The Eastern Ontario Wardens’ Caucus is spearheading a $170 million broadband project that is improving access to high-speed Internet across the region.

Thanks to the project, known as the Eastern Ontario Regional Network (EORN), high-speed Internet access via satellite technology is available now at improved pricing for Eastern Ontario residents.

By spring 2014, additional wired and wireless networks will also be built to expand broadband access across Eastern Ontario. The project is supported through funding from federal, provincial and local governments, along with private sector investment.

Regardless of how difficult the terrain or how remote the location, EORN is committed to trying to ensure the delivery of high-speed Internet to homes and businesses across the region, as economically as possible.

Given that the project must reach one million people spread out over 50,000 square kilometres, a mix of wired, wireless and satellite technologies will be needed. Through a competitive bidding process, EORN is choosing the technology that best fits the needs of a particular area.

What is broadband?

Broadband is a high-speed Internet connection that supports the audio, video and interactive applications that are now commonplace in the “Web 2.0” world. It is more capable of delivering innovative applications, like those used for health, education and business services, to the people of Eastern Ontario. Broadband speeds start at 1.5 Mbps (megabits per second), and can be up to 125 times faster than dial up service.

Who will get satellite?

Connecting to the Internet via satellite technology will be used in areas with low population density or where difficult topography means that neither wired nor wireless options are possible, for example where valleys or trees block the “line of sight” to fixed wireless towers. In very sparsely populated areas, satellite is simply the most cost-effective means of delivering high-speed Internet services.
How does satellite work?
The Internet feed is beamed from a ground station in Canada, to a satellite orbiting the earth, and back down to a dish installed at a home or business. Current satellites can deliver a variety of speeds tailored to individual needs.

Is broadband satellite service dependable?
Yes. Each subscriber has a direct connection to the satellite, without wires through the ground or on poles that can be disrupted by digging, accidents, or weather events. While some minor degradation is possible in severe weather, satellite service is robust and reliable, much like satellite television service.

What's next for broadband satellite?
Xplornet Communications Inc. has launched a new 4G satellite network based on high throughput satellite (HTS) technology that further closes the gap between urban and rural Internet service in terms of speed, capacity and quality. Their new satellites represent a five-year leap in advanced technologies, delivering significantly more capacity, something that has become essential to a successful subscriber experience.

What about latency (delays) and interference?
Satellite broadband technology continues to evolve and improve. New acceleration technologies and additional capacity are helping to manage latency, which is the amount of time that it takes the signal to travel from a computer to the end destination on the Internet, and back. While this sub-second latency can cause issues for those playing some online video games that require immediate feedback, in normal online use, such as e-mail and browsing, this latency will not be very noticeable. It may be slightly noticeable in services such as voice calling over the Internet. Modern satellite broadband is delivered using licensed frequencies in the “Ka” band, which is not used by other services, avoiding the possibility of radio frequency interference.

How much does satellite broadband cost?
The EOWC and Xplornet have negotiated a new offering that provides for significant savings for Easter Ontario residents. Xplornet is now offering 1.5 Mbps, 3.0 Mbps and 5.0 Mbps packages at prices comparable to fixed wireless service.

Why Xplornet?
Xplornet was chosen through a competitive Request for Proposal process to provide broadband access via satellite, with improved pricing, to residents across Eastern Ontario. Xplornet is Canada's largest rural broadband provider, with customers across the country in every province and territory. Xplornet was able to provide robust, affordable broadband service to even the most sparsely populated areas of Eastern Ontario using existing and new satellite capacity.

How do I know what kind of package I need?
To help determine what you need, consider how you use the Internet. You will choose both the speed at which you can download or upload information and the amount of data you can download.

It is helpful to know that each of these activities represents one gigabyte (1GB) of usage:

- View 26,000 Web pages OR
- Send 105,000 e-mails OR
- Attach over 2,000 Microsoft Word documents (of about 10 pages each) OR
- Receive up to 500 digital photos OR
- Download more than 200 songs OR
- Stream 18 hours of music from the Web OR
- Watch 3 hours of standard definition movies (or one hour in high-definition) OR
- Play games online for 240 hours (or 10 days)

How do I sign up for service?
To find out more information about pricing or services, contact Xplornet directly at 1-866-943-8632 or by visiting www.xplornet.com

For more information visit www.eorn.ca