



Closing the Gap: The Price of Internet Service

Rural markets have generally paid higher prices than urban centres for high-speed Internet access. This is because Internet service providers (ISPs) had little incentive to provide or improve Internet access, given the high costs of serving large areas with only a small base of potential customers.

The Eastern Ontario Regional Network (EORN) is working to change that. A project of the Eastern Ontario Wardens' Caucus, the \$170 million regional broadband project is providing municipal, provincial and federal funding to support private sector investment in building Internet infrastructure.

To create the network, Bell and Bell Aliant are building a 5,500-kilometre fibre optic backbone in the region, including laying more than 400 kilometres of new cable. ISPs can then build off of this backbone to connect residents and businesses. One of the project's goals is not only to expand access, but to narrow the urban/rural price gap.

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More affordable pricing

Prices are set by ISPs based on local marketplace conditions. While EORN does not set rates, improved pricing is a priority:

- Affordability is one of the criteria for evaluating bids for contracts with ISPs to build local networks to deliver broadband Internet access.
- EORN is encouraging more competitive rates through an open access policy, which allows any ISP to purchase wholesale bandwidth from the backbone network at the same competitive rates.

Getting the best technology for the price

Given the size of the region, improving high-speed Internet access across Eastern Ontario will require a mix of technologies to reach the greatest number of residents.

DSL

- DSL, or digital subscriber line, is a high-speed digital Internet connection over existing telephone lines, using a frequency that does not interrupt voice conversations.
- DSL often offers the least expensive rates for consumers where service is available. However, DSL has a limited reach. Upgrading wired connections to deliver DSL service to all locations isn't feasible given the size, terrain and low population densities of Eastern Ontario. Fortunately, with the introduction of a large capacity fibre optic network into rural areas, availability of DSL services for locations close to the network will significantly improve.

Wireless

- Wireless access uses radio waves to transmit and receive broadband Internet signals from a nearby tower. ISPs build local networks by connecting these towers to the fibre optic backbone and then beaming the signal to subscribers.
- This option is typically slightly more expensive per month than DSL service, but it can reach a far wider region more efficiently, as long as the terrain doesn't interfere with the signal.

Satellite

- This form of Internet access is delivered via a satellite dish installed at a home or business. Satellite has the benefit of being available widely because the signal is delivered via a satellite in space, taking geography out of the equation. As long as the dish has a view of the southern sky, the signal can be beamed down anywhere - much like satellite television.
- Satellite technology has improved significantly recently thanks to new high throughput satellite (HTS) technology that improves speed, capacity and quality.
- While satellite can be somewhat more costly than other services, EORN has negotiated improved pricing with Xplornet

Communications Inc. and certain packages are now comparable to that of wireless technologies. This service is available now throughout Eastern Ontario.

Cable and mobile phone companies are also providing Internet access in parts of the region. Having a greater number of options available will make rural markets more competitive and improve consumer choice and affordability.

Who gets what?

The purpose of the local access contracts is to improve access in underserved areas and to improve pricing. However, consumers can choose to purchase services from the vendor of their choice.

EORN is awarding contracts based on several criteria, including:

- The geographic reach and number of households covered by the proposal;
- The speeds and bandwidth that will be made available; and,
- Competitive consumer pricing.

In some cases, different parts of the same community will have different technologies available. Access to DSL depends largely on how close a location is to a "Point of Presence" along the fibre optic backbone, and wireless access will depend on where tower structures can be located. Trees and other natural features can affect wireless signals.

For sparsely populated areas or rugged terrain, satellite is often the most effective and economical option. Satellite access is currently available for Eastern Ontario residents at reduced pricing through Xplornet Communications Inc. Residents should visit www.xplornet.com or call 1-866-841-6001 for more information on special packages.

For more information visit www.eorn.ca