

Eastern Ontario Regional Network



Mapping the Future:
Technology, People & Rural Prosperity

Monieson Centre Conference
Kingston, Ontario



April 8, 2014

Presentation Outline



- Origins of Eastern Ontario Regional Network
- Building and Rolling Out the System
- A Different Kind of Rural Broadband Project
- The Importance of Phase Two (Uptake)
- Early Signs of Impact
- Future Expectations of Impact



Origins of Eastern Ontario Regional Network (EORN)



- Decade-long decline/job losses in traditional sectors; more than 150,000 households and businesses **un-served** by high-speed
- Business community signals importance of broadband for retention
- Eastern Ontario Wardens' Caucus identification of broadband infrastructure as key to "new economy"
- Key decisions to advocate for a regional project, to self-manage but not manage resulting network
- Expectations of significant economic impact



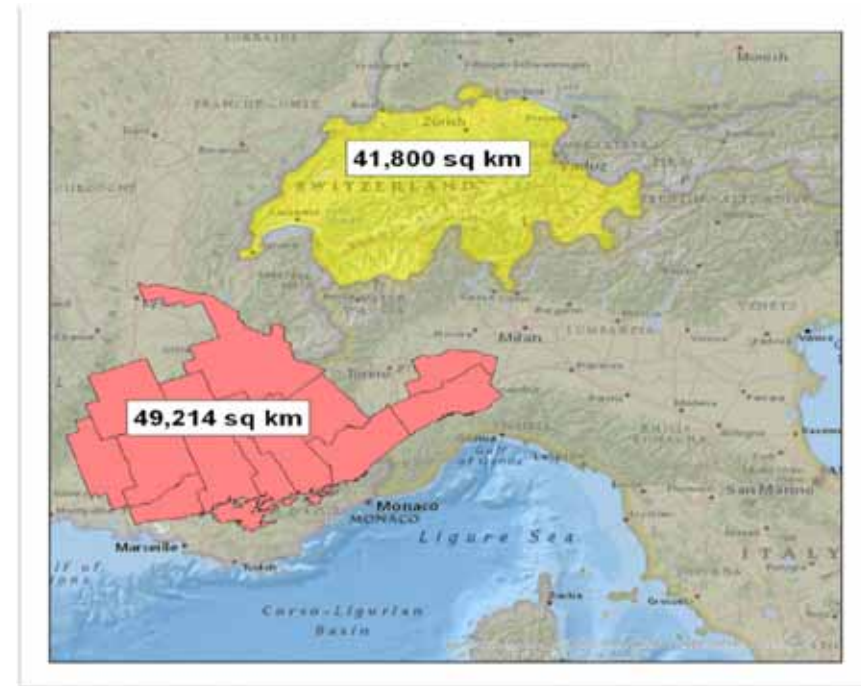
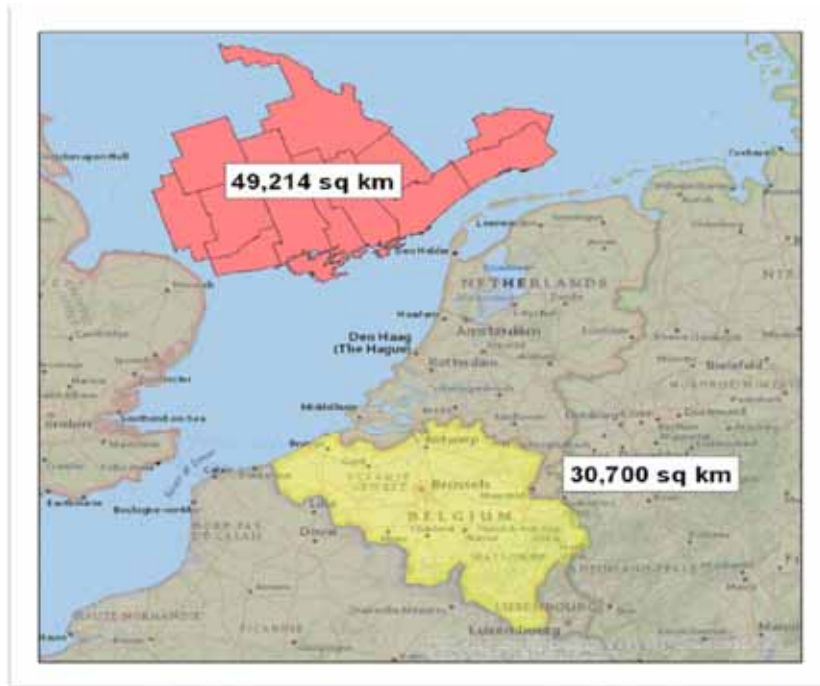
Origins of Eastern Ontario Regional Network (EORN)



- Multi-year process:
 - Gap analysis to scope the need (2007)
 - A year to put the plan together (2008)
 - A year to build pan-regional support, willingness to contribute (\$10M) (2009)
 - Two years of discussion to secure provincial and federal support for \$110m (2008-9)
 - 51 weeks to negotiate contribution agreements (2009-10) and set up project management team



Scale & Scope

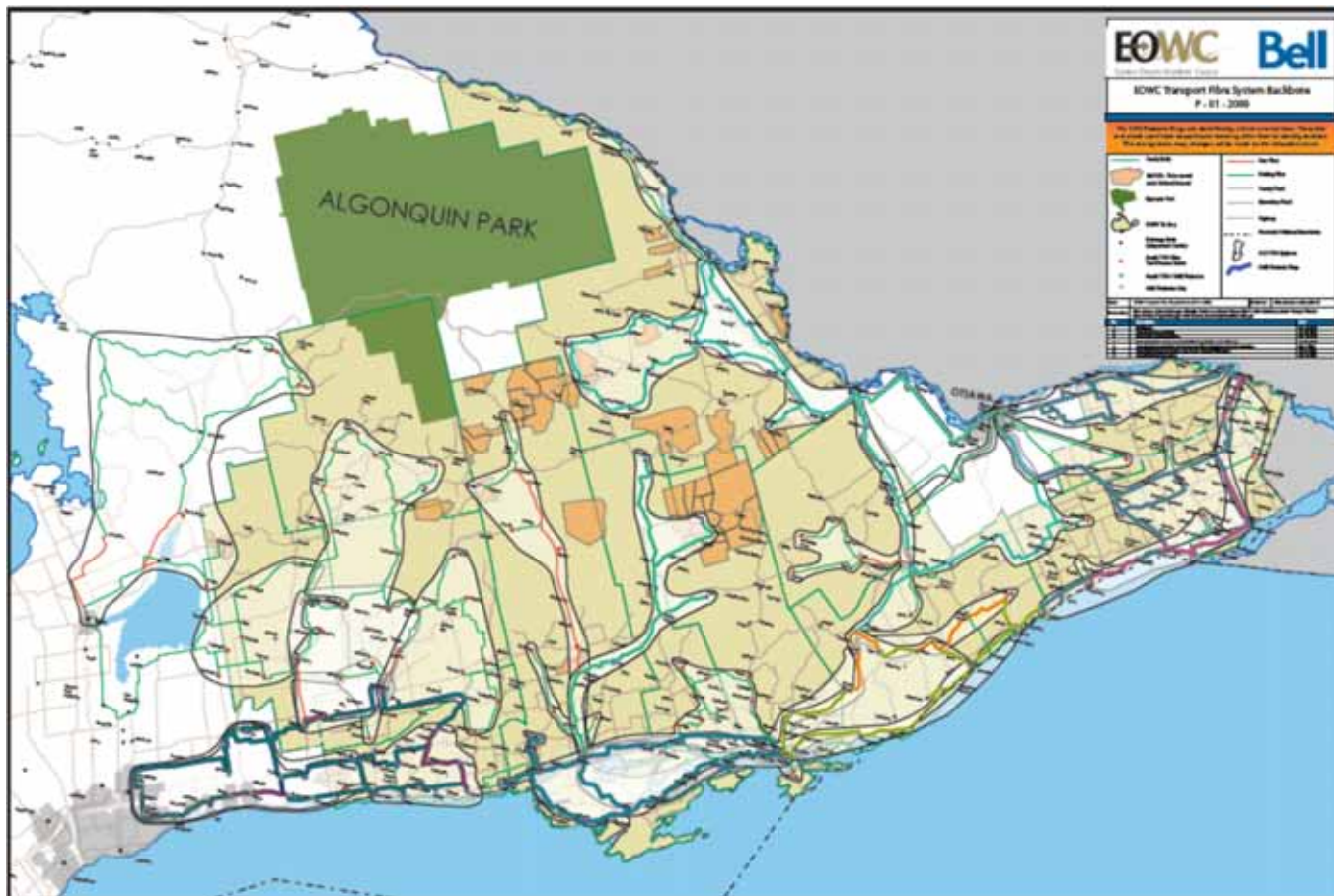


- Larger than 109 countries
- 500,000+ homes & businesses
- Sparsely populated rural areas, small cities
- Difficult topography (hills, trees, water)

Backhaul Fibre Network



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Backhaul PoP Construction



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- 160 Points of Presence
- 10G scalable to 100G
- 5,500 kms of interconnected fibre in 41 rings
- 99.999% availability



Building and Rolling Out the Network



- Fibre backbone in place by September 2013
- Multiple technologies (DSL, wireless, satellite)
- Zone by zone light-up from Embrun in 2011 to Hastings North in 2014
- 22 contracts with ISPs
- Coverage of 86 % of region at 10Mbps, >95% at 1.5 to 10 Mbps – exceeds National 5 Mbps mark
- Significant rural coverage and holistic network improvements

EORN: A Different Kind of Rural Broadband Project



- Regional scale --- largest undertaken in Canada
- Commitment to comparable pricing (rural:urban)
- Recognition that uptake is everything (without uptake, no utilization; without utilization, no economic or social impact)
- Network ownership transfers to private sector in 2017
- Turret swivelling; attention increasingly focused on extracting value (economic impact) from network (part of project from beginning)



EORN: A Different Kind of Rural Broadband Project

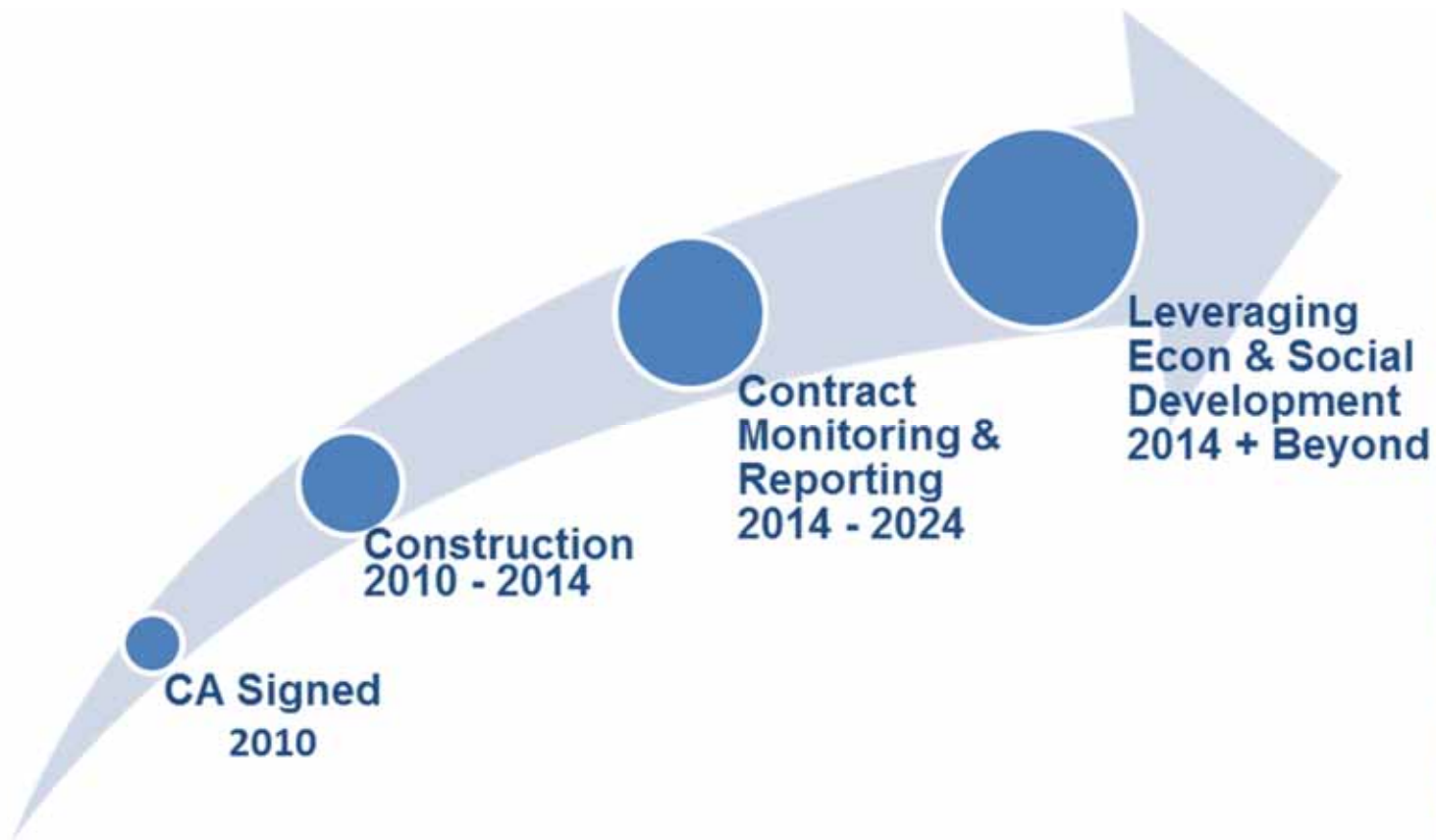


- Turret swivelling: increasing focus on extracting value (economic impact) from network
- Key metrics:
 - Employment – retention and job growth
 - Business start-ups and investment
- Serving a region of small and medium-sized employers, with many home-based businesses

Timelines



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The Importance of Phase 2 - Uptake



- *"The higher speed internet has truly allowed us to flourish in the community where we started and where we want to stay"* Ian MacGillivray, Network Assistant, Beaus All Natural Brewing company, Vankleek Hill
- *"A year ago, I started this company – now we have 11 full-time employees and we're hiring more every three months. We're in Picton and we couldn't do this without Broadband."* Craig Schoen, President and Founder, Dealer Plus Inc. Picton, Ontario
- *"We are very excited and thankful for the efforts by the County of Renfrew and Eastern Ontario Regional Network to finally bring broadband service to Whitewater Region. This will allow us to move forward with new business development, reliable online booking and communications with our guests and enable us to meet our guest expectations for high bandwidth communications during their stay with us."* Margaret Maloney, Owner RiverRun Rafting and Wilderness Resort
- *"Expanding high-capacity, high speed internet fibre to these business parks will help our communities to attract and retain local businesses It is a real boon for economic development."* Eric Duncan, Warden United Counties of Stormont, Dundas and Glengarry



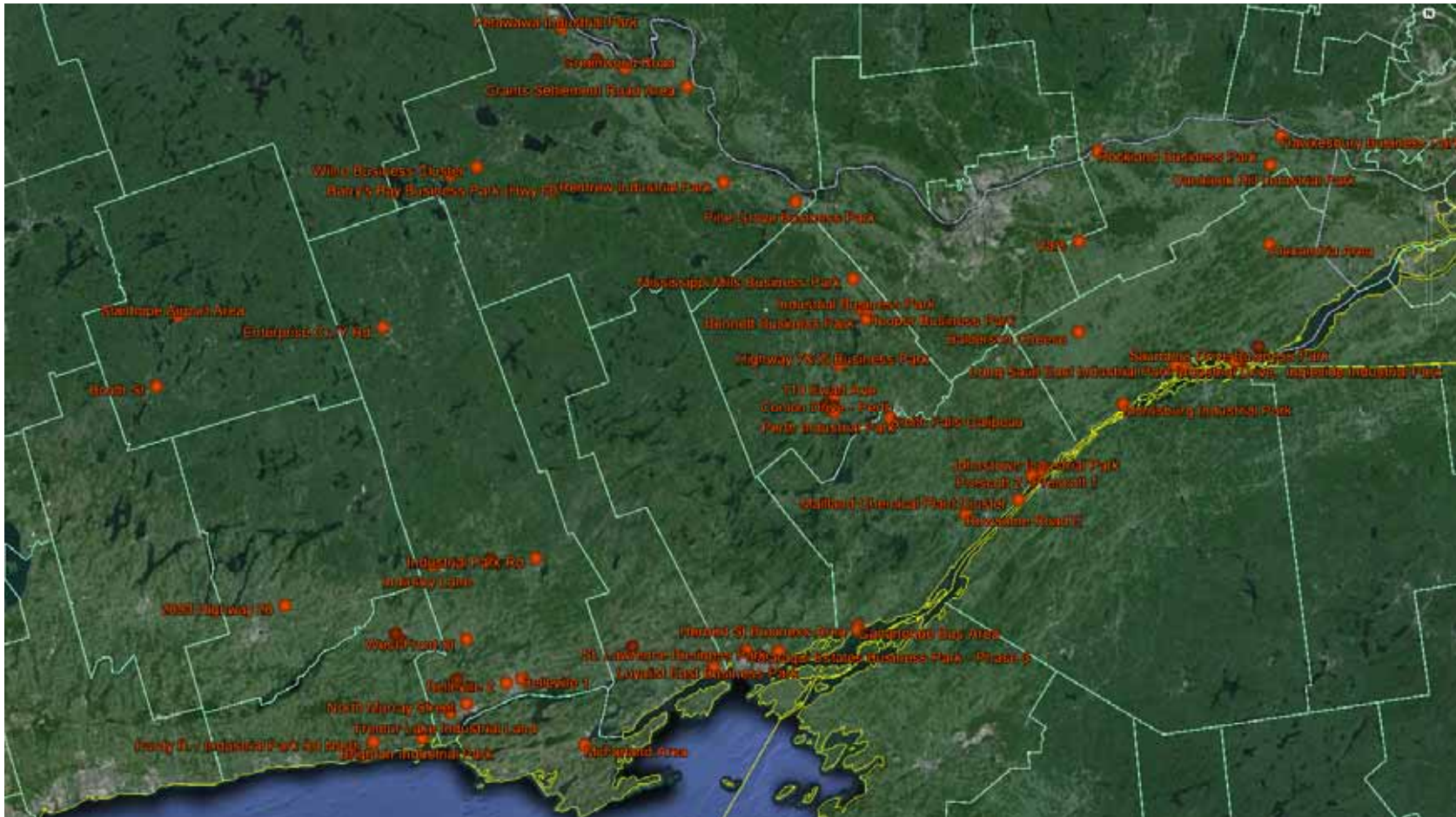
The Importance of Phase 2 - Uptake



- Ability to go beyond original project:
 - Business Parks – fibre connectivity to 50+ business parks/clusters
- Phase 2: projects to...
 - Support business and public education and adoption
 - Enhance economic development
 - Improve municipal service delivery



Business Parks/Cluster Fibre Builds



Early Signs of Impacts



- Increase in subscribers: +30,000 in first 18 months
- Embrun tower equipment expansion needed 8 months after launch – multiple locations have increased capacity now
- Increasing attractiveness of business park locations (broadband = essential service)
- Individual businesses excited to introduce new internet-based marketing programs
- No expectation of discernable macroeconomic impact yet
- Approximately \$8M in hydro pole replacements



Future Expectations of Impacts



- 2015: first time to test?
- Map impact-based research to Phase 2 rollout
- Microeconomic: firm-level analysis
- Macroeconomic: pan-regional impact on employment and business investment
 - Challenging due to nature of economy



Inquiries



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