

Cellular Service Improvements – HICEEC Investigation Summary for Islands Trust

Background

In 2015, *Hornby Island Community Economic Enhancement Corporation* (HICEEC) undertook an extensive *Economic Action Plan* (EAP) project to recommend focus areas for future efforts. Engagement was strong, with 323 responses and approximately 1,400 individual comments to various questions.

A committee of community members interpreted the results and made recommendations to the Board, which were accepted, and continue to be included in the annual plans. Key findings included:

Guiding Principles

- Conservation-oriented economy; we have no economy without the environment
- Grow the economy (and the population)
- Sustain island culture – creative, entrepreneurial, and artistic spirit

Top three trends of concern over Hornby's future

1. Not enough young people
2. Housing problems
3. Aging population

Top three things that could be done to ensure people can live on Hornby

1. Housing solutions
2. Fix ferries
3. Attracting/retaining young people and families

The 100+ general ideas and specific action suggestions were mostly of the “what” and “why” variety, requiring follow-on investigation to flesh out the “how,” “who,” and so on. Within the “Level II” priorities, one initiative was identified, called, *Attract New Residents through quality-of-life promotion*, with the following rationale:

Using terminology such as “urban refugees” gives a sense of the slice of the population that craves a simpler, rural lifestyle but perhaps doesn't realize that there are, indeed, options for balancing that with the need to either “make a living” in the traditional sense, or adopting a “back-to-the-land” mindset. For the former, high-speed internet access means serving clients around the world from Hornby, while for the latter, there are properties available for greater self-sufficiency.

Within the subsequent HICEEC Annual Plan for 2016, the project was lifted to active status.

Research to date

We've been exchanging notes and phone calls back and forth with a couple of people at TELUS for some months now to explore whether or not we can increase the availability and speed of internet service (both wireline and "wireless"). Our main area of contact at TELUS is with a department's whose purpose is to find ways to service communities with "unusual footprints" that make regular business cases difficult for broadband.

It was thought - and still could be the case - that we won't be able to afford anything. We're waiting for the cost of the incremental add-on cellular service costs to the microwave tower proposal. If it were in the hundreds of thousands of dollars, it would require outside funding. The federal government has announced new dollars for supporting rural digital

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access programs, but we haven't explored any of that yet.

In terms of the specific height of the tower being proposed, the way I understand it is that the lower height is satisfactory for the telephone/internet back-up service, which is the fundamental part of the application, while the higher height is an optional add-on – while they're at it – to provide cellular service in the central part of the island that currently has none.

Elements of our research includes:

1. Official Community Plan
 - Supports transmission towers for community radio and to enable high-speed internet access
 - Supports high-speed internet access to facilitate education and commercial opportunities for residents
2. April
 - Question to Hornby Island Fire & Rescue regarding cell coverage – indication that better coverage would be beneficial, especially in the dead zone from the bakery to the Co-op.
3. May
 - Initial contact with TELUS to explore possibilities
4. November (initial broadgauge estimates and assumptions)
 - 1,000 premises – good coverage to 99.6% of them would require 11 sites at a cost of \$6.6M to \$7M, which isn't economically viable.
 - 76% coverage requires 4 sites, \$2.8M to \$3M; TELUS economic model would need \$1.4M to \$1.6M in contributions to make the project viable, as well as support for the 4 towers.
 - TELUS to refine estimates of cost; assumptions: 1,148 residential dwellings, 300-400 businesses; 950 fixed population; 2,000 residents and 40,000 visitors in summer
 - Capital mgt roughly \$2,500-\$2,600 per household in TELUS budget
 - Gap amount requires other funding: provincial – Connecting BC agreements; federal – Connecting Canadians (program closed but Hornby was designated as an “underserved” community)
 - Roughly \$600k cost per tower for estimating purposes
 - Current estimate is 28% of the island gets cellular coverage
 - Assumptions used: 450 permanent households, 550 seasonal households
 - 20% of clients currently use TELUS; expectation is that 40-50% of clients in small communities use TELUS, so the Marketing team might see that there is the potential to “uplift on subscriber penetration”
 - Will present our case to their internal committee when we are ready and they will decide on the cost sharing requirements
 - Next steps: will look into a model that covers the Priority One area
 - Estimates will be for standard cellular and mobile data coverage for cell phones / smartphones / tablets (not sufficient coverage for high-speed internet Smart Hubs to provide internet to an entire home or business)
5. December

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- TELUS engineering group identified a radio tower project on Hornby that, with additional height, could provide cellular coverage and provide savings due to cost sharing.
- List of central area priority coverage:
 - Medical, dental and home support clinic/offices
 - Tribune Bay Outdoor Education Centre
 - Tribune Bay Provincial Park
 - Tribune Bay Campsite
 - Co-op Store and Gas Bar
 - Ringside market
 - Residential areas
 - ISLA (Island Secure Land Association) subdivision
 - School, pre-school, print shop, internet centre, natural history museum
 - Community Hall
 - Arts Council trailer
 - Union Bay Credit Union building
 - RCMP building
 - Farmers' market (up to 75 vendors)
 - Proposed "Spark" (hacker space) in old fire hall
 - Joe King park
 - Island Distillers

6. January

- Waiting for cellular tower costing estimates from TELUS, which may come in two flavours: one as an extension to the microwave tower proposal (cost sharing) and one as an alternative using a standalone design
- Much discussion on Facebook Word of Mouth group