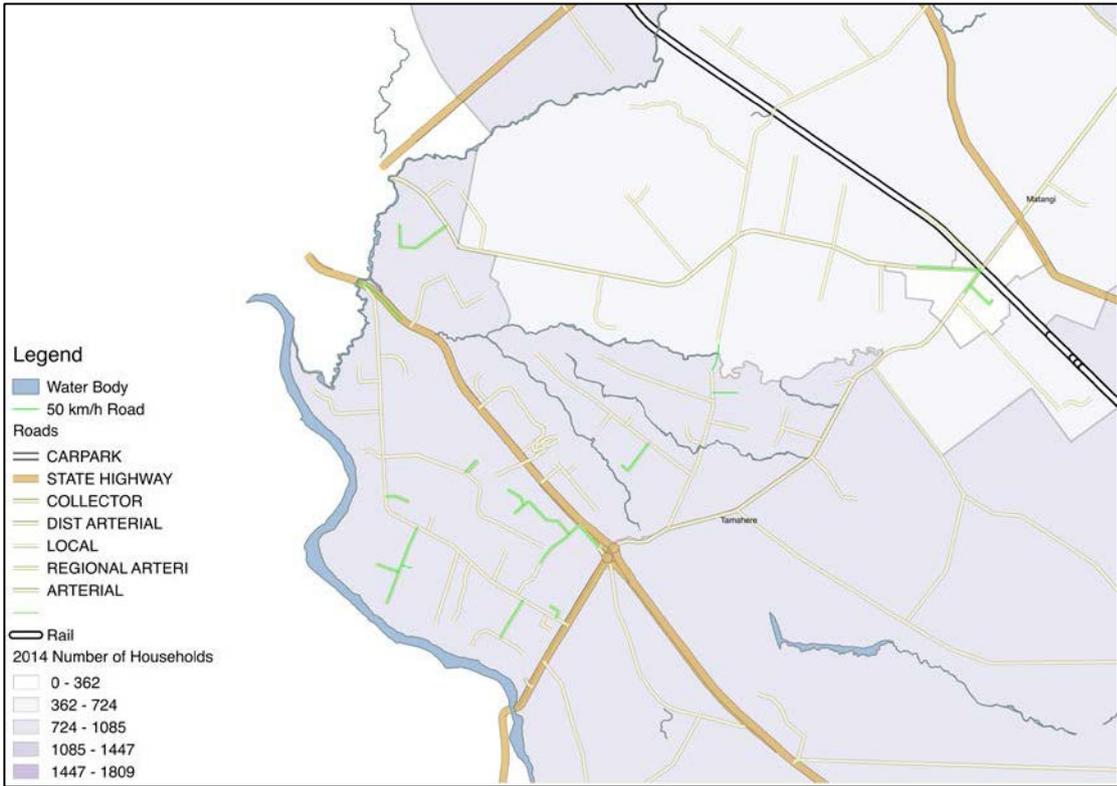
Tamahere, part of the Waikato district, is a high growth area on the southern outskirts of Hamilton City. Residents of the historic Tamahere/Tauwhare area enjoy a rural lifestyle with low density living and tranquillity on the doorstep of New Zealand's fourth largest city.

From approximately the 1950s, land at Tamahere has been converted from traditional farms to smaller, intensive horticultural and lifestyle blocks. By 1970, much of the catchment had been subdivided into four hectare blocks, although farming continued on the remaining larger blocks and on those small blocks in single ownership. Farming has gradually reduced, a trend that accelerated after 2000, when the Waikato District Plan was changed to allow the four hectare blocks to be further subdivided into 5000 square metre sections.

Since 2005, Hamilton has continued to experience unprecedented growth, with development pressures spilling from city boundaries to adjoining catchments such as Tamahere. Developments such as the Future Proof partnership and the roll out of the Waikato Expressway will have long-term implications for infrastructure provision.

Land Supply

Mainly lifestyle blocks are available.



Te Kauwhata

Te Kauwhata is a small rural North Waikato village. Set in rolling farmland and nestled on the edge of Lake Waikare, it is midway between Auckland and Hamilton (approximately 40 minutes' drive either way).

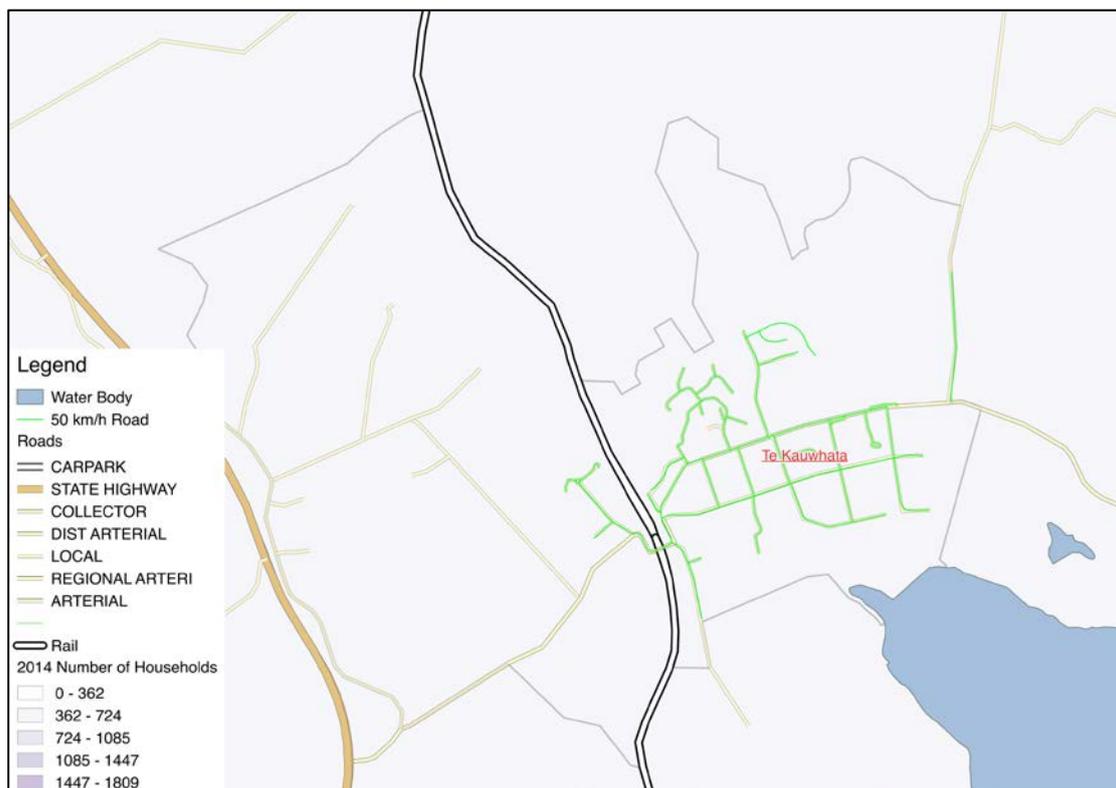
Te Kauwhata continues its traditional role of servicing a large rural area, including Waikaretu, Onewhero, Maramarua, Meremere, Waerenga, Ohinewai, Rangiriri, Naike and Glen Murray.

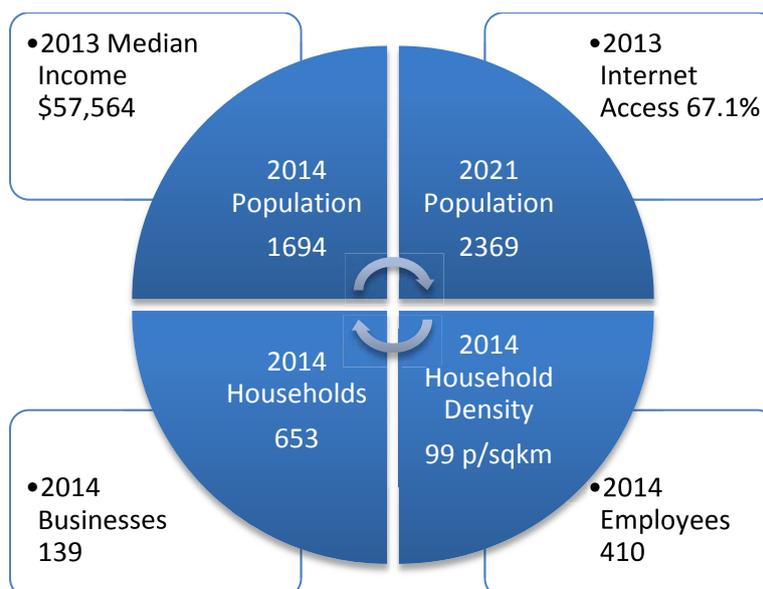
Its location offers easy access to both west coast beaches (Raglan) and the white sand east coast and Thames/Coromandel peninsula in little over an hour.

Te Kauwhata's quiet growth has been enhanced in recent times by the Waikato expressway upgrade, which has shortened commuter times to both Auckland and Hamilton.

With its roots firmly set in agricultural, horticultural and viticulture origins, Te Kauwhata is still home to a variety of farming industries, including dairying, beef units, sheep and cattle, deer, alpaca and goats, fruit orchards, market gardening, horse studs and eel processing.

Cottage industries include greenstone carving, herb garden/cottage teas, home stays, farm stays, and apple/grape juice production. The village is also home to a variety of artists working in different media.





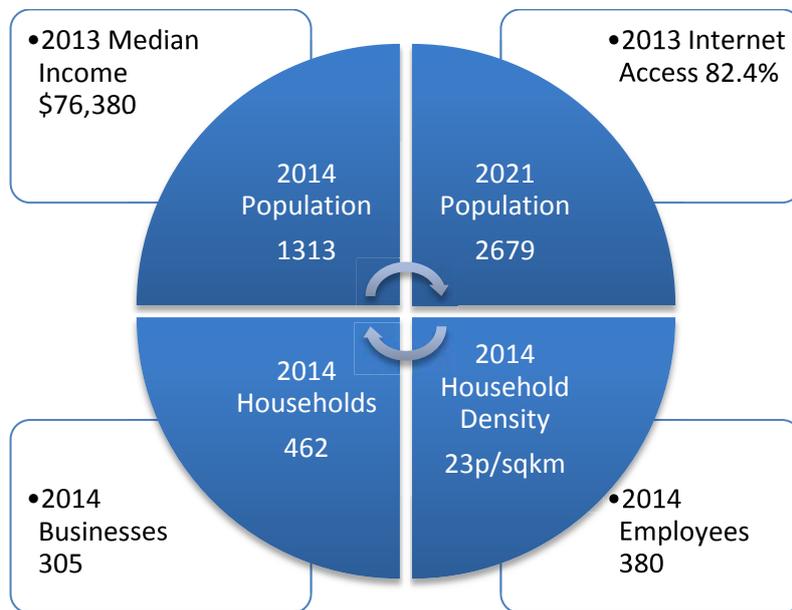
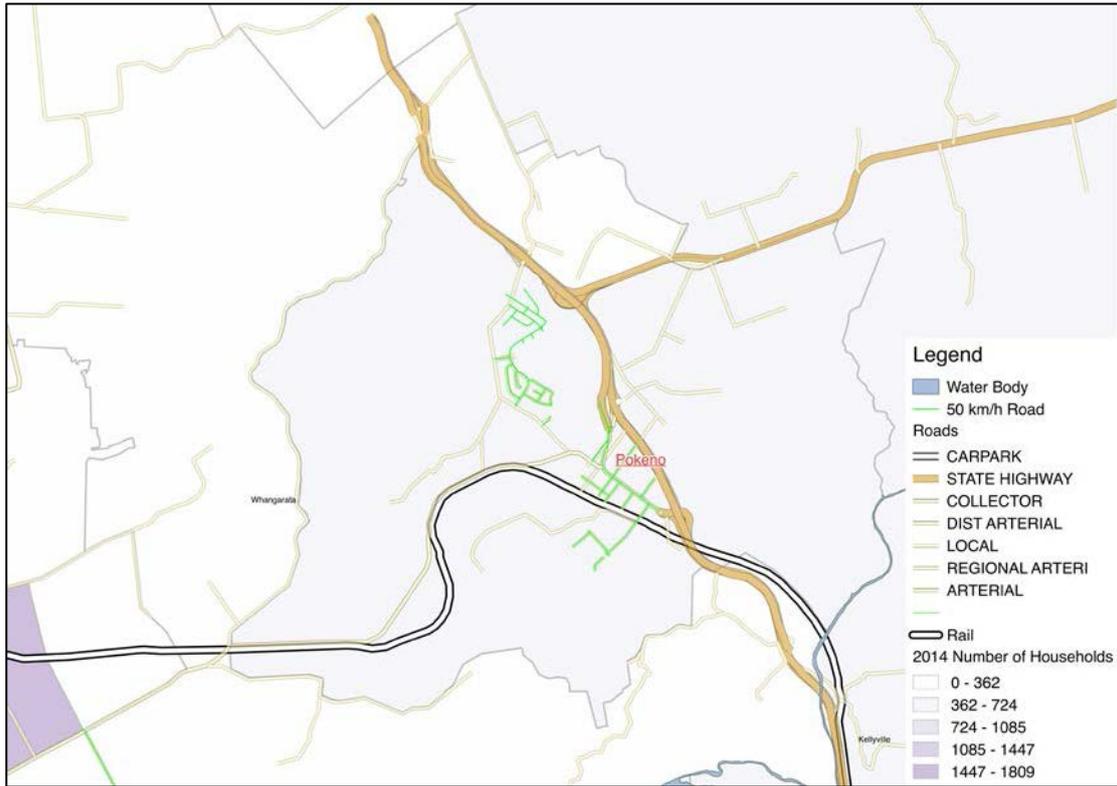
Pokeno

Pokeno is a small rural town in the north Waikato, just south of the Bombay Hills and only a short drive from New Zealand's largest city, Auckland. It is adjacent to the Waikato Expressway, a four-lane highway which, when complete, will allow a direct commute from the Bombay Hills to south of Cambridge. As such, it is a popular resting point for motorists. Pukekohe is the nearest retail centre to Pokeno, and is just 15km away.

Land Supply

A recent Structure Plan for Pokeno, completed by Waikato District Council, has been developed to manage huge growth in this town through new residential, business, industrial and recreation zonings. Pokeno Village Estate planned to develop 2,000 residential sections and 12 hectares of dedicated sports park and reserves, wetlands and walkways. As at May 2015, the main developer (Dines Ltd) has created 1,500 sections in Pokeno of which 500 have been sold and of these 470 have houses built on them. It now plans to develop 1,000 additional sections in the next 5 – 6 years. Fibre is being installed for all new sections in Pokeno.

Dines Ltd. has also developed 80 hectares of industrial land at Gateway Business Park, just south of Pokeno village. A range of lots ranging in size from 1500m² to 1 hectare and above are being offered for sale. Infant formula manufacturer Yashili is currently constructing a \$212 million state-of-the-art production plant there which is expected to sustain 130 jobs when the plant builds up to full production.



Horotiu

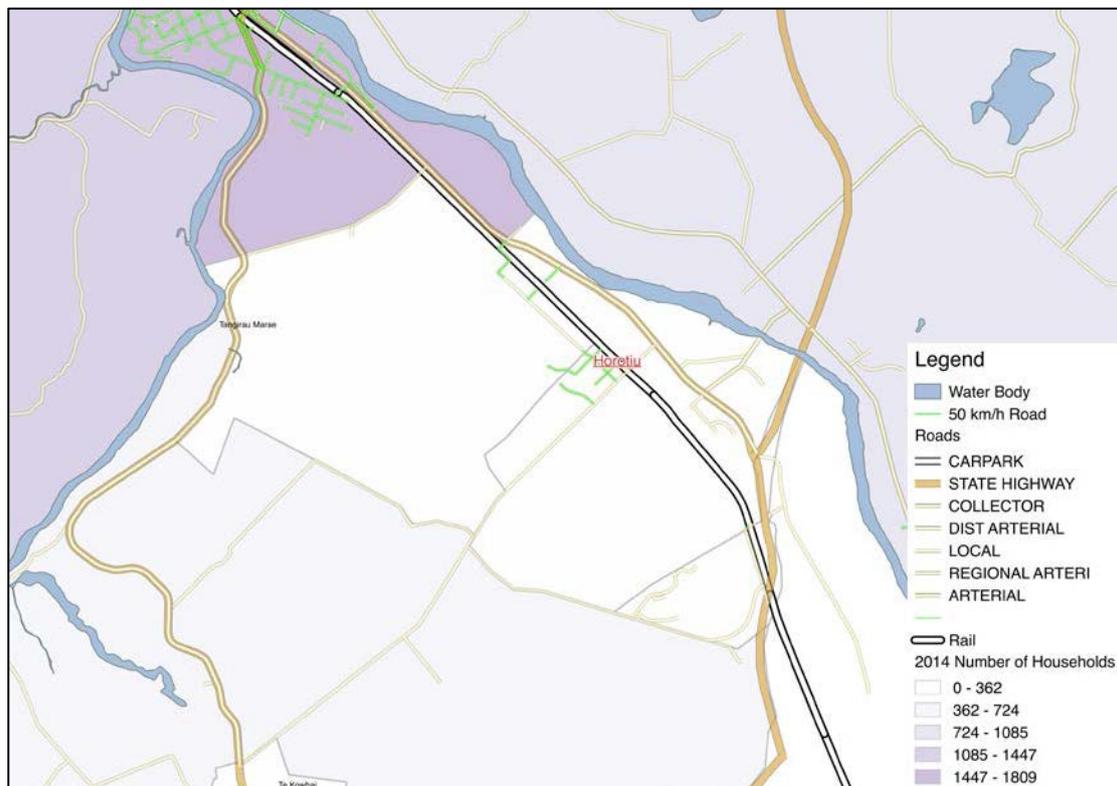
Horotiu is a rural town that lies just north of Hamilton City. As at March 2013 the population was 768.

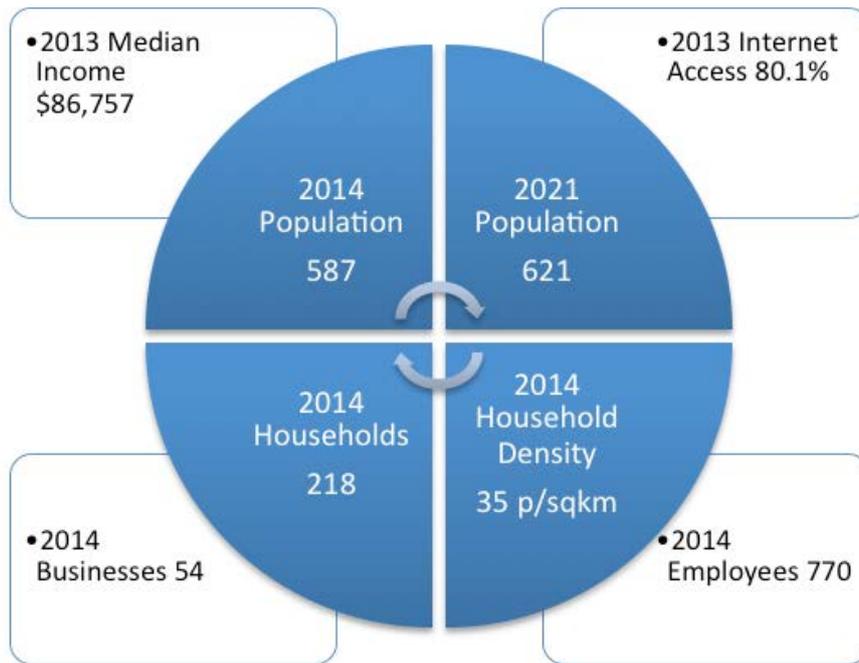
A major industry in the area is the meat processing facility, AFFCO Horotiu. The Horotiu plant is one of the most modern beef processing plants in the southern hemisphere. On the same site is AFFCO's Horotiu rendering plant, where protein meals and tallows are produced for the Asian market. Horotiu also features a new industrial estate – Northgate Business Park – of 109 hectares.

Land Supply

Northgate Business Park – 109ha of industrial zoned land. www.northgatepark.co.nz

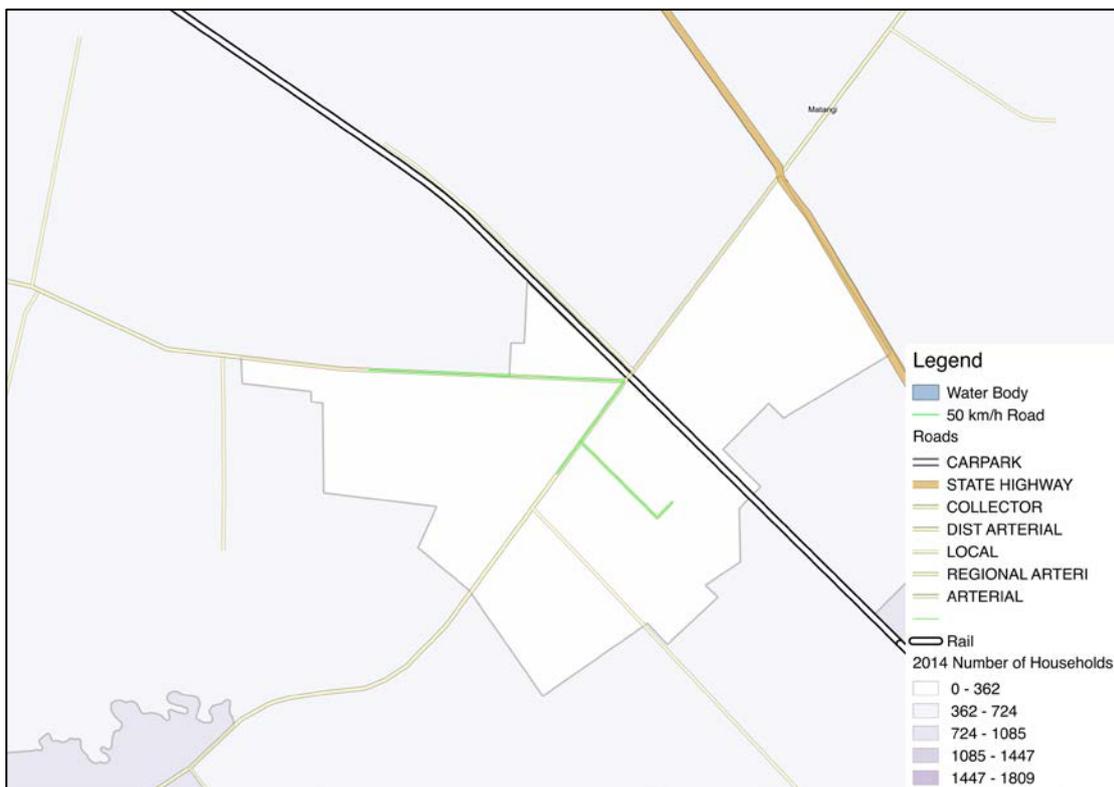
Northgate Park in Horotiu has a number of strategic advantages that support its development for industrial purposes. These strengths include its proximity to the Waikato Expressway, the existing State Highway 1 and the North Island Main Trunk Railway and its relative separation from residential activities. Northgate has all of its resource consents in place which could enable a major intermodal freight hub to be built on the site.

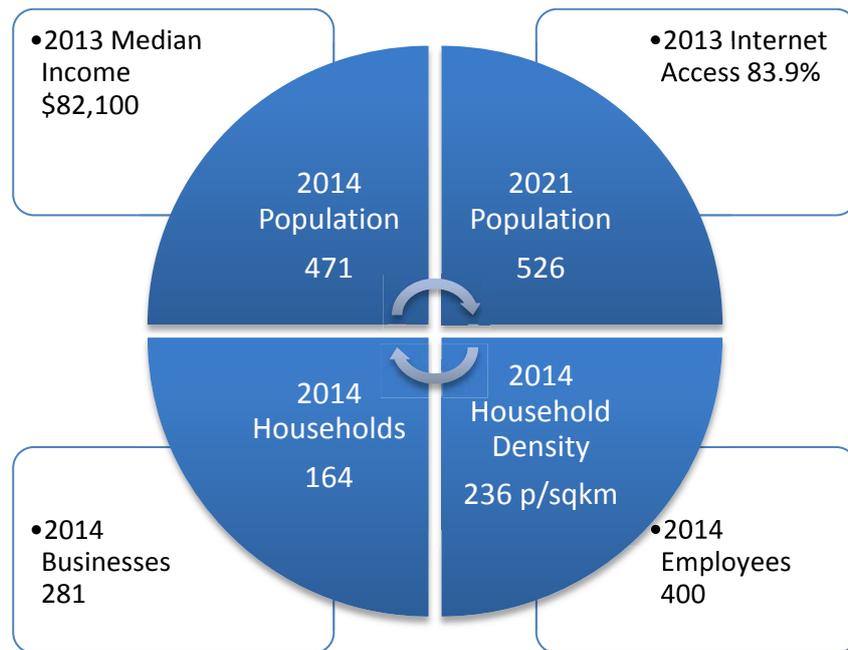




Matangi

At the southern end of the district on the margins of Hamilton City, Matangi has a rich dairy heritage and attracts residents to a rural environment that is only minutes from the city and the airport. The two largest companies to come out of New Zealand, Fonterra and Glaxo Smith Kline, both have their roots in Matangi. Tauwhare Marae is nearby and plays a central role in the Matangi community.



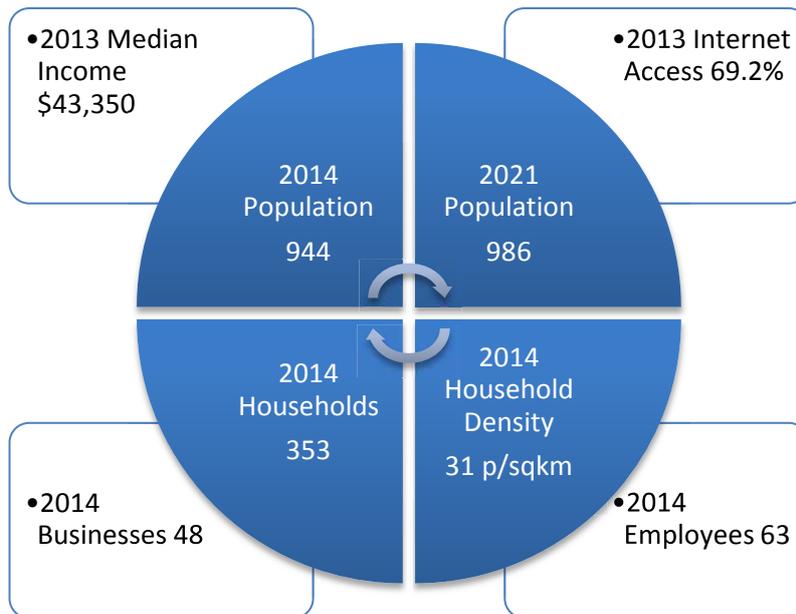


Port Waikato

Given Port Waikato is just 88km southwest of Auckland, it is a popular holiday resort.

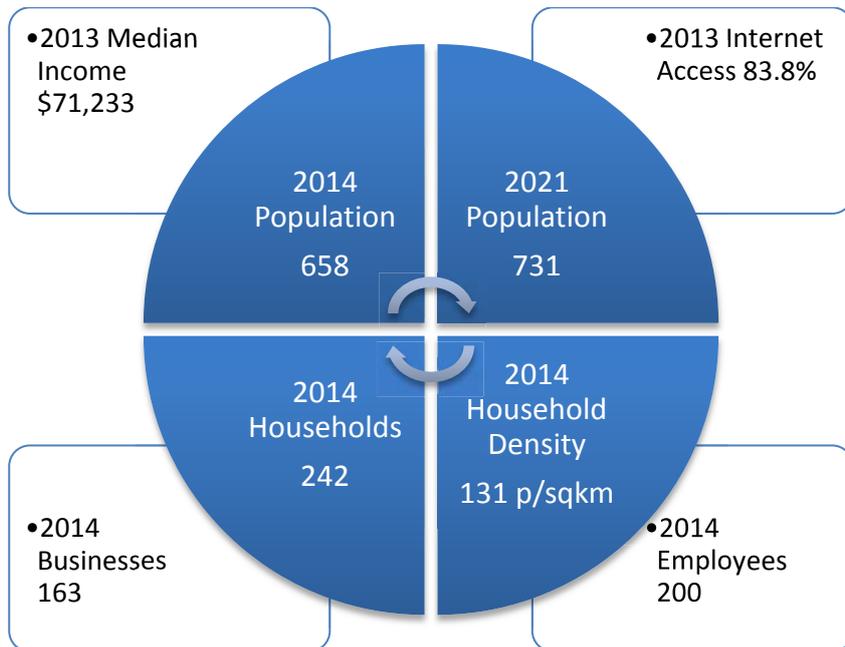
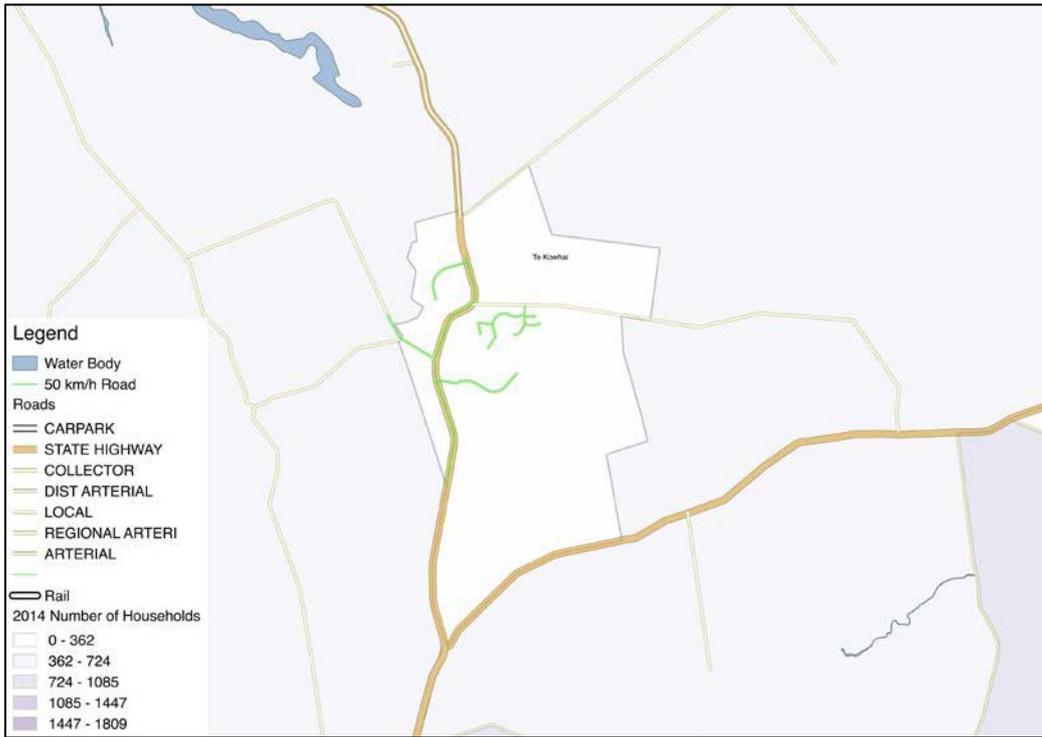
Following the establishment of the Wharf Store in 1893, the community has grown with the addition of a community hall, fire station, library, surf life saving club, yachting club, fishing club, and a holiday camp.

Currently the settlement has a small population of permanent residents but experiences a substantial influx of seasonal visitors during the summer holidays.



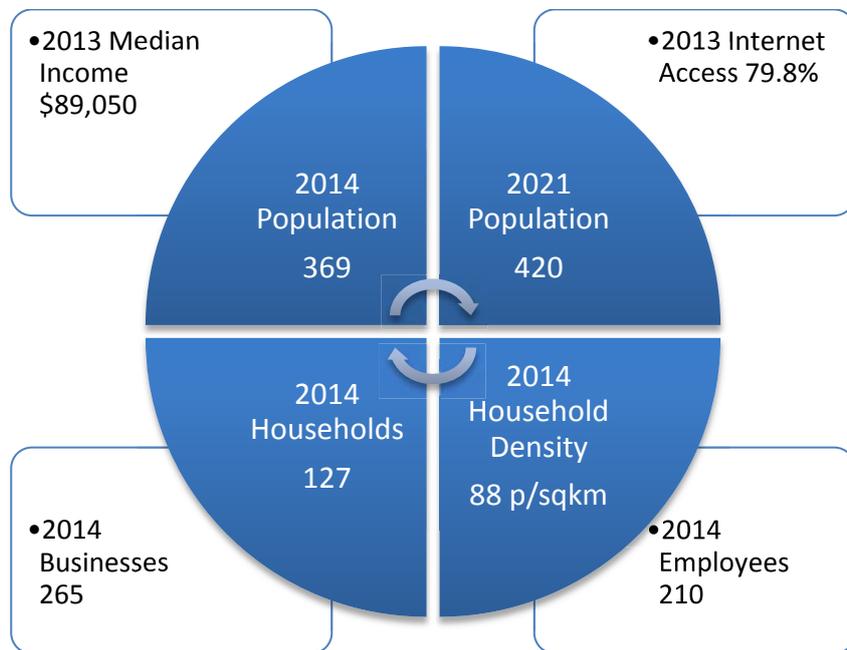
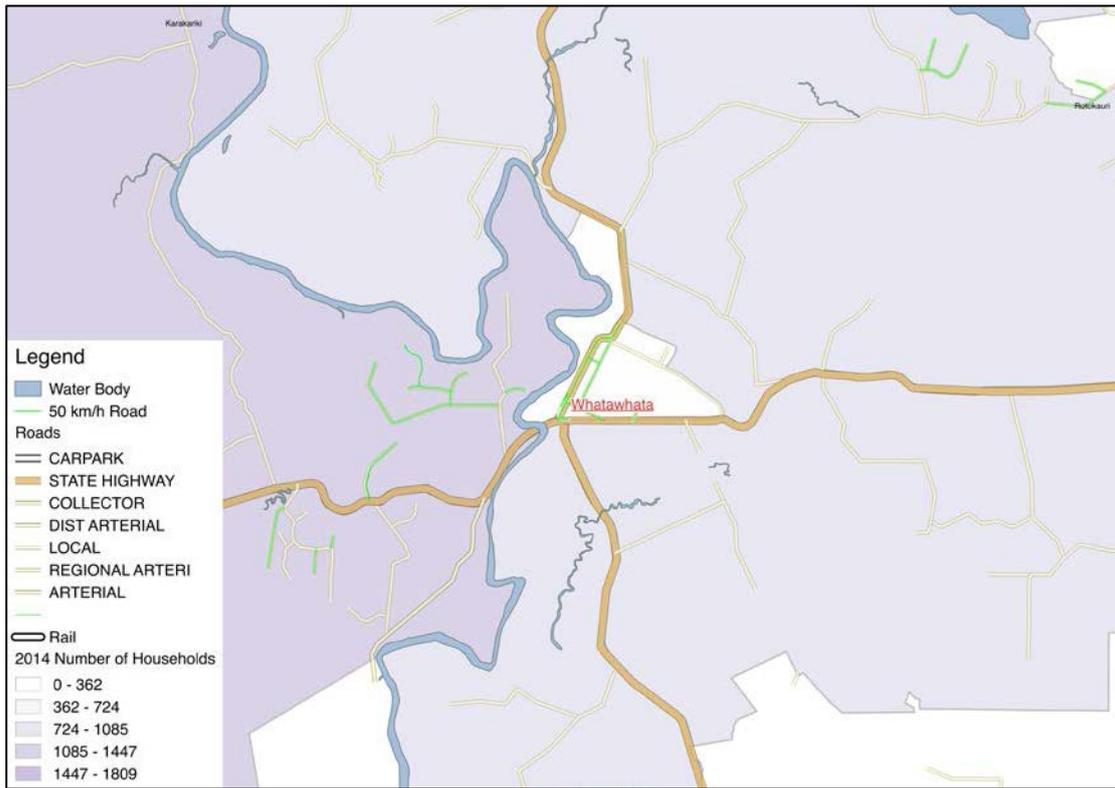
Te Kowhai

Te Kowhai is a small rural town situated 15 km north west of Hamilton City in New Zealand. It consists of mainly dairy and cattle farms and also includes a primary/intermediate school, small dairy/takeaways, fresh vegetable and fruit store, a large park with a playground and skatepark, and mechanics shop. Te Kowhai Aerodrome is situated near the township. The town is popular for new subdivisions. The local community has actively engaged with broadband service providers to seek to improve their existing levels of service (refer Te Kowhai Community case study in Section 1.0).



Whatawhata

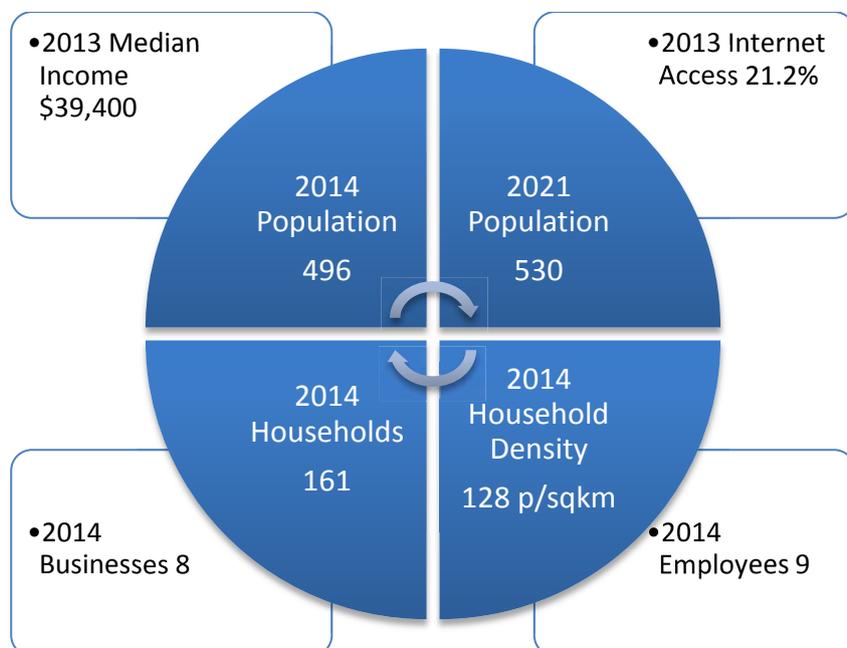
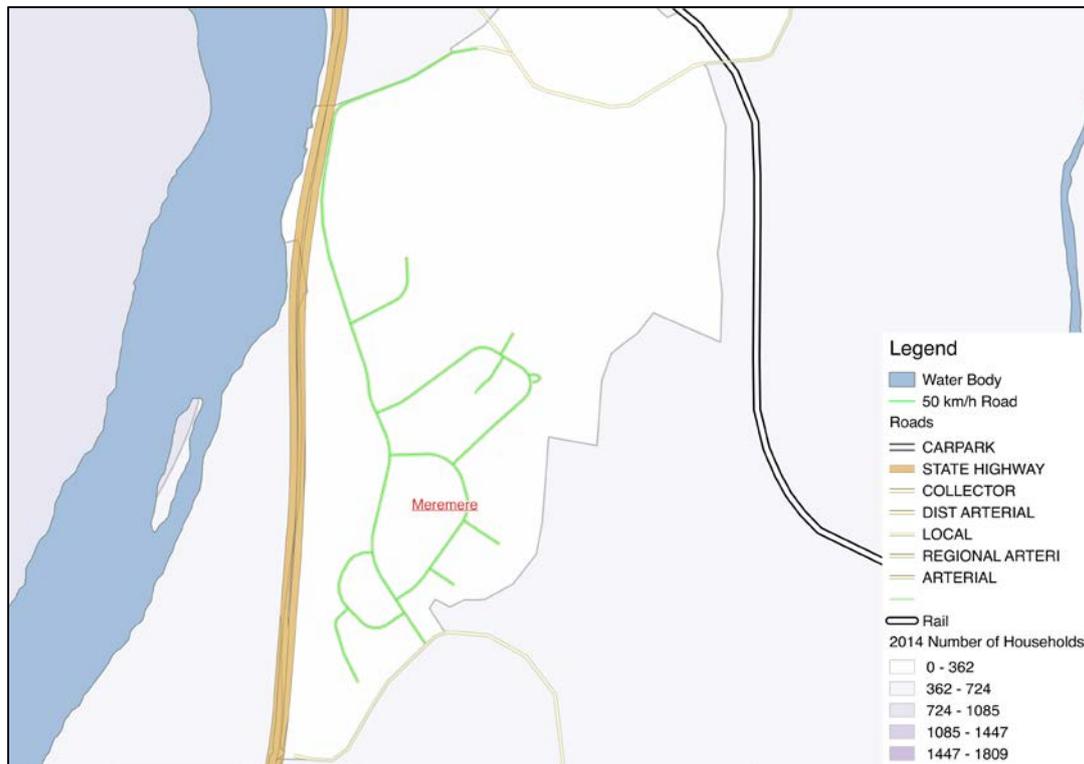
Whatawhata is a small township in the Waikato Region on the east bank of the Waipa River, at the junction of State Highways 23 and 39, 12 km from Hamilton.



Meremere

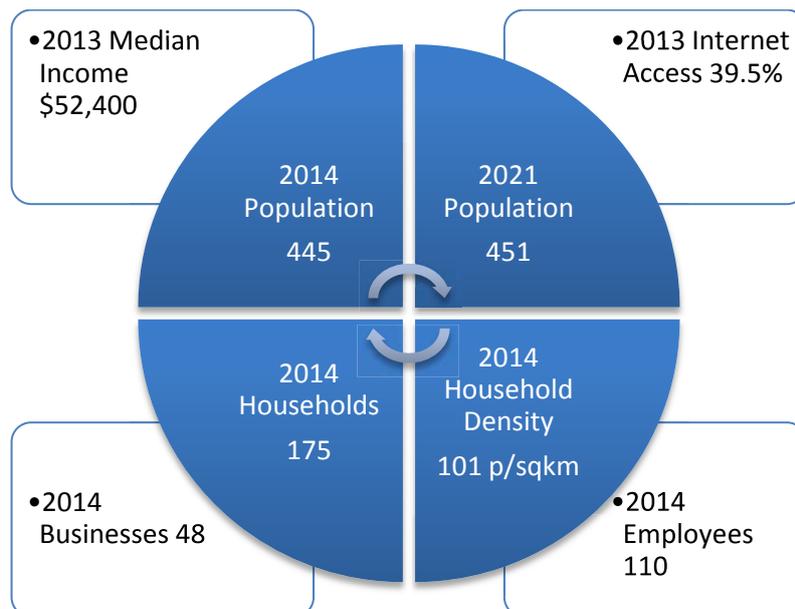
Meremere is a small town in the northern Waikato region in the North Island of New Zealand. It is located on the east bank of the Waikato River, 50 kilometres north of Hamilton. Meremere Dragway, New Zealand's only permanent drag racing facility, is nearby and hosts many popular motorsports

events throughout the year including Import All-Stars, 4&Rotary Nationals, Nostalgia Drags, the IHRA Championships and Nightspeed Dragwars. The Hampton Downs motorsports circuit has been constructed alongside State Highway 1 to the south of Meremere.



Taupiri

Taupiri is located near the northern end of the Waikato Basin immediately south of the junction of the Mangawara Stream (which drains the northern part of the basin) and the Waikato River. The Waikato River then flows northward through the Taupiri Gorge between the Hākarimata Range to the south and the Taupiri Range to the north, into the Lower Waikato.



Areas of Local authority Assistance

The Council is committed to taking a proactive and responsive approach in working with providers to support deployment of UFB infrastructure and optimise use of the infrastructure, as follows:

a. District Plan

- Since 2010 the Council's Consent team has administered two 'rule books' – the district plan for the Waikato District and the district plan for the ex-Franklin District area.
- Council has commenced the review of its District Plan aimed at integrating the provisions from the former Franklin District Plan with that of the Waikato District Plan. Staff are working at having a draft for approval by Council by October 2016 with notification in 2017.
- This is an opportunity for Council to look at its rule provisions to see how enabling they are (or could be) with regards to supporting economic development without compromising the principles of the Resource Management Act. Council is keen to ensure every community in the district is able to connect to broadband and if there are any impediments in plan provisions that make this goal difficult, we will address it through the District Plan Review.

b. Consents

- The Waikato District Plan has standards for network utilities, and for telecommunications aerials and antennas. There are different requirements across the zones relating to height, setbacks, and antenna dimensions. Resource consent is required where there is non-compliance with these standards. There are also constraints if such facilities are lodged in mapped 'Ridgeline Policy Areas'.
- The Consents team always endeavour to match appropriately experienced staff with customer applications, and key points of contact can be arranged with relevant Consent Team Leaders.
- The Consents team have developed a dedicated pre-application service. This was rolled out for customers in early 2015. It facilitates early discussions with customers about their proposals, with a focus on information requirements for applications, and opportunity to indicate potential process steps and outcomes.
- The Council is investing in E-Application capabilities as a service for customers, so that in time customers may apply for resource consents online.
- The District Plan Review process will provide timely opportunities for network providers to have input into new or changed rules which would assist deployment over coming years.

c. Identification of infrastructure

- The council does not have any existing pole infrastructure within the boundaries of the 50 kmph zone of its towns.
- The council does not have existing ducts able to be used for laying fibre.
- The council is able to share plans of existing underground utility infrastructure with providers (i.e. water/stormwater/sewage networks); and would welcome reciprocated plans from providers to show the location of existing telecommunications infrastructure (e.g. existing fibre backhaul links to schools).

d. Council land

- Waikato District Council administers and manages over 900 parcels of land. Lands are generally managed as reserves under the Reserves Act 1977 and are of varying classifications depending on their community purpose i.e. Recreation Reserves are able to be utilised under the Act for community recreation, nature reserves for protection of biodiversity

values. There are also properties held in fee simple. All properties have been acquired overtime for a specific purpose, some are acquired for infrastructure works such as roading designations which may or may not eventuate. The current use and relevance of that original purpose today will differ on a parcel by parcel basis. For example some recreation classified land is currently disused i.e. tennis courts in small rural communities in the west of the district.

- Essentially it is a case by case basis as to whether Council administered lands can be utilised for infrastructure/utility purposes and that use will be at the discretion of the Asset Management Team Leader in Parks and Facilities based on knowledge and current and future plans for the land in question. Formalisation and documentation of any infrastructure within Council land is paramount to ensure it is noted on the title and Council plans.
- Also note that the Council entered into a Joint Management Agreement with Waikato Tainui. As a part of this agreement any change in use of Council administered land which is crown derived and part of the Waikato-Tainui confiscation area is of interest to the tribe and may incur a right of objection should the change in use require public notification i.e. a lease.

e. Council Funding

- The Waikato District Council has budgeted for \$100,000 in the 2015/25 Long-term Plan to support broadband initiatives in the district. Additional funding is also actively being sought through the Waikato Well-being trust.
- All such funding will be managed by the Economic Development Manager and will be available to be allocated to 'digital enablement' projects and programmes identified in the Digital Enablement Plan (due to be completed by September 18, 2015). It is anticipated that these projects and programmes will be focused on supporting households and businesses to improve their use of technology or on-line services. The funding will not be available to contribute to the direct costs of network providers technical equipment but may be used to support activities associated with the roll-out of UFB2 or RBI2 projects (e.g. communications and engagement with residents/businesses, information collection and investigation work).

f. Road Corridor management

- The Council's Roothing Corridor Engineer has a working relationship with network providers so that any new assets are discussed prior to any application receipt. This is in order to establish the level of detail required due to the potential impact on the roading corridor.
- The Roothing Corridor Engineer is a new position where service providers are not charged for the corridor engineer's time. Often site visits are required to confirm layline positions, identify issues before work construction and expectations of reinstatement before application is lodged. This demonstrates a viable strategy for corridor management with best practice and planning interests protected.
- The Council values this coordination between service providers and various internal departments so that a coordinated response is consistent in approach and in line with the National Code of Practice for Utility Operators' Access to Transport Corridors (Nov 2011). Internal stakeholders include Strategic Planning, Design, Project, 3Waters, Parks and Consents along with the external providers. The outcome gives Roothing a representative who provides input, identifies conflicts and highlights shortfalls in approach and communicates standard requirements before getting to advanced stages. Issues are rare and managed effectively causing minimal lost time and opportunity due to the good working relationships.
- Applications are received via the RAMM Corridor Access Requests by the Roothing Compliance Officer and projects pertaining to new assets are checked with the Corridor Engineer for approval. Submissions are automated online with monitored response times. As-built files are collected for verification and project sign off.
- Refer Attachment C for endorsements from network providers sub-contractors (Counties Power Ltd. and Connect8) concerning the Council's road corridor management function.

g. Council services

- Free internet and wifi is available to library users at all libraries. The presence of a library has been included as a factor in the additional criteria used to prioritise towns for UFB2.
- As Waikato District Council moves to provide more of its services on the internet, high speed connections will become increasingly important to have meaningful engagement with our communities. With all of our communities, but specifically our rural and remote communities, the internet will provide a mechanism they can use to have real input into the direction and governance of their communities. As well as future interactions the Council is moving to provide all its services on-line in the next 24 months to ensure that customers can view and interact with all council services without the need to come into an office or service centre.
- There are also a number of future requirements that the Council would like to be able to investigate delivering, that build on a high speed data connection. One of the factors considered in declining the electronic voting trial was the lack of district wide internet coverage.

RBI2 Programme

Final Prioritisation of RBI2 Areas

Table 3 shows the RBI2 candidate area statistics. Table 4 shows the final RBI2 priority list of towns in the District.

Table 3: Waikato District RBI2 Candidate Area Statistics

Area	2014 Populati on	2021 Populati on	2014 Househo lds	2013 Median Income	2013 Internet Access	2014 Business Numbers	2014 Employee Numbers
TeUku	1891	1995	706	\$66,100	71.4%	368	370
Tamahere-Tauwhare	1101	1256	373	\$102,208	86.9%	714	1060
Kainui	2892	3252	999	\$73,271	64.7%	503	750
Onewhero	753	786	282	\$61,097	59.7%	673	660
Whitikahu	2168	2216	739	\$63,440	49.2%	486	630
Eureka	1126	1235	394	\$77,320	70.0%	353	1890
Waerenga	1281	1307	344	\$51,533	46.8%	464	920
Waikato Western Hills	848	920	311	\$67,529	56.6%	550	630
TeAkau	1025	1055	392	\$61,895	63.9%	284	320
Mangatawhiri	540	563	195	\$57,263	51.8%	299	390
Maramarua	541	582	201	\$41,900	39.9%	203	220

Table 4: Waikato District RBI2 prioritised candidate areas

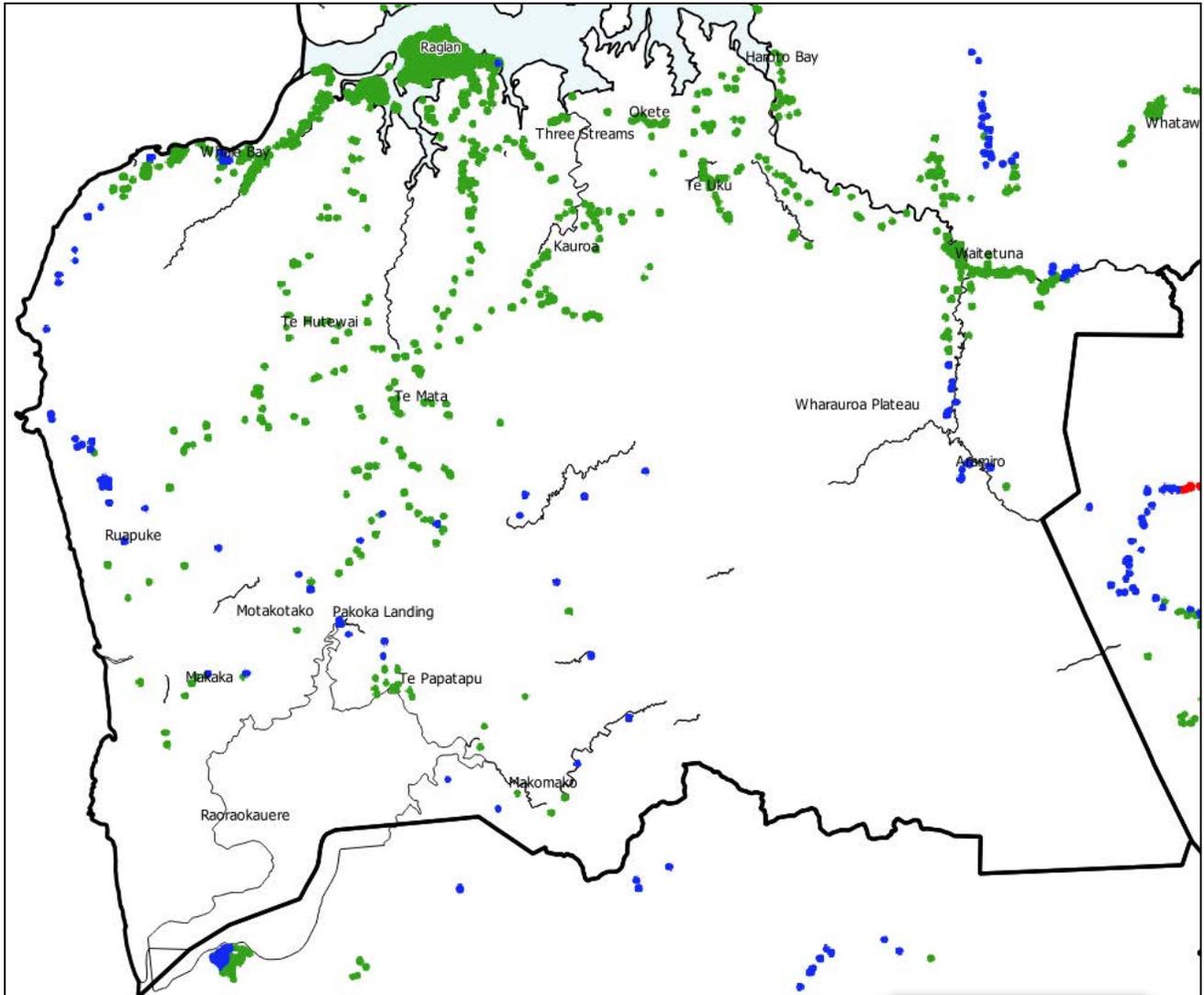
Rank	Area	ROI Criteria Score	Additional Criteria Score	Overall Score
1	Te Uku	32	75	107
2	Tamahere-Tauwhare	22	85	107
3	Kainui	18	90	108
4	Onewhero	48	65	113
5	Whitikahu	33	85	118
6	Eureka	29	90	119
7	Waikato Western Hills	44	75	119
8	Waerenga	44	75	119
9	Te Akau	51	85	136
10	Mangatawhiri	67	90	157
11	Maramarua	74	90	164

Refer Attachment D for data on additional criteria.

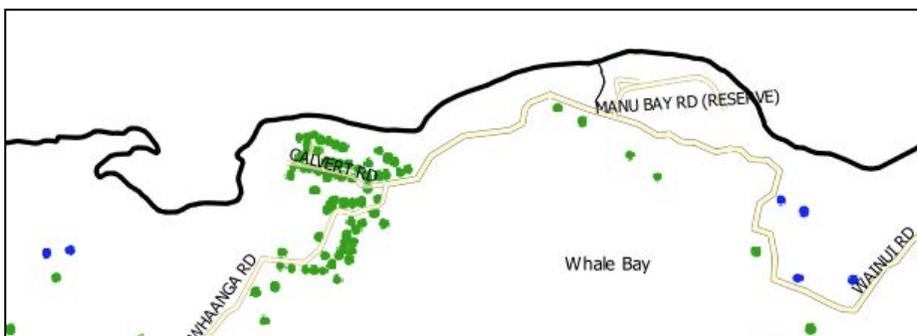
Proposed Areas for RBI2

The following coverage maps show firstly the broadband coverage and quality for the entire RBI candidates, followed by more detailed maps for specific areas that have been shown as having broadband quality less than 5mbps.

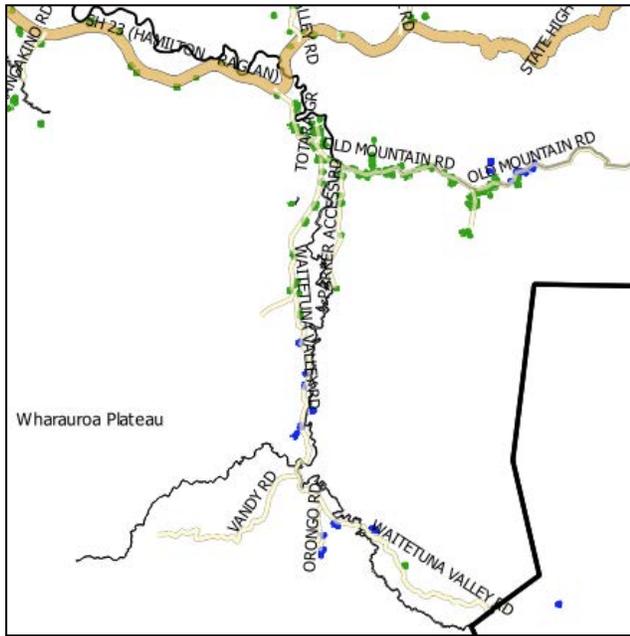
Te Uku



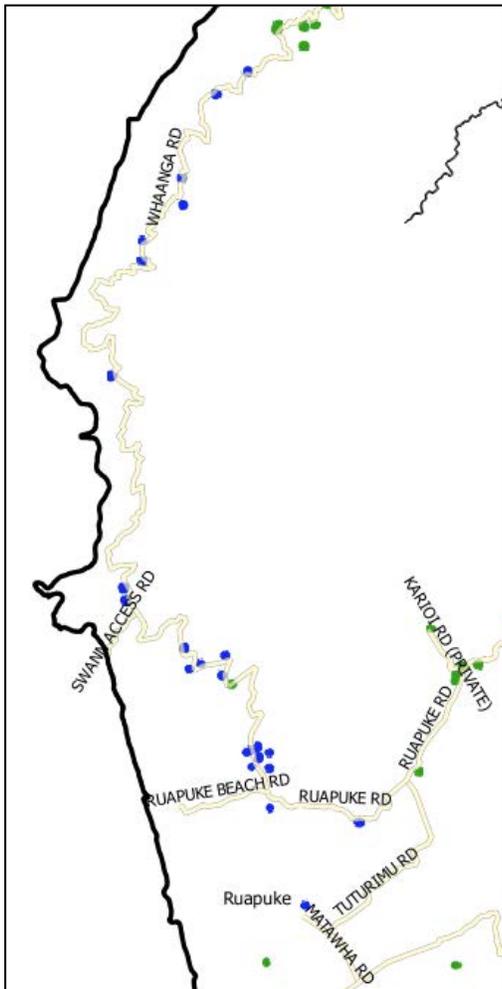
Coast between Upper Wainui and Whale Bay



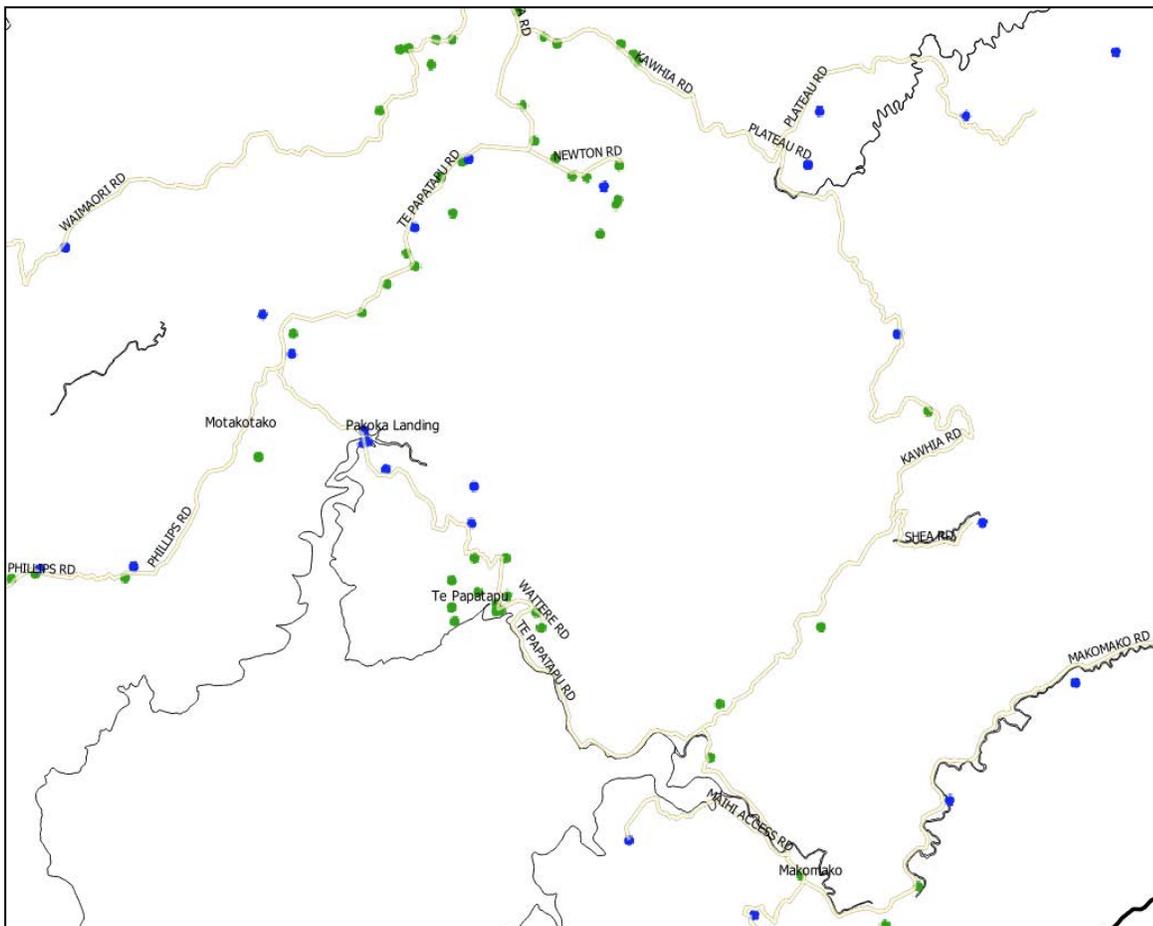
Wharauroa Plateau



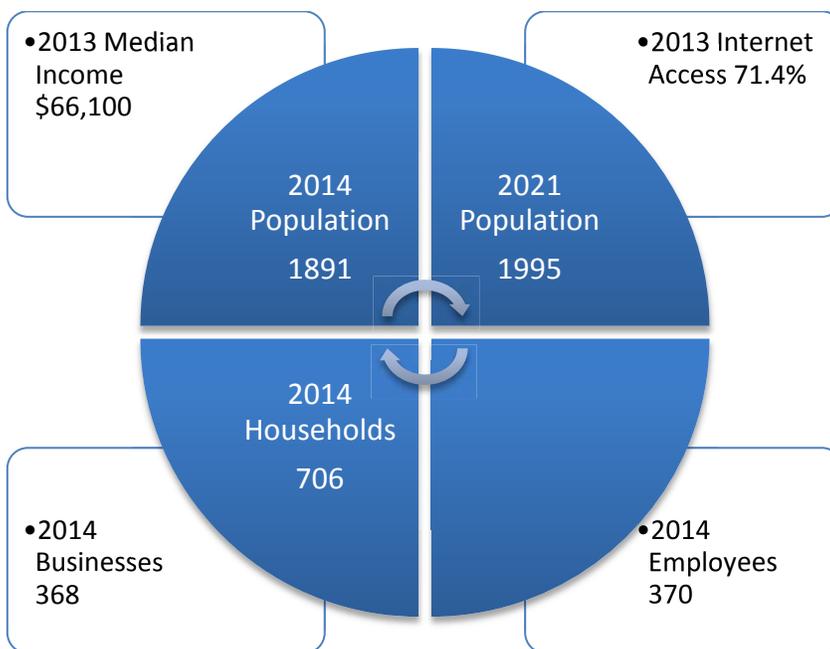
Coast south of Whale Bay – Whanga Rd & Ruapuke



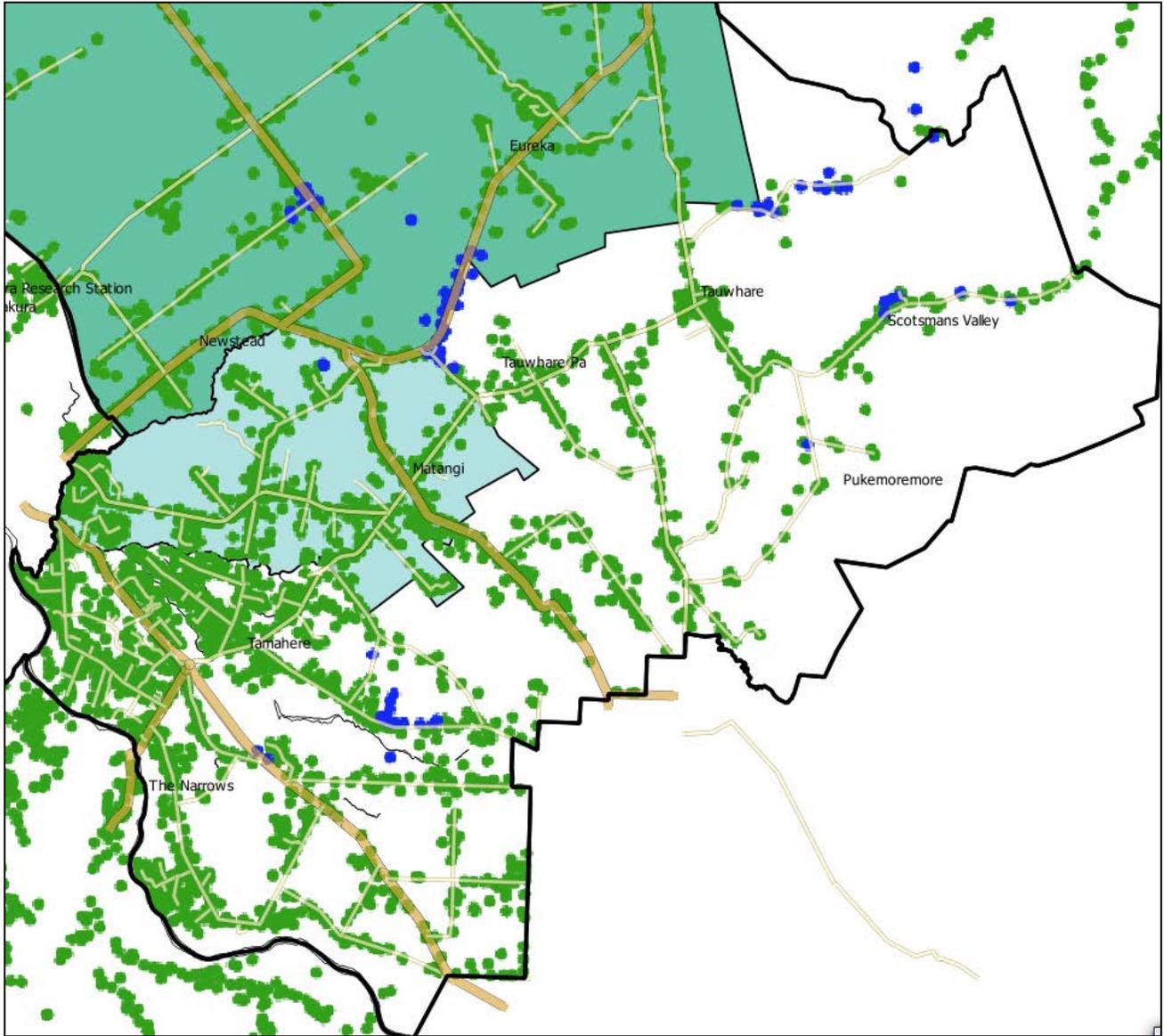
Pakoka Landing & Makomako



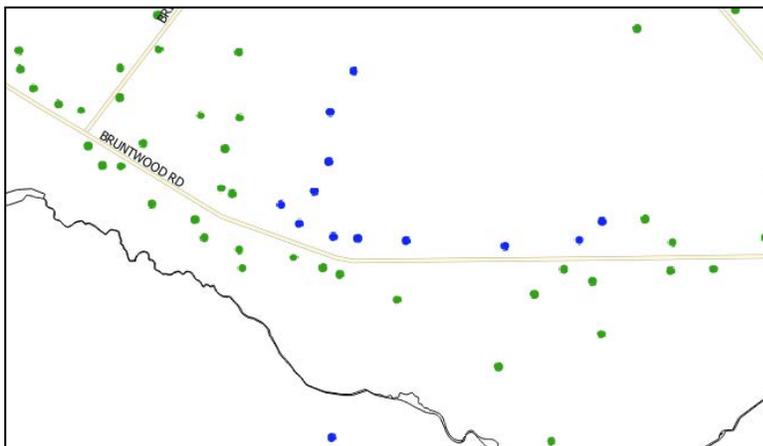
Te Uku Statistics



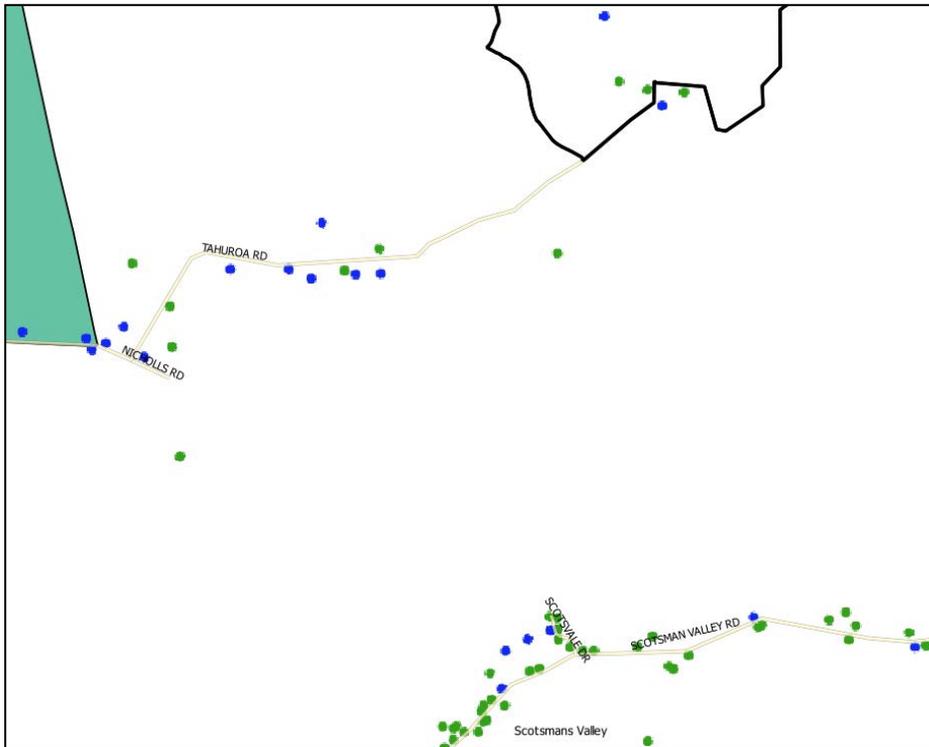
Tamahere-Tauwhare



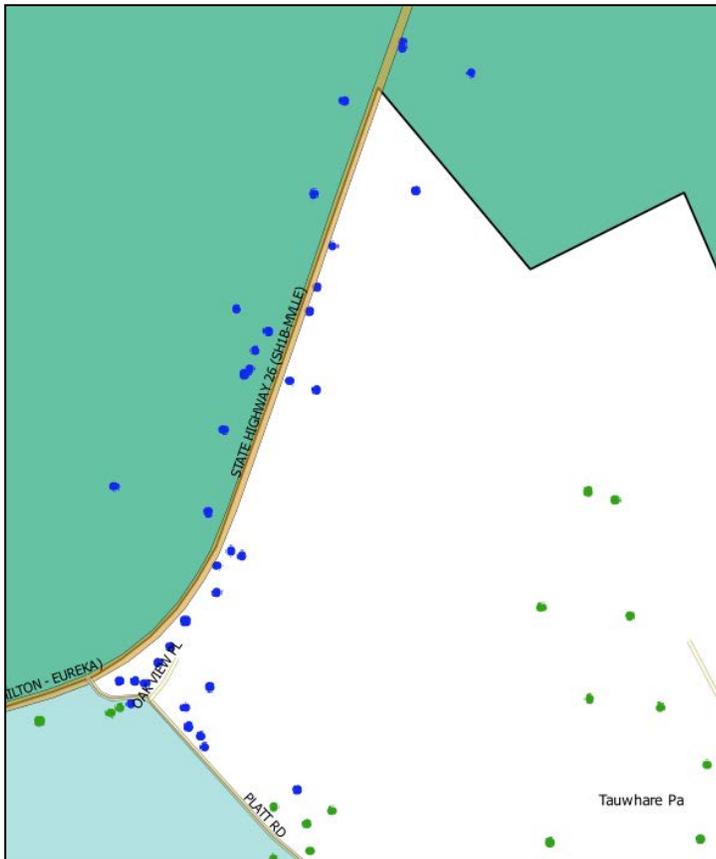
Bruntwood Rd



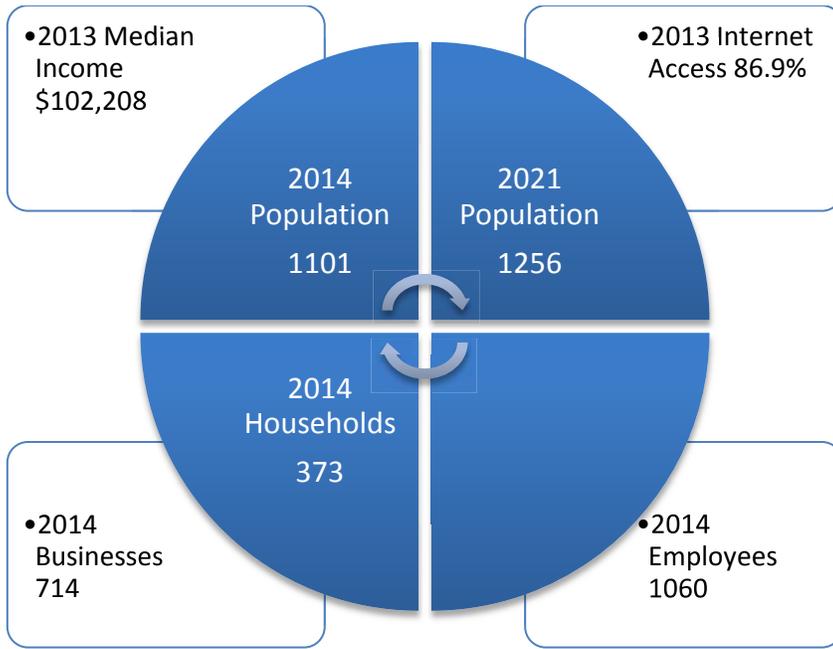
Tahuroa and Scotsman Valley Rds



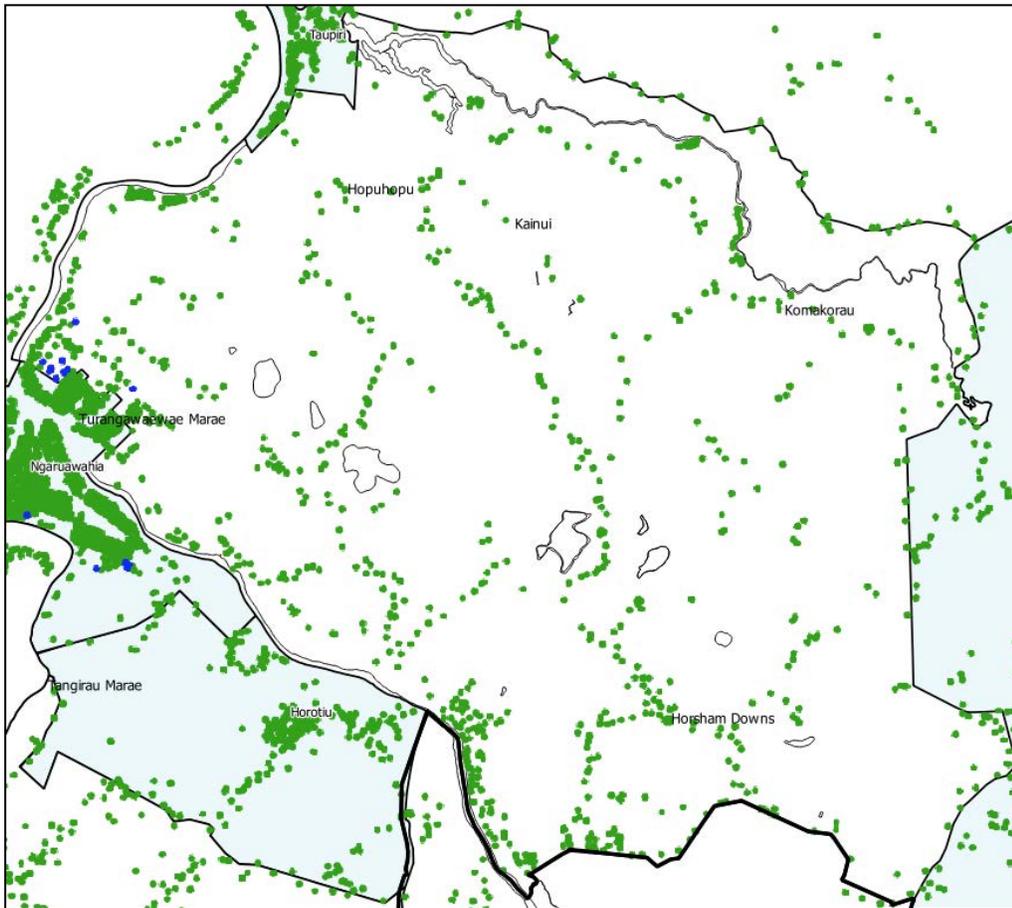
SH26 Eureka to Morrinsville



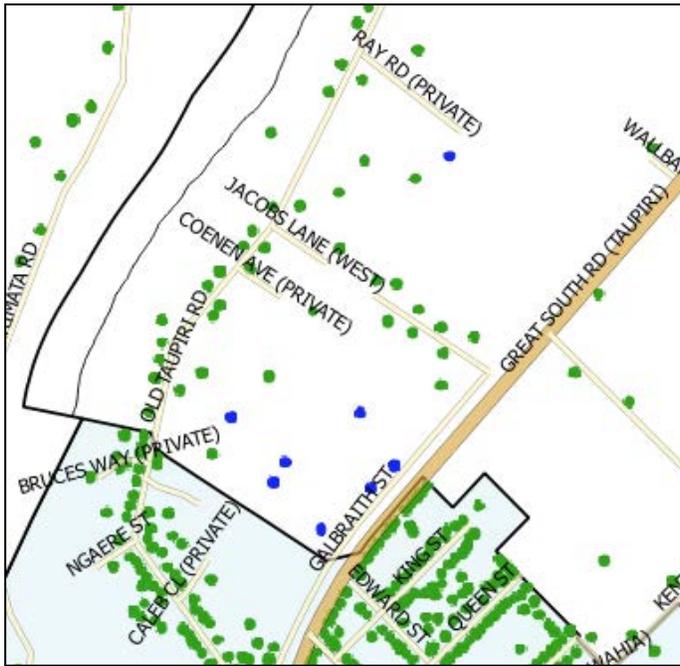
Tamahere-Tauwhare Statistics



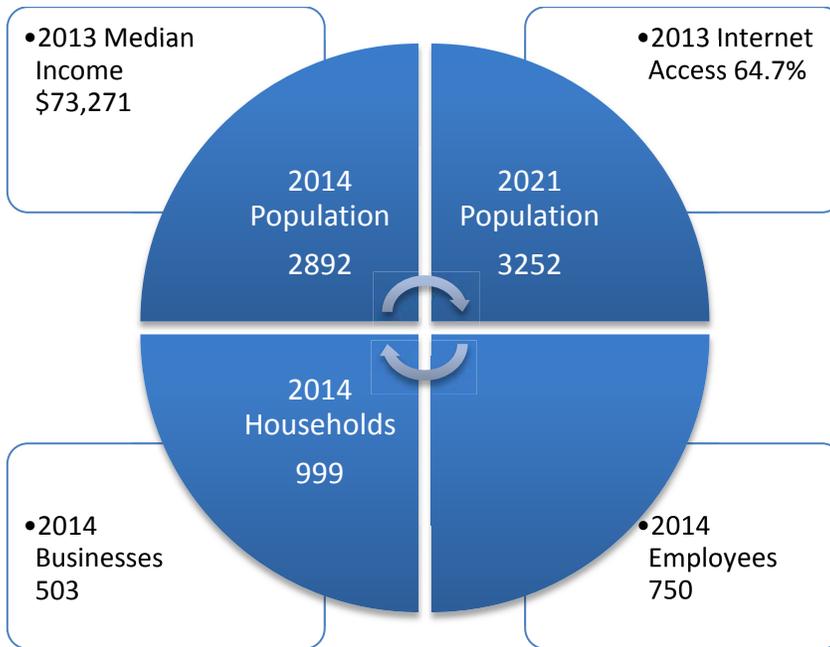
Kainui



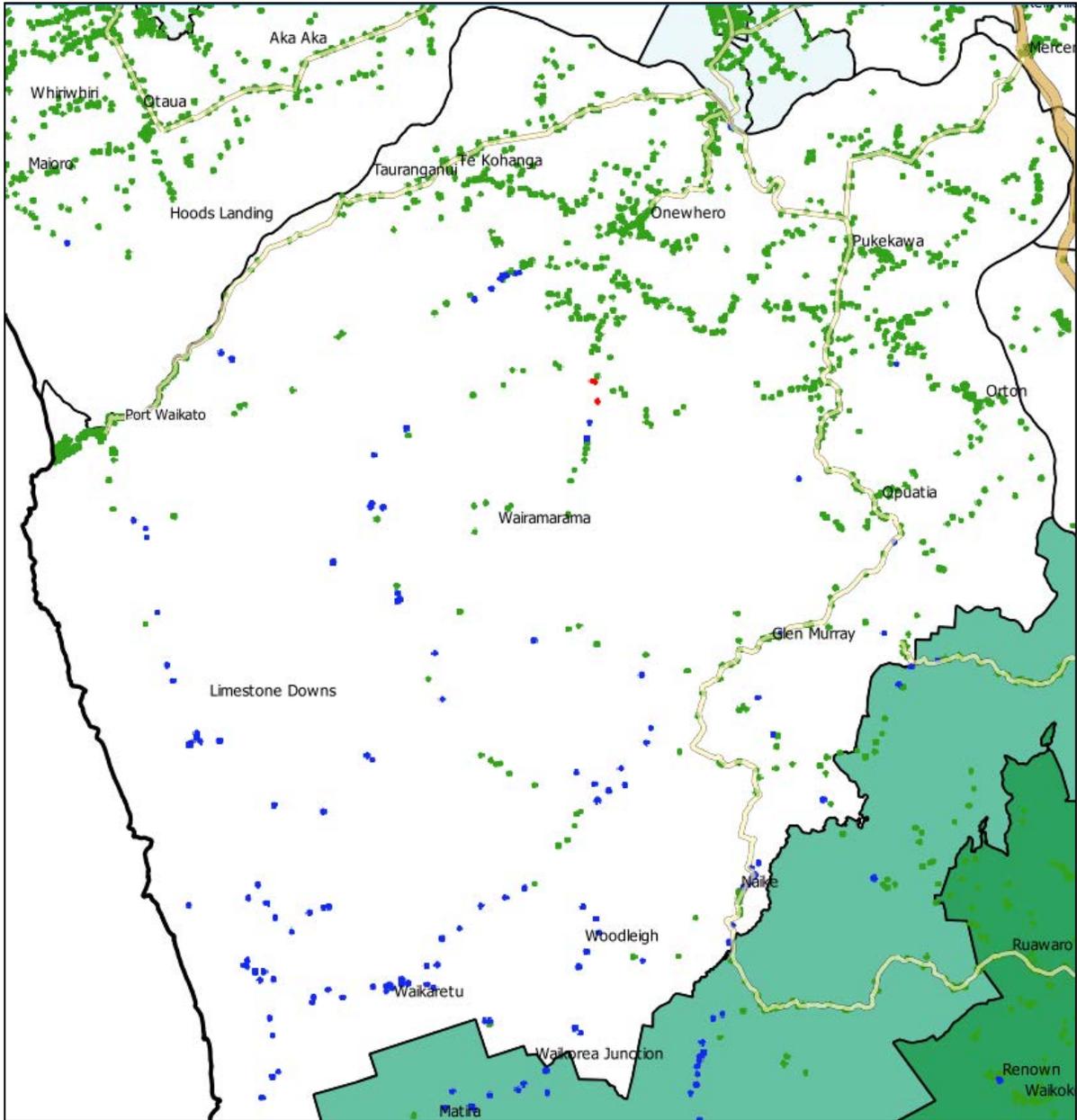
Galbraith Street, Ngaruawahia

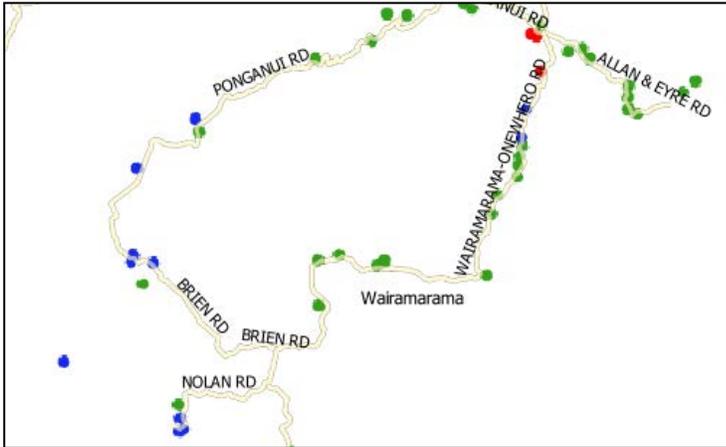


Kainui Statistics

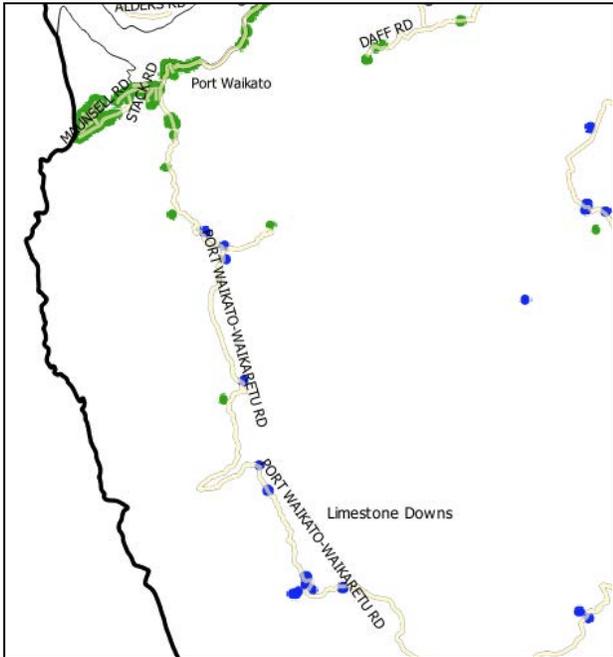


Onewhero

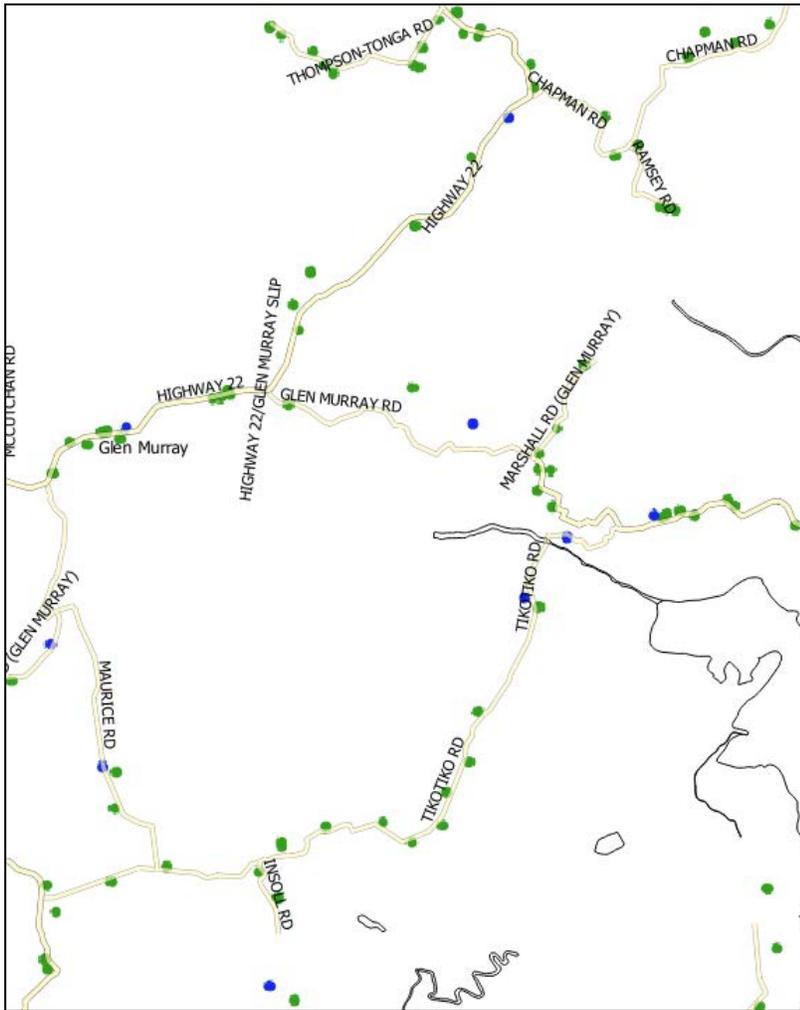




Limestone Downs



Glen Murray

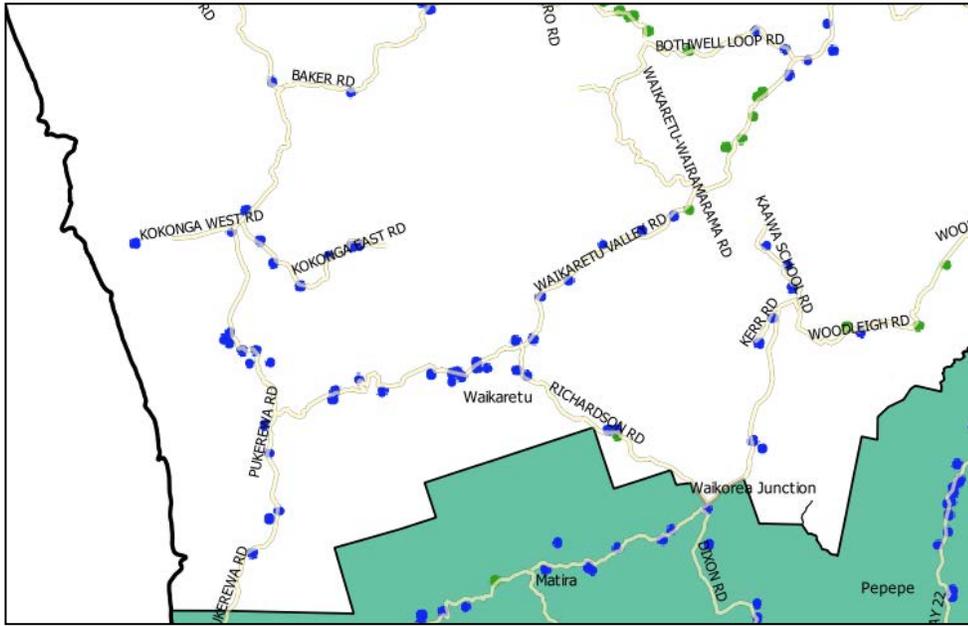


Note: The MBIE map for Glen Murray shows only a scattering of properties with no/limited coverage but this is inconsistent with the coverage maps provided by Chorus, Vodafone RBI and Lightwire.

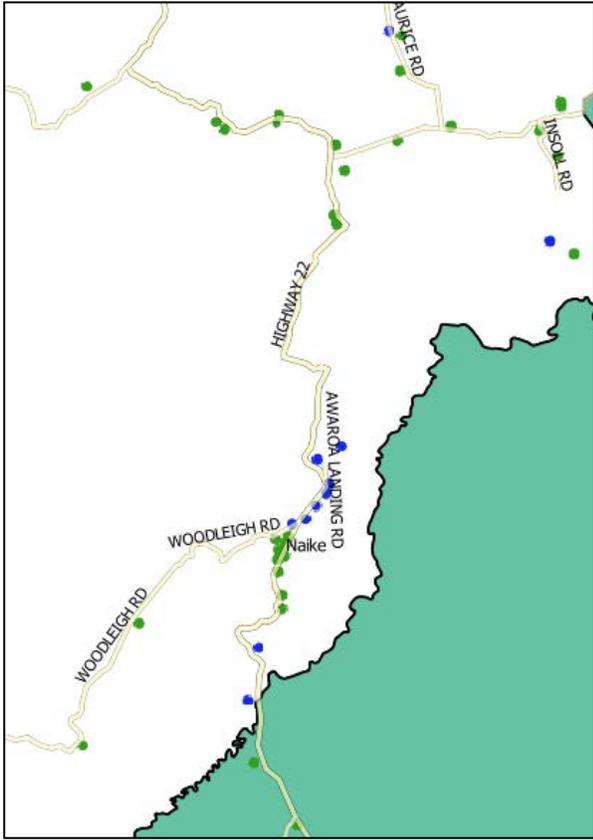
Klondyke Rd (south of Onewhero)



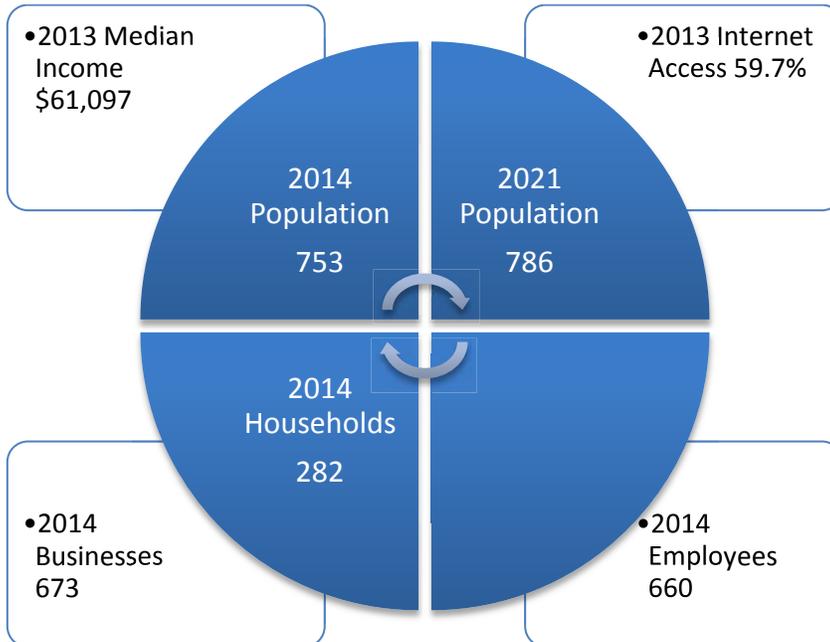
Waikaretu & Woodleigh



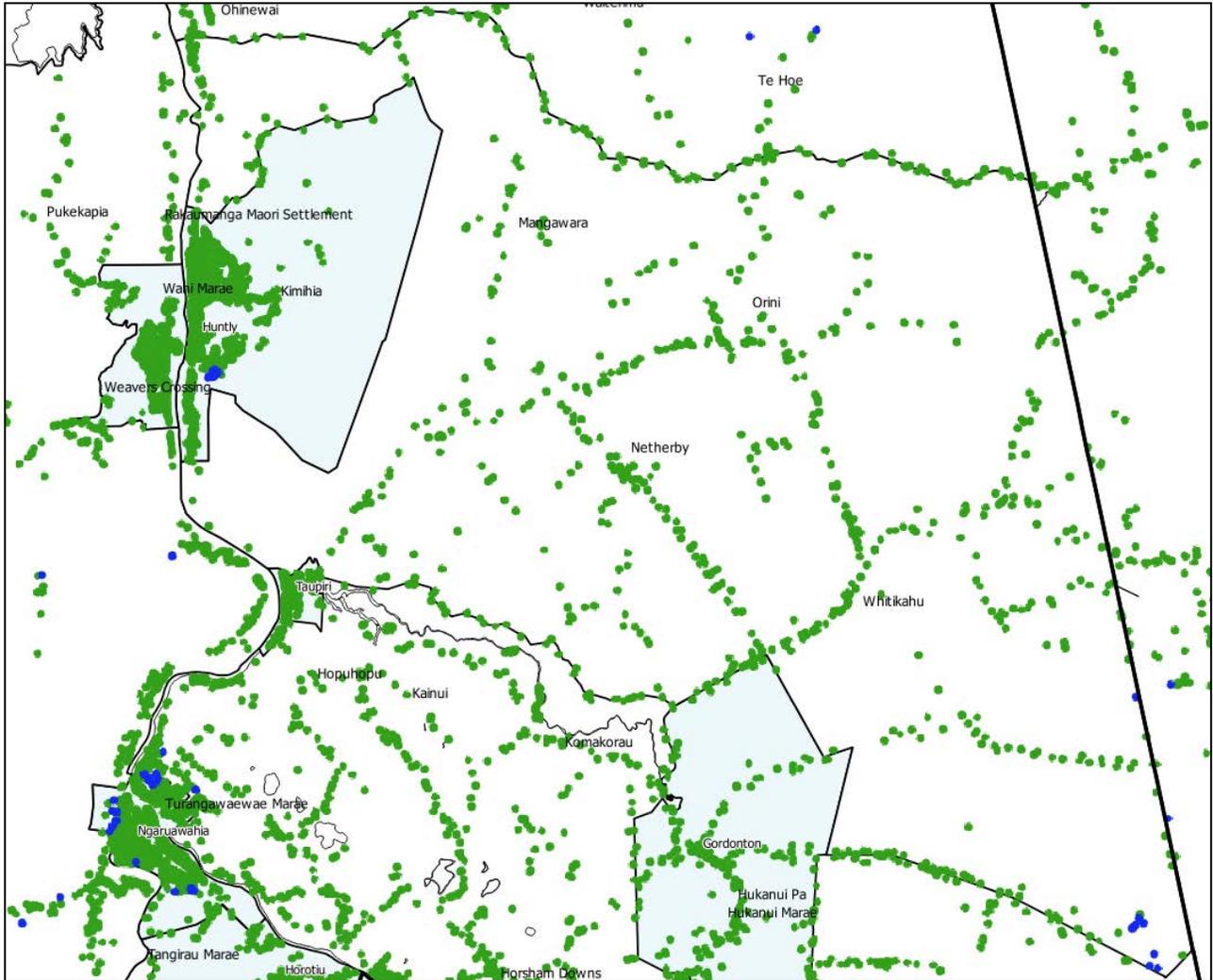
Naike Broadband Coverage



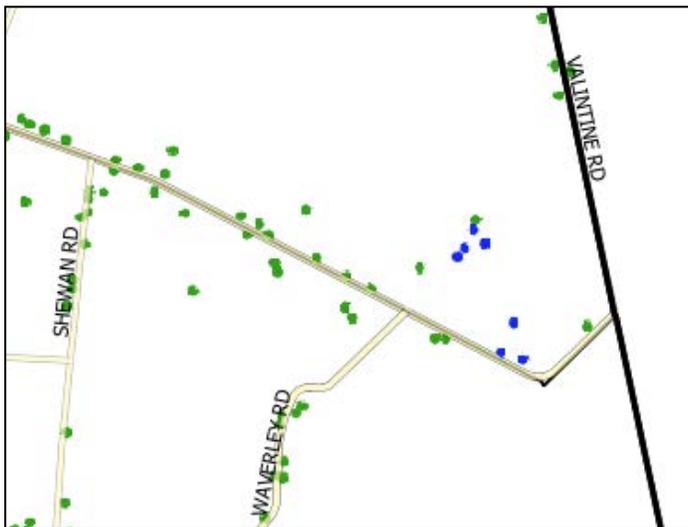
Onewhero Statistics

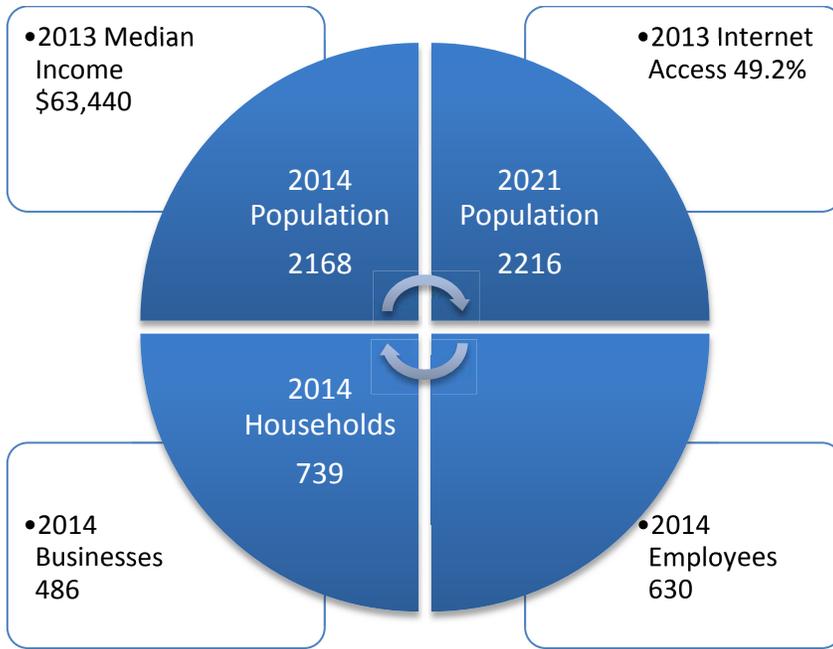


Whikitahu

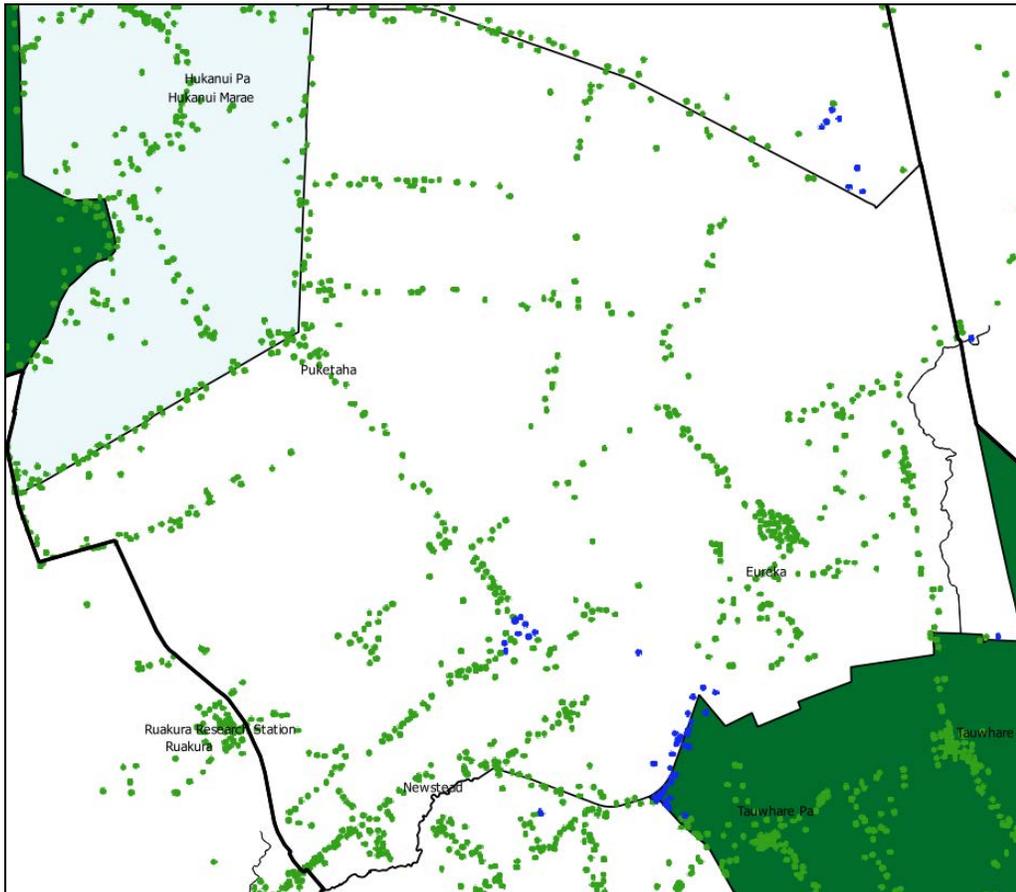


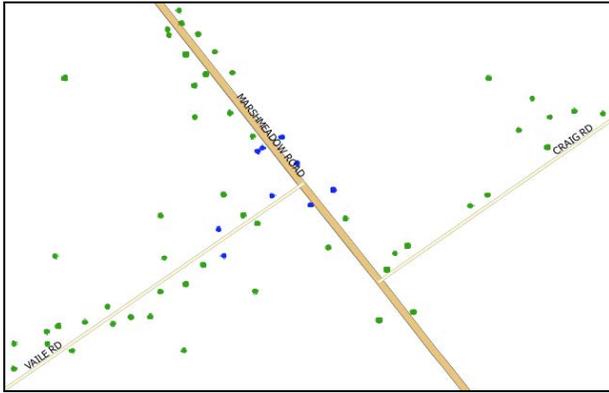
Paiko Rd



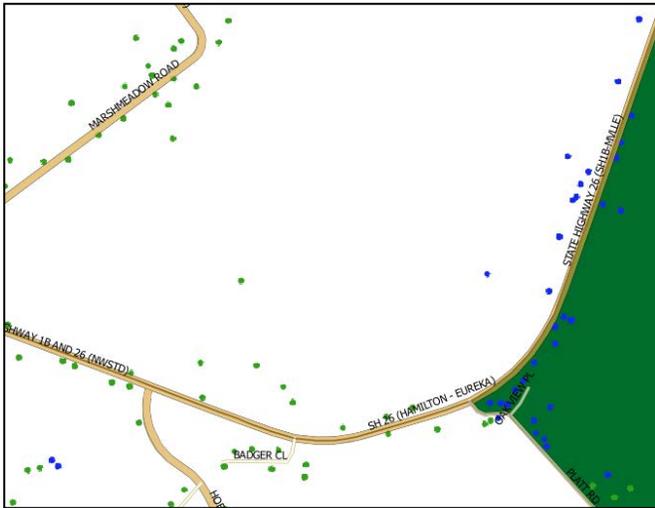


Eureka

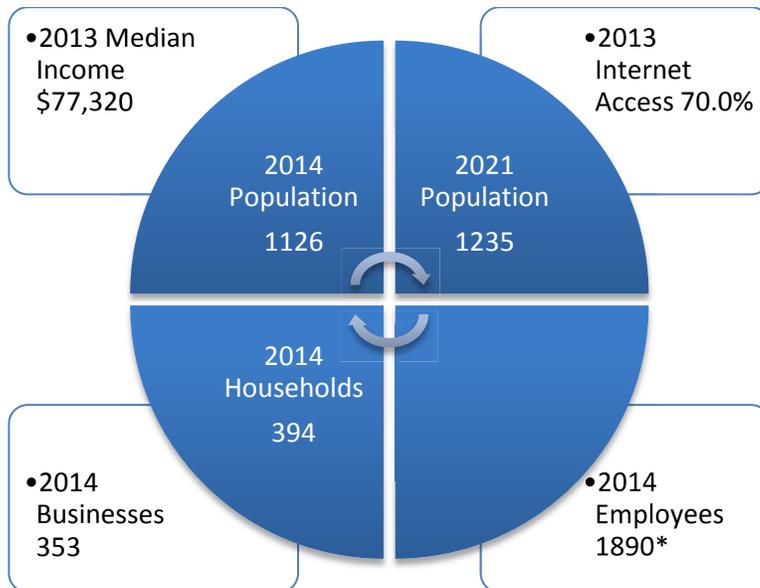




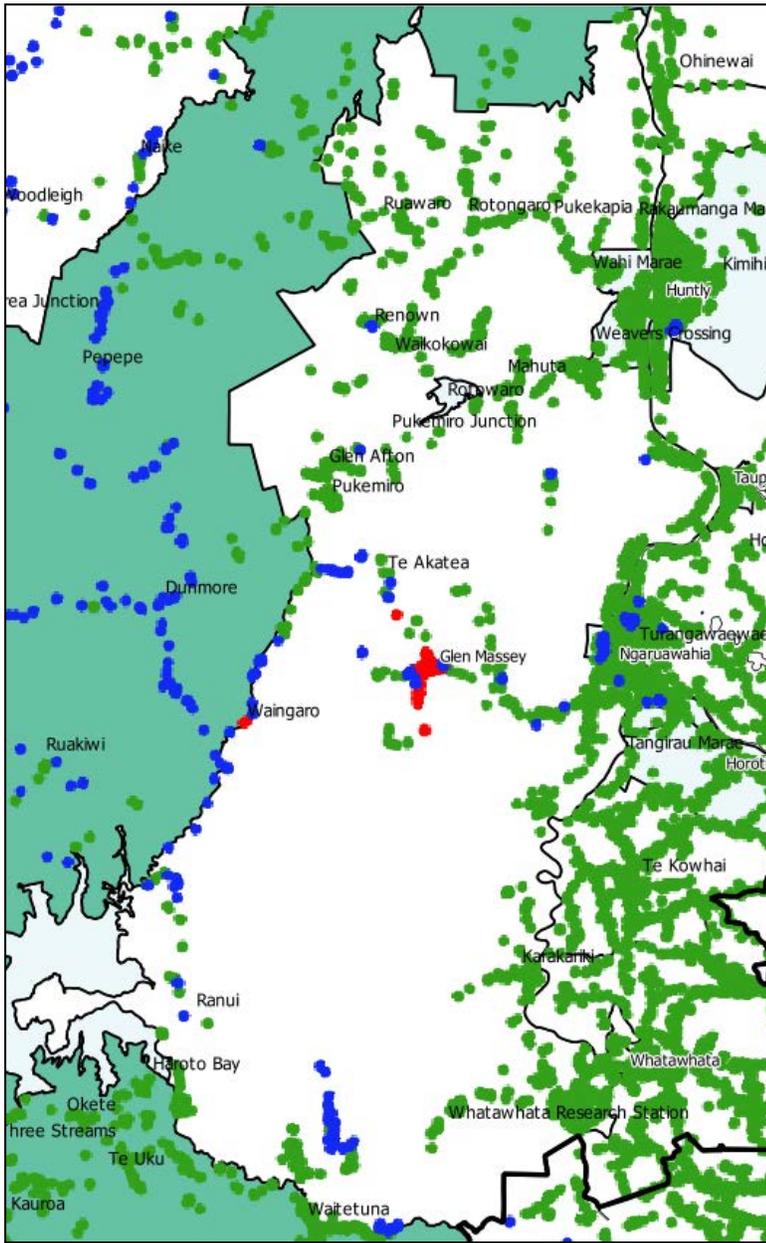
State Highway 26 Hamilton to Eureka



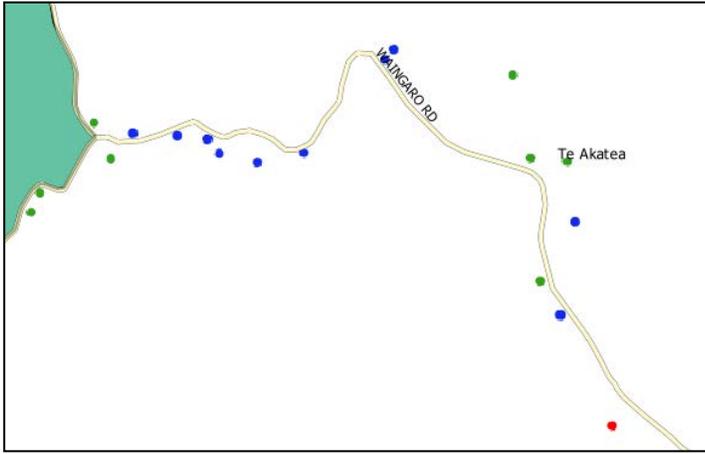
Eureka Statistics



Waikato Western Hills



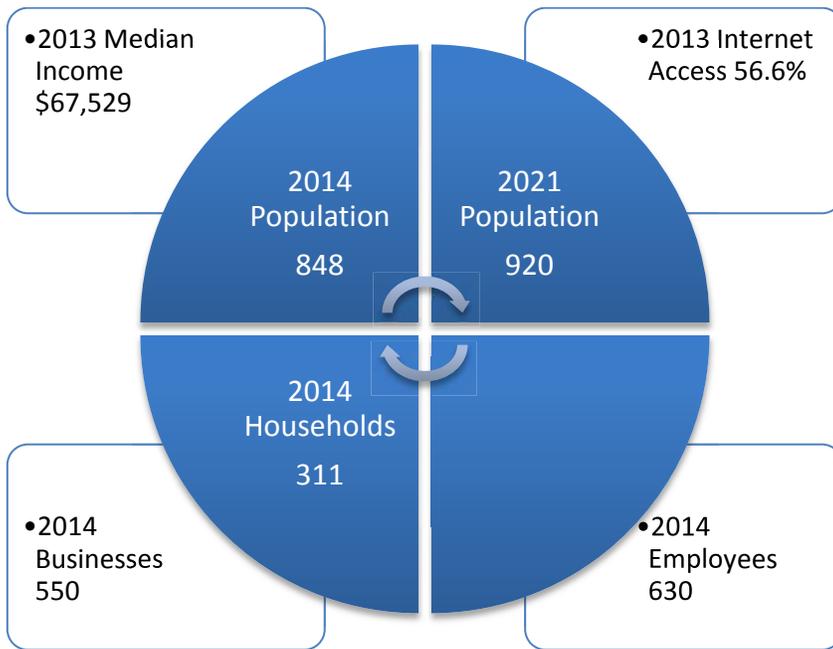
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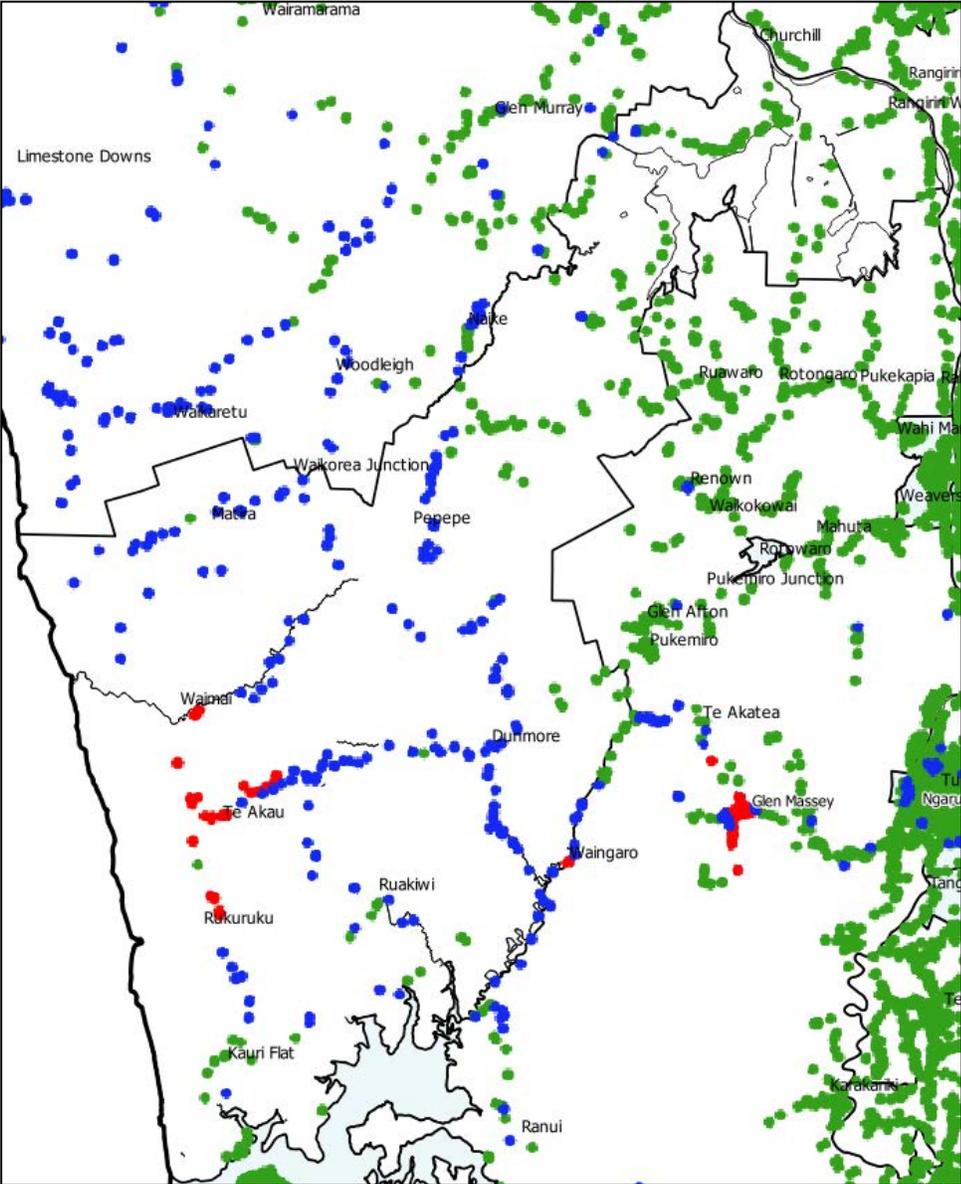
Waingaro

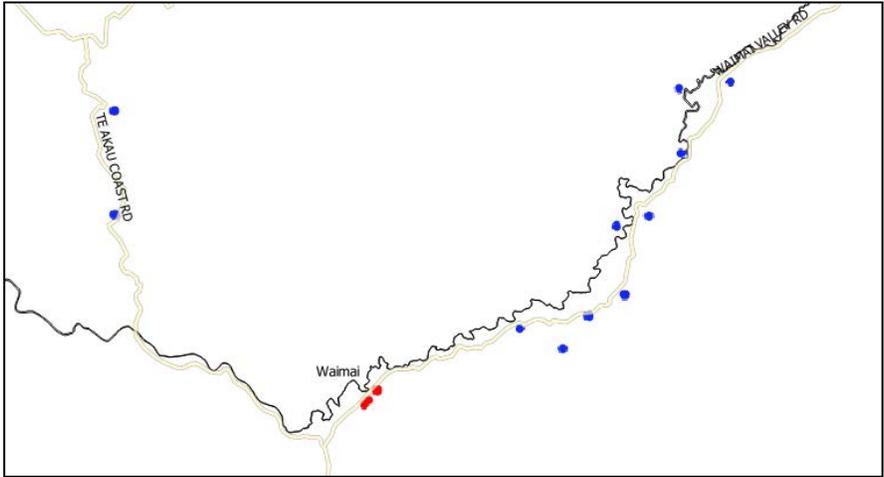


Waitetuna - Cogswell Rd

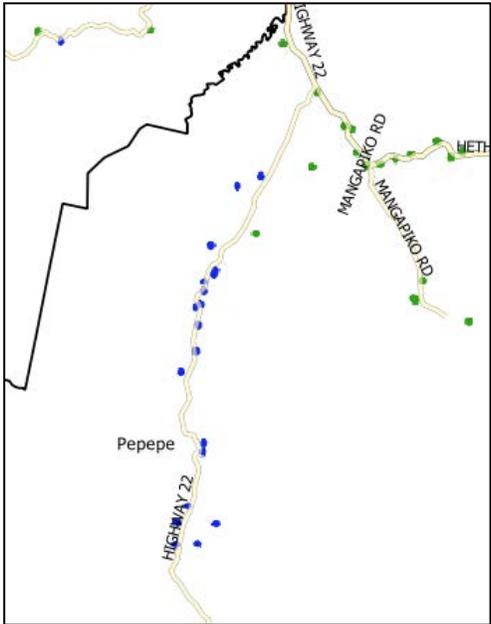


Te Akau

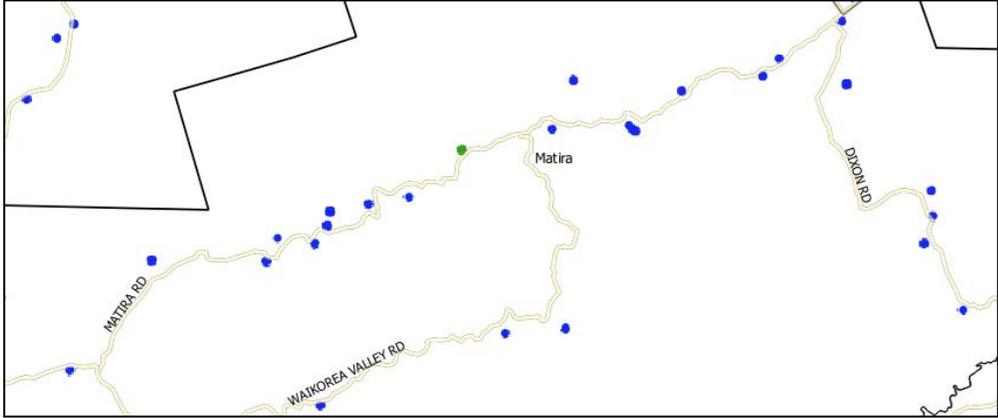




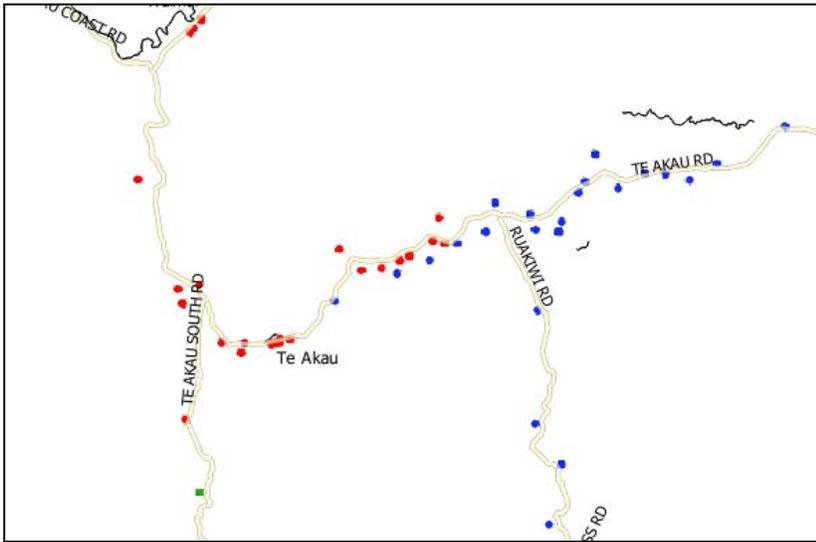
Pepepe



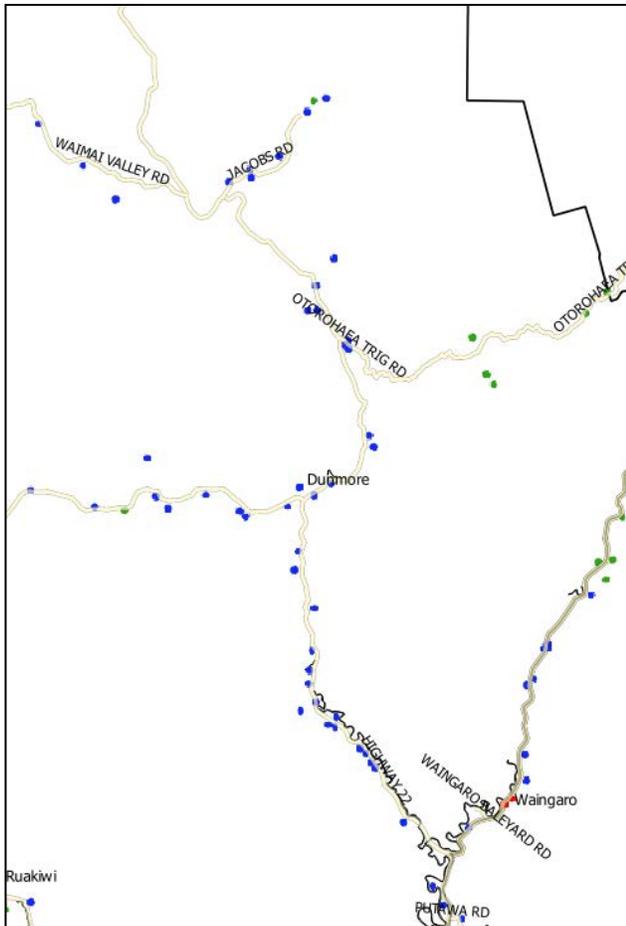
Matira



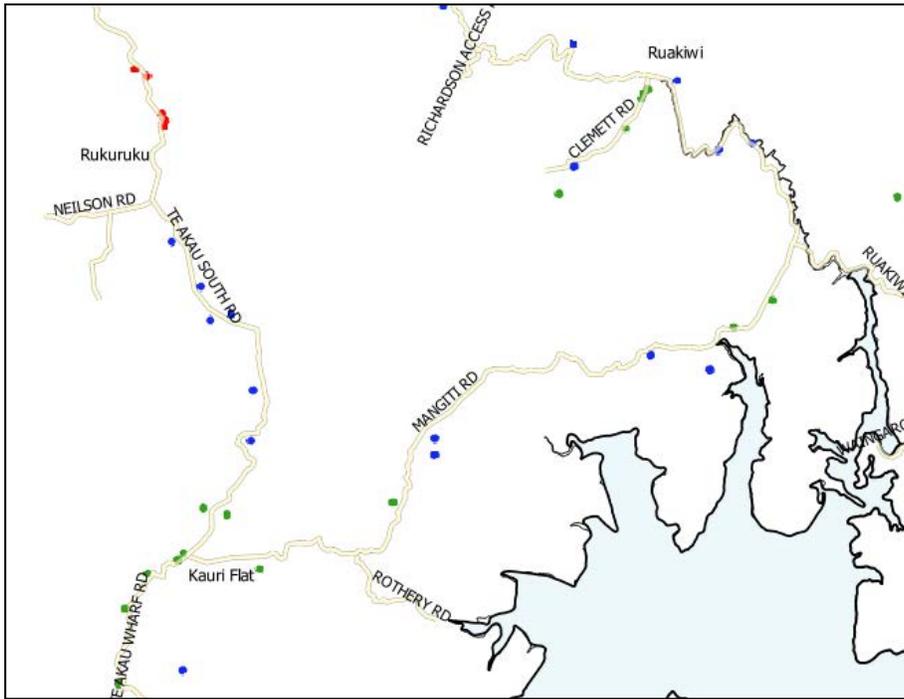
Te Akau



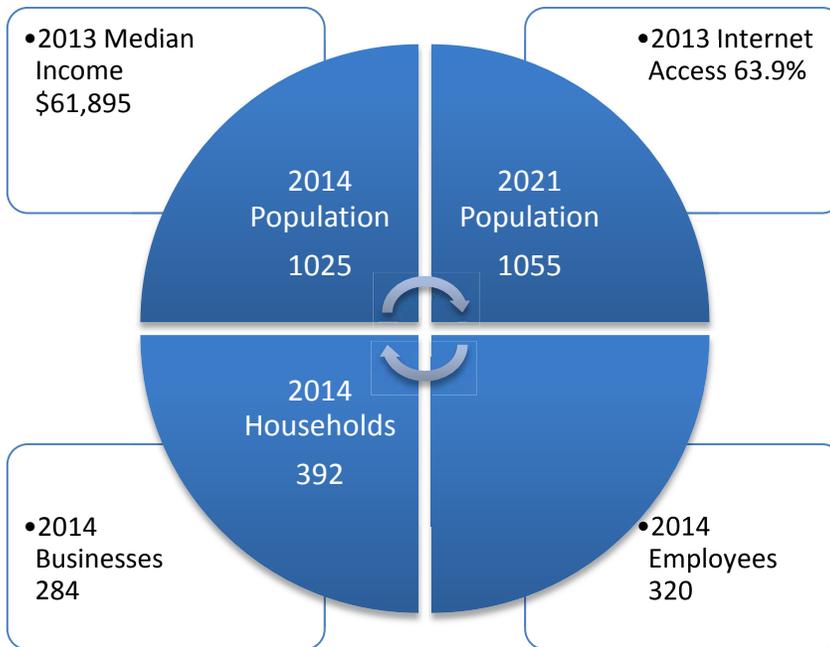
Dunmore



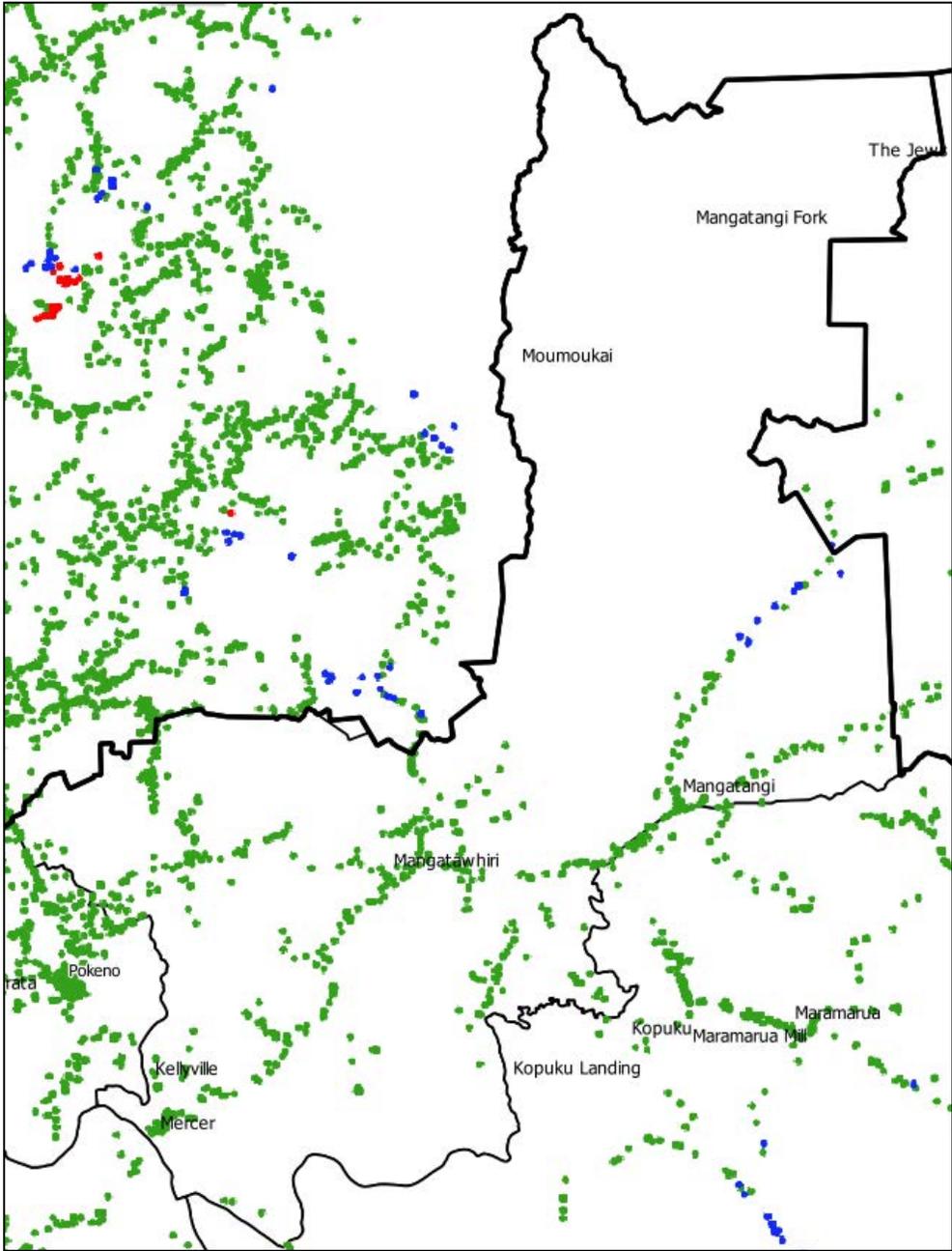
Rukuruku & Ruakiwi



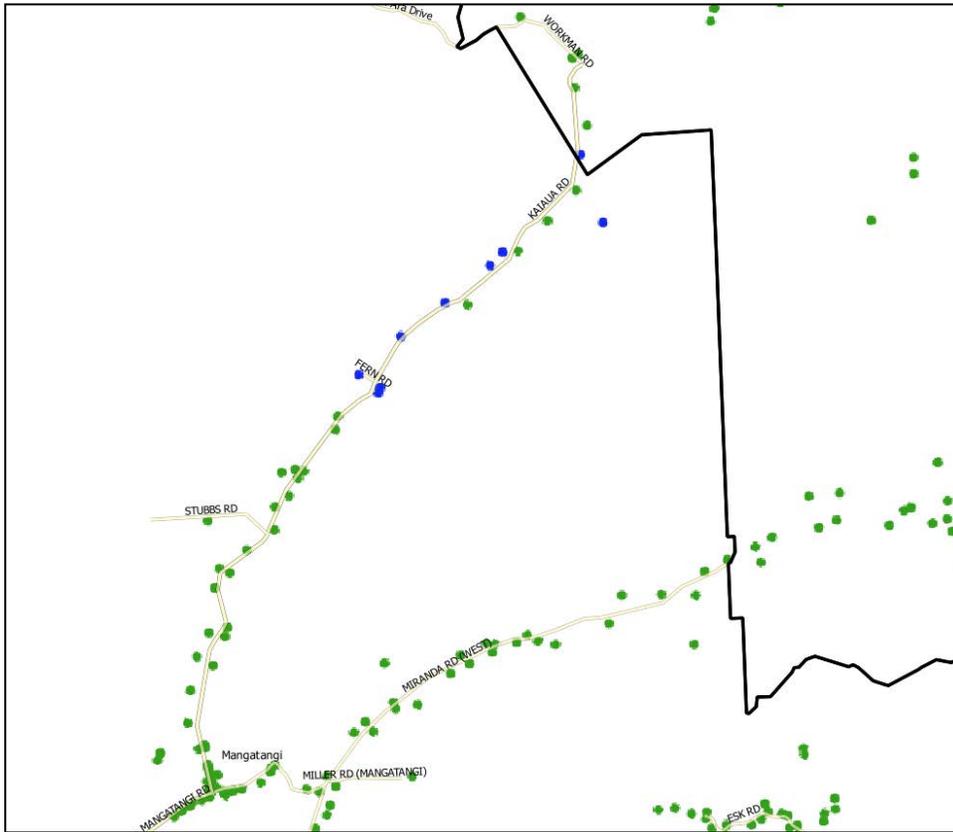
Te Akau Statistics



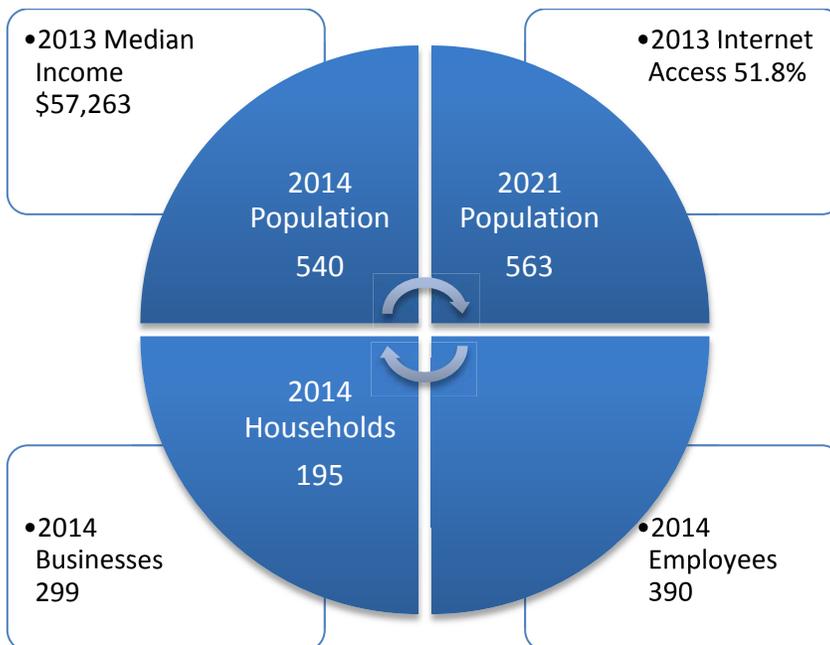
Mangatawhiri



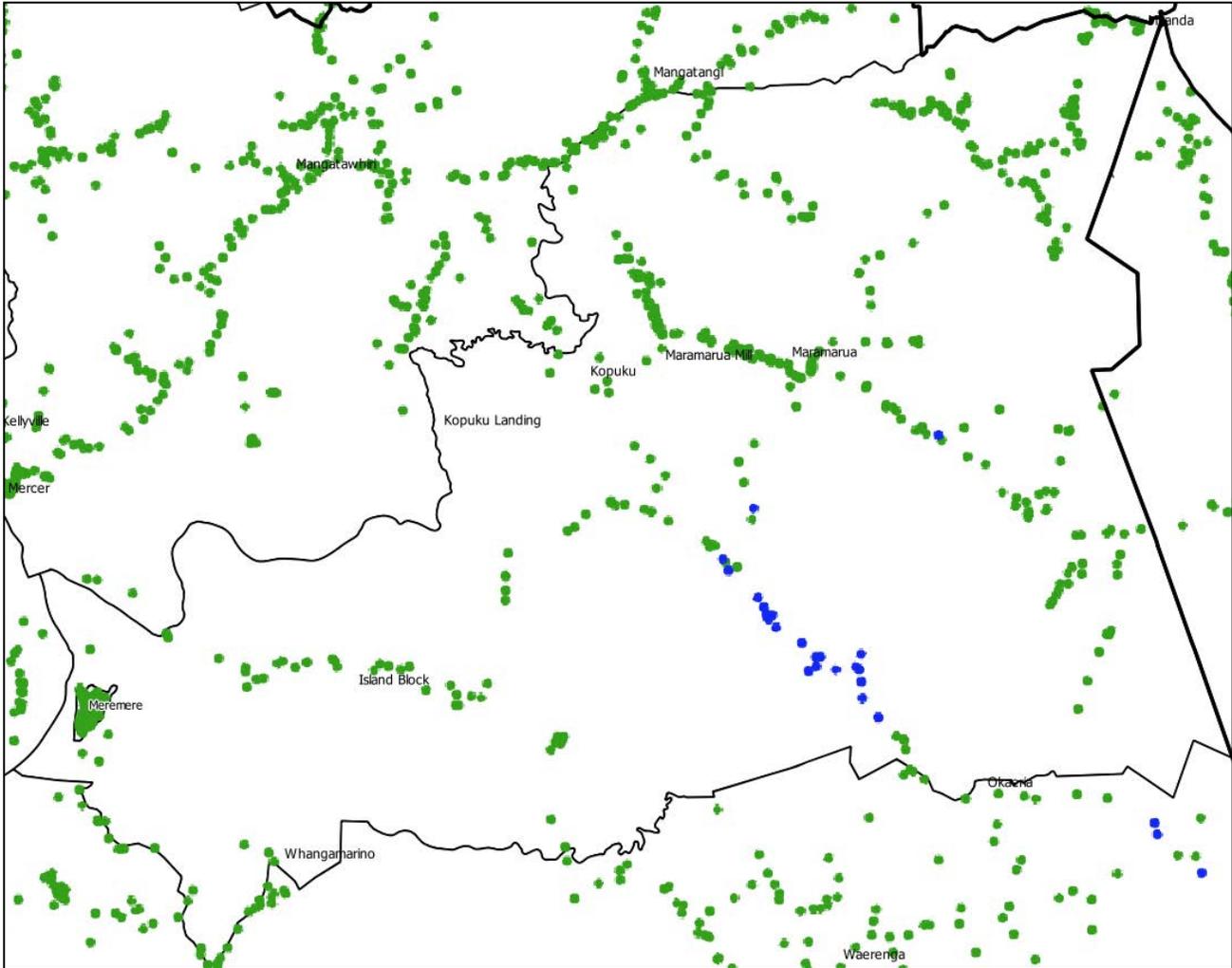
Kaiaua Rd (north of Mangatangi)



Mangatawhiri Statistics



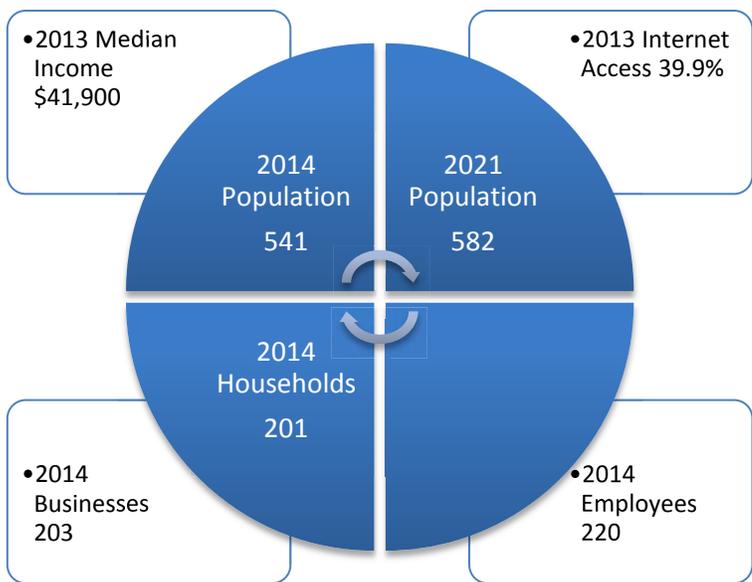
Maramarua



Kopuku Rd (east of Meremere and south of Maramarua)



Maramarua Statistics



Areas of Local authority Assistance

The Council is committed to taking a proactive and responsive approach in working with providers to support deployment of RBI infrastructure and optimise use of the infrastructure, as follows:

a. District Plan

- Since 2010 the Council's Consent team has administered two 'rule books' – the district plan for the Waikato District and the district plan for the ex-Franklin District area.
- Council has commenced the review of its District Plan aimed at integrating the provisions from the former Franklin District Plan with that of the Waikato District Plan. Staff are working at having a draft for approval by Council by October 2016 with notification in 2017.
- This is an opportunity for Council to look at its rule provisions to see how enabling they are (or could be) with regards to supporting economic development without compromising the principles of the Resource Management Act. Council is keen to ensure every community in the district is able to connect to broadband and if there are any impediments in plan provisions that make this goal difficult, we will address it through the District Plan Review.

b. Consents

- The Waikato District Plan has standards for network utilities, and for telecommunications aerials and antennas. There are different requirements across the zones relating to height, setbacks, and antenna dimensions. Resource consent is required where there is non-compliance with these standards. There are also constraints if such facilities are lodged in mapped 'Ridgeline Policy Areas'.
- The Consents team always endeavour to match appropriately experienced staff with customer applications, and key points of contact can be arranged with relevant Consent Team Leaders.
- The Consents team have developed a dedicated pre-application service. This was rolled out for customers in early 2015. It facilitates early discussions with customers about their proposals, with a focus on information requirements for applications, and opportunity to indicate potential process steps and outcomes.
- The Council is investing in E-Application capabilities as a service for customers, so that in time customers may apply for resource consents online.
- The District Plan Review process will provide timely opportunities for network providers to have input into new or changed rules which would assist deployment over coming years.

c. Identification of infrastructure

- The council does not have existing ducts able to be used for laying fibre.
- The council is able to share plans of existing underground utility infrastructure with providers (i.e. water/stormwater/sewage networks); and would welcome reciprocated plans from providers to show the location of existing telecommunications infrastructure (e.g. existing fibre backhaul links to schools).

d. Council land

- Waikato District Council administers and manages over 900 parcels of land. Lands are generally managed as reserves under the Reserves Act 1977 and are of varying classifications depending on their community purpose i.e. Recreation Reserves are able to be utilised under the Act for community recreation, nature reserves for protection of biodiversity values. There are also properties held in fee simple. All properties have been acquired overtime for a specific purpose, some are acquired for infrastructure works such as roading designations which may or may not eventuate. The current use and relevance of that original purpose today will differ on a parcel by parcel basis. For example some recreation classified land is currently disused i.e. tennis courts in small rural communities in the west of the district.

- Essentially it is a case by case basis as to whether Council administered lands can be utilised for infrastructure/utility purposes and that use will be at the discretion of the Asset Management Team Leader in Parks and Facilities based on knowledge and current and future plans for the land in question. Formalisation and documentation of any infrastructure within Council land is paramount to ensure it is noted on the title and Council plans.
- Also note that the Council entered into a Joint Management Agreement with Waikato Tainui. As a part of this agreement any change in use of Council administered land which is crown derived and part of the Waikato-Tainui confiscation area is of interest to the tribe and may incur a right of objection should the change in use require public notification i.e. a lease.

e. Council Funding

- The Waikato District Council has budgeted for \$100,000 in the 2015/25 Long-term Plan to support broadband initiatives in the district. Additional funding is also actively being sought through the Waikato Well-being trust.
- All such funding will be managed by the Economic Development Manager and will be available to be allocated to 'digital enablement' projects and programmes identified in the Digital Enablement Plan (due to be completed by September 18, 2015). It is anticipated that these projects and programmes will be focused on supporting households and businesses to improve their use of technology or on-line services. The funding will not be available to contribute to the direct costs of network providers technical equipment but may be used to support activities associated with the roll-out of UFB2 or RBI2 projects (e.g. communications and engagement with residents/businesses, information collection and investigation work).

f. Road Corridor management

- The Council's Roothing Corridor Engineer has a working relationship with network providers so that any new assets are discussed prior to any application receipt. This is in order to establish the level of detail required due to the potential impact on the roading corridor.
- The Roothing Corridor Engineer is a new position where service providers are not charged for the corridor engineer's time. Often site visits are required to confirm layline positions, identify issues before work construction and expectations of reinstatement before application is lodged. This demonstrates a viable strategy for corridor management with best practice and planning interests protected.
- The Council values this coordination between service providers and various internal departments so that a coordinated response is consistent in approach and in line with the National Code of Practice for Utility Operators' Access to Transport Corridors (Nov 2011). Internal stakeholders include Strategic Planning, Design, Project, 3Waters, Parks and Consents along with the external providers. The outcome gives Roothing a representative who provides input, identifies conflicts and highlights shortfalls in approach and communicates standard requirements before getting to advanced stages. Issues are rare and managed effectively causing minimal lost time and opportunity due to the good working relationships.
- Applications are received via the RAMM Corridor Access Requests by the Roothing Compliance Officer and projects pertaining to new assets are checked with the Corridor Engineer for approval. Submissions are automated online with monitored response times. As-built files are collected for verification and project sign off.
- Refer Attachment C for endorsements from network providers' sub-contractors (Counties Power Ltd. and Connect8) concerning the Council's road corridor management function.
- The council could provide it's network maintenance contractor to providers for the purpose of maintaining access tracks to cellular towers in rural areas (which may be more cost-effective for providers).

g. Council services

- As Waikato District Council moves to provide more of its services on the internet, high speed connections will become increasingly important to have meaningful engagement with our communities. With all of our communities, but specifically our rural and remote communities, the internet will provide a mechanism they can use to have real input into the direction and governance of their communities. As well as future interactions the Council is moving to provide all its services on-line in the next 24 months to ensure that customers can view and interact with all council services without the need to come into an office or service centre.
- There are also a number of future requirements that the Council would like to be able to investigate delivering, that build on a high speed data connection. One of the factors considered in declining the electronic voting trial was the lack of district wide internet coverage.

Mobile Black Spot Fund

Known Mobile Blackspots in the Waikato District

The following maps identify the known mobile blackspots in the Waikato District. Community and anecdotal feedback suggests that in some areas, the coverage maps from providers do not always equate with experience. These cases are duly noted when relevant.

Coverage maps have been sourced from mobile providers (Spark, Vodafone and 2degrees) as well as the signal.nz¹⁴ mobile coverage website. Where possible, vehicle counts from NZTA¹⁵ have also been included as a measure of the volume of potential users travelling through known mobile blackspot areas. The council has not prioritised the mobile blackspot areas as limited data is available for many of them (besides household numbers in the vicinity) and the council recognises that if providers receive funding to address broadband coverage gaps in our prioritised RBI2 locations, the same solutions may alleviate mobile blackspots in those areas.

Area	MBS
Maramarua	Kopuku Rd - east of Meremere and south of Maramarua Hampton Downs
Mangatawhiri	Kaiaua Rd - north of Mangatangi
Onewhero	Tuakau Bridge - Port Waikato Rd Hwy 22 Tuakau to Pukekawa Hwy 22 Pukekawa to Glen Murray Port Waikato - Waikaretu Rd
Naike	Naike & surrounds Hwy 22 Glen Murray to Naike Hwy22 Naike to Pepepe
Waerenga	Waerenga Rd - near Waerenga
Waikato Western Hills	Waingaro Waitetuna - Cogswell Rd Te Akatea

¹⁴see www.signal.nz

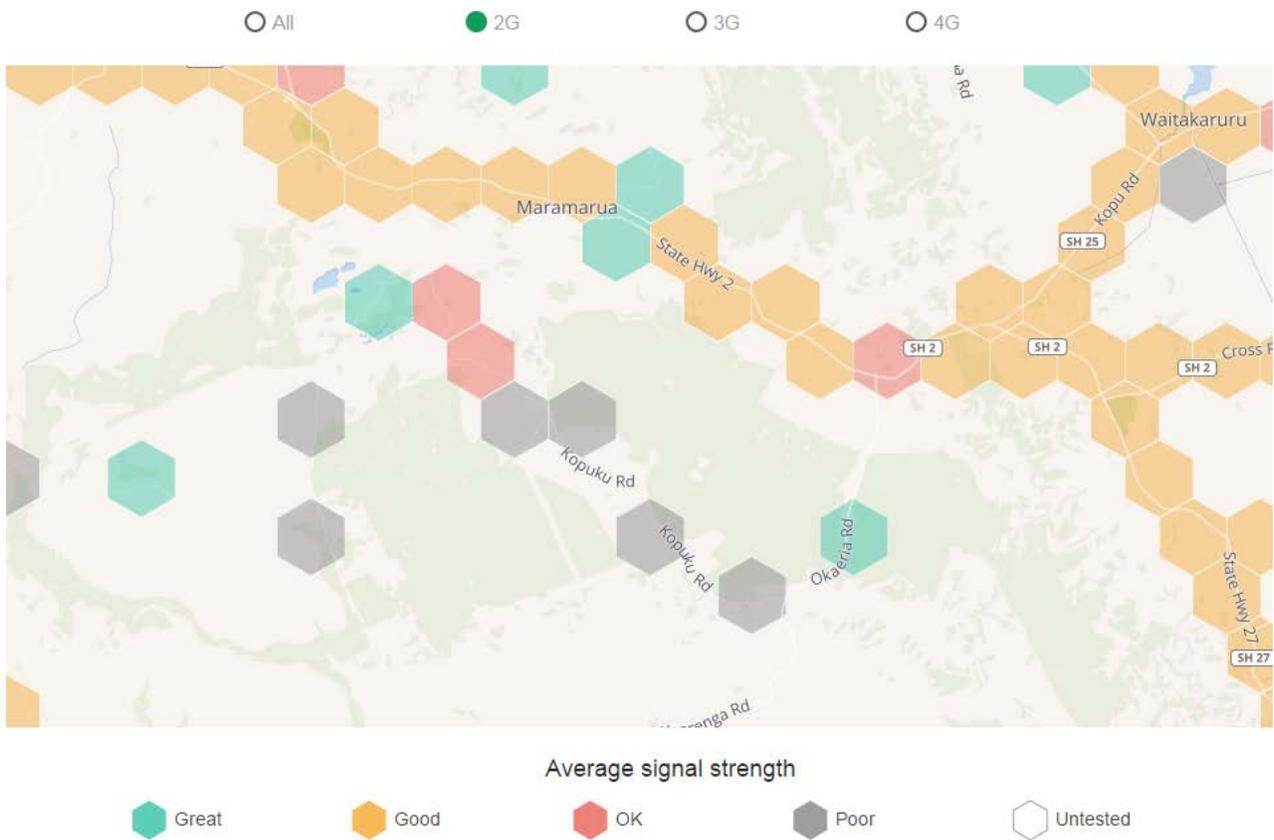
¹⁵see <http://www.nzta.govt.nz/resources/state-highway-traffic-growth/>

Te Akau	Te Akau township Rukuruku Ruakiwi Waimai Dunmore Matira Pepepe
Kainui	Kainui - between SH1 and SH1B
Te Uku	SH23 between Whatawhata & Raglan Coast Road south of Raglan Bridal Veil Falls – Raglan -> Kawhia road
Tamahere Tauwhare	Tauwhare surrounds
Eureka	SH26 Hamilton to Eureka SH26 Eureka to Morrinsville
Te Kauwhata	In township Vineyard Rd

Maramarua Mobile Coverage

Mobile coverage is shown as patchy or non-existent by all carriers in the Kopuku Rd area.

Kopuku Rd

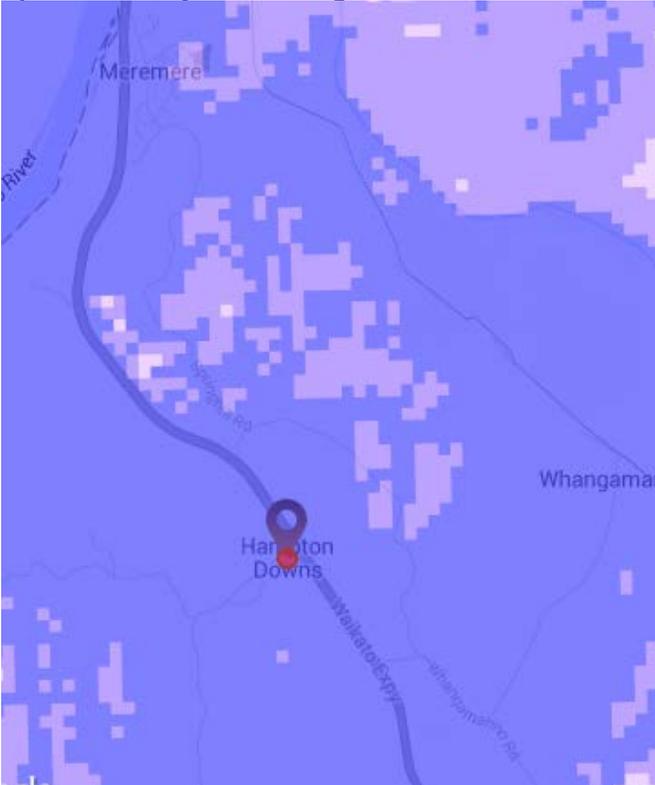


Source - <http://signal.nz/>

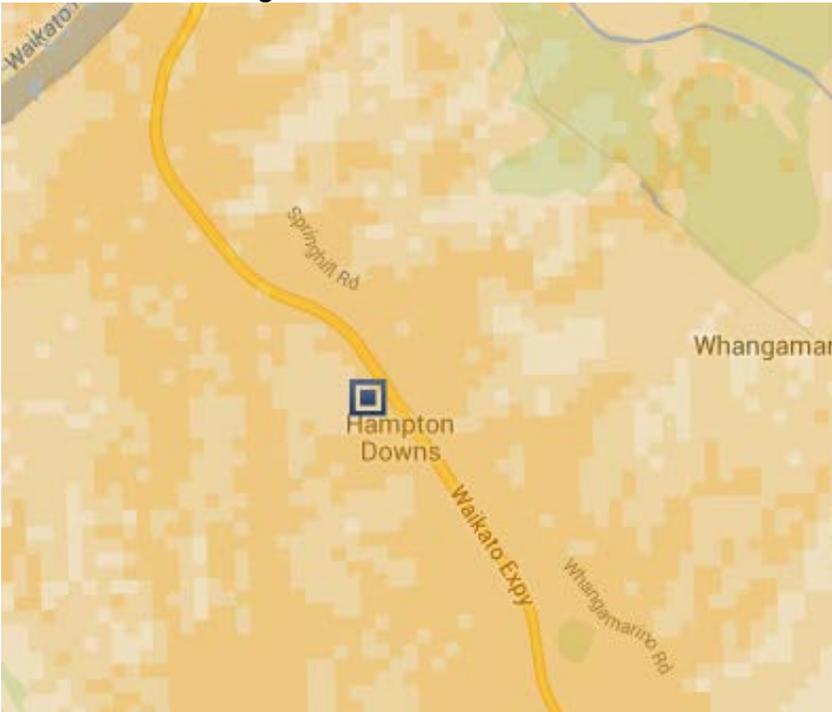
Hampton Downs

Hampton Downs outside of the state highway has been identified by the community as a mobile blackspot. Coverage is shown as 'ok' by the mobile carriers.

Spark & Skinny 3G coverage



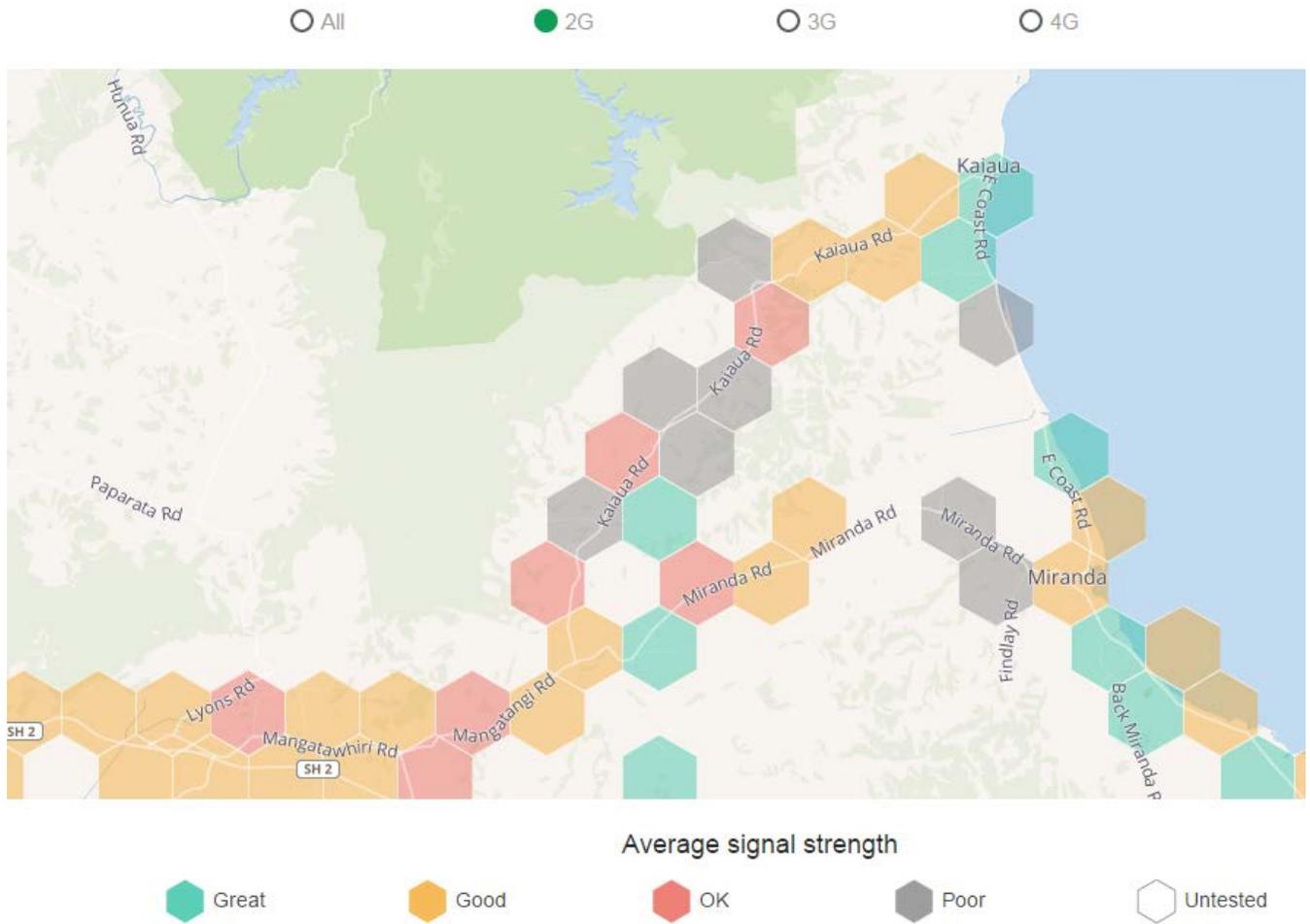
Vodafone 2G coverage



Mangatawhiri Mobile Coverage

Mobile coverage is shown as patchy by all carriers in the Kaiaua area, which is a popular visitor destination.

Kaiaua Rd (north of Mangatangi)

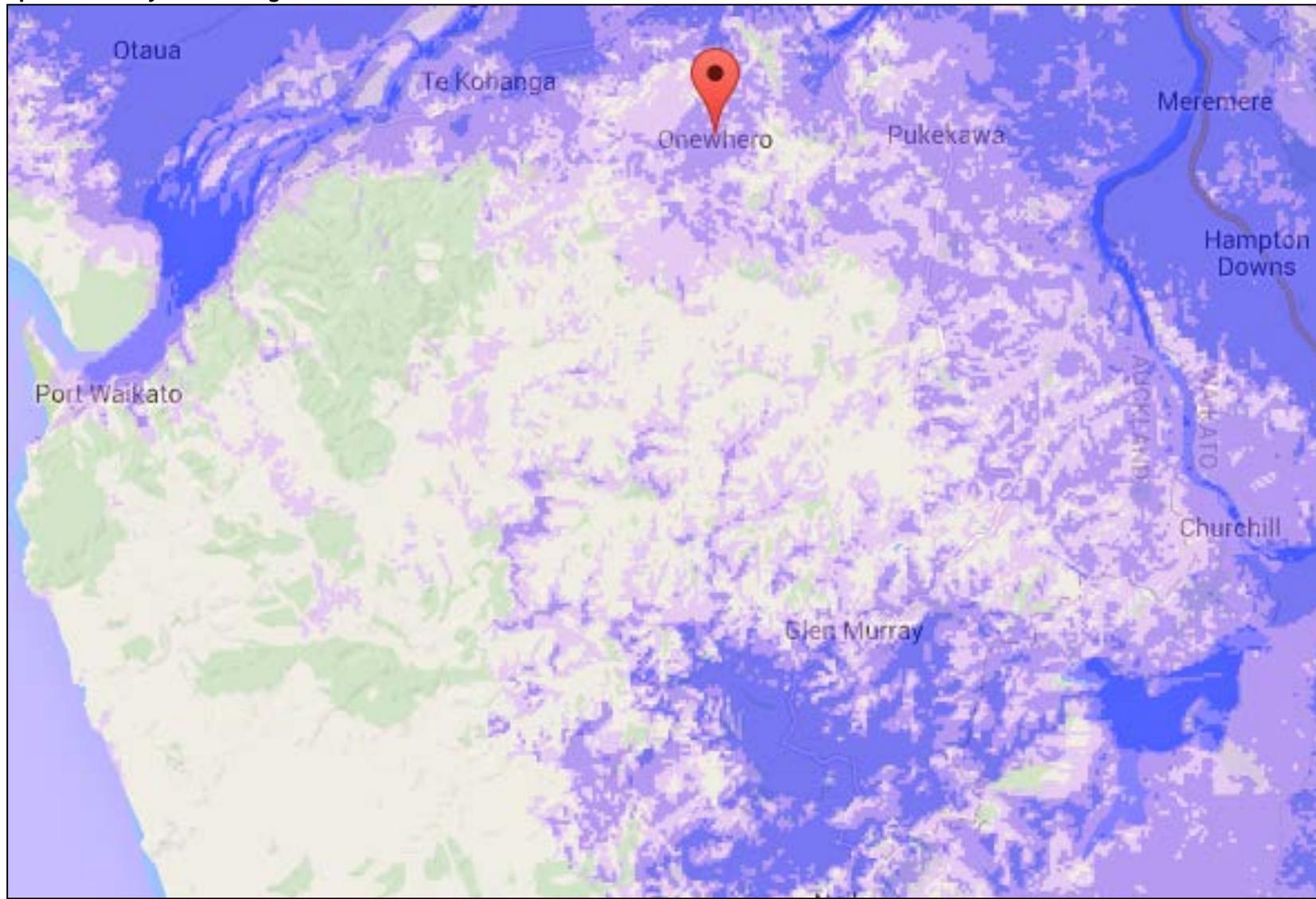


Source - <http://signal.nz/>

Onewhero Mobile Coverage

Mobile coverage is poor or non-existent across most of the Onewhero/Port Waikato area.

Spark & Skinny 3G coverage



Vodafone 2G Coverage

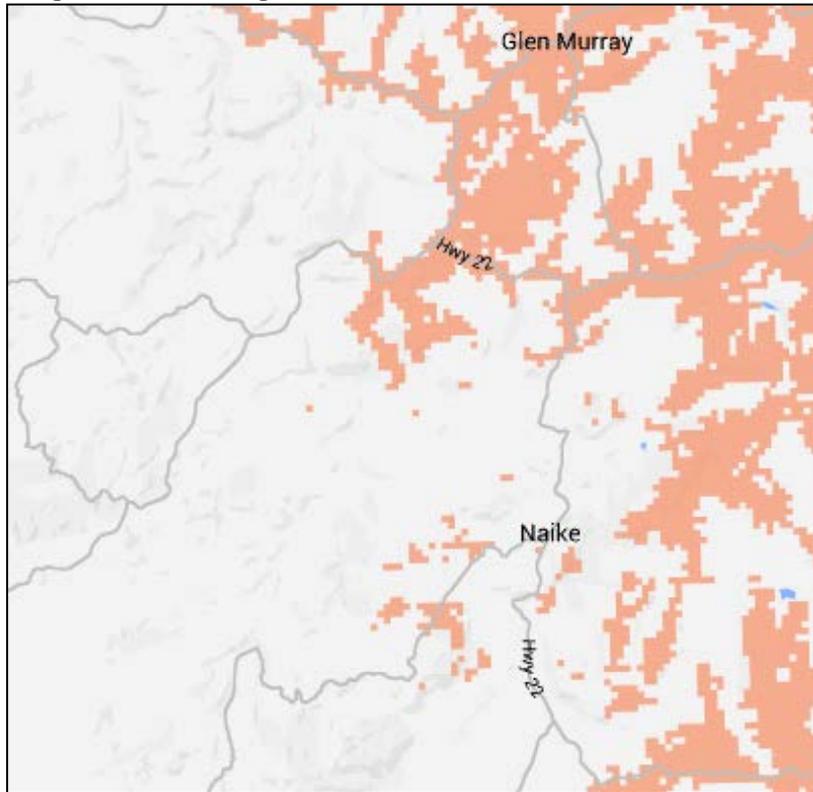


2degrees 2G coverage

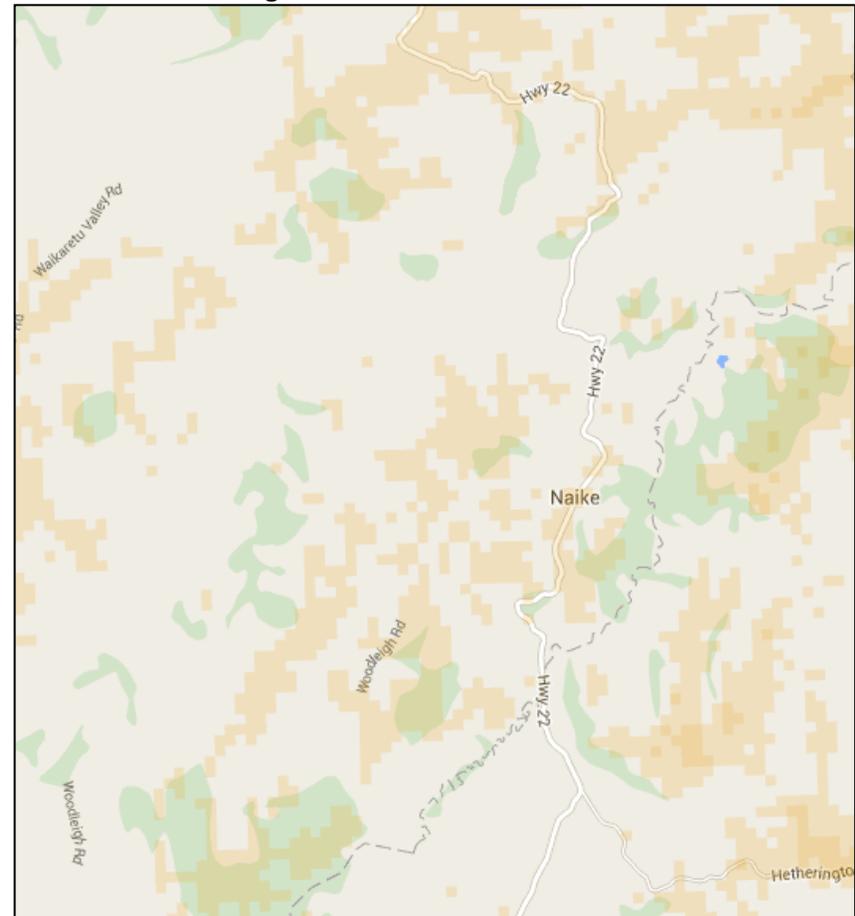


Naike Mobile Coverage

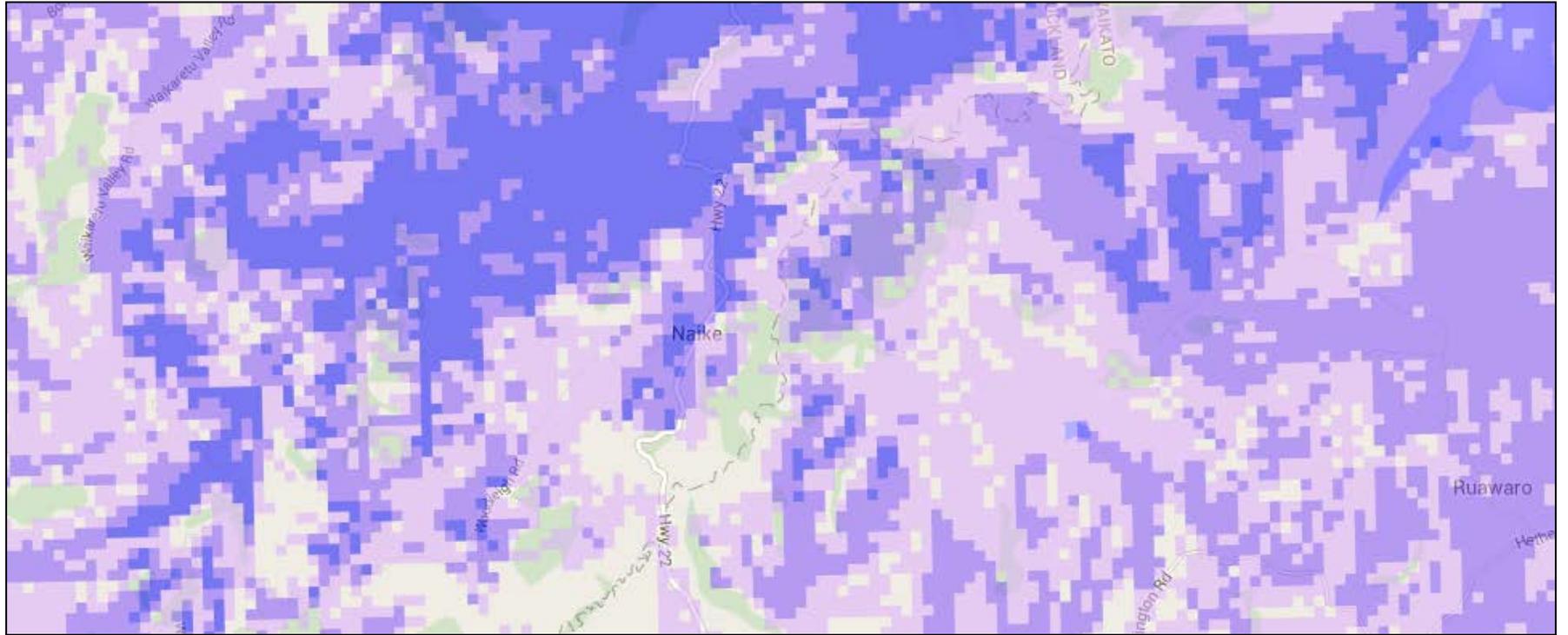
2degrees 2G coverage



Vodafone 2G coverage



Spark & Skinny 3G coverage



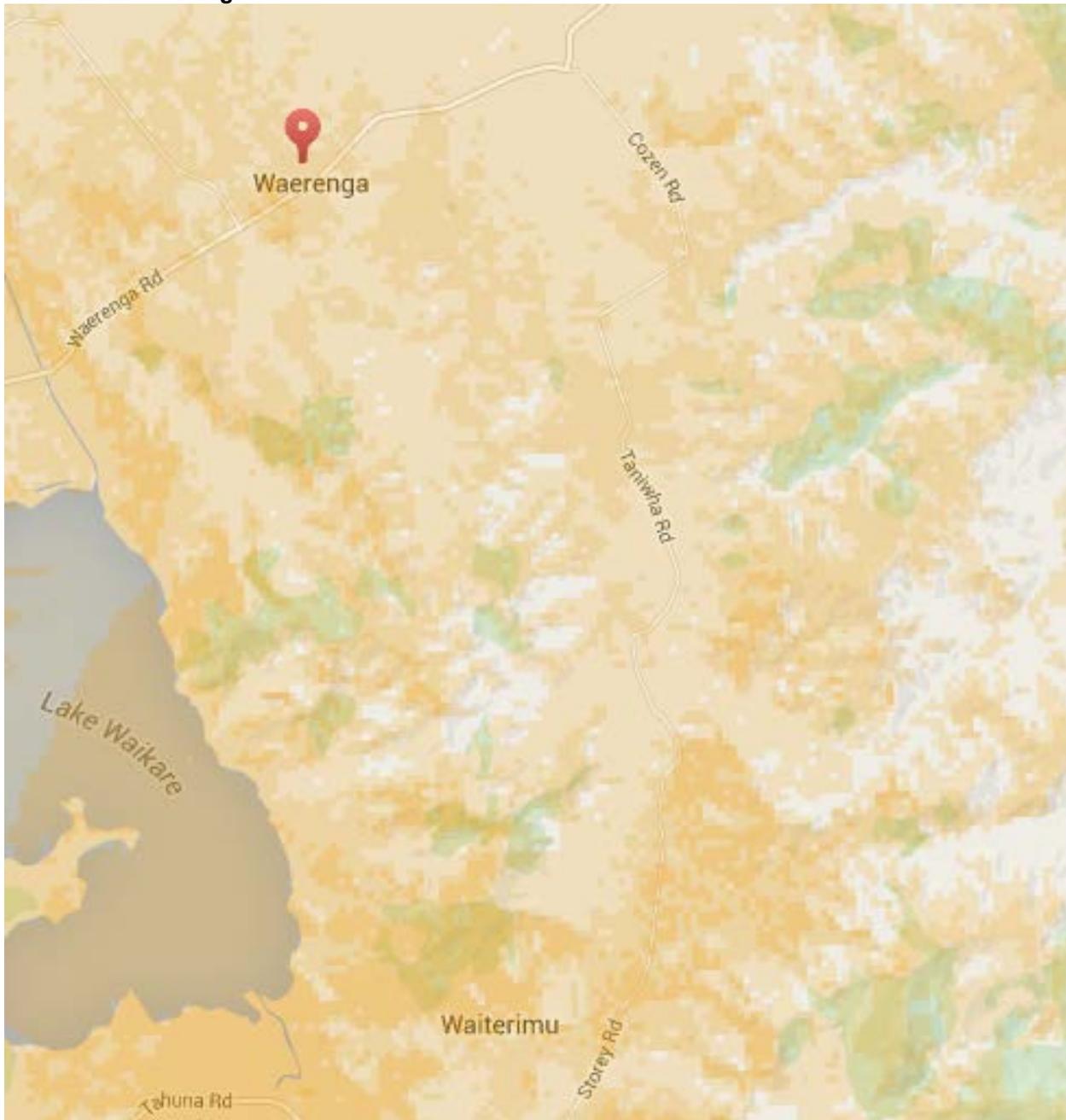
Waerenga Mobile Coverage

Mobile coverage is shown as mostly ok by all of the carriers in the Waerenga area but is patchy around Waerenga Rd near Waerenga. This area has been identified by the community as having poor coverage.

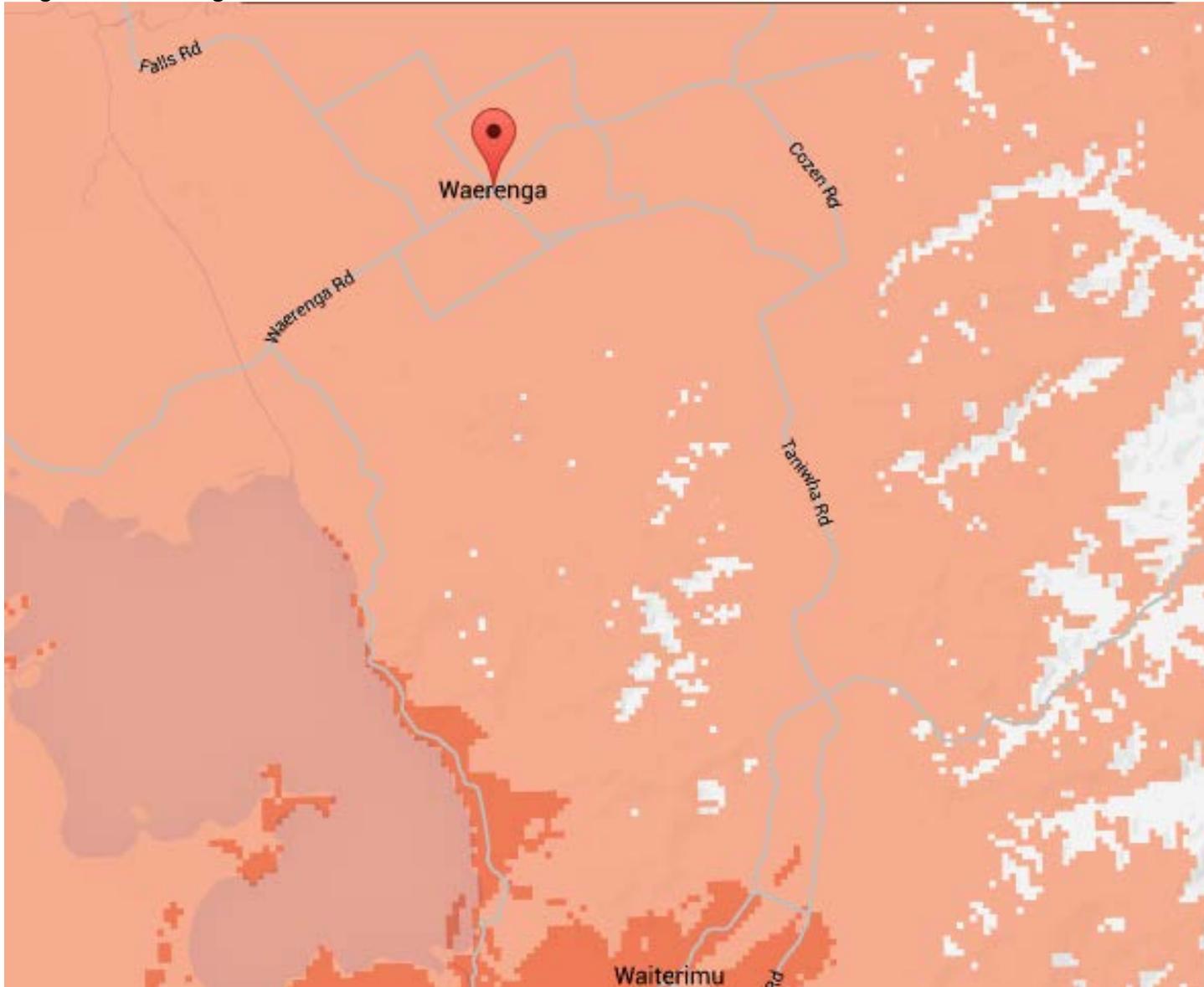
Spark & Skinny 3G coverage



Vodafone 2G coverage



2degrees 2G coverage



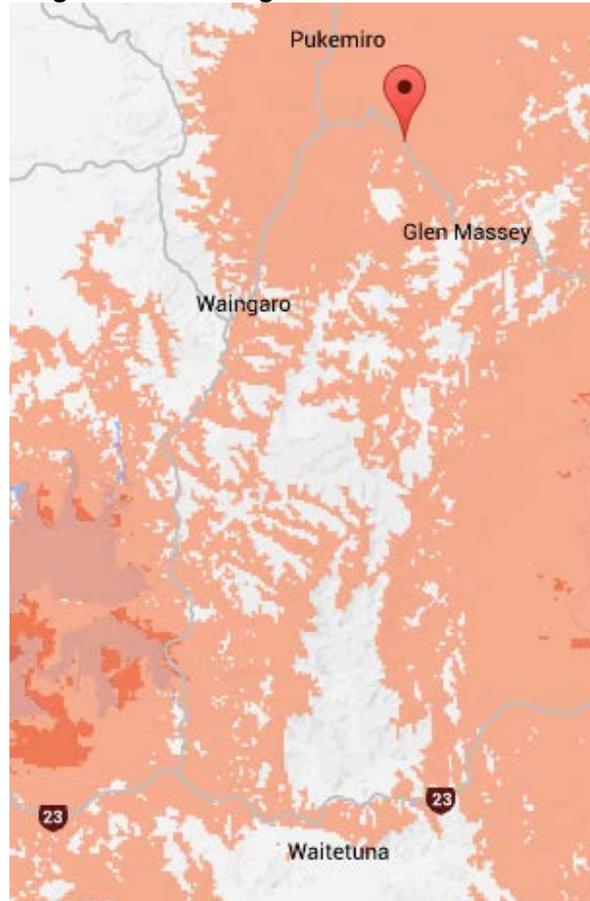
Waikato – Western Hills Mobile Coverage

Mobile coverage through this area is limited especially south of Waingaro

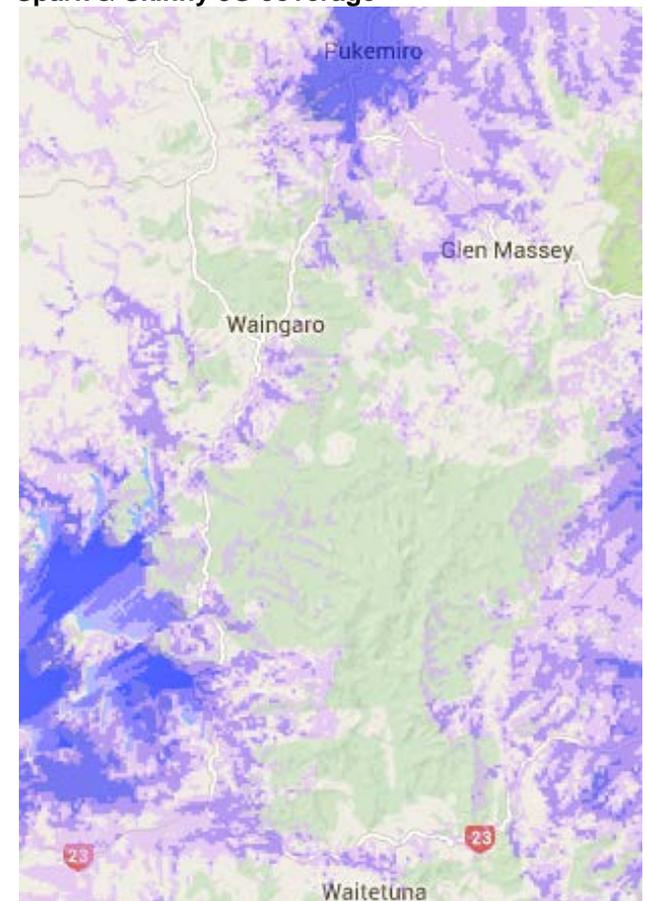
Vodafone 2G coverage



2degrees 2G coverage



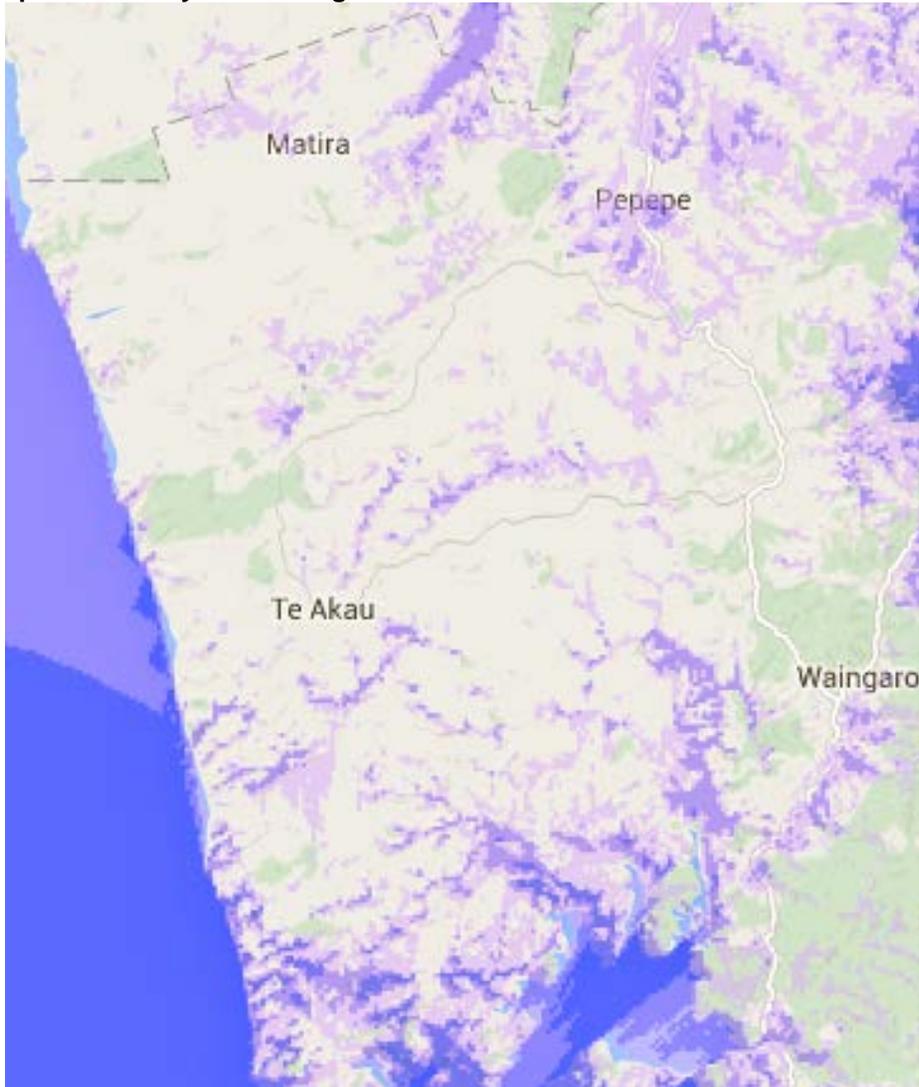
Spark & Skinny 3G coverage



Te Akau Mobile Coverage

MBIE have assessed coverage in Te Akau township as poor although this is not reflected in the coverage data from Chorus. The entire area is shown as having little or no mobile coverage by any of the mobile carriers.

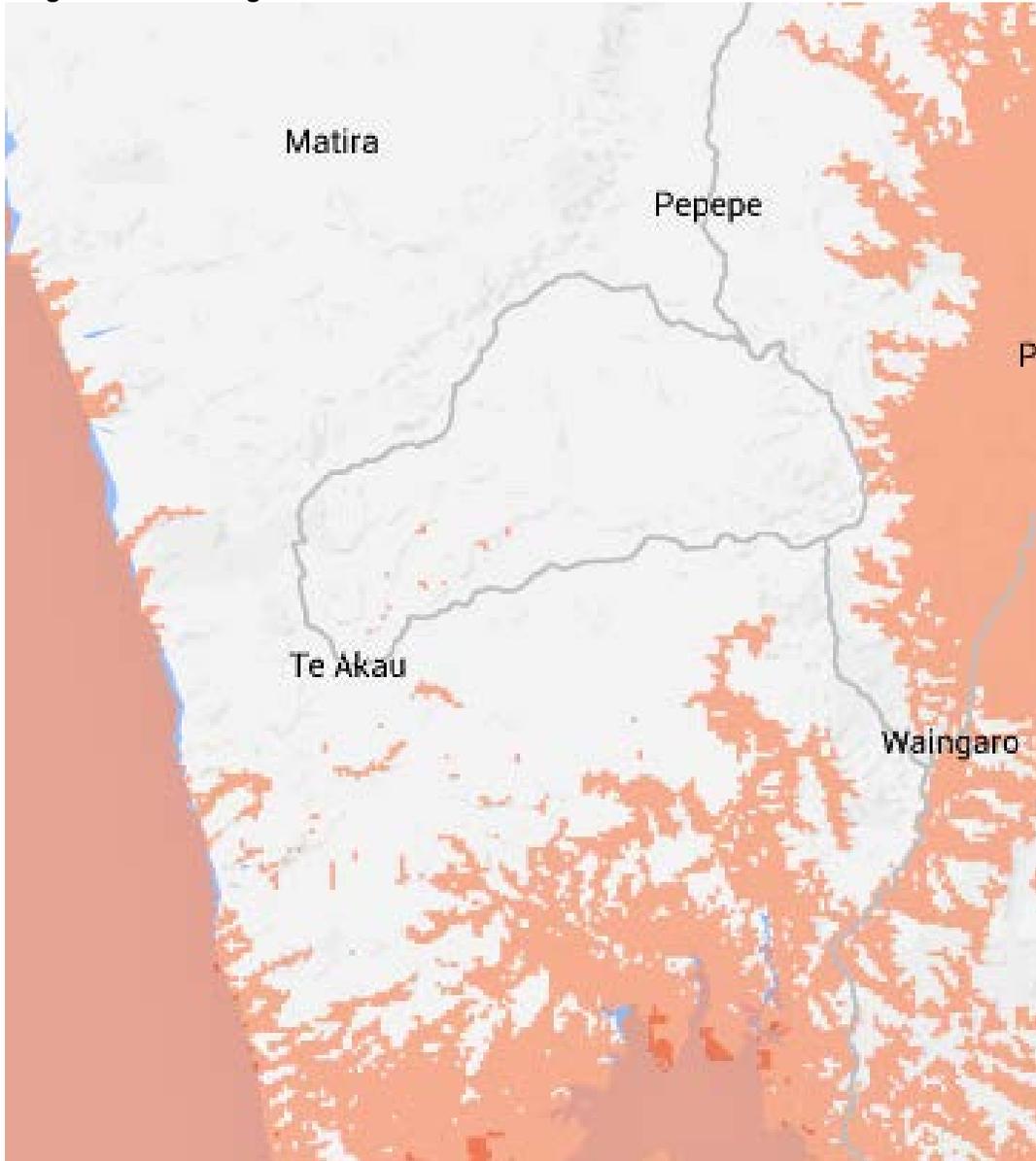
Spark & Skinny 3G coverage



Vodafone 2G coverage

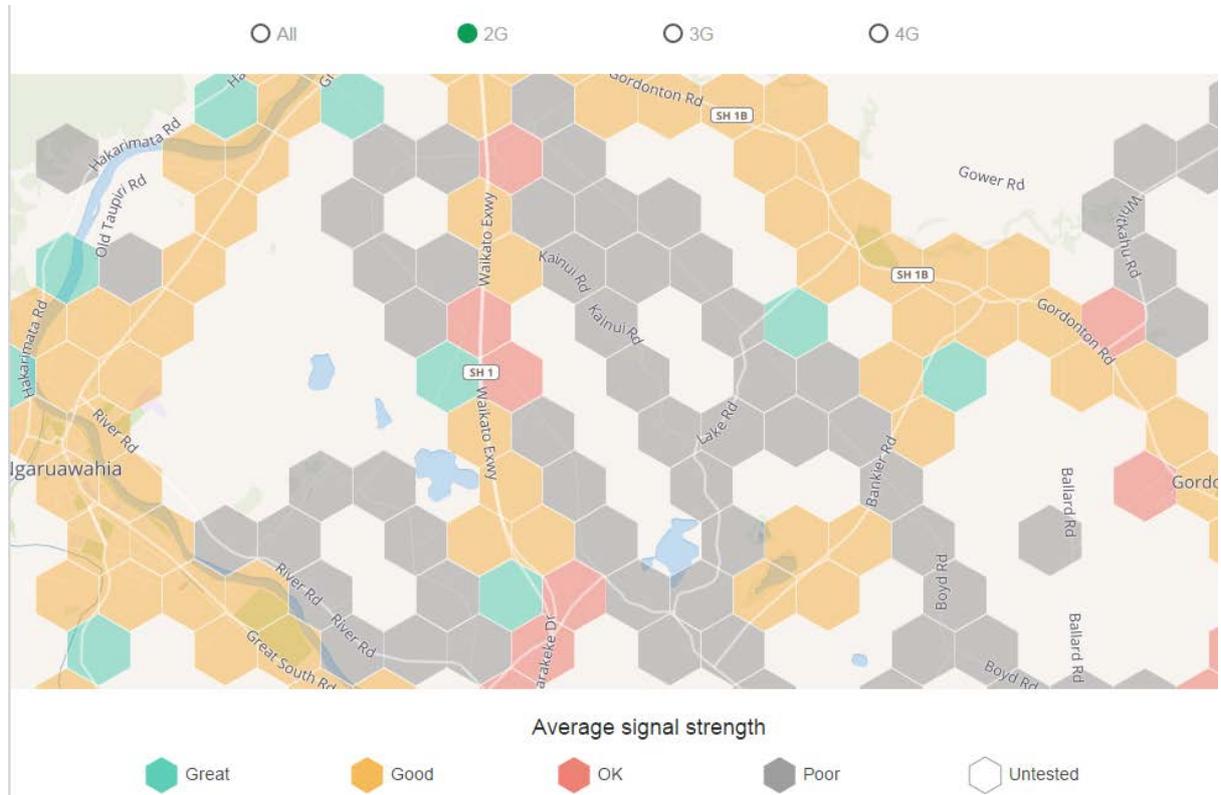


2degrees 2G coverage



Kainui Mobile Coverage

Mobile coverage is generally good on SH1 and SH1B but the area between the two shows as poor.

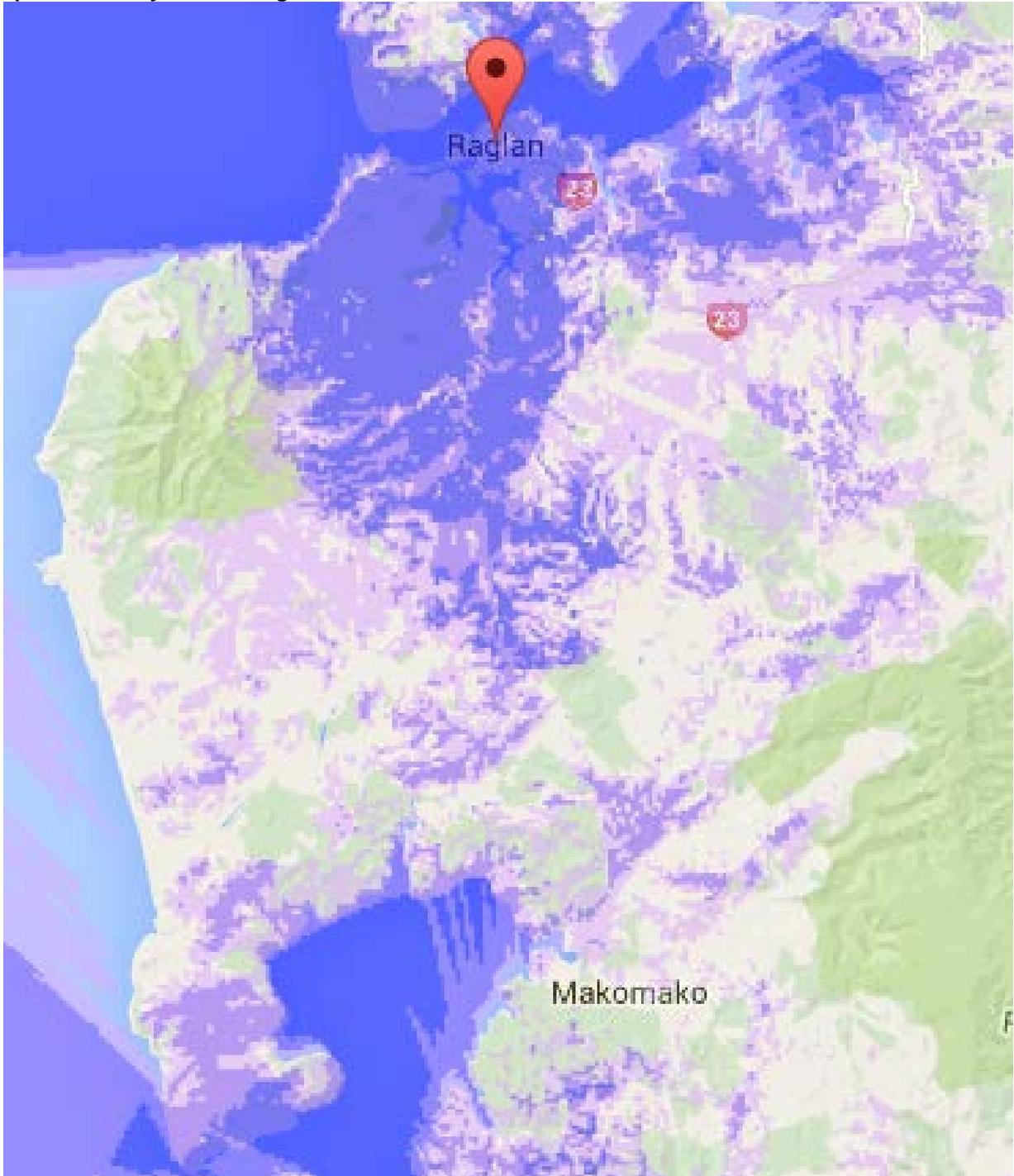


Source - <http://signal.nz/>

Te Uku Mobile Coverage

Mobile coverage is poor or non-existent across much of the Te Uku area.

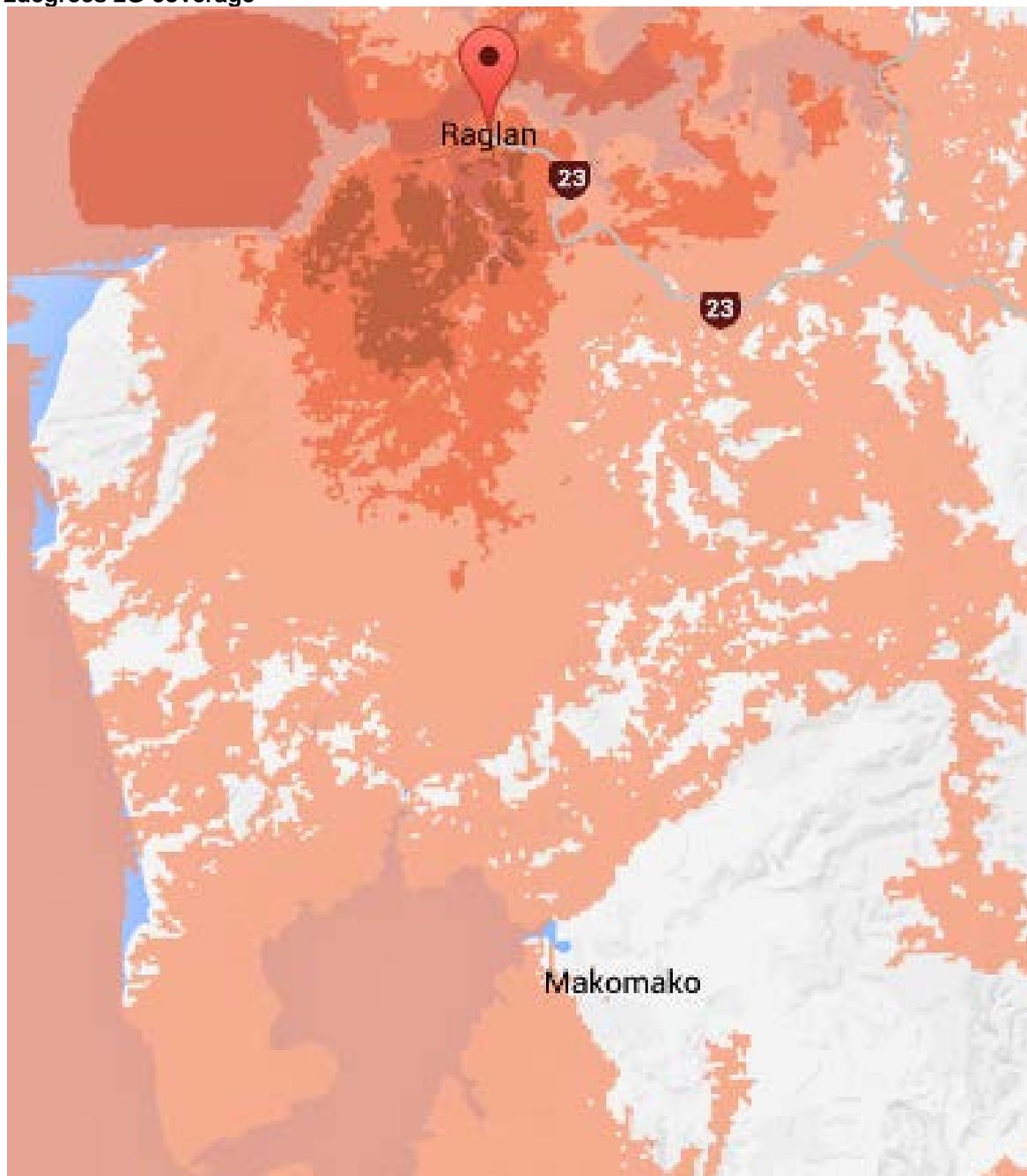
Spark & Skinny 3G coverage



Vodafone 2G coverage



2degrees 2G coverage

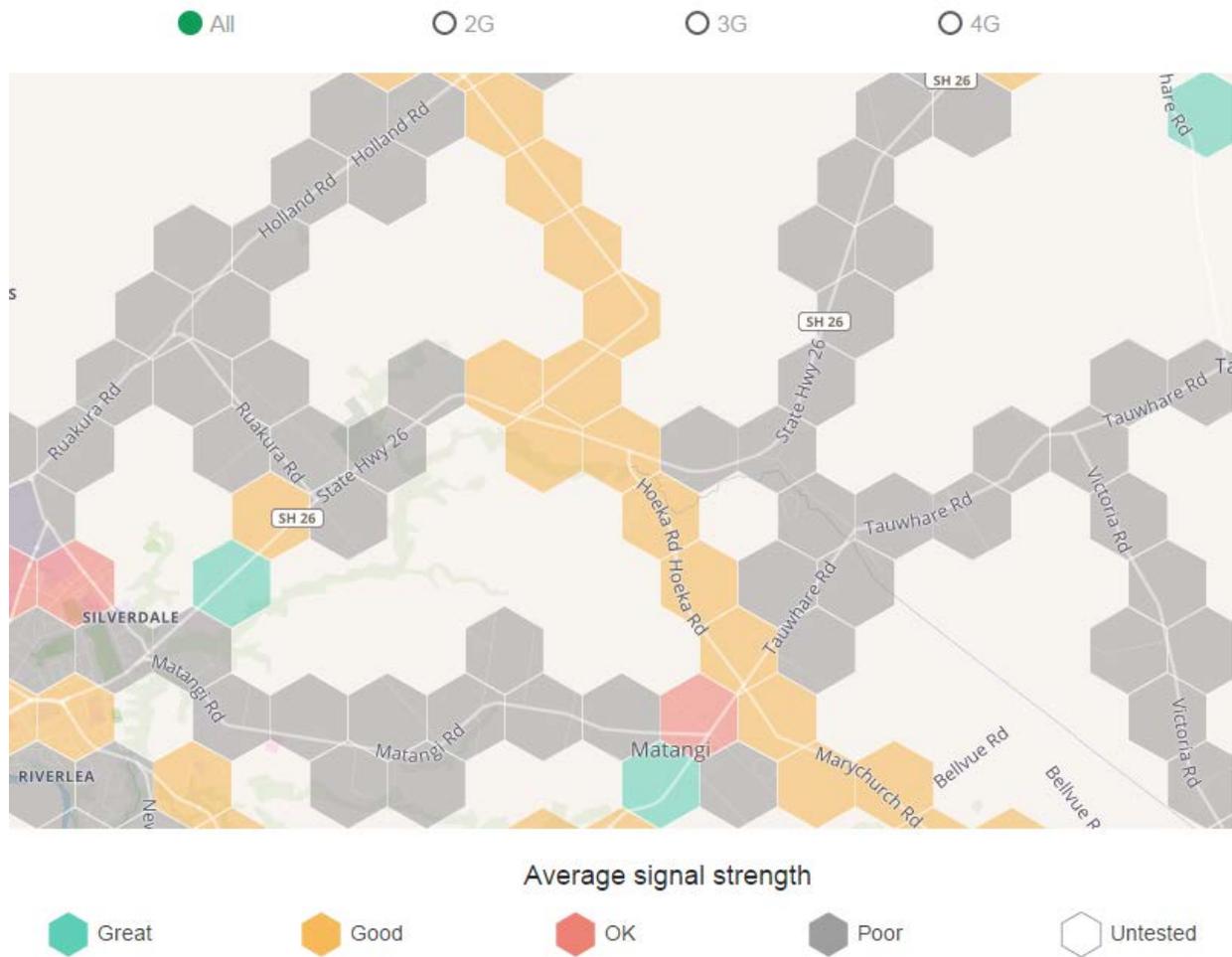


Traffic Volumes 2012-14

SH	Description	Direction	AADT (2012)	AADT (2013)	AADT (2014)	% Heavy
23	20m West of Hawk St	Both	11459	11190	11360	4
23	40m East of Newcastle Rd	Both	10402	10842	10711	6
23	880m East of Kakaramea Rd	Both	5301	4995	5621	5
23	200m West of Maori Point Rd	Both	6235	6013	6429	5
23	90m East of Wrights Rd	Both	3745	3655	3628	5

Eureka Mobile Coverage

There are mobile blackspots on SH26 from Hamilton to Eureka and SH26 from Eureka to Morrinsville



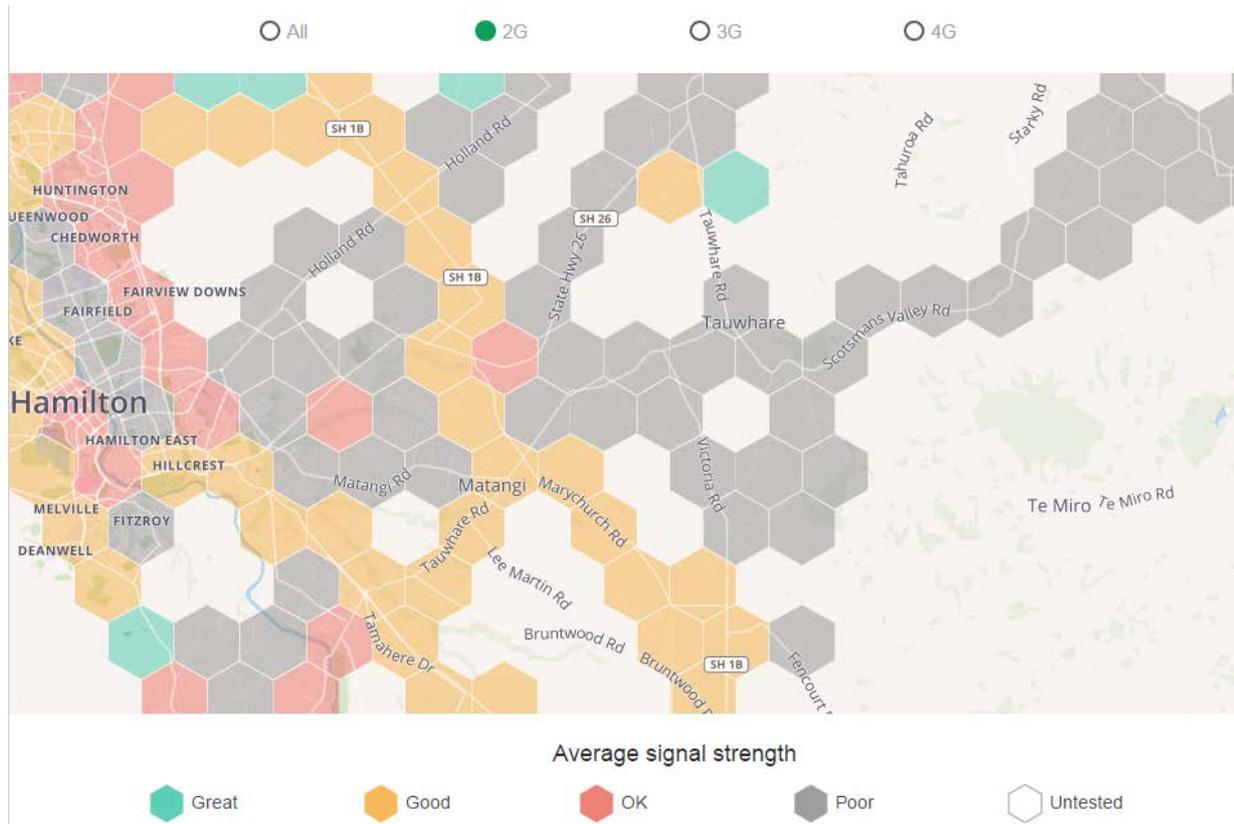
Source - <http://signal.nz/>

Traffic Volumes 2012-14

SH	Description	Direction	AADT (2012)	AADT (2013)	AADT (2014)	% Heavy
26	875m West of Lissette Rd	Both	5849	6027	5771	7
26	MATANGI - Telemetry Site 116 (New 2014)	Both	9432	8782	9079	6
26	700m East of Platt Rd	Both	4917	4858	4867	9

Tamahere - Tauwhare Mobile Coverage

The Tauwhare surrounds show poor coverage.

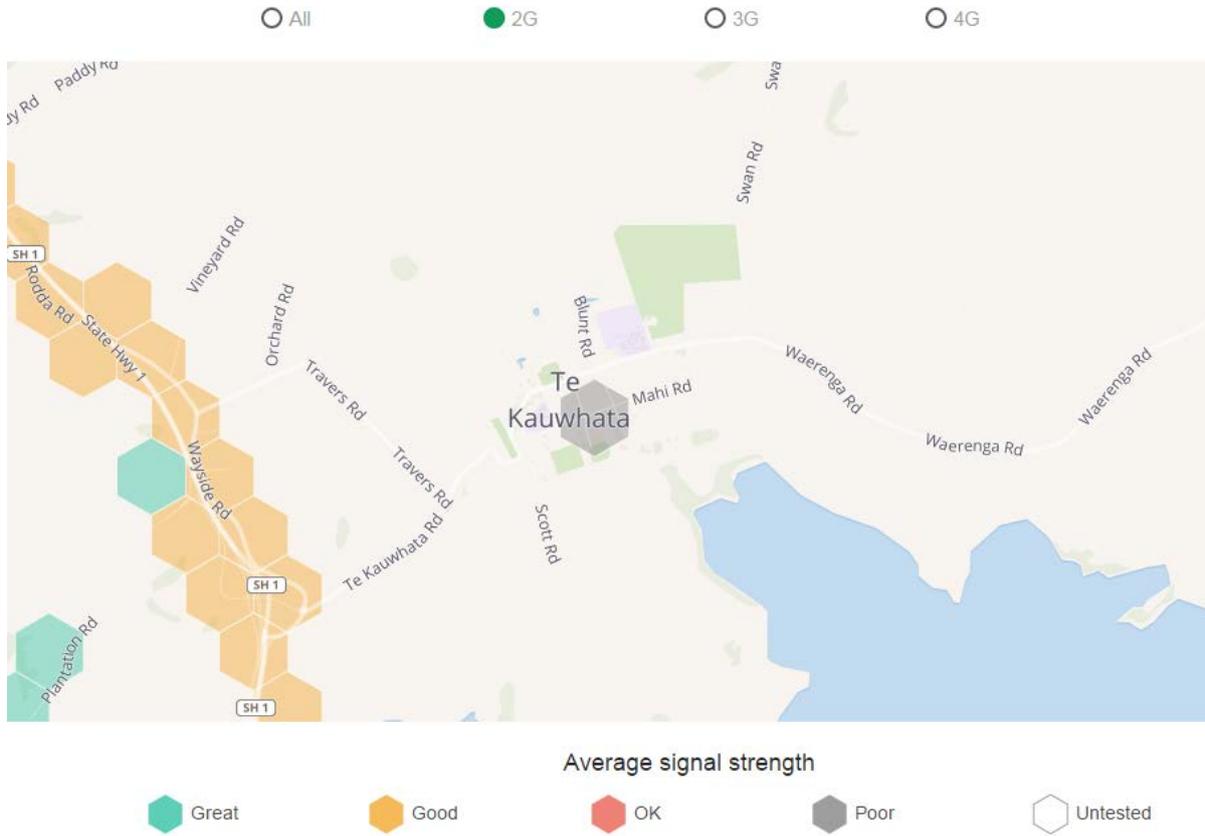


Traffic Volumes 2012-2014

SH	Description	Direction	AADT (2012)	AADT (2013)	AADT (2014)	% Heavy
1B	200m before Tauwhare Intersection	Both	3623	3748	3604	10
1B	200m after Tauwhare Intersection	Both	3876	4072	3957	7

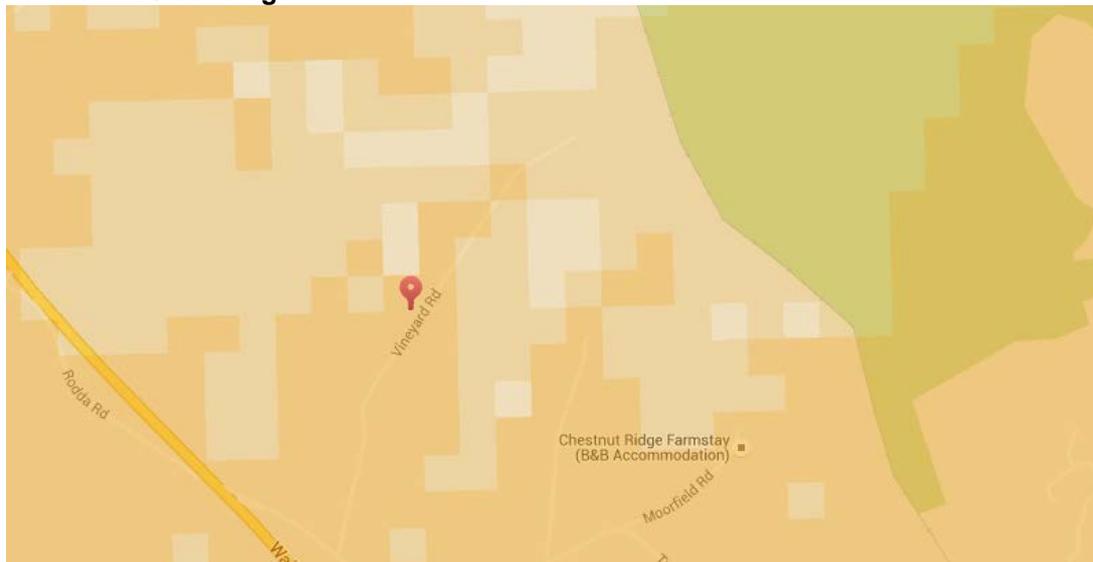
Te Kauwhata Mobile Coverage

Signal shows poor mobile coverage in the township but this is not reflected in the mobile carriers coverage maps. Vineyard Rd has also been identified by locals as a blackspot. There is a planned subdivision for this area.

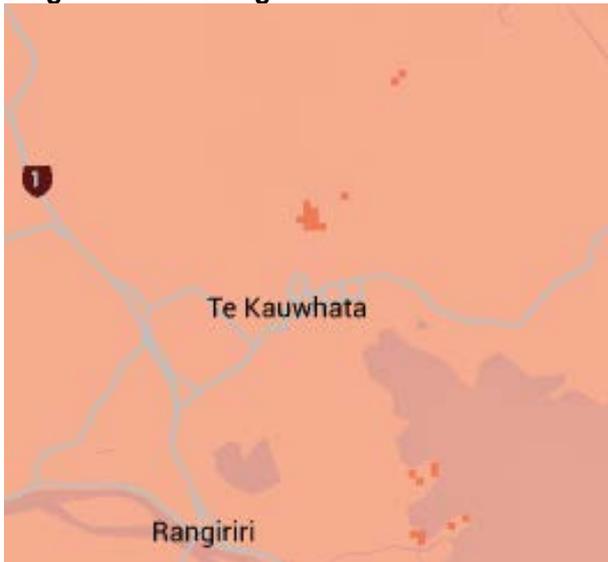


Vineyard Rd

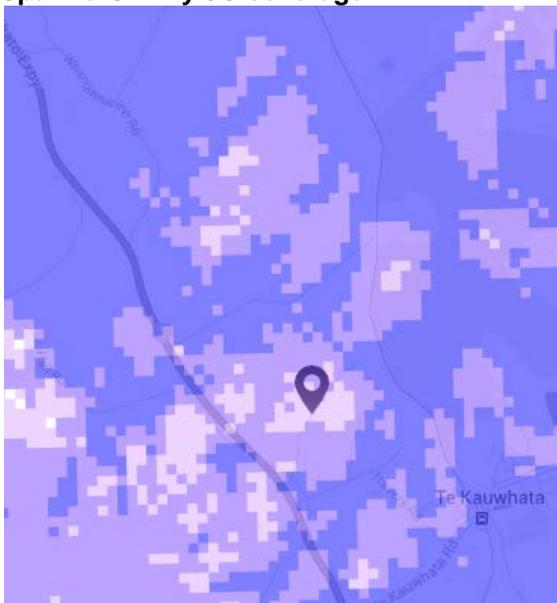
Vodafone 2G coverage



2degrees 2G coverage



Spark & Skinny 3G coverage



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e. Road Corridor management

- The Council's Roding Corridor Engineer has a working relationship with network providers so that any new assets are discussed prior to any application receipt. This is in order to establish the level of detail required due to the potential impact on the roading corridor.
- The Roding Corridor Engineer is a new position where service providers are not charged for the corridor engineer's time. Often site visits are required to confirm layline positions, identify issues before work construction and expectations of reinstatement before application is lodged. This demonstrates a viable strategy for corridor management with best practice and planning interests protected.
- The Council values this coordination between service providers and various internal departments so that a coordinated response is consistent in approach and in line with the National Code of Practice for Utility Operators' Access to Transport Corridors (Nov 2011). Internal stakeholders include Strategic Planning, Design, Project, 3Waters, Parks and Consents along with the external providers. The outcome gives Roding a representative who provides input, identifies conflicts and highlights shortfalls in approach and communicates standard requirements before getting to advanced stages. Issues are rare and managed effectively causing minimal lost time and opportunity due to the good working relationships.

- Applications are received via the RAMM Corridor Access Requests by the Roadway Compliance Officer and projects pertaining to new assets are checked with the Corridor Engineer for approval. Submissions are automated online with monitored response times. As-built files are collected for verification and project sign off.
- Refer Attachment C for endorsements from network providers' sub-contractors (Counties Power Ltd. and Connect8) concerning the Council's road corridor management function.
- The council could provide its network maintenance contractor to providers for the purpose of maintaining access tracks to cellular towers in rural areas (which may be more cost-effective for providers).

Assumptions

The following assumptions have been made in preparing this Rol:

1. Feedback from Community Board and Community Committee members about broadband and mobile coverage gaps in their areas is accurate.
2. Respondents replies to the council's on-line survey are accurate.
3. Council's demographic estimates and projections provide an appropriate basis for profiling the constituent urban and rural areas of the district, and they are a better-fit for the Rol requirements than Stats NZ population projections (which are based on pre-2013 Census data).

3. Our declaration

Respondent's declaration		
Topic	Declaration	Respondent's declaration
ROI Process, Terms and Conditions:	I/we have read and fully understand the ROI, including the ROI Process, Terms and Conditions (shortened to ROI-Terms detailed in Section 6, as amended by Section 1, paragraph 1.6. if applicable). I/we confirm that Respondent/s agree to be bound by them.	agree
Collection of further information:	<p>The Respondent/s authorises the Buyer to:</p> <ul style="list-style-type: none"> a. collect any information about the Respondent, except commercially sensitive pricing information, from any relevant third party, including a referee, or previous or existing client b. use such information in the evaluation of this Registration. <p>The Respondent/s agrees that all such information will be confidential to the Buyer.</p>	agree
Requirements:	I/we have read and fully understand the nature and extent of the Buyer's Requirements as described in Section 2. I/we confirm that the Respondent/s has the necessary capacity and capability to fully meet or exceed the Requirements and will be available to deliver throughout the relevant Contract period.	agree
Ethics:	<p>In submitting this Registration the Respondent/s warrants that it:</p> <ul style="list-style-type: none"> a. has not entered into any improper, illegal, collusive or anti-competitive arrangements with any Competitor b. has not directly or indirectly approached any representative of the Buyer (other than the Point of Contact) to lobby or solicit information in relation to the ROI c. has not attempted to influence, or provide any form of personal inducement, reward or benefit to any representative of the Buyer. 	agree
Conflict of Interest declaration:	The Respondent warrants that it has no actual, potential or perceived Conflict of Interest in submitting this Registration, or entering into a Contract to deliver the Requirements. Where a Conflict of Interest arises during the procurement process the Respondent will report it immediately to the Buyer's Point of Contact.	agree

Details of Conflict of Interest: Not applicable

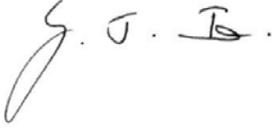
DECLARATION

I/we declare that in submitting the Registration and this declaration:

- a. the information provided is true, accurate and complete and not misleading in any material respect
- b. the Registration does not contain Intellectual Property that will breach a third party's rights
- c. I/we have secured all appropriate authorisations to submit this Registration, to make the statements and to provide the information in the Registration and I/we am/are not aware of any impediments to enter into a Contract to deliver the Requirements.

I/we understand that the falsification of information, supplying misleading information or the suppression of material information in this declaration and the Registration may result in the Registration being eliminated from further participation in the ROI process and may be grounds for termination of any Contract awarded as a result of the ROI.

By signing this declaration the signatory below represents, warrants and agrees that he/she has been authorised by the Respondent/s to make this declaration on its/their behalf.



Signature: _____
Full name: Gavin John Ion
Title / position: Chief Executive
Name of organisation: Waikato District Council
Date: 30 June 2015

Attachments

Attachment A: Letter from Tamahere Community Committee



Tamahere Community Committee

11 June 2015

Clive Morgan

Waikato District Council

Private Bag 544

Ngaruawahia

cc. Kelvin Norgrove

Dear Clive,

The Tamahere Community Committee thank you for the 8 June presentation on the MBIE Registration of Interest process for improved broadband infrastructure.

Currently many residents in the ward experience frustratingly low speeds for their broadband, especially at peak hours; late afternoon school homework hours and later when workforce is home. For some the speed is almost like dial-up which is very unsatisfactory. This has been an on-going issue for some time and it seems that as the CLZ is further built up the speeds on average further decline from time to time.

Therefore on behalf of the community this committee wishes to support Waikato District Council in their efforts to gain extra funding for our District and particularly for our Ward so this situation can be improved. This is important for the whole ward but particularly important for the Tamahere Country Living Zone [CLZ].

We have grave concerns that currently broadband capacity is compromised with Chorus developers that there is none or very limited availability to connect. This in itself is poor given the planning that we would have expected to have previously occurred. Opportunity for UFB to be available in our district would obviously go a long way to providing the required internet access that the modern world needs.

The demographic make-up of the area means there would be a high uptake of fibre services. The area has a high number of medical specialists who are keen to have instant access to images and reports; ability to do this at residences saves time, travel and money. Many professionals run their businesses from home or at least work at home for part of the time, effective ultra-fast broadband access would be a huge improvement to productivity.

As part of a recent structure review there will soon be a commercial area and a village centre with enlarged sports fields adjacent to the school which will become the Tamahere Community Village Hub within the CLZ. This will provide business's opportunities and ultra-fast broadband will be essential.

Currently locally there are playgroups, kindergartens, café and store, public and private schools and many businesses that would benefit from an improved broadband service.

Yours faithfully

Maggie Wilcock

Secretary

Letter from Waikato-Tainui



Wednesday, 17 June 2015

Waikato District Council
Private Bag 544
Ngaruawaahia 3742
Attention: Clive Morgan

Teena koe Clive,

LETTER OF SUPPORT – RURAL BROADBAND INITIATIVE

On behalf of Waikato-Tainui, I am pleased to support Waikato District Council's proposal to the government's Rural Broadband Initiative, on the basis that proposed initiatives will deliver affordable, high speed broadband to rural marae and papakainga in the district.

Marae are central to our tribal identity, and intrinsic to the heritage of the Waikato District. Marae are used for a wide range of whaanau and tribal activities. For example, we host over 30 poukai across our marae annually, which are attended by the Maaori King and hundreds of supporters. Other events, such as tangi, hui and waananga bring large groups to marae for a number of days. Marae are typically sustained by whaanau living in nearby papakainga (villages), and so Waikato-Tainui also supports improved internet availability to these households. Furthermore, marae are frequently used by the wider community, and improved internet access will increase the attractiveness of marae as venues for local and regional gatherings.

Most Waikato-Tainui marae are rural, and currently have no or limited internet access. Our vision is that marae will be a thriving hub for our 68,000 plus iwi members as well as the wider region. Reliable, high speed broadband will assist Waikato-Tainui and our partners to deliver key tribal development initiatives from marae. These include education, training, youth and kaumatua services, and information management systems for marae such as cloud-based accounting and online databases. Internet access will also facilitate marae based economic activities such as cultural tourism and horticulture.

WAIKATO-TAINUI TE KAUHANGANUI INC.

Telephone: +64 824 8689 Freephone: 0800 TAINUI Email: info@tainui.co.nz
Address: PO Box 648 Hamilton 3240 - 4 Bryce Street Hamilton Website: www.waikatotainui.com

Should you require any further involvement by Waikato-Tainui in the development of your proposal, please liaise with our ICT Manager, Helaman Tangiora on 021 565 616 or via email at Helaman.Tangiora@tgh.co.nz.

Noho ora mai,

A handwritten signature in blue ink, appearing to read 'P. McLean', with a long horizontal flourish extending to the right.

Parekawhia McLean

Chief Executive

Waikato-Tainui Te Kauhanganui Inc.

Letter from Fiona Gower, Onewhero-Tuakau Board Deputy Chairman

Why is RBI 2 to Rural North Waikato essential?

Everyone has the right to fully participate in society (Report to the Royal Commission on Social Policy 1979). Accessible and affordable technology ensures social inclusion for people who are geographically isolated. Social exclusion negatively impacts on a person's wellbeing.

Broadband & mobile coverage are vital to running rural enterprises in a way that is efficient and competitive; Cellphones are a critical safety device in the event of an accident, a crime, an adverse event or other emergency, but there are still large areas of New Zealand that do not have cellphone coverage.

The objectives are social and economic inclusion. Social inclusion has gone beyond the telephone. The importance of a level playing field when it comes to connectivity should be a given. Internet speeds must be kept relevant. The fact that it may cost more to achieve high speeds in remote areas should not be a factor in denying people their right to have social and economic connectivity without an additional cost burden.

Cellphone & broadband is essential- for our multi million dollar farming enterprises in the area to work more efficiently, lifting productivity and so become even more economically beneficial to the district. These enterprises have become increasing more technically advanced and has a requirement for real time information for things such as accurate readouts from equipment, alarms, etc, as well as getting fast turn around information from the companies such as Fonterra

However broadband is essential to rural Waikato for a myriad of other reasons

Education- Having access to equitable broadband in rural areas is essential for education- to ensure our children are getting access to the information for learning, especially where Correspondence lessons are required. It gives those who live rurally the option of quality distance learning which helps keep both children and adults living rurally yet still getting quality education. In this digital age, those with no internet, on dial up, or on expensive satellite are often disadvantaged when it comes to learning

Health- having connectivity in rural is good for the health of rural communities- as they can keep in contact with others and keep an eye on each other.

Having decent broadband & cellphone coverage encourages more people to move to or stay in rural Waikato. Without this connectivity, many are discouraged from applying for jobs in rural areas, or from buying or moving into areas without that connectivity. Without this staffing & community members, rural efficiency is threatened and economic activity affected. While making up only 14% of the rural population the agriculture community contributes significantly to the New Zealand's economic success.

Social benefits to rural communities are very important, being able to connect with others means that being rural doesn't mean being isolated from others. Having access to social media is a vital tool for so many young women who ask questions about health, farming, cooking, and often a plea to meet up with others in their district when they have just moved there. **Only 14% of rural households are farmers** on economic units, the remainder are a mix of life-stylers, hobby farmers, retired, contractors, workers, small business owners, teachers, home care workers and the myriad of other occupations that make up rural communities.

Having high speed broadband delivered to rural hubs other than schools such as community halls and marae means that these facilities could be used for a number of purposes for the community, such as for education and health satellite centres, to run seminars and gather the community together to help it grow strong. Having professionals come to the communities would benefit those cannot easily get into town for appointments.

A large percentage of rural residents first desire is not for live streaming movies or tv, their priority is for their businesses, family's education and social contact- having the other would be a bonus for them. Many would be happy to get standard broadband instead of dial up or expensive satellite.

Mobile Black Spots are seen as real safety issues for rural farmers, families and communities. Certainly on rural highways there is a need for coverage for accidents, but that need is even more of an issue in the rural heartland. Cellphone coverage is essential here. As our manifesto states for those living rurally "Cellphones are a critical safety device in the event of an accident, a crime, an adverse event or other emergency." If a person has to leave their home in a hurry due to an emergency or a crime, discover or is involved in an accident, without cellphone coverage they are vulnerable, or often have a long trek to the nearest landline, if that one is working. In the case of a nasty accident the "golden hour" is seen as important- how many accidents have gone too long without treatment because of no cellphone coverage? Certainly State Highway 22 needs to be covered, but the increasing numbers of visitors along the Port Waikato road from Tuakau through Waikaretu to SH22 needs to be seriously looked at as well, as there are long stretches of road without houses for anyone involved in an accident to get to, also for the emergency services attending emergencies

With the advent smart phones, more and more people rely on them for their real time business information. With the 700mHz frequency even better cellphone coverage could be obtained for our rural communities. Perhaps the RBI 2 would be best spent on well placed rural cellphone towers to get that coverage to ensure that rural has equity of connectivity- that way both broadband & cellphone coverage would cover a wider area of New Zealand.

Of course many rural Waikato residents still have poor landline service, have no broadband & definitely no cellphone coverage, to have that rectified would be a huge leap forward for them. It must be remembered in times of emergency, adverse events or even in power cuts, the only way for people can often communicate is through their landline. The providers should not give up on servicing and improving this service while focusing on the other.

In summary, we urge those involved in making the decision on the RBI 2 to look at doing a Rural Impact Assessment on the advantages of using that funding to increase cellphone and broadband coverage to rural Waikato- economic, social, educationally, healthwise, safety for communities, and the retaining of those communities.

As Port Waikato is being covered by the tower being built under RBI 1, we are not focusing on this community. Tuakau needs further investment under the Ultrafast broadband, however, most residents have access to either or both cellphone & broadband. Rural areas we see benefitting are Glen Murray, Waikaretu, Naike, Te Akau, to support the communities and ensure economic growth for them, as well as community growth. It could lead to further businesses opening in these areas, leading to more visitors and more money flowing into the area.

We are happy to speak on this to explain it further

Fiona Gower
Onewhero Tuakau Community Board Deputy Chairman
Ph 092329711
Cell 0274283884
fionaandterry@xnet.co.nz



Why does Raglan need Ultra-fast Broadband?

- Most businesses thrive on an Internet presence in this day and age
- UFB would allow businesses to connect effectively and efficiently, and stay connected at all times
- UFB and a boost in Mobile Coverage would connect many residents and businesses who are without strong (or any) coverage in their area
- The Council just extended Raglan's summer months to include October - April, 7 months of the calendar year. This means, for 7 months, Raglan is home to 20k+ visitors on any given day
- Most visitors to Raglan are coming from a city with a powerful Internet connection, and expect the same connectivity as they have in their home town. A failure to provide this service means a loss in revenue for many business owners. It also results in many disgruntled Raglan visitors.
- No connectivity is a safety issue: The lack of Mobile Coverage along the 23 Highway could cost lives. If an accident happened between Waitetuna and Te Uku, calling for Emergency Services could take 15 - 20 minutes. The 23 Highway NEEDS strong Mobile Coverage to insure the safety of daily travellers.
- Many people work via the Internet, if Raglan has a strong Internet connection for potential new residents, it could ultimately provide new income for the community. If residents can work and live in the Raglan area, than the Raglan community has the opportunity to grow and thrive.
- Education: Students have access to a fiber connection at their schools, but when they come home to do their homework, they are unable to get the same Internet access, hindering and delaying the completion of many school projects.

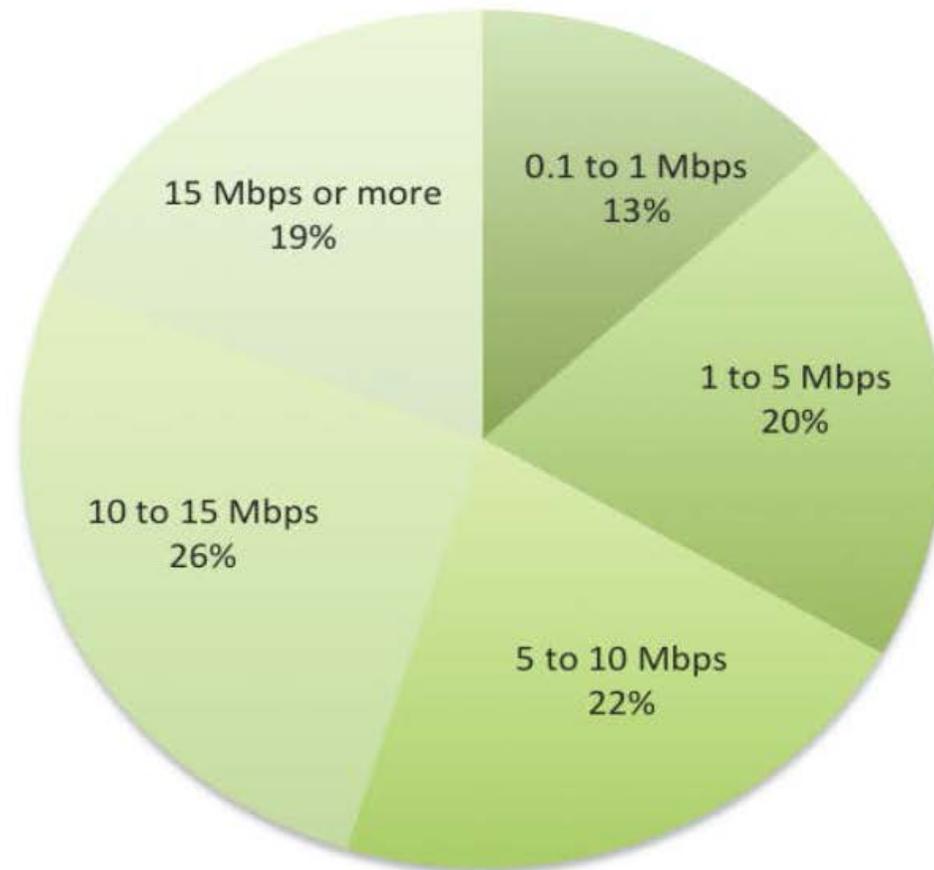
Who took our survey?

- 60% – Raglan Area Residents
- 40% – Raglan Area Business Owners
- We received feedback from Residents and Business owners in Waitetuna, Te Uku, Te Mata, Raglan Central, Raglan West and Whale Bay

Raglan Area Download Speed

- 13% – 0.1 to 1 Mbps**
- 20% – 1 to 5 Mbps**
- 22% – 5 to 10 Mbps**
- 26% – 10 to 15 Mbps**
- 19% – 15 Mbps or more**

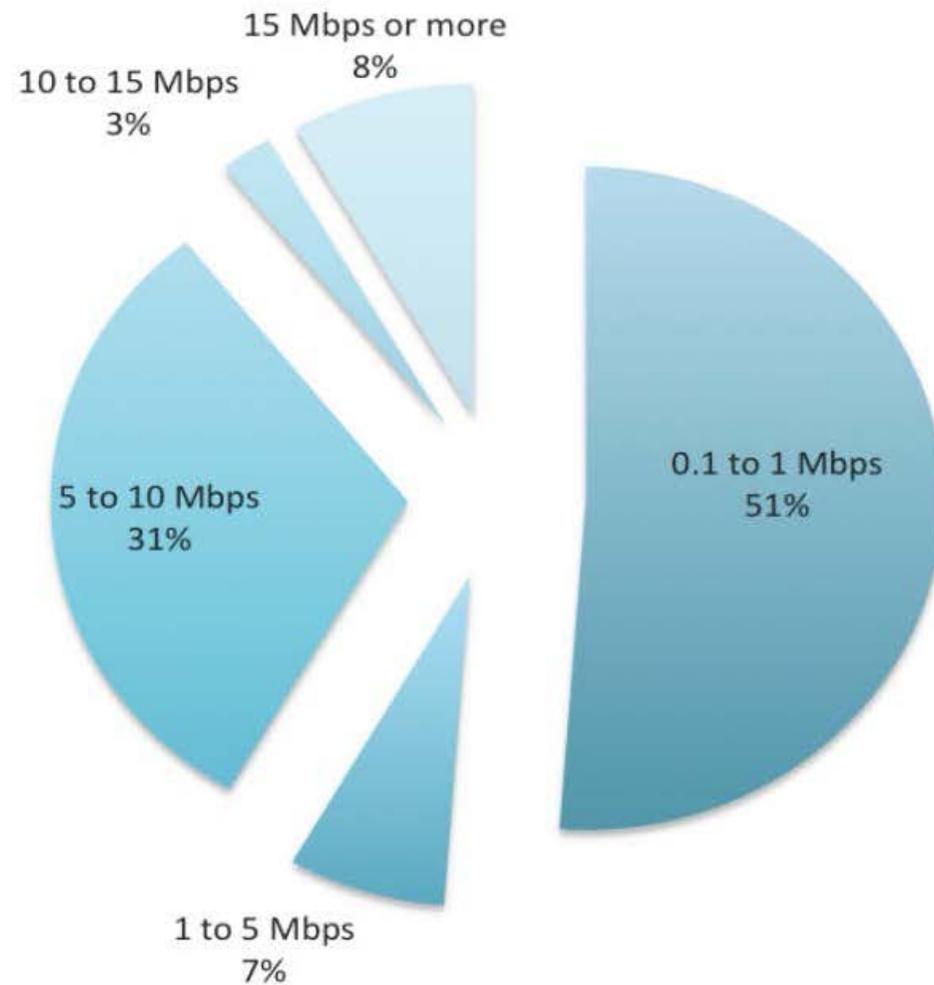
Download Speed



Raglan Area Upload Speed

51% – 0.1 to 1 Mbps
7% – 1 to 5 Mbps
31% – 5 to 10 Mbps
3% – 10 to 15 Mbps
8% – 15 Mbps or more

Upload Speed



Mobile Service

Raglan Area Mobile Coverage

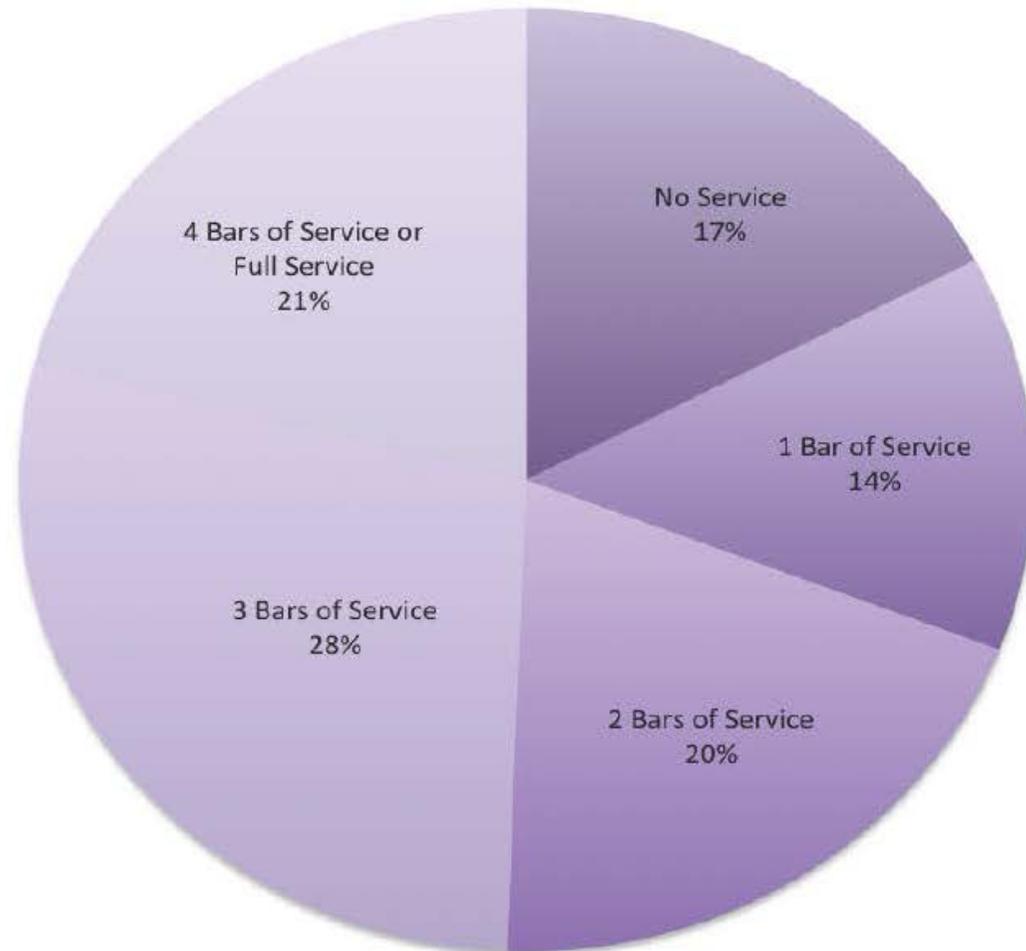
17% – No Mobile Service

14% – 1 Bar of Service

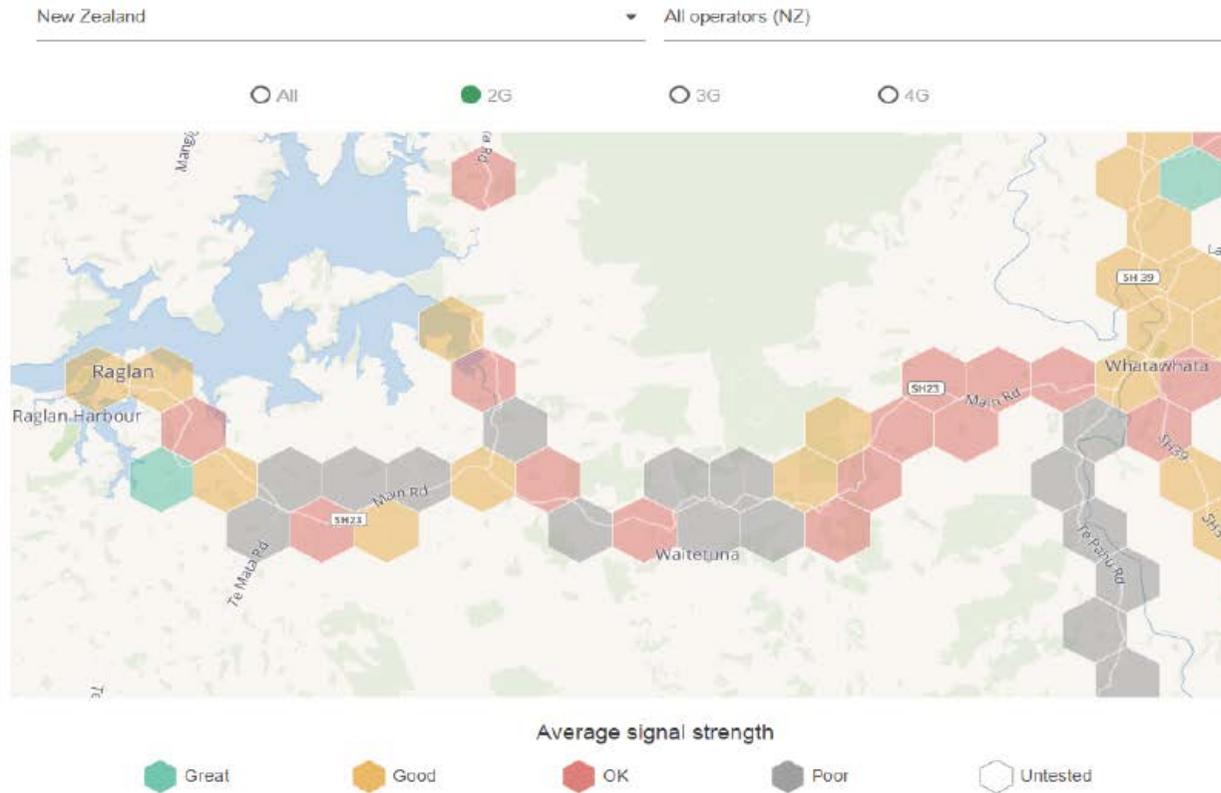
20% – 2 Bars of Service

28% – 3 Bars of Service

21% – 4 Bars of Service/Full Service



Mobile Coverage Map | New Zealand



The Raglan Area Survey concludes that this data is an accurate representation of the Mobile Coverage through the Raglan Area. However, there is also no Mobile Coverage in the Whale Bay area.

There are also businesses that are effected by the poor/no mobile coverage in Waitetuna, Te Uku, Te Mata and Whale Bay. Of the 40% of businesses owners that took the Raglan Area Survey, 6 of those business owners operate their business in an area with **no mobile phone coverage**.

Case Study: MetOcean Solutions Limited 1 Wainui Road, Raglan

Dear Alan Vink:

Firstly, thank you for making contact with us in regards to your role as the Chair of the Raglan Community Board. As a company in Raglan, we are keen to be involved, and to also express our commitment to the Raglan community. We are a research and development technology based company that was founded 11 years ago by myself and two others, since then we have grown to have approximately 24 full time staff based primarily in Raglan (16), but also in New Plymouth, Auckland, France and Portugal. As part of our strategic development, approximately 2-years ago MetService acquired a 49% stake in our company.

As part of our current business, and to facilitate the expected growth of our company within the next 2-5 years, it is vital that we have the robust and fast broadband internet connectivity that fibre offers, not only for communication within our company, but communication externally and for providing speeds conducive to downloading/uploading the large files (GB) that are required in our day to day operations. This connectivity forms the backbone of our company.

To put this in context, as part of our core business, we run both forecast and hindcast numerical (computer) models of both the atmosphere and oceans locally and internationally. The forecast data is used primarily for offshore work, including, but not limited to, within the offshore oil and gas sector and ports and harbours, where our forecast products are used to quantify hazard levels, informing such things as rig demanning, safe offshore maritime operations, port berth safety, underkeel clearance and operability levels. Further, we supply emergency response capabilities (oil spill response, persons lost at sea etc.) to the offshore oil and gas industries operating in New Zealand, and have been actively engaged in assisting with lost persons at sea and in an official capacity with Maritime NZ in predicting the fate (location and timing) of spilled oil during the Rena event, where our high resolution model data was key in predicting the fate of the spilled oil. The products we developed in house to service the New Zealand offshore industry greatly assisted the response to Maritime NZ during the Rena event.

All these mentioned services and products are ultimately reliant on having fast and reliable internet connectivity, and it is fair to say that we have been limited as a company with the internet services available within Raglan and New Zealand, to the point where we have been forced to run much of our operational systems within the USA rather than host them here. Having greater internet connectivity due to fibre would potentially enable us to look at hosting some of these services locally and provide some further necessary

Alan Vink
10 June 2015
Page 2

robustness around the safety services we supply to the offshore oil and gas industry, ports and harbours, and as required to Maritime NZ. Further, it would enable us to accommodate the expected growth of our company within the next 2-5 years, bringing more highly skilled and educated people into the community and potentially being the catalyst for the development of a more technology focused 'hub' within the central Raglan business district.

If you have any questions or would like further clarification on any of the aspects I have mentioned, please feel free to contact me directly, and our door is always open.

Sincerely,



Brett Beamsley
MetOcean Solutions Limited
Director/Senior Oceanographer
E: b.beamsley@metocean.co.nz
M: +64 21 362950



Case Study: Raglan Surfing School/Karioi Lodge
5B Whaanga Road, Whale Bay, Raglan



Alan Vink
Chairman
WDC Raglan Community Board

Subject: Internet and Mobile Services Case Study

Dear Alan,

We operate 5 tourism businesses from our offices which are located in Whale Bay, Raglan. The Raglan Surfing School Ltd, Karioi Lodge, Sleeping Lady Lodgings Ltd, Raglan Boat Charters and Raglan EELS Ltd.

We are very supportive of the WDC effort to bring to light the shortfalls in broadband services businesses like ours are experiencing in Raglan.

Here is a current update for you and the WDC.

Mobile Service

None

Broadband Speeds as recorded on 13-06-2015

1.72mbs Download .53mbs Upload

In a nutshell, our businesses are now being strangled the more reliant our services become on internet connectivity.

Raglan is a renowned international tourism destination.

We are a tourism based enterprise. From our customer's perspective they now demand access to fast broadband. When confronted with the prospect of no mobile service and dial up speed broadband there is a rising level of dissatisfaction with their destination of choice.

They are unable to engage in social media or make voice connections via Skype or Face Time.

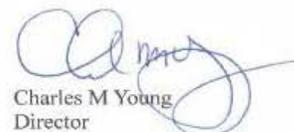
Our businesses and the Waikato District as a whole suffer as this customer interaction on social media now plays a very large part in telling our story as a desirable destination. Simply, it makes us less competitive to other destinations in NZ and the world.

Our business is also struggling to stay competitive as we are also unable to engage in active social media and internet marketing by being unable to upload large file videos and photos. Internally we have moved our point of sale and accounting systems to the cloud with IBIS and XERO. Instead of reaping the benefits of such services they have become unbearably slow to access and now have become a frustrating time wasting exercise for our staff and bookkeeping dept.

We need help.

Please let me know if there is anything I can do to bring light to this important issue.

Regards,



Charles M Young
Director

5B Whaanga Road, Whale Bay, Raglan ,NZ 3297

(07) 825-7873

Case Study: Wainui Environmental Ltd.
--- Raglan



WE Ref: RagUFB

12 June 2015

Raglan Community Board

Attn: Alan Vink

Raglan Broadband Submission

Dear Alan

As a growing engineering consultancy, our business is increasingly relying on cloud based storage and operating/collaborating systems. We currently use cloud services for downloading and uploading large software files and daily backup of our server data.

Additional cloud based services are available to us however current internet speeds don't allow efficient use of these. A key service we would like to be using are Autocad (design and drafting software) Cloud services whereby collaboration software helps design, engineering, and project teams work together efficiently on a centralized platform, viewing, searching, and sharing data in the cloud using desktop, web, and mobile devices.

Increased broadband speeds will have a noticeable effect on the efficiency of our business, ultimately enabling us to grow and be more profitable.

We trust the above is to your satisfaction. Should you require any further information please do not hesitate to contact the undersigned.

Yours faithfully

WAINUI ENVIRONMENTAL LTD

A handwritten signature in black ink, appearing to read "H Vink", is written over a light blue horizontal line.

Hayden Vink
Director/Civil and Environmental Engineer
T: +64 7 825 8336
M: +64 22 028 5411

Case Study: Freecruit Ltd.

10th June 2015

I moved to Raglan in 2014 and I'm working on an internet startup with colleagues in Auckland so a fast, reliable internet connection is crucial to being able to collaborate with them effectively. The company will be providing 'Software as a Service' (SaaS) and new features will need to be developed and deployed very frequently, on an ongoing basis. This will be reliant on us being able to use software collaboration tools over the internet.

Internet Usage

Amongst other things, I currently use my internet connection for:

- communication with colleagues in Auckland using teleconferencing software (a critical function);
- downloading and uploading large software files;
- connection to my company's virtual private network, e.g. to access wiki. etc.;
- access to cloud-based business & collaboration services.

Once we launch our service, it will be crucial that I am able to efficiently communicate with and support our customer base through the internet from Raglan.

Challenges

Only an ADSL service is available where I'm located. Due to the modest performance levels of my internet connection, teleconferencing is challenging with image and sound often of poor quality with latency (the delay between when the signal enters and when it emerges from a system) being the main problem. So the quality of experience is often unacceptable, especially at times of the day when general use of the internet is peaking. While the internet connection seems to be capable of running at a rate near the maximum possible speed for ADSL, I think the tortoise-like upload speed limit is one of the main impediments to a better experience.

I also need to transfer large files of software updates in the range of 100s of MBytes to gigabytes of data on a regular basis. It's not always possible, or convenient, to schedule these to run overnight. Therefore, these downloads can hog bandwidth and cannot be run while teleconferencing is operating, for instance. In effect, I can only do one thing at a time with my current connection or else the service is significantly degraded.

Bridging our two networks (Auckland & Raglan) into a virtual whole would make our IT infrastructure seamless and more usable. Unfortunately, as I saw demonstrated recently, data caps get burnt through quickly due to the 'always on' nature of such connectivity, and because VPN utilises background data at all times, the already lethargic network connection slows down even further and becomes even more unusable.

Over a sufficiently-fast, well-priced, uncapped connection we will be able to deploy our test systems at the very least (and have them tested remotely). This can be done on the cloud of course, but because one needs to bring up and take down test servers much faster than production environments, and the number of test servers should naturally be large to allow for sufficient testing, the cost can add up quickly. The alternative is to not do as much testing, which would lower quality. Neither the cost nor lower quality is something that a startup can readily afford.

A concern we have is that international clientele, especially investors, simply won't take us seriously as a high tech SaaS company if we are connecting to them over poor connections.

Finally, I have colleagues in Auckland who are interested in relocating to Raglan but the local internet infrastructure is a major obstacle to their following this desire.

Warmest regards,

Brian Scrafton,
Director of Business Development,
Freecruit Ltd.

Case Study: New Zealand Fire Service - Raglan

New Zealand Fire Service Update New technologies

Work is underway to develop technology plans for next fiscal year. One critical area the NZFS needs to deliver on is replacing incident ground communications radios through a national tender process. It is anticipated that the replacement programme occurring over three years with a rolling replacement around the country. Released radios will be used to support operation users with older radio. There are also operational issues that need to be resolved before tendering for the national replacement. These include operational communication planning, inter-operability (in particular with rural colleagues), breathing apparatus interfaces (including accessories), allocation policy, training and direct access to Comcen for officers. "Once these operational requirements have been determined, they will look for appropriate technologies to meet the requirements and also future-proof any potential developments in technology or user requirements."

Digital technology

Probably the most topical discussion is the use of digital technologies for both radio frequency modulation standards (analogue FM vs multiple digital standard) and audio processing (noise cancelation, voice clarity improvements, etc.). Initially radios will be conventional FM, but will be capable of upgrade to the government digital standard of P25 (conventional and trunked). NZFS is already seeing significant improvements in voice quality with digital speech processing and removal of high ambient noise such as alarms tones, pump panel and water jets. There are also significant developments in battery technology and charging, which should remove the battery issues of the past.

The NZFS will consider wireless linking technologies such as Bluetooth linking to radio speaker microphone (RSM) or BA units if this is determined to be a requirement. Likewise, cross band (VHF to UHF links), repeaters (range extenders) and linking (e.g. IGC to Comcen, phone line or other digital radio standards) will be considered once their requirement has been determined. Also, a new availability and messaging system is planned to be delivered and implemented by the end of this calendar year.

Consistent IT gear The NZFS is working toward up-to-date and consistent IT equipment such as computers, monitors, and printers, and upgrade of network cabling, software, systems and applications in stations across the country. This is to better support training, information sharing and other areas to help personnel do their job. By the end of this June, NZFS plans to install new IT equipment in 30 volunteer stations that need them. It will then continue to have a big push to update IT equipment throughout the country as needed through to the 2015/2016 fiscal year. There are also plans to develop a programme of work for wireless network access and mobility technology available on vehicles, in the field, in stations, and other locations.

Paging NZFS is actively looking at replacement or augmentation of Spark-provided paging with a cellular-based system as almost everyone has a cell phone, coverage is improving, and they can be relied on most of the time. This could range from simple text message notification (similar to the pager to text backup system some people may be using now) through to a full-blown interactive smartphone application. NZFS has even trialled a system that rings any phone with a voice message to 'turn out' and the user's response is visible to the Comcen. There are some interesting challenges when it comes to individual preference for cell phones, carrying a second phone for alerting, private use, etc. These all need to be considered and trailed.

Stats from NZFS

- There are over 2200 cell sites providing similar coverage to 110 paging sites.
- During a recent weather event, cellular was lost, but paging was not affected.
- There is no text message timing delivery SLA from any telco.
- After a recent trial of new brand of pager, a brigade that was struggling with missed pager messages did not miss a single page and have removed page to text back- up.
- When NZFS asks its overseas colleagues what they use for alerting, many of them still say they use broadcast paging.
- Spark is connecting more users to the paging network.

The NZFS is developing a programme of work for wireless access and to have mobile technology available on vehicles, in the field, in stations, other locations where its people – career and volunteer – do their jobs.

Survey Feedback

Government Road: (Download: 7.33Mbps / Upload: 0.82Mbps)

In order to get the speeds above I had to install a Yagi antennae and connect this to my wifi modem. Without the antennae mobile reception is almost non existent as my house is on the lee side of the Spark and other providers aerials. Standalone mobile phone reception is very poor. Telecom providers need to rethink the locations of their repeater aerials as I suspect only the Raglan CBD and surrounding streets get good reception. On weekends even with the Yagi Antennae receptions drops significantly because of the number of visitors in the town.

Smith Street: (Download: 6.77Mbps / Upload: 0.30Mbps)

I work from home running a digital typing service. I rely on a good internet service. Quite often I have to reset my router throughout the day as the signal has "dropped off". The service is second rate here compared to when we lived in Hamilton. It needs improvement.

Riria Kereopa Memorial Drive (Download: 4.31Mbps / Upload: 0.72Mbps)

Both vary at home depending on the weather. Bad weather = no mobile phone service. Good weather = 2 or 3 bars. After a lot of rain broadband drops off a lot. I have had 7 or 8 callouts from the repair service, and rewired our phone lines in the house but still experience the same issues. Time of day has a lot to do with it. I have filled this survey in at a "good" time of day, as the real issues generally start later in the day - afternoon / evening - and over the weekend.



Attachment C: Endorsements of Waikato District Council road corridor management

Counties Power email:

From: Steve Casbolt [mailto:steve.casbolt@countiespower.com]

Sent: Wednesday, 17 June 2015 10:19 a.m.

To: James Templeton

Hi James,

Counties Power have been involved with the rollout of the UFB Fibre in the Pukekohe, Papakura and Waiuku areas over the last 2 years as one of the several preferred contractors involved with the UFB rollout project in the Auckland Council area.

In the course of this work Counties Power have had a good relationship with the Auckland Council for:

- Traffic management planning and execution , which directly involves Council planners,
- Streets and reserves staff with the restoration of road berms after works have been completed.
- Council, landowners and the general public. - Counties Power as a service provider ensure that through their work processes and procedures that these interests are considered.

With our normal electricity works Counties Power have found the Waikato District Council to be helpful, and keen to work together to minimise delays, and find ways to work more efficiently. The planning and approval processes in place ensure that both parties interests are accounted for in the least disruptive way for Council's customers.

For the UFB Deployment works planned in Waikato District Council Area Counties Power is confident that the excellent work completed in the 'Auckland Area' will continue in the future and that the service providers will be totally satisfied with Counties Power's work on their project.

Regards

Steve Casbolt

Connect8 email

From: Damon Newton [mailto:damon.newton@connect8.co.nz]

Sent: Friday, 12 June 2015 4:09 p.m.

To: James Templeton

Subject: Waikato DC

Hi James,

Connect8 have been engaged with the Waikato District over the past 9 months for the installation of 116km of fibre optic ducting and cable through the Waikato to Auckland. Your team have been instrumental in our ability to deliver this project in terms of understanding the work being undertaken and providing consents while being mindful of the commercial pressures in delivering an infrastructure of this size.

The relationship, trust and understanding our two organisations have developed leaves me confident of our ability to deliver our remaining works program on time and to our customers expectations.

Damon Newton
Construction Manager
+64 21 900 157
+64 9 280 6606
damon.newton@connect8.co.nz

Attachment D: Waikato District Council criteria for UFB2 prioritisation

Area	Character (1)	2014 Population (2)	2021 Population (2)	2014 Households (2)	2014 Household Density (HH's per square km) (3)	2013 Median Income (4)	2013 Internet Access (4)	2014 Business Numbers (5)	2014 Employee Numbers (5)	Total unoccupied dwellings (8) \$	Visitor Numbers (9) \$	Health Facilities * (10)	Industrial Land * (11)	Number of Marae (12) \$	Library (13)
Huntly	Urban	7031	6945	2516	187	\$42,106	44.6%	443	2080	110	78261	Y	Medium	1	Y
Tuakau	Urban	4765	5572	1674	278	\$49,694	51.4%	261	580	108		Y	High	1	Y
Raglan	Urban	2749	2725	1194	200	\$46,737	64.6%	310	390	477	30145	Y	Low	1	Y
Ngaruawahia	Urban	5320	5377	1809	152	\$49,432	55.5%	251	980	144		Y	Low	1	Y
Tamahere CLZ	Tamahere CL	2538	2913	860	74	\$124,800	89.0%	326 (6)	525 (7)	78			Low	0	
Te Kauwhata	Urban	1694	2369	653	99	\$57,564	67.1%	139	410	63			Medium	0	Y
Pokeno	Urban	1313	2679	462	23	\$76,380	82.4%	305	380	30			High	0	
Horotiu	Urban	587	621	218	35	\$86,757	80.1%	54	770	15			High	1	
Matangi	Urban	471	526	164	236	\$82,100	83.9%	281	400	15			Low	0	
Onewhero	Port Waikato	944	986	353	31	\$43,350	69.2%	48 (6)	63 (7)	294	1700 per day or 10371		Low	8	
Te Kowhai	Urban	658	731	242	131	\$71,233	83.8%	163	200	27			Low	0	
Whatawhata	Urban	369	420	127	88	\$89,050	79.8%	265	210	33			Low	0	
Meremere	Urban	496	530	161	128	\$39,400	21.2%	8	9	18			Low	0	Y
Taupiri Community	Urban	445	441	175	101	\$52,400	39.5%	48	110	15			Low	1	
(1)	Determined by WDC urban/ rural splits of area units														
(2)	Data sourced from WDC population projections 2013 Census base														
(3)	Calculated in QGIS														
(4)	Data sourced from 2013 Census meshblock Dataset, using Stats NZ meshblocks within and intersected by WDC area unit														
(5)	Data sourced from Stats NZ Business Frame														
(6)	Business counts for Tamahere CLZ and Port Waikato have been calculated as a proportion of total Business counts for the Tamahere-Tauwhare and Onewhero area units using proportions derived from (7)														
(7)	As Tamahere CLZ and Port Waikato are sub-sections of larger area units, employee counts have been calculated based on workplace address data in 2013 Census Dataset Meshblock Dataset														
*	This was also asked for in the MBIE ROI														
(8)	2013 Census data sourced from Stats NZ														
(9)	Data provided by WDC from iSite statistics (Huntly and Raglan); Sunset Beach Club/ Franklin Daily News for Port Waikato; Te Kauwhata Community Board Meeting anecdotal														
(10)	Data sourced from Open Waikato Town Profiles http://openwaikato.co.nz/Live/Detail/38/our-towns														
(11)	Data provided by WDC														
(12)	Data provided by WDC. Data is for the entire Area Unit														
(13)	Data sourced from WDC website														
§	See ROI for rationale on inclusion of additional criteria														

Waikato District Council criteria forBI2 prioritisation

Area (1)	2014 Population (2)	2021 Population (2)	2014 Households (2)	2013 Median Income (3)	2013 Internet Access (4)	2014 Business Numbers (4)	2014 Employee Numbers (4)	Total unoccupied dwellings (5) \$	Number of Marae (6) \$
Kainui	2892	3252	999	\$73,271	64.7%	503	750	51	0
Tamahere-Tauwhare	1101	1256	373	\$102,208	86.9%	714	1060	78	2
Eureka	1126	1235	394	\$77,320	70.0%	353	1890	54	0
Te Uku	1891	1995	706	\$66,100	71.4%	368	370	132	5
Whitikahu	2168	2216	739	\$63,440	49.2%	486	630	57	2
Waerenga	1281	1307	344	\$51,533	46.8%	464	920	129	4
Waikato Western Hills	848	920	311	\$67,529	56.6%	550	630	168	8
Onewhero	753	786	282	\$61,097	59.7%	673	660	294	8
Te Akau	1025	1055	392	\$61,895	63.9%	284	320	96	3
Mangatawhiri	540	563	195	\$57,263	51.8%	299	390	48	1
Maramarua	541	582	201	\$41,900	39.9%	203	220	48	0
(1)	Determined by WDC urban/ rural splits of area units								
(2)	Data sourced from WDC population projections 2013 Census base								
(3)	Data sourced from 2013 Census meshblock Dataset, using Stats NZ meshblocks within and intersected by WDC area unit								
(4)	Data sourced from Stats NZ Business Frame								
(5)	2013 Census data sourced from Stats NZ								
(6)	Data provided by WDC. Data is for the entire Area Unit								
\$	See ROI for rationale on inclusion of additional criteria								