



COUNTY OF WELLINGTON

COMMITTEE REPORT

To: Chair and Members of the Administration, Finance and Human Resources Committee
From: Justine Dainard, Smart Cities Project Manager
Date: Tuesday, April 20, 2021
Subject: **Update on Rural Broadband**

Background:

To encourage Internet Service Provider (ISP) service expansion, the County provided letters of support to ISPs seeking Provincial and Federal broadband funding this winter. These companies represent various types of service, one of which is an innovative model of delivery.

Report:

As the County continues to pursue improvements in rural internet, we remain committed to the SWIFT rural broadband project. Our investment in SWIFT has resulted in four projects, all nearing completion and offering more connectivity than originally scoped. It is also worth noting that the SWIFT projects inspired additional, un-funded expansion by companies moving quickly to establish service territory in response to our endorsed projects.

However, there is funding available at both the provincial and federal levels that SWIFT is not eligible for, and in such cases the County advocates for ISPs in their pursuit of these funds. Offering letters of support allows us to build contacts with these companies and to understand their plans for future coverage. The Smart Cities Office tracks this expansion in order to direct residents to newly available services.

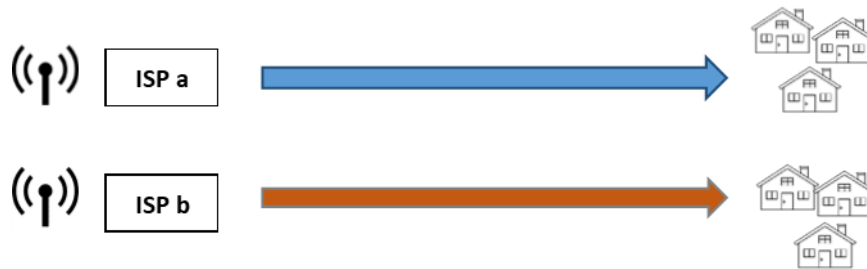
For the most recent rounds of federal UBF (Universal Broadband Fund) and provincial ICON (Improving Connectivity for Ontario) funding, the County provided letters of support to the six ISPs who approached us: BAI Communications, Eh!Tel, Leepfrog, North Frontenac, Rogers, and Xplornet. Collectively these projects included a range of fibreoptic, wireless broadband, and fixed wireless services, all meeting the minimum service standard of 50/10 Mbps.

One of these companies – BAI Communications – is proposing a Carrier Host Neutral fibre network. Because this is a business model we have not encountered before, an explanation is provided. Following are some descriptions of different ownership and service delivery models:

Local or National Internet Service Provider (ISP):

This is the most common model of service in our County. Each company installs and owns its fibre infrastructure where they think they will have enough subscribers to recoup their investment. Residents have a choice of service providers only if there happens to be multiple lines running past their house, as shown in Figure 1.

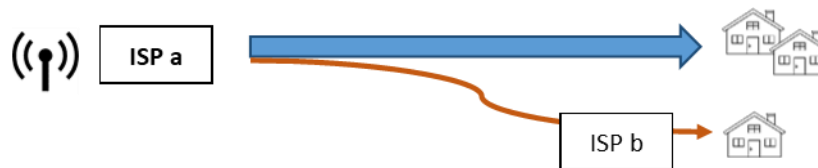
Figure 1: Private company with own infrastructure



SWIFT-funded ISP:

Successful ISPs under this model install and own their fibre infrastructure, but are required by SWIFT to maintain a portion of what is called Open Fibre (Figure 2). This Open Fibre is available to other providers; they can buy access to compete for customers on this same infrastructure, which means that a single line of cable can offer a choice of service. ISPs bid on SWIFT funding when they believe the density of addresses along their proposed line will provide a good return on investment.

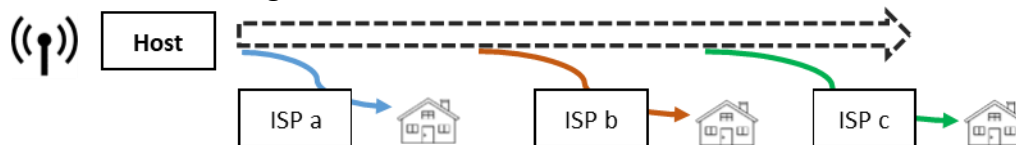
Figure 2: SWIFT-funded infrastructure



Carrier Host Neutral Model:

Under this model, a telecommunications company installs and owns the fibre infrastructure but does not offer any services along these lines themselves. This is 100% Open Fibre, or “Carrier Host Neutral”, with all ISPs invited to offer services (Figure 3). The carrier host charges access fees to the ISPs, and is therefore motivated to have many companies competing for customers along these lines. Theoretically, this model offers residents the most choice, and the competition between ISPs should keep service rates from escalating.

Figure 3: Carrier Host Neutral infrastructure



BAI Communications is pursuing funding for a Carrier Host Neutral model. Their proposal is to install this open fibre along all roads in our County where there is no existing or approved fibre providing adequate service. BAI is approaching ISPs and to date have one national and one local company indicating they will provide service over these future lines. BAI will own and maintain the infrastructure, and is not requesting an investment from the municipalities.

While most new rural broadband accounts require residents to pay a substantial connection fee to run the cable to their house, BAI is hoping to incentivize uptake by offering a reduced connection fee to households who confirm their interest early.

If provincial and federal funding is approved for this project, BAI will ask the County and member municipalities for assistance communicating with residents in order to raise awareness of the company's installation schedule and the opportunity for savings through early connection.

Recommendation:

That the Update on Rural Broadband be received for information.

Respectfully submitted,

A handwritten signature in black ink, reading "Justine Dainard". The signature is written in a cursive, flowing style.

Justine Dainard
Smart Cities Project Manager