



# Broadband Expansion Ontario's Digital Strategy

Northwestern Ontario Regional Conference  
September 30, 2010

## Broadband = Digital Economy

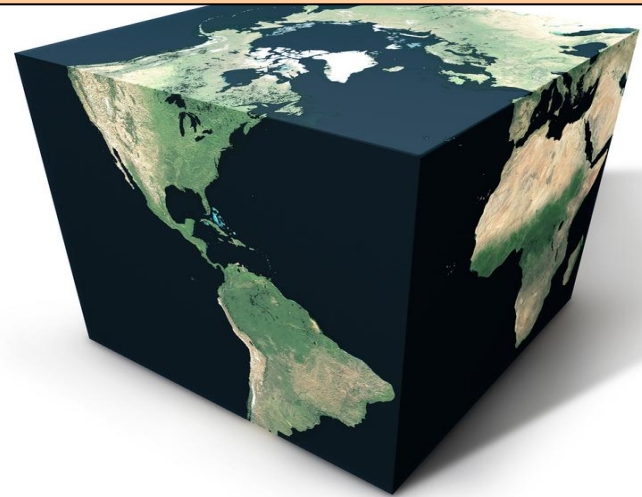
- Ontario's service-producing industries, which include ICT, financial services, new media and entertainment, contributed \$324 billion (in 1997 dollars) to Ontario's GDP in 2006.
- In 2005, Canada's ICT sector accounted for nearly 6% of the country's GDP, with ICT services alone accounting for 5%.
- Home access to the Internet in Ontario has grown from 59% of households in 2000 to 85% in 2007.
  - In 2005 More than 50% of Canadian tax filers used the Internet to file their federal tax returns.
- 87% of Ontario's businesses had broadband access to the Internet in 2007.

# Challenges in a Digital Economy

- Global competition for investment, jobs and skilled workers.
- Mobile investment and workforce.
- Transitioning from an industrial economy to a knowledge economy.
- Moving to a “green” economy.

“New players, on a new playing field, developing new process and habits for horizontal collaboration.”

**Thomas L. Friedman, *The World is Flat***

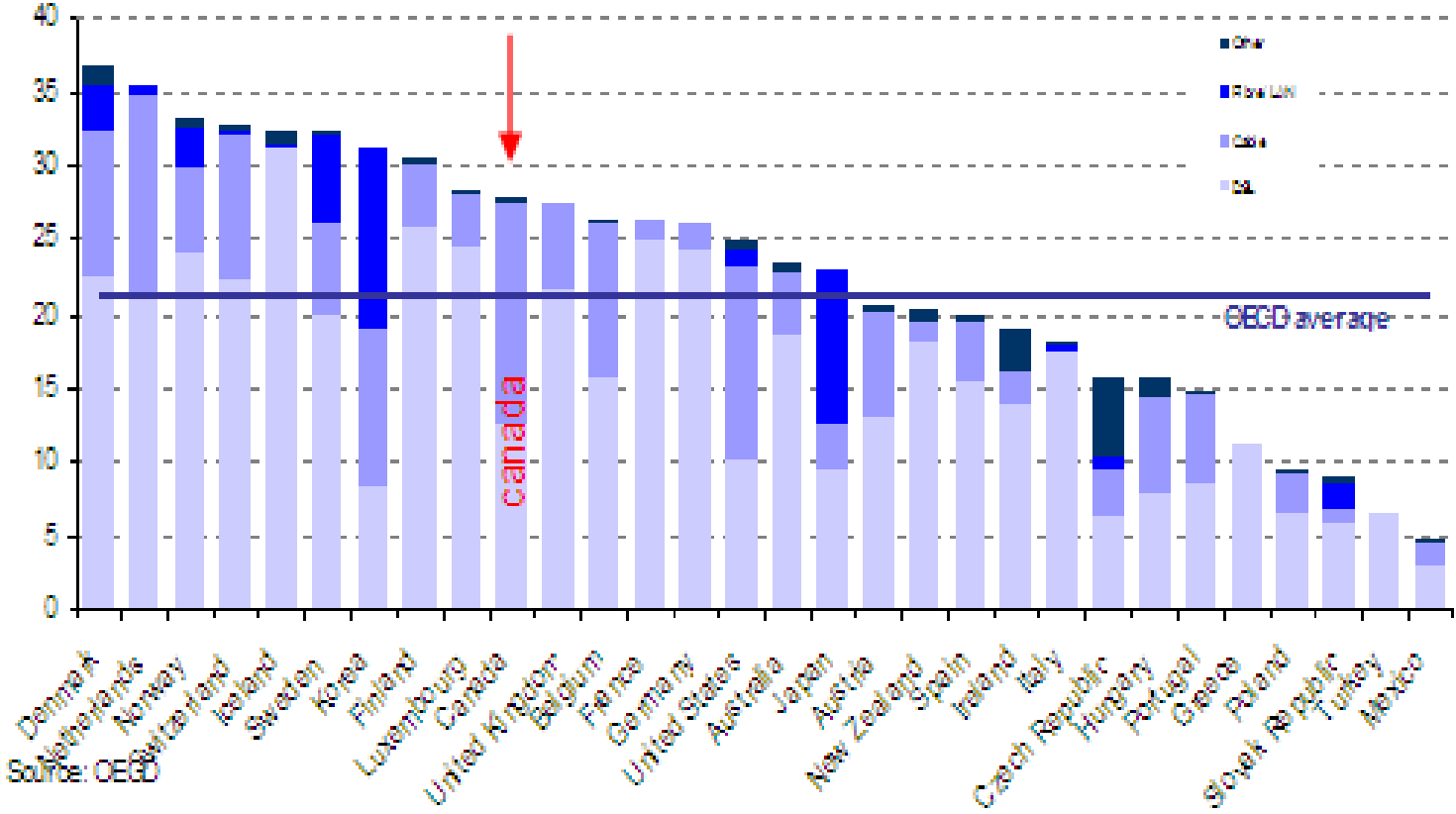


# Canada's Spot on the World's Stage



# Broadband Subscribers: Canada and the World

OECD Broadband subscribers per 100 inhabitants, by technology, June 2008

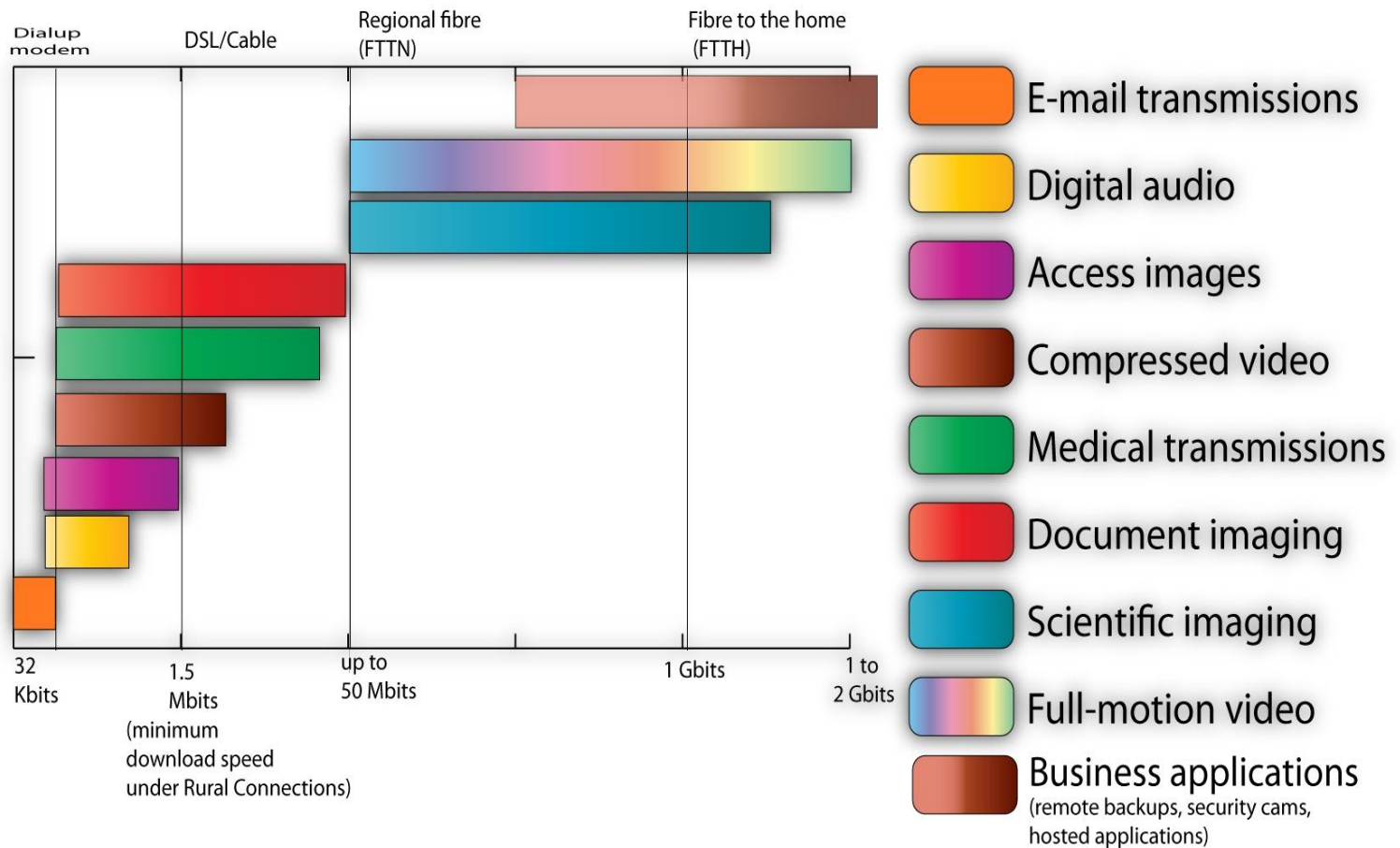


## Speed and Affordability Matters in the New Economy

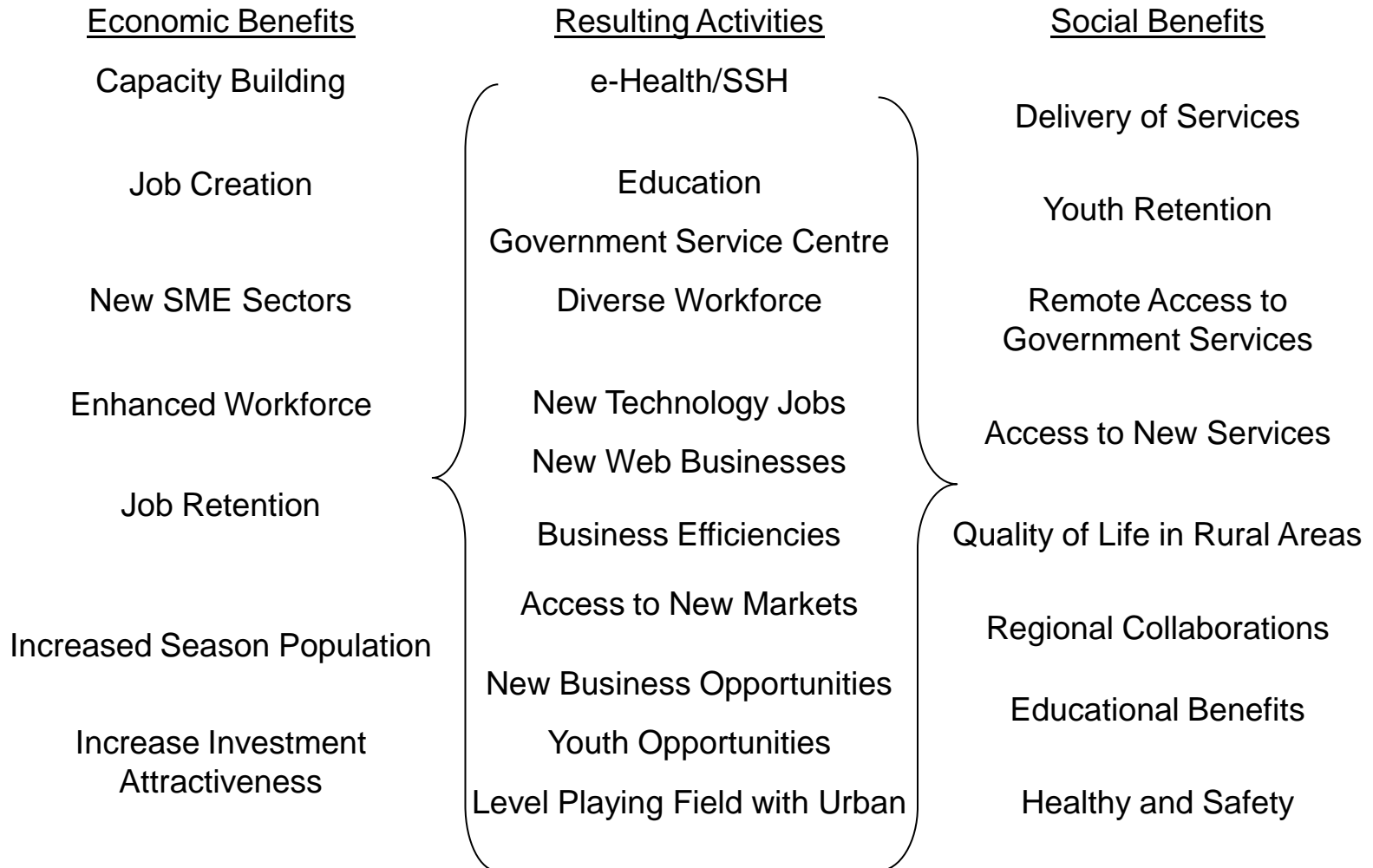
Country	2007 Average Advertised Download Speed (Mbps)	2007 Average Cost Per Month (\$US)
Japan	93.7	\$41.05
France	44.2	\$44.77
South Korea	43.3	\$37.81
Sweden	21.4	\$45.22
New Zealand	13.6	\$54.01
Finland	13.0	\$43.35
Australia	12.1	\$61.14
Norway	11.8	\$88.07
United Kingdom	10.6	\$39.67
United States	8.9	\$53.06
<b>Canada</b>	<b>7.8</b>	<b>\$59.76</b>

# Today's Applications Require More Speed

## Bandwidth requirements for various applications

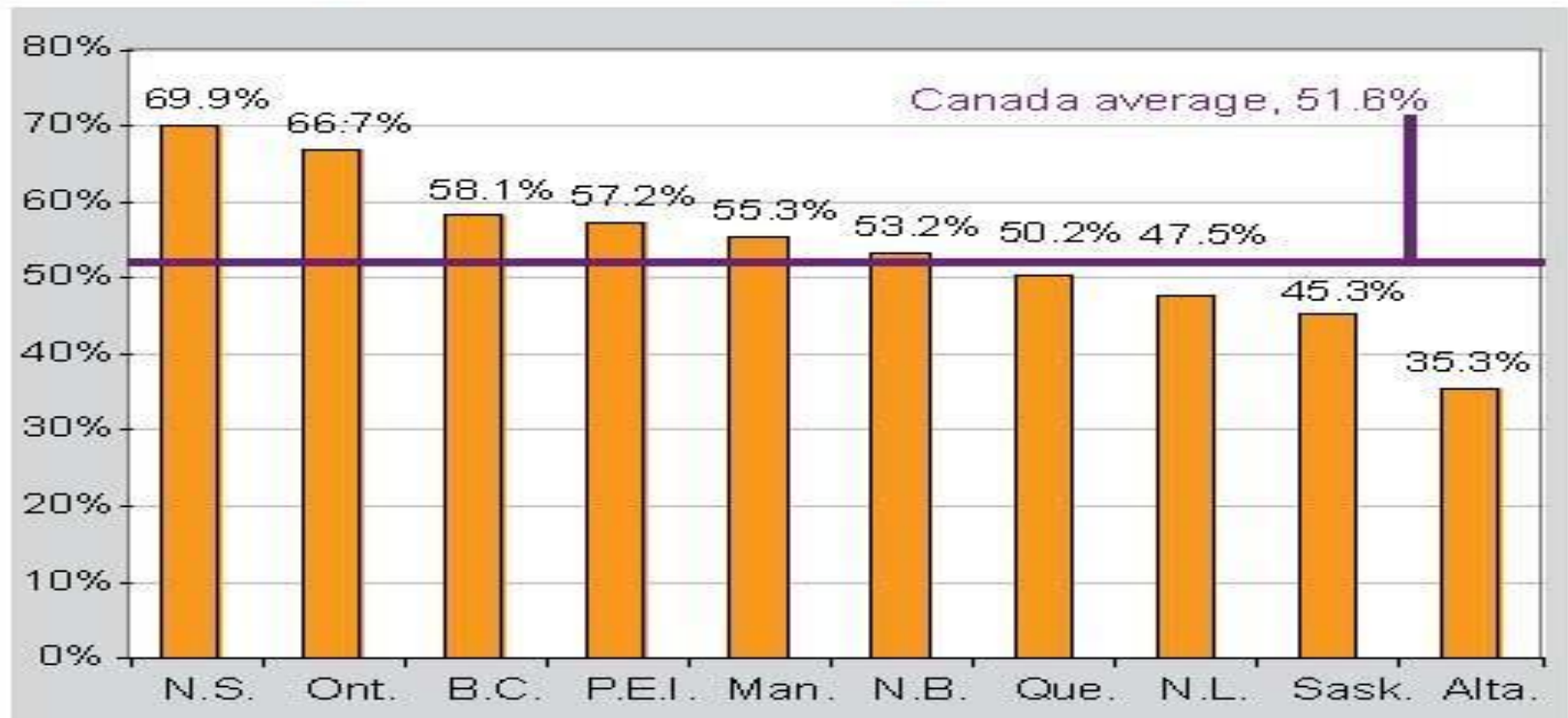


# Economic and Social Benefits of Broadband





## CHART 1: PROPORTION OF CANADIAN HOUSEHOLDS WITH BROADBAND ACCESS, BY PROVINCE, 2006



Source: Broadband Office, Industry Canada

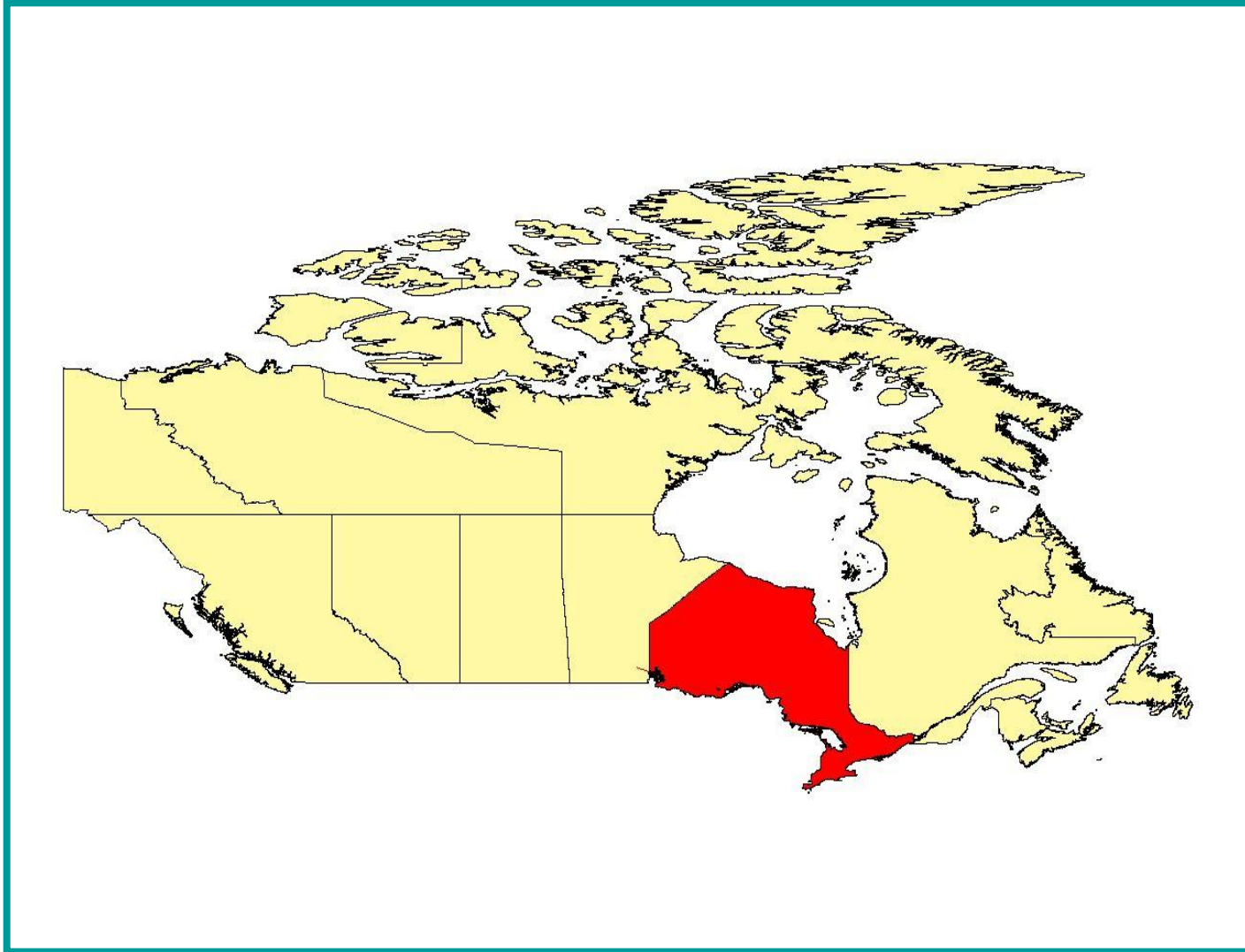
## Federal/Provincial Programs: Broadband Canada: Connecting Rural Canadians

- \$225 million announced in 2009 federal spring budget.
- Ontario government committed up to \$32.75 million to “top up” federal funding.
- Under the *Building Broadband in Rural and Northern Ontario* program, the province will provide up-to 1/3 of total eligible project costs approved and funded by Industry Canada
- Ontario “top-up” funding criteria to address hard to serve areas and First Nations communities.
- 31 applications were submitted for provincial funding. Approvals expected to be completed in 2010. Industry Canada’s funding terminates on December 31, 2011.

## Federal/Provincial Programs: Eastern Ontario Wardens' Caucus Project

- A high-speed, high-capacity broadband network in Eastern Ontario, co-funded by the province and Infrastructure Canada.
- Objective is to reach at least 95% of the population with minimum 1.5 Mbps broadband, including 85% of citizens and businesses in region with dependable high-capacity (10Mbps) service.
- Project includes three components:
  - Fibre backbone across the region;
  - Satellite service for remote areas;
  - Local access component (last mile).
- Anticipate completion of build by end of 2013.

# Ontario's Place



## Ontario's Current Context

- Ontario still has areas without access to high-speed broadband technology.
- Ontario's urban centres are falling behind as capacity as well as citizens and businesses demand for faster bandwidth and content-rich applications grows.
- Ontario risks being left behind in the wake of leading broadband jurisdictions developing aggressive and interventionist broadband public policy.
- Government leadership and a coordinated response are critical to regain lost ground and move forward.

# Role of Broadband in Ontario

## Challenges

Geographic Distances  
Population Decline (youth)  
Aging Population  
Resource Based Industry  
Service Delivery Cost  
Isolated Communities

## Benefits

Bridge Distances  
Diversify Industry  
Efficient Service Delivery  
Population Retention  
Job Retention/ Creation  
Access to Information  
Capacity Building  
Innovation

# Ontario Specific Broadband Policy/Program Delivery – Who Does What?

- The **Ministry of Government Services** is responsible for the project management/coordination for the overall Digital Strategy, including policy development and strategic research.
- The infrastructure program component is led and administered by the **Ministry of Agriculture, Food and Rural Affairs**.
- The outreach to small and medium size enterprises (SMEs) is led by the **Ministry of Economic Development and Trade** to promote the adoption and use of e-business solutions and new technologies.
- **The Ministry of Northern Development, Mines and Forestry** leads the development of ICT expansion in Northern Ontario, in partnership with the other ministries.

## What is Ontario Doing?

- In 2007-08, \$10 million was allocated to Rural Connections for a one-year program.
- In 2008-09, \$30 million was allocated over four years to continue addressing broadband gaps in rural southern Ontario through the Rural Connections Broadband Program.
- Applications are accepted from eligible municipalities in rural southern Ontario.
- The Northern Ontario Heritage Fund Corporation has allocated \$30 million over 3 years to address cellular (\$15 million) and broadband (\$15 million) access gaps in northern Ontario.
- Ontario is looking forward to opportunities for collaborating with Federal Government on their National Digital Strategy.



But...

- There are still gaps in rural Southern Ontario
- 3<sup>rd</sup> intake of Rural Connections was closed in August 2010
- Successful projects are expected to be announced in the Fall 2010

# The Northern Perspective

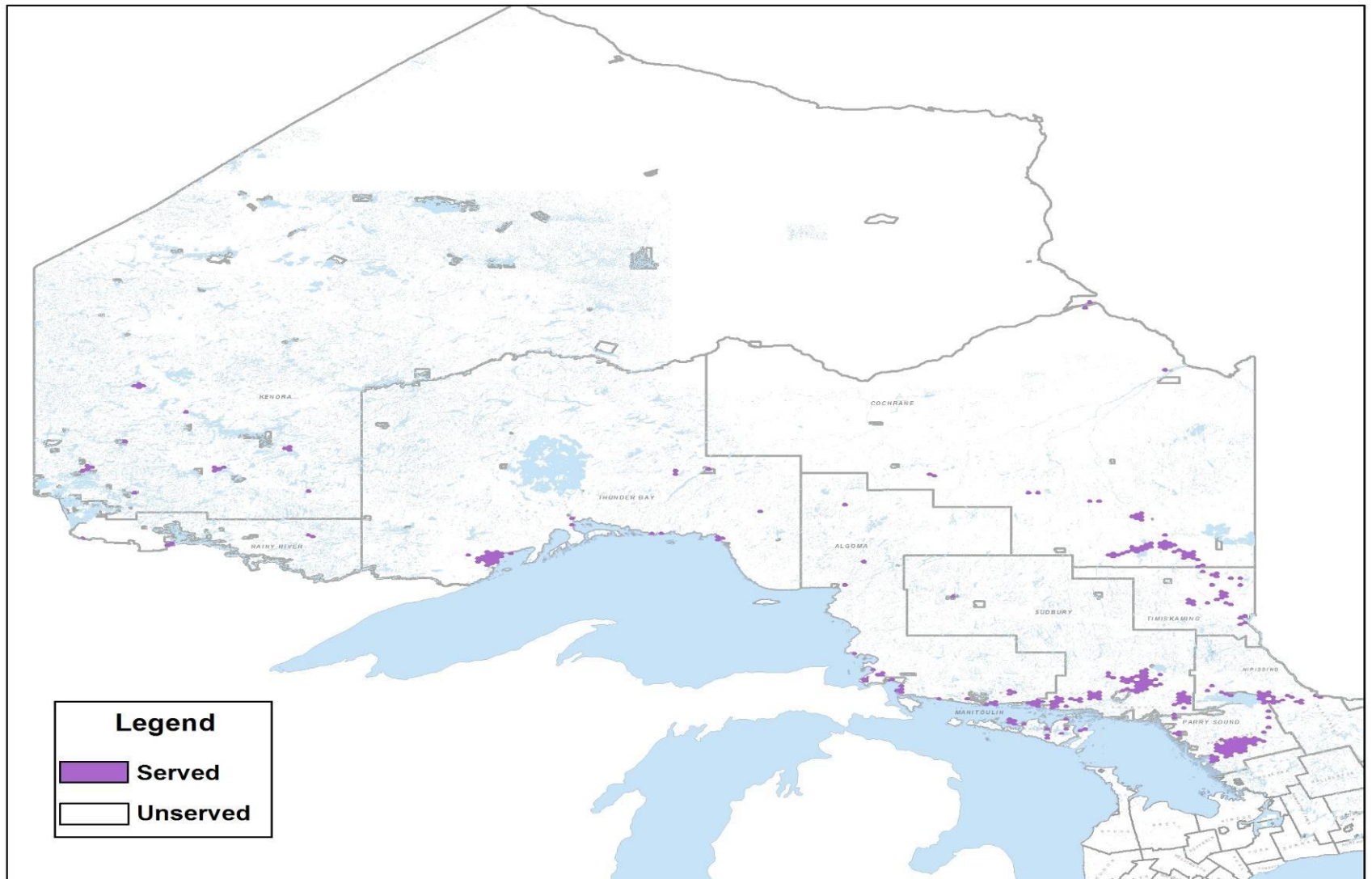


# Measuring Broadband in Northern Ontario

## 2006 Gap Study Findings

- 122 communities identified as unserved
- 43,000 residents in unserved communities
- 42 of 122 locations are First Nations
- Challenge: 40 communities are <100 people
- Challenge: 85 of 122 have no local connection point
- Challenge: estimating unserved populations in served communities
  - Total population unserved in North estimated to be 200,000

# Northern Ontario: Pre 2007 Estimate



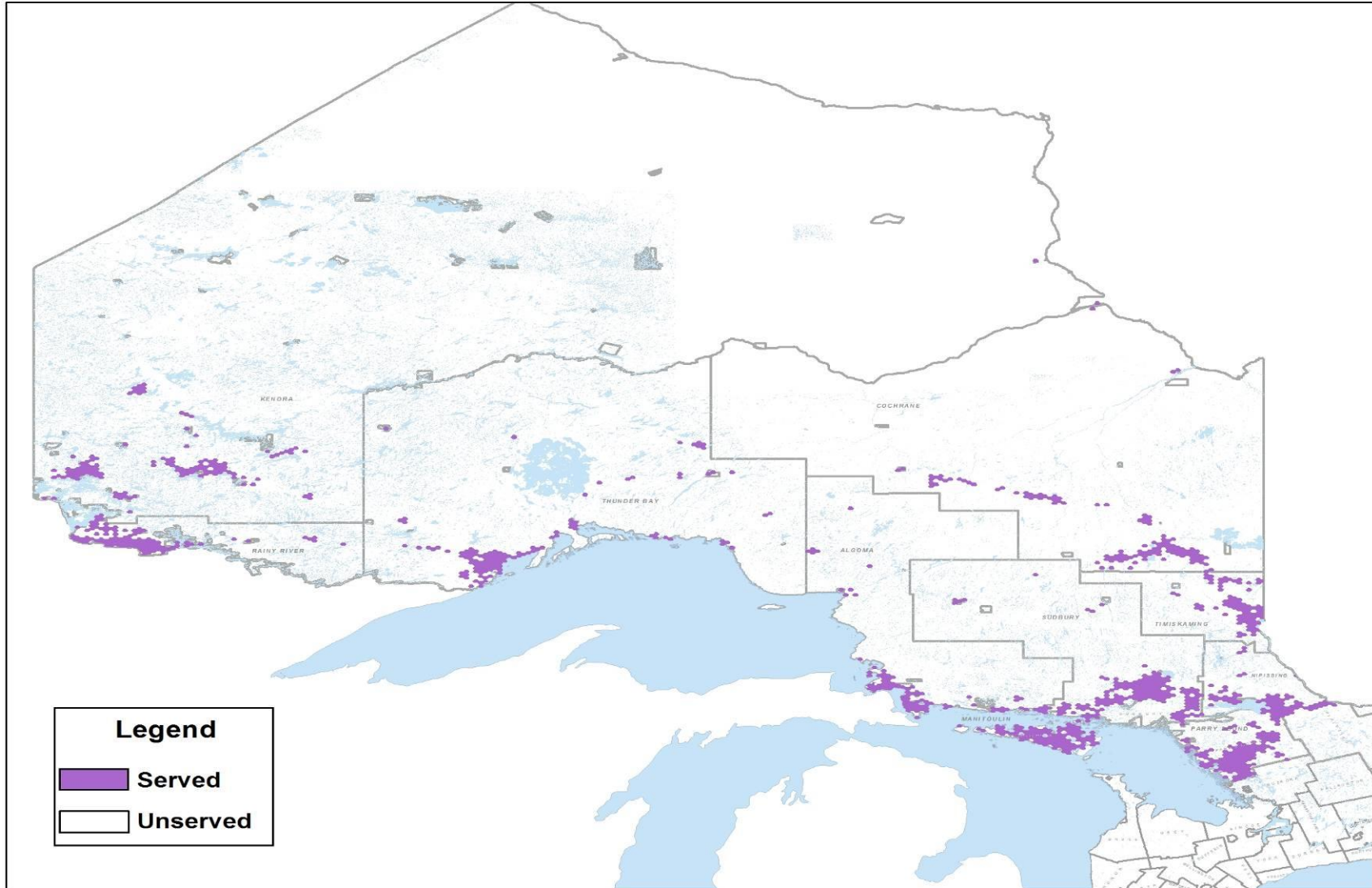
## 2007 - NOHFC Emerging Technology Program

- Up to 75% funding for connectivity projects
- Target connectivity gaps in Northern Ontario
- Both cellular and/or broadband projects eligible
- Combined cellular and broadband encouraged to reduce cost
- Regional projects encouraged for economy of scale

## Examples: Successful Uses in Northern Ontario

- Security / surveillance (De beers)
- GIS delivery – shared services, technology & expertise
- Retention of seasonal and commuting residents – Lake of the Woods
- Facilitating services – medical access, court appearances
- Video conference – K-Net
- Training / skills development - Con College campuses/ NOSM
- Tourism marketing – Thunder Bay – budget mostly web-based
- Bio/Molecular medicine – DNA activities
- Back office – call centre and outsourcing growth
- Access to government services – government information centres
- Multi- Media Industry growth
- SME & International Sales Growth

# Northern Ontario: 2009 Estimate



# Analysis of Gaps

## 2009 broadband program two part process

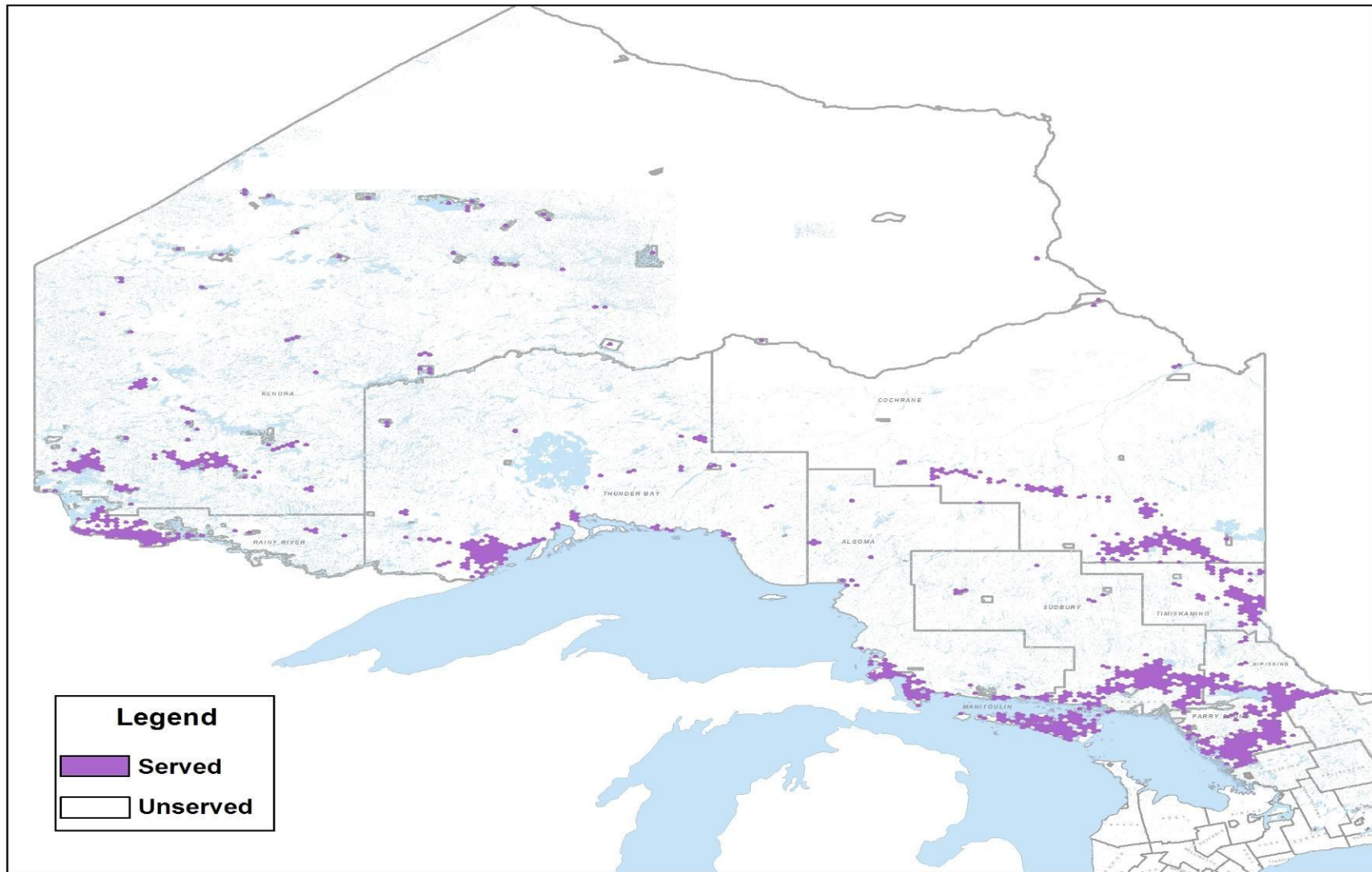
- 1) Detailed Assessment of service gap
- 2) Receiving of 75 applications from private sector

## Intelligence gathered includes:

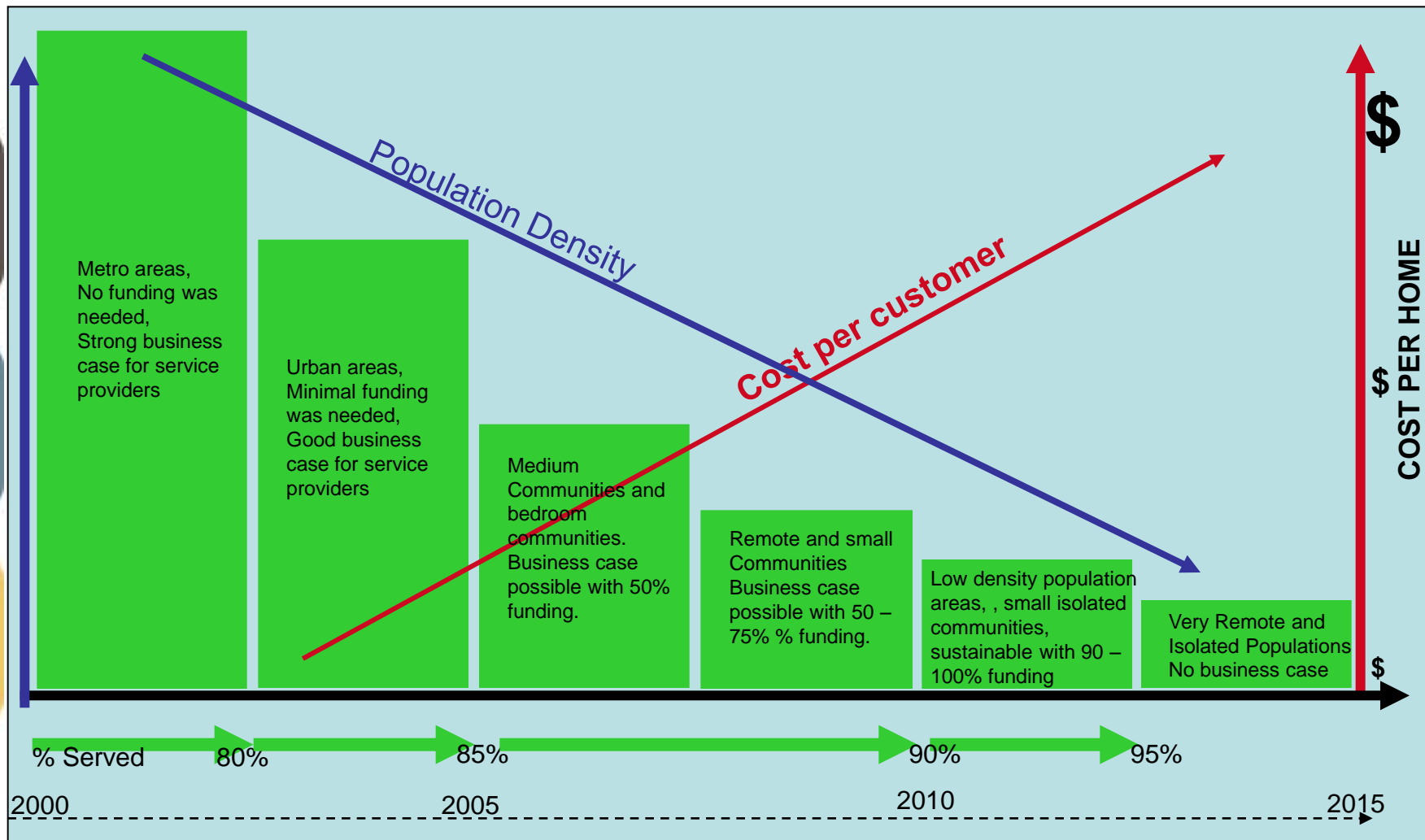
- Accurate details on service gaps
- Details on where service providers will serve and at what cost.
- What gaps would remain
- Density / profitability statistics, predicting future directions



# Northern Ontario: Predicted Service Areas



# Sustainability Key to Expansion



# Analysis of Private Sector Submission

Assistance Required	Predicted Population Served	Population Density Reached
<b>\$5,000,000</b>	<b>91%</b>	<b>&gt;15 hh/sqkm</b>
<b>\$10,000,000</b>	<b>92%</b>	<b>&gt;10 hh/sqkm</b>
<b>\$15,000,000</b>	<b>93%</b>	<b>&gt;5 hh/sqkm</b>
<b>\$20,000,000</b>	<b>95%</b>	<b>&gt;3 hh /sqkm</b>

\*\* Note: does not include the NAN project area (26 communities / 14,000 people)

\* Note: households, (hh) are calculated on 2.5 people per home

# QUESTIONS?

