

Date: Thursday 2 July 2015
Time: 9.30am
Meeting Room: Level 2 Reception Lounge
Venue: Auckland Town Hall
301-305 Queen Street
Auckland

Regional Strategy and Policy Committee

OPEN ATTACHMENTS

ATTACHMENTS UNDER SEPARATE COVER

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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: 10 July 2015

Mihi

*He mihi ki te kaahui tūpuna,
te taura-here mō tātou te muka tāngata,
ki ngā mana ātua, kia tau te mauri.*

*He kura tangihia, he maimai aroha,
rātou kua whetūrangitia ki a rātou
tātou te hunga mata-rerehua ki a tātou*

*E ngā mana, e ngā reo, e ngā karangatanga maha,
tēnā rā koutou katoa.*

1. About the Respondent

Our profile

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

Item	Detail
Local authority name:	Auckland Council
Physical address:	135 Albert Street, Auckland Central, Auckland 1010
Postal address:	Auckland Council Private Bag 92300 Victoria Street West Auckland 1142
Website:	www.aucklandcouncil.govt.nz

Our Point of Contact

Item	Detail
Contact person:	Jim Quinn
Position:	Chief of Strategy
Phone number:	n/a
Mobile number:	027 592 6002
Email address:	jim.quinn@aucklandcouncil.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">• Ultrafast Broadband 2 (UFB2)• Rural Broadband Initiative 2 (RBI2)• Mobile Black Spot Fund (MBSF)	

UFB2

Through engagement with communities outside of the UFB1 footprint, and with support from geospatial analysis, Auckland Council has identified:

- 11 major gaps in UFB1 coverage within the Metropolitan Urban Limit
- 17 rural towns outside of the Metropolitan Urban Limit and not included in UFB1

These have been grouped into candidate areas that would benefit from an upgrade under UFB2. These candidate areas include (in prioritised order):

1. Gaps in UFB1 coverage within the Metropolitan Urban Limit:

- Laingholm
- Ormiston
- Hingaia
- Whenuapai West
- Long Bay
- Orewa West
- Mangere South
- Hobsonville East
- Otara West
- Birdwood
- Swanson

1. Warkworth
2. Helensville
3. Wellsford
4. Huia / Cornwallis
5. Clevedon
6. Snells Beach / Algies Bay

7. Matakana
8. Stillwater
9. Piha
10. Point Wells
11. Kawakawa Bay / Orere Point
12. Patumahoe
13. Waiheke Island
14. Leigh / Matheson Bay
15. Omaha
16. Parau (Armour Bay)
17. Whitford

Candidate areas for UFB2 were prioritised based on:

- Number of businesses, the usually resident population, and population density
- Qualitative assessment of the extent of upgrade benefits
- Qualitative assessment of demand and likely uptake of UFB2 services

Included with this ROI Support document in Appendix 1 is a profile for each of the above candidate areas. Each profile indicates the area that would benefit from an upgrade, and provides key information as requested in the Ministry of Business, Innovation and Employment's *Registrations of Interest – Support* document released 12 March 2015. Also provided electronically is the data used to develop these profiles.

Auckland Council encourages the Ministry of Business, Innovation and Employment and telecommunications network operators to use the information provided as a starting point for more detailed investigation of the needs of each community. Auckland Council is available to support this investigation, and is also available to support infrastructure deployment planning once the allocation of funding has been decided.

1 Areas of Local authority Assistance

a) Consents

i) Auckland Council Resource Consents

The Major Infrastructure Projects Team (MIPT), Resource Consents Department, is able to make a tangible and constructive contribution to the on-going success of the further rollout of Ultrafast Broadband 2 (UFB2), the Rural Broadband Initiative 2 (RBI2), and the deployment of cellphone infrastructure under the Mobile Black Spot Fund (MBSF). The MIPT have extensive experience in managing and delivering consents for telecommunications infrastructure projects across the Auckland region and, therefore, can deliver consistent and integrated consenting outcomes.

On receipt of an application or a pre-application request a dedicated resource consent planner (or planners, as circumstances dictate) will be allocated from the MIPT to take ownership of, and be accountable for, the necessary resource consenting process that surrounds the deployment of either UFB or RBI. We encourage early and frequent engagement on the project to ensure the resource consent process can be delivered to secure the aspirations and imperatives of the broadband proponents. This ensures a consistent, timely and cost-effective approach to the consent process. Depending on the circumstances of the applications, we are keen to work with the applicant's planning team to explore flexible and innovative approaches to delivering these consents which could include identifying activities and or specific sections that could be covered by global consents or work methodologies.

Regarding the activity status of, in particular Aerial deployment of telecommunications infrastructure, the Proposed Auckland Unitary Plan (PAUP) is reasonably permissive. Under the PAUP, new overhead telecommunication lines and new support structures are generally permitted in the rural, future urban, quarry and marinas zones. These are Discretionary in the residential, centres and open space zones. It is Restricted Discretionary in the industrial zones and general business zones, but a Permitted activity in the Heavy Industry zone.

The PAUP also recognises the need to provide for the continued operation of the network utilities. Therefore, as a Permitted activity, a number of standards have been developed to enable the minor upgrading of the existing infrastructure. This includes alterations and additions to telecommunication lines, including the placement of new lines on existing poles, as well as providing for modifications of existing poles.

ii) Works in the Road Corridor

At present Auckland Transport have a dedicated team of 4 site auditors/advisors, 1 Corridor Access Request (CAR) coordinator and 1 relationship manager, that manage the UFB rollout from preliminary design application through to final walkover and putting the work into warranty, for the entire Auckland region.

Having a dedicated team allows for a consistent view of the overall project, approach to management of work sites and when setting conditions for things such as reinstatement requirements. It has also helped build strong working relationships with the key stakeholders.

The team has a consistent approach and work collaboratively to problem-solve and agree conditions to better manage the project that produces a better outcome for all involved. Weekly meetings are used to work through any ongoing issues, better coordinate with other works such as footpath renewals, and discuss things such as new methods of deployment.

Each cabinet/FFP area can also be covered by one CAR and an agreed set of fees which includes a set number of site audits. Non-compliance notices and other performance-related charges sit outside of this fee structure.

With an understanding of scope and expectations around the next stage of the RBI rollout, Auckland Transport could explore a similar approach to that initiative, and for works under the Mobile Black Spot Fund.

b) Identification of infrastructure

Relevant infrastructure has been identified in each community profile (see Appendix 1). The data used to develop each profile is also provided electronically.

2 Uptake and awareness assistance

Based on community engagement undertaken as part of the development of this registration of interest, Auckland Council understands that demand for improved broadband is consistently high across rural Auckland and that the factor limiting the uptake of broadband services in rural areas is an undersupply of quality and affordable broadband services, and where services are available, a limited awareness that those services are available.

To that end Auckland Council commits to working with the successful network operator(s) to raise awareness of residents and businesses with a focus on:

- The services that are available
- Where those services are available
- The timing of infrastructure deployment under UFB2, RBI2, and the MBSF
- Minimising disruption associated with infrastructure deployment under those three programmes

This approach is consistent with Auckland Council's commitment to UFB1 and RBI1.

Uptake and awareness assistance will be further detailed in the Digital Enablement Plan that is due to be submitted in September 2015.

3 Investment options

Auckland Council is investing significant resource in support of the deployment of better broadband infrastructure under UFB2, RBI2, and the MBSF. This includes the investigation and planning of infrastructure deployment, resource consenting, corridor access, and communications and community engagement.

RBI2

Through engagement with communities outside of the UFB1 footprint, and with support from geospatial analysis, Auckland Council has identified 24 communities that fall outside of current plans for ultrafast broadband, that would benefit from an upgrade under the RBI2 programme. These have been grouped into the candidate areas listed below in prioritised order:

1. Bethells Beach / Te Henga
2. Waiwera Valley
3. Makarau
4. Taupaki
5. Opanuku Road
6. Kingseat / Clarks Beach
7. Karekare
8. Ara-Kotinga
9. Anawhata
10. Waitoki
11. Wainui
12. Hunua
13. Glenbrook
14. Waimauku
15. Kaukapakapa
16. Great Barrier Island
17. Awhitu
18. South Head
19. Rodney North
20. Muriwai
21. Coatesville

22. Riverhead / Paremoremo

23. Tapora

24. Rakino Island

Candidate areas for RBI2 were prioritised based on:

- Number of businesses, the usually resident population, and population density
- Qualitative assessment of the extent and severity of connectivity issues
- Qualitative assessment of demand and likely uptake of RBI2 services

Included with this ROI Support document in Appendix 2 is a profile for each of the above candidate areas. Each profile indicates the area that would benefit from an upgrade, and provides key information as requested in the Ministry of Business, Innovation and Employment's *Registrations of Interest – Support* document released 12 March 2015. Also provided electronically is the data used to develop these profiles.

Auckland Council encourages the Ministry of Business, Innovation and Employment and telecommunications network operators to use the information provided as a starting point for more detailed investigation of the needs of each community. Auckland Council is available to support this investigation, and is also available to support infrastructure deployment planning once the allocation of funding has been decided.

1 Areas of Local authority Assistance

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The Major Infrastructure Projects Team (MIPT), Resource Consents Department, is able to make a tangible and constructive contribution to the on-going success of the further rollout of Ultrafast Broadband 2 (UFB2), the Rural Broadband Initiative 2 (RBI2), and the deployment of cellphone infrastructure under the Mobile Black Spot Fund (MBSF). The MIPT have extensive experience in managing and delivering consents for telecommunications infrastructure projects across the Auckland region and, therefore, can deliver consistent and integrated consenting outcomes.

On receipt of an application or a pre-application request a dedicated resource consent planner (or planners, as circumstances dictate) will be allocated from the MIPT to take ownership of, and be accountable for, the necessary resource consenting process that surrounds the deployment of either UFB or RBI. We encourage early and frequent engagement on the project to ensure the resource consent process can be delivered to secure the aspirations and imperatives of the broadband proponents. This ensures a consistent, timely and cost-effective approach to the consent process. Depending on the circumstances of the applications, we are keen to work with the applicant's planning team to explore flexible and innovative approaches

to delivering these consents which could include identifying activities and or specific sections that could be covered by global consents or work methodologies.

Regarding the activity status of, in particular Aerial deployment of telecommunications infrastructure, the Proposed Auckland Unitary Plan (PAUP) is reasonably permissive. Under the PAUP, new overhead telecommunication lines and new support structures are generally permitted in the rural, future urban, quarry and marinas zones. These are Discretionary in the residential, centres and open space zones. It is Restricted Discretionary in the industrial zones and general business zones, but a Permitted activity in the Heavy Industry zone.

The PAUP also recognises the need to provide for the continued operation of the network utilities. Therefore, as a Permitted activity, a number of standards have been developed to enable the minor upgrading of the existing infrastructure. This includes alterations and additions to telecommunication lines, including the placement of new lines on existing poles, as well as providing for modifications of existing poles.

ii) Works in the Road Corridor

At present Auckland Transport have a dedicated team of 4 site auditors/advisors, 1 Corridor Access Request (CAR) coordinator and 1 relationship manager, that manage the UFB rollout from preliminary design application through to final walkover and putting the work into warranty, for the entire Auckland region.

Having a dedicated team allows for a consistent view of the overall project, approach to management of work sites and when setting conditions for things such as reinstatement requirements. It has also helped build strong working relationships with the key stakeholders.

The team has a consistent approach and work collaboratively to problem-solve and agree conditions to better manage the project that produces a better outcome for all involved. Weekly meetings are used to work through any ongoing issues, better coordinate with other works such as footpath renewals, and discuss things such as new methods of deployment.

Each cabinet/FFP area can also be covered by one CAR and an agreed set of fees which includes a set number of site audits. Things like non-compliance notices and other performance related charges sit outside of this fee structure.

With an understanding of scope and expectations around the next stage of the RBI rollout Auckland Transport could explore a similar approach to that initiative, and for works under the Mobile Black Spot Fund.

a) Identification of infrastructure

Relevant infrastructure has been identified in each community profile (see Appendix 2). The data used to develop each profile is also provided electronically.

2 Uptake and Awareness Assistance

Based on community engagement undertaken as part of the development of this registration of interest Auckland Council understands that demand for improved broadband is consistently high across rural Auckland and that the factor limiting the uptake of broadband services in rural areas is an undersupply of quality and affordable broadband services, and where services are available, a limited awareness that those services are available.

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Mobile Black Spot Fund

Through engagement with communities across rural Auckland, and with support from geospatial analysis, Auckland Council has identified 29 mobile black spots. A list of these black spots is included below and spatially represented in Appendix 3:

- **Franklin Local Board**
 - Awhitu
 - Clevedon
 - Hunua
 - Kawakawa
 - Orere Point
 - Pukekohe East

- **Great Barrier Local Board**
 - Karaka Bay
 - Kawa
 - Motairehe
 - Okiwi
 - Wairahi

- **Rodney Local Board**
 - Algies Bay
 - Coatesville
 - Makarau
 - Matakana
 - South Head
 - Te Arai
 - Tomarata
 - Wainui
 - Wellsford
 - Kaukapakapa
 - Riverhead
 - Tahekeroa
 - Warkworth

- **Waiheke Local Board**
 - Rakino Island

- **Waitakere Ranges Local Board**
 - Bethells Beach
 - Henderson Valley
 - Huia
 - Waitakere

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Each cabinet/FFP area can also be covered by one CAR and an agreed set of fees which includes a set number of site audits. Non-compliance notices and other performance-related charges sit outside of this fee structure.

With an understanding of scope and expectations around the next stage of the RBI rollout, Auckland Transport could explore a similar approach to that initiative, and for works under the Mobile Black Spot Fund.

a) Identification of infrastructure, land or land access

Relevant infrastructure has been identified in each community profile (see Appendix 3). The data used to develop each profile is also provided electronically.

2 Investment options

Auckland Council is investing significant resource in support of the deployment of better broadband infrastructure under UFB2, RBI2, and the MBSF. This includes the investigation and planning of infrastructure deployment, resource consenting, corridor access, and communications and community engagement.

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	Agree

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.

Details of Conflict of Interest: not applicable

DECLARATION

I 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 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 has been authorised by the Respondent to make this declaration on its behalf.

Signature: _____

Full name: Jim Quinn

Title / position: Chief of Strategy

Name of organisation: Auckland Council

Date: _____

Appendix 1: UFB2 Candidate Area Profiles

* source: community feedback

** source: Auckland Council and Statistics New Zealand

[Maps are being developed for each candidate area and will be included in the appropriate section when complete. Further supporting material provided by some communities may also be included here]

Gaps in UFB1 coverage within the Metropolitan Urban Limit

Candidate Area	All UFB Coverage Gaps within MUL	Laingholm	Ormiston	Hingaia	Whenuapai West	Long Bay	Orewa West	Mangere South	Hobsonville East	Otara West	Birdwood	Swanson
Priority	1 of 17 (1st equal)	1 of 11	2 of 11	3 of 11	4 of 11	5 of 11	6 of 11	7 of 11	8 of 11	9 of 11	10 of 11	11 of 11
Rateable Units**	2165	1223	93	623	45	87	30	40	10	5	7	2
Population (Usually Resident)**	6776	3312	1465	1309	212	197	115	76	30	30	24	6
Pop Density (SqKm)**	172	705	222	519	130	66	49	8	55	47	53	38
Total Household (Usually Resident)**	2223	1155	409	426	69	64	41	33	10	6	9	1
Median Income (\$)**	155856	92538	937700	114150	72925	102200	101100	65000	85000	0	81300	62500
Mobile Access (Household)**	1848	975	317	378	64	57	25	16	8	0	7	1
Internet Access (Household)**	1921	1020	333	404	58	54	22	14	8	0	7	1
Number of Businesses**	36	19	3	4	4	2	0	2	0	2	0	0

Warkworth

Candidate Area	Warkworth
Priority	1 of 17 (1 st equal)
Current Service*	ADSL, VDSL, RBI Wireless, 3G Modem
Issues Description*	Services slow, services unstable, limited access at peak times, wireless services unreliable, connections do not support business activity
Average Download (Mbps)*	6.54
Average Upload (Mbps)*	0.66
Ping (ms)*	33
Rateable Units**	1840
Population (Usually Resident)**	3582
Pop Density (SqKm)**	943
Total Household (Usually Resident)**	1325
Median Income (\$)***	60540
Mobile Phone (Households)**	1149
Internet Access (Households)**	1043
Number of Businesses**	24
Number of Homes with Business Activity*	5
Individuals that Would Work From Home*	y
Total Number of Students*	1

Helensville

Candidate Area	Helensville
Priority	2 of 17
Current Service*	ADSL, VDSL, RBI Wireless
Issues Description*	Services slow, services unstable, inconsistent coverage, quality varied by time of day, cabinet upgrade required
Average Download (Mbps)*	5.44
Average Upload (Mbps)*	0.69
Ping (ms)*	369
Rateable Units**	1121
Population (Usually Resident)**	2535
Pop Density (SqKm)**	1348
Total Household (Usually Resident)**	957
Median Income (\$)***	54918
Mobile Phone (Households)**	772
Internet Access (Households)**	667
Number of Businesses**	11
Number of Homes with Business Activity*	173
Individuals that Would Work From Home*	y
Total Number of Students*	1300

Wellsford

Candidate Area	Wellsford
Priority	3 of 17
Current Service*	ADSL, WiFi
Issues Description*	Services slow, services unstable, require cabinet upgrade
Average Download (Mbps)*	n/a
Average Upload (Mbps)*	n/a
Ping (ms)*	n/a
Rateable Units**	796
Population (Usually Resident)**	1587
Pop Density (SqKm)**	810
Total Household (Usually Resident)**	615
Median Income (\$) **	40388
Mobile Phone (Households)**	471
Internet Access (Households)**	348
Number of Businesses**	21
Number of Homes with Business Activity*	y
Individuals that Would Work From Home*	n/a
Total Number of Students*	n/a

Huia / Cornwallis

Candidate Area	Huia / Cornwallis
Priority	4 of 17
Current Service*	ADSL
Issues Description*	Services slow, services unstable, cabinet upgrade needed, limited access to RBI wireless, limited access to fixed line
Average Download (Mbps)*	0.39
Average Upload (Mbps)*	0.82
Ping (ms)*	98
Rateable Units**	342
Population (Usually Resident)**	652
Pop Density (SqKm)**	80
Total Household (Usually Resident)**	267
Median Income (\$)***	65000
Mobile Phone (Households)**	121
Internet Access (Households)**	205
Number of Businesses**	0
Number of Homes with Business Activity*	200
Individuals that Would Work From Home*	y
Total Number of Students*	y

Clevedon

Candidate Area	Clevedon
Priority	5 of 17
Current Service*	ADSL, 3G, Satellite, Vodem
Issues Description*	Services slow, services unstable, patchy mobile services, rain fade, does not support video content, does not support business activity
Average Download (Mbps)*	4.01
Average Upload (Mbps)*	0.57
Ping (ms)*	47
Rateable Units**	153
Population (Usually Resident)**	361
Pop Density (SqKm)**	1203
Total Household (Usually Resident)**	122
Median Income (\$) **	91750
Mobile Phone (Households)**	109
Internet Access (Households)**	100
Number of Businesses**	5
Number of Homes with Business Activity*	4
Individuals that Would Work From Home*	y
Total Number of Students*	7

Snells Beach / Algies Bay

Candidate Area	Snells Beach / Algies Bay
Priority	6 of 17
Current Service*	ADSL
Issues Description*	Slow and variable speeds, unstable connections
Average Download (Mbps)*	11.00
Average Upload (Mbps)*	0.95
Ping (ms)*	27
Rateable Units**	2069
Population (Usually Resident)**	3406
Pop Density (SqKm)**	1346
Total Household (Usually Resident)**	1407
Median Income (\$) **	52071
Mobile Phone (Households)**	1162
Internet Access (Households)**	1036
Number of Businesses**	21
Number of Homes with Business Activity*	30
Individuals that Would Work From Home*	n/a
Total Number of Students*	35

Matakana

Candidate Area	Matakana
Priority	7 of 17
Current Service*	ADSL, VDSL, RBI, Satellite, Dial-up
Issues Description*	Services slow, services unstable, limited RBI coverage, limited access to fixed-line services, slow speeds at peak times
Average Download (Mbps)*	4.87
Average Upload (Mbps)*	0.80
Ping (ms)*	62
Rateable Units**	162
Population (Usually Resident)**	267
Pop Density (SqKm)**	445
Total Household (Usually Resident)**	101
Median Income (\$) **	64800
Mobile Phone (Households)**	87
Internet Access (Households)**	84
Number of Businesses**	9
Number of Homes with Business Activity*	5
Individuals that Would Work From Home*	100
Total Number of Students*	n/a

Stillwater

Candidate Area	Stillwater
Priority	8 of 17
Current Service*	ADSL
Issues Description*	Services slow, services unstable
Average Download (Mbps)*	n/a
Average Upload (Mbps)*	n/a
Ping (ms)*	n/a
Rateable Units**	326
Population (Usually Resident)**	876
Pop Density (SqKm)**	1564
Total Household (Usually Resident)**	315
Median Income (\$) **	100457
Mobile Phone (Households)**	278
Internet Access (Households)**	271
Number of Businesses**	7
Number of Homes with Business Activity*	y
Individuals that Would Work From Home*	n/a
Total Number of Students*	y

Piha

Candidate Area	Piha
Priority	9 of 17
Current Service*	ADSL
Issues Description*	Services slow, services unstable
Average Download (Mbps)*	0.54
Average Upload (Mbps)*	n/a
Ping (ms)*	n/a
Rateable Units**	704
Population (Usually Resident)**	811
Pop Density (SqKm)**	520
Total Household (Usually Resident)**	336
Median Income (\$) **	77688
Mobile Phone (Households)**	266
Internet Access (Households)**	263
Number of Businesses**	7
Number of Homes with Business Activity*	n/a
Individuals that Would Work From Home*	n/a
Total Number of Students*	y

Point Wells

Candidate Area	Point Wells
Priority	10 of 17
Current Service*	
Issues Description*	Services slow, services unstable, cabinet upgrade required
Average Download (Mbps)*	3.65
Average Upload (Mbps)*	0.27
Ping (ms)*	n/a
Rateable Units**	252
Population (Usually Resident)**	384
Pop Density (SqKm)**	985
Total Household (Usually Resident)**	171
Median Income (\$) **	56100
Mobile Phone (Households)**	141
Internet Access (Households)**	141
Number of Businesses**	2
Number of Homes with Business Activity*	y
Individuals that Would Work From Home*	y
Total Number of Students*	n/a

Kawakawa Bay / Orere Point

Candidate Area	Kawakawa Bay / Orere Point
Priority	11 of 17
Current Service*	ADSL, 3G wireless stick
Issues Description*	Services slow, services unstable, services unusable, residents forced to commute for internet access, rain fade
Average Download (Mbps)*	2.71
Average Upload (Mbps)*	0.55
Ping (ms)*	469
Rateable Units**	259
Population (Usually Resident)**	375
Pop Density (SqKm)**	682
Total Household (Usually Resident)**	152
Median Income (\$)***	60900
Mobile Phone (Households)**	106
Internet Access (Households)**	86
Number of Businesses**	5
Number of Homes with Business Activity*	3
Individuals that Would Work From Home*	y
Total Number of Students*	56

Patumahoe

Candidate Area	Patumahoe
Priority	12 of 17
Current Service*	ADSL
Issues Description*	Services slow, limited connectivity, services unstable
Average Download (Mbps)*	3.92
Average Upload (Mbps)*	0.77
Ping (ms)*	n/a
Rateable Units**	273
Population (Usually Resident)**	114
Pop Density (SqKm)**	161
Total Household (Usually Resident)**	195
Median Income (\$)***	78333
Mobile Phone (Households)**	167
Internet Access (Households)**	194
Number of Businesses**	9
Number of Homes with Business Activity*	12
Individuals that Would Work From Home*	n/a
Total Number of Students*	11

Waiheke Island

Candidate Area	Waiheke Island
Priority	13 of 17
Current Service*	3G Mobile, Satellite, Wireless
Issues Description*	Services slow, services unstable, requires cabinet upgrade
Average Download (Mbps)*	3.89
Average Upload (Mbps)*	2.94
Ping (ms)*	32
Rateable Units**	433
Population (Usually Resident)**	3222
Pop Density (SqKm)**	315
Total Household (Usually Resident)**	1389
Median Income (\$) **	67764
Mobile Phone (Households)**	1096
Internet Access (Households)**	1032
Number of Businesses**	13
Number of Homes with Business Activity*	y
Individuals that Would Work From Home*	n/a
Total Number of Students*	y

Leigh / Matheson Bay

Candidate Area	Leigh / Matheson Bay
Priority	14 of 17
Current Service*	
Issues Description*	
Average Download (Mbps)*	
Average Upload (Mbps)*	
Ping (ms)*	
Rateable Units**	559
Population (Usually Resident)**	598
Pop Density (SqKm)**	433
Total Household (Usually Resident)**	243
Median Income (\$)***	59545
Mobile Phone (Households)**	180
Internet Access (Households)**	175
Number of Businesses**	19
Number of Homes with Business Activity*	
Individuals that Would Work From Home*	
Total Number of Students*	

Omaha

Candidate Area	Omaha
Priority	15 of 17
Current Service*	
Issues Description*	
Average Download (Mbps)*	
Average Upload (Mbps)*	
Ping (ms)*	
Rateable Units**	828
Population (Usually Resident)**	428
Pop Density (SqKm)**	594
Total Household (Usually Resident)**	183
Median Income (\$)***	632500
Mobile Phone (Households)**	159
Internet Access (Households)**	132
Number of Businesses**	3
Number of Homes with Business Activity*	
Individuals that Would Work From Home*	
Total Number of Students*	

Parau (Armour Bay)

Candidate Area	Parau (Armour Bay)
Priority	16 of 17
Current Service*	
Issues Description*	
Average Download (Mbps)*	
Average Upload (Mbps)*	
Ping (ms)*	
Rateable Units**	148
Population (Usually Resident)**	403
Pop Density (SqKm)**	1343
Total Household (Usually Resident)**	144
Median Income (\$)***	85000
Mobile Phone (Households)**	123
Internet Access (Households)**	118
Number of Businesses**	3
Number of Homes with Business Activity*	
Individuals that Would Work From Home*	
Total Number of Students*	

Whitford

Candidate Area	Whitford
Priority	17 of 17
Current Service*	
Issues Description*	
Average Download (Mbps)*	
Average Upload (Mbps)*	
Ping (ms)*	
Rateable Units**	31
Population (Usually Resident)**	87
Pop Density (SqKm)**	964
Total Household (Usually Resident)**	25
Median Income (\$)***	121900
Mobile Phone (Households)**	20
Internet Access (Households)**	22
Number of Businesses**	1
Number of Homes with Business Activity*	
Individuals that Would Work From Home*	
Total Number of Students*	

Appendix 2: RBI2 Candidate Area Profiles

* source: community feedback

** source: Auckland Council and Statistics New Zealand

[Maps are being developed for each candidate area and will be included in the appropriate section when complete. Further supporting material provided by some communities may also be included here]

Bethells Beach / Te Henga

Candidate Area	Bethells Beach / Te Henga
Priority	1 of 24
Current Service*	ADSL
Issues Description*	Services slow, services unstable, services largely unusable, frequent time-outs, waiting list for connections, unable to use connections, quality has deteriorated over time
Average Download (Mbps)*	1.86
Average Upload (Mbps)*	0.54
Ping (ms)*	804
Rateable Units**	157
Population (Usually Resident)**	309
Pop Density (SqKm)**	97
Total Household (Usually Resident)**	125
Median Income (\$) **	61350
Mobile Phone (Household)**	32
Internet Access (Household)**	93
Number of Businesses**	3
Number of Homes with Business Activity*	307
Individuals Would Work From Home*	83
Total Number of Students*	87



Te Kawerau Iwi Tribal Authority

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Mangere Bridge
Auckland 2151
2/3 Airport Dr
Airport Oaks
09 973 0898
www.tekawerau.iwi.nz
admin@tekawerau.iwi.nz

23 June 2015

Robert Lundberg
Advisor Digital Policy
Auckland Council
Email: Robert.Lundberg@aucklandcouncil.govt.nz

Dear Robert,

Re: Internet Upgrade for Te Henga / Bethells

Tena koe,

In March 2015 government announced additional funding to extend the coverage of the Rural Broadband Initiative (RBI) and Ultrafast Broadband (UFB) programme. Local authorities have been invited to represent the needs of communities that would benefit from a broadband upgrade. Given the persistent issues with broadband quality of service that the community has experienced, Te Henga has been identified as a community that would benefit from such an upgrade.

As well as a significant resident population (554 people) and many home-based businesses, the Te Kawerau Iwi Tribal Authority has plans to develop a papakainga (Kainga Whakahirahira) in Te Henga including a marae, kaumatua housing, and associated facilities starting within the next 5 years. A broadband upgrade is fundamental for the Te Henga community to participate in the 21st century, as well as enabling Te Kawerau to better occupy and use their ancestral lands since communications will be vital to the future plans for the papakainga including social, educational, cultural, and commercial aspirations.

Te Kawerau support the prioritisation of Te Henga for a broadband upgrade under the Rural Broadband Initiative and would welcome the opportunity to work with Auckland Council, central government, and delivery partners to ensure the expedient rollout of broadband to Te Henga, as well as realising the potential of that service.

Kind Regards,

A handwritten signature in blue ink, appearing to read 'Edward Ashby'.

Edward Ashby (MA, PgDip For.Sci.)
Heritage and Environment Manager
Heritage and Environment Unit
Te Kawerau Iwi Tribal Authority

Waiwera Valley

Candidate Area	Waiwera Valley
Priority	2 of 24
Current Service*	ADSL, ADSL2+, VDSL, Satellite
Issues Description*	Services slow, services unstable, cabinet upgrade required, waiting list to get connected, services unusable at peak times
Average Download (Mbps)*	0.82
Average Upload (Mbps)*	0.46
Ping (ms)*	470
Rateable Units**	271
Population (Usually Resident)**	653
Pop Density (SqKm)**	19
Total Household (Usually Resident)**	236
Median Income (\$) **	84890
Mobile Phone (Household)**	162
Internet Access (Household)**	185
Number of Businesses**	12
Number of Homes with Business Activity*	0
Individuals Would Work From Home*	y
Total Number of Students*	y

Makarau

Candidate Area	Makarau
Priority	3 of 24
Current Service*	ADSL, Dial-up, Satellite
Issues Description*	Limited access to fixed-line services, limited access to wireless RBI services, services slow, services unstable
Average Download (Mbps)*	5.98
Average Upload (Mbps)*	2.09
Ping (ms)*	6
Rateable Units**	77
Population (Usually Resident)**	181
Pop Density (SqKm)**	18
Total Household (Usually Resident)**	62
Median Income (\$) **	67925
Mobile Phone (Household)**	39
Internet Access (Household)**	48
Number of Businesses**	3
Number of Homes with Business Activity*	1801
Individuals Would Work From Home*	700
Total Number of Students*	y

Taupaki

Candidate Area	Taupaki
Priority	4 of 24
Current Service*	Dial-up, ADSL, RBI Wireless
Issues Description*	Services slow, services unstable, cabinet at capacity
Average Download (Mbps)*	1.68
Average Upload (Mbps)*	1.15
Ping (ms)*	292
Rateable Units**	148
Population (Usually Resident)**	483
Pop Density (SqKm)**	54
Total Household (Usually Resident)**	167
Median Income (\$) **	83208
Mobile Phone (Household)**	127
Internet Access (Household)**	121
Number of Businesses**	13
Number of Homes with Business Activity*	51
Individuals Would Work From Home*	40
Total Number of Students*	58

Opanuku Road

Candidate Area	Opanuku Road
Priority	5 of 24
Current Service*	ADSL
Issues Description*	Services slow, services unstable, ADSL unusable, quality has deteriorated over time
Average Download (Mbps)*	0.50
Average Upload (Mbps)*	0.30
Ping (ms)*	n/a
Rateable Units**	64
Population (Usually Resident)**	260
Pop Density (SqKm)**	130
Total Household (Usually Resident)**	90
Median Income (\$)***	73500
Mobile Phone (Household)**	72
Internet Access (Household)**	72
Number of Businesses**	3
Number of Homes with Business Activity*	1
Individuals Would Work From Home*	n/a
Total Number of Students*	n/a

Kingseat / Clarks Beach

Candidate Area	Kingseat / Clarks Beach
Priority	6 of 24
Current Service*	RBI wireless
Issues Description*	Services slow, services unstable, cabinet upgrade required
Average Download (Mbps)*	n/a
Average Upload (Mbps)*	n/a
Ping (ms)*	n/a
Rateable Units**	333
Population (Usually Resident)**	719
Pop Density (SqKm)**	78
Total Household (Usually Resident)**	241
Median Income (\$) **	90283
Mobile Phone (Household)**	213
Internet Access (Household)**	195
Number of Businesses**	24
Number of Homes with Business Activity*	0
Individuals Would Work From Home*	y
Total Number of Students*	y

Karekare

Candidate Area	Karekare
Priority	7 of 24
Current Service*	WiFi
Issues Description*	Cabinet upgrade required
Average Download (Mbps)*	n/a
Average Upload (Mbps)*	n/a
Ping (ms)*	n/a
Rateable Units**	104
Population (Usually Resident)**	144
Pop Density (SqKm)**	25
Total Household (Usually Resident)**	48
Median Income (\$)***	83900
Mobile Phone (Household)**	37
Internet Access (Household)**	40
Number of Businesses**	0
Number of Homes with Business Activity*	0
Individuals Would Work From Home*	y
Total Number of Students*	y

Ara-Kotinga

Candidate Area	Ara-Kotinga
Priority	8 of 24
Current Service*	
Issues Description*	Slow connections, unstable connections
Average Download (Mbps)*	4.43
Average Upload (Mbps)*	0.66
Ping (ms)*	n/a
Rateable Units**	33
Population (Usually Resident)**	91
Pop Density (SqKm)**	294
Total Household (Usually Resident)**	33
Median Income (\$) **	92500
Mobile Phone (Household)**	24
Internet Access (Household)**	24
Number of Businesses**	0
Number of Homes with Business Activity*	0
Individuals Would Work From Home*	n/a
Total Number of Students*	25

Anawhata

Candidate Area	Anawhata
Priority	9 of 24
Current Service*	Satellite
Issues Description*	Satellite services expensive, slow, and unreliable, Options limited to satellite and very limited mobile
Average Download (Mbps)*	0.02
Average Upload (Mbps)*	n/a
Ping (ms)*	188
Rateable Units**	36
Population (Usually Resident)**	33
Pop Density (SqKm)**	9
Total Household (Usually Resident)**	14
Median Income (\$)***	78900
Mobile Phone (Household)**	8
Internet Access (Household)**	9
Number of Businesses**	1
Number of Homes with Business Activity*	4
Individuals Would Work From Home*	n/a
Total Number of Students*	4

Waitoki

Candidate Area	Waitoki
Priority	10 of 24
Current Service*	ADSL
Issues Description*	Services slow, services unstable, connections unsable at peak times
Average Download (Mbps)*	2.09
Average Upload (Mbps)*	0.55
Ping (ms)*	31
Rateable Units**	255
Population (Usually Resident)**	625
Pop Density (SqKm)**	26
Total Household (Usually Resident)**	22
Median Income (\$) **	96987
Mobile Phone (Household)**	179
Internet Access (Household)**	176
Number of Businesses**	24
Number of Homes with Business Activity*	7
Individuals Would Work From Home*	n/a
Total Number of Students*	y

Wainui

Candidate Area	Wainui
Priority	11 of 24
Current Service*	ADSL
Issues Description*	Services slow, services unstable, require cabinet upgrade, waiting list for connections, no RBl coverage
Average Download (Mbps)*	0.70
Average Upload (Mbps)*	0.64
Ping (ms)*	2300
Rateable Units**	142
Population (Usually Resident)**	265
Pop Density (SqKm)**	25
Total Household (Usually Resident)**	88
Median Income (\$)***	91012
Mobile Phone (Household)**	63
Internet Access (Household)**	67
Number of Businesses**	9
Number of Homes with Business Activity*	1
Individuals Would Work From Home*	15
Total Number of Students*	n/a

Hunua

Candidate Area	Hunua
Priority	12 of 24
Current Service*	ADSL, VDSL, RBI Wireless, Satellite, Compass Wireless
Issues Description*	Services slow, services unstable, cabinet upgrade required, limited coverage / access, waiting list to connect
Average Download (Mbps)*	4.18
Average Upload (Mbps)*	0.82
Ping (ms)*	51
Rateable Units**	306
Population (Usually Resident)**	289
Pop Density (SqKm)**	12
Total Household (Usually Resident)**	260
Median Income (\$)***	103824
Mobile Phone (Household)**	221
Internet Access (Household)**	203
Number of Businesses**	5
Number of Homes with Business Activity*	1
Individuals Would Work From Home*	2
Total Number of Students*	8

Glenbrook

Candidate Area	Glenbrook
Priority	13 of 24
Current Service*	ADSL, RBI Wireless
Issues Description*	Services slow, services unstable
Average Download (Mbps)*	0.70
Average Upload (Mbps)*	2.30
Ping (ms)*	n/a
Rateable Units**	108
Population (Usually Resident)**	210
Pop Density (SqKm)**	114
Total Household (Usually Resident)**	81
Median Income (\$)***	60800
Mobile Phone (Household)**	69
Internet Access (Household)**	48
Number of Businesses**	4
Number of Homes with Business Activity*	0
Individuals Would Work From Home*	y
Total Number of Students*	n/a

Waimauku

Candidate Area	Waimauku
Priority	14 of 24
Current Service*	ADSL, 3G Mobile
Issues Description*	Services slow, services unstable, require cabinet upgrade
Average Download (Mbps)*	6.93
Average Upload (Mbps)*	0.86
Ping (ms)*	41
Rateable Units**	282
Population (Usually Resident)**	732
Pop Density (SqKm)**	283
Total Household (Usually Resident)**	230
Median Income (\$) **	113343
Mobile Phone (Household)**	197
Internet Access (Household)**	205
Number of Businesses**	5
Number of Homes with Business Activity*	18
Individuals Would Work From Home*	y
Total Number of Students*	611

Kaukapakapa

Candidate Area	Kaukapakapa
Priority	15 of 24
Current Service*	ADSL, 3G mobile
Issues Description*	Services slow, services unstable, slow at peak times, limited access to services
Average Download (Mbps)*	2.98
Average Upload (Mbps)*	0.77
Ping (ms)*	n/a
Rateable Units**	47
Population (Usually Resident)**	141
Pop Density (SqKm)**	49
Total Household (Usually Resident)**	54
Median Income (\$) **	65000
Mobile Phone (Household)**	42
Internet Access (Household)**	39
Number of Businesses**	0
Number of Homes with Business Activity*	10
Individuals Would Work From Home*	n/a
Total Number of Students*	1

Great Barrier Island

Candidate Area	Great Barrier Island
Priority	16 of 24
Current Service*	ADSL, Satellite
Issues Description*	Services slow, services unstable, limited coverage, patchy service, cabinet upgrade required
Average Download (Mbps)*	1.82
Average Upload (Mbps)*	0.68
Ping (ms)*	64
Rateable Units**	732
Population (Usually Resident)**	407
Pop Density (SqKm)**	3
Total Household (Usually Resident)**	210
Median Income (\$)***	36761
Mobile Phone (Household)**	110
Internet Access (Household)**	104
Number of Businesses**	2
Number of Homes with Business Activity*	1
Individuals Would Work From Home*	y
Total Number of Students*	y

Awhitu

Candidate Area	Awhitu
Priority	17 of 24
Current Service*	ADSL, Dial-up, 3G mobile, Wireless, Satellite
Issues Description*	Services slow, services unstable, limited access to all services, cabinet upgrade required
Average Download (Mbps)*	
Average Upload (Mbps)*	
Ping (ms)*	
Rateable Units**	1120
Population (Usually Resident)**	1336
Pop Density (SqKm)**	7
Total Household (Usually Resident)**	552
Median Income (\$) **	56166
Mobile Phone (Household)**	422
Internet Access (Household)**	359
Number of Businesses**	88
Number of Homes with Business Activity*	2
Individuals Would Work From Home*	y
Total Number of Students*	1

South Head

Candidate Area	South Head
Priority	18 of 24
Current Service*	ADSL, RBI Wireless
Issues Description*	Services slow, services unstable, frequent drop outs, limited coverage
Average Download (Mbps)*	3.93
Average Upload (Mbps)*	0.66
Ping (ms)*	42
Rateable Units**	161
Population (Usually Resident)**	268
Pop Density (SqKm)**	5
Total Household (Usually Resident)**	105
Median Income (\$) **	58440
Mobile Phone (Household)**	81
Internet Access (Household)**	76
Number of Businesses**	6
Number of Homes with Business Activity*	400
Individuals Would Work From Home*	n/a
Total Number of Students*	460

Rodney North

Candidate Area	Rodney North
Priority	19 of 24
Current Service*	ADSL, Dial-up, 3G mobile
Issues Description*	Connection slow, connection unstable, limited fixed-line broadband coverage, limited fixed-wireless broadband coverage, patchy service, extremely variable quality of service
Average Download (Mbps)*	1.71
Average Upload (Mbps)*	6.40
Ping (ms)*	48
Rateable Units**	4183
Population (Usually Resident)**	8311
Pop Density (SqKm)**	18
Total Household (Usually Resident)**	3171
Median Income (\$)***	66470
Mobile Phone (Household)**	2493
Internet Access (Household)**	2319
Number of Businesses**	171
Number of Homes with Business Activity*	28
Individuals Would Work From Home*	n/a
Total Number of Students*	4

Muriwai

Candidate Area	Muriwai
Priority	20 of 24
Current Service*	ADSL, VDSL
Issues Description*	Services slow, services unstable
Average Download (Mbps)*	6.69
Average Upload (Mbps)*	0.80
Ping (ms)*	31
Rateable Units**	245
Population (Usually Resident)**	327
Pop Density (SqKm)**	38
Total Household (Usually Resident)**	112
Median Income (\$) **	86750
Mobile Phone (Household)**	93
Internet Access (Household)**	92
Number of Businesses**	4
Number of Homes with Business Activity*	2
Individuals Would Work From Home*	n/a
Total Number of Students*	y

Coatesville

Candidate Area	Coatesville
Priority	21 of 24
Current Service*	ADSL
Issues Description*	Services slow, services unstable
Average Download (Mbps)*	0.71
Average Upload (Mbps)*	0.60
Ping (ms)*	58
Rateable Units**	162
Population (Usually Resident)**	482
Pop Density (SqKm)**	119
Total Household (Usually Resident)**	143
Median Income (\$)***	127442
Mobile Phone (Household)**	129
Internet Access (Household)**	138
Number of Businesses**	1
Number of Homes with Business Activity*	1
Individuals Would Work From Home*	y
Total Number of Students*	y

Riverhead / Paremoremo

Candidate Area	Riverhead / Paremoremo
Priority	22 of 24
Current Service*	ADSL, VDSL
Issues Description*	Services slow, services unstable, cabinet upgrade required
Average Download (Mbps)*	6.21
Average Upload (Mbps)*	0.53
Ping (ms)*	168
Rateable Units**	54
Population (Usually Resident)**	132
Pop Density (SqKm)**	92
Total Household (Usually Resident)**	45
Median Income (\$) **	115000
Mobile Phone (Household)**	42
Internet Access (Household)**	42
Number of Businesses**	2
Number of Homes with Business Activity*	0
Individuals Would Work From Home*	1500
Total Number of Students*	n/a

Tapora

Candidate Area	Tapora
Priority	23 of 24
Current Service*	Dial-up
Issues Description*	Very slow, unstable
Average Download (Mbps)*	n/a
Average Upload (Mbps)*	n/a
Ping (ms)*	n/a
Rateable Units**	44
Population (Usually Resident)**	62
Pop Density (SqKm)**	2
Total Household (Usually Resident)**	27
Median Income (\$)***	48350
Mobile Phone (Household)**	19
Internet Access (Household)**	17
Number of Businesses**	0
Number of Homes with Business Activity*	0
Individuals Would Work From Home*	n/a
Total Number of Students*	n/a

Rakino Island

Candidate Area	Rakino Island
Priority	24 of 24
Current Service*	
Issues Description*	Intermittent access to wireless services
Average Download (Mbps)*	n/a
Average Upload (Mbps)*	n/a
Ping (ms)*	n/a
Rateable Units**	192
Population (Usually Resident)**	15
Pop Density (SqKm)**	10
Total Household (Usually Resident)**	9
Median Income (\$)***	45000
Mobile Phone (Household)**	0
Internet Access (Household)**	0
Number of Businesses**	0
Number of Homes with Business Activity*	0
Individuals Would Work From Home*	n/a
Total Number of Students*	n/a

Appendix 3: Supporting Information for Mobile Black Spots

[map showing the regional distribution of mobile black spots to be inserted]