



**EASTERN ONTARIO REGIONAL NETWORK**



**FURTHER...FASTER**

# **“Broadband for Eastern Ontario”**

**A project of the Eastern Ontario  
Wardens’ Caucus**

**-Presentation to City of Brockville-**

**February 17, 2011**



**EOWC**  
Eastern Ontario Wardens’ Caucus

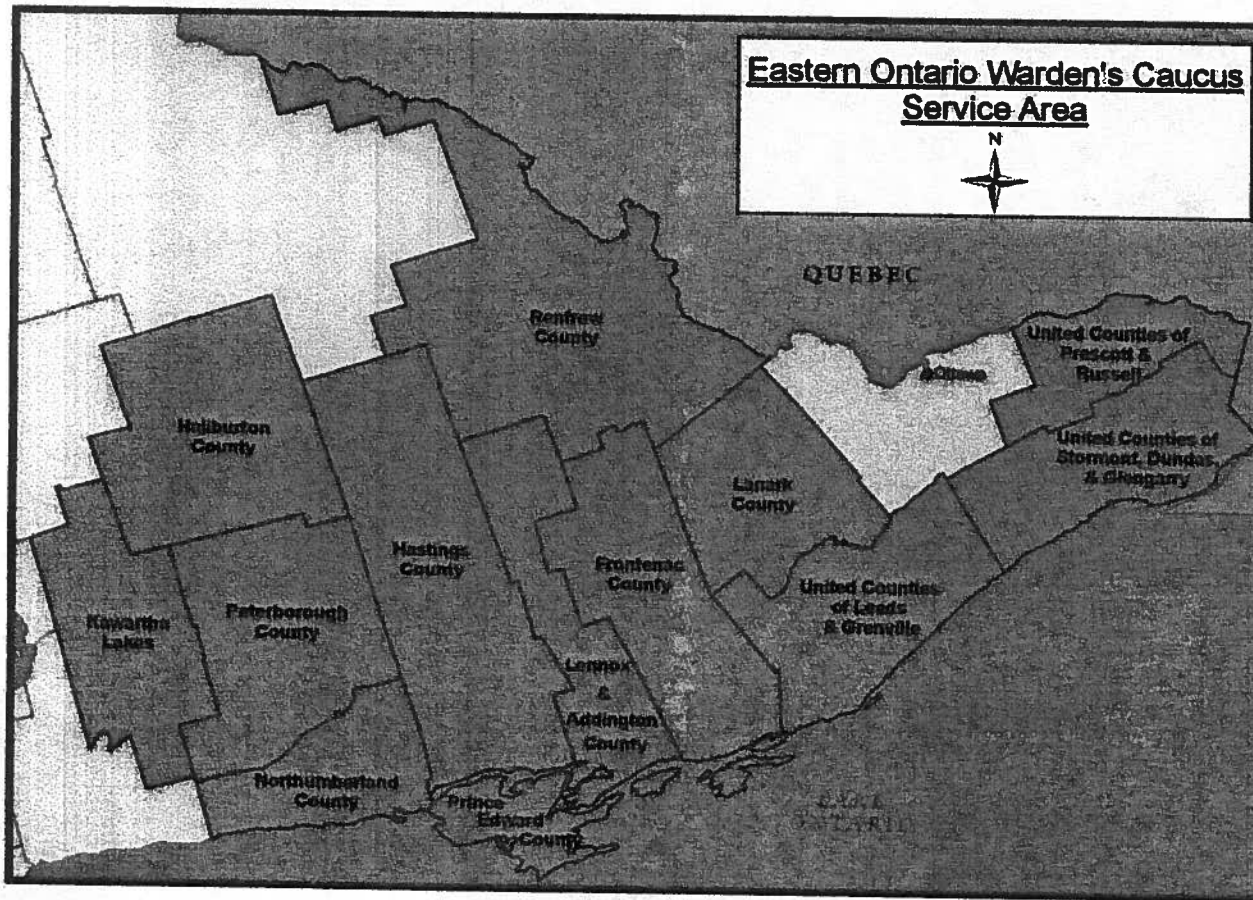




# EASTERN ONTARIO REGIONAL NETWORK



**FURTHER...FASTER**



Area is larger than:

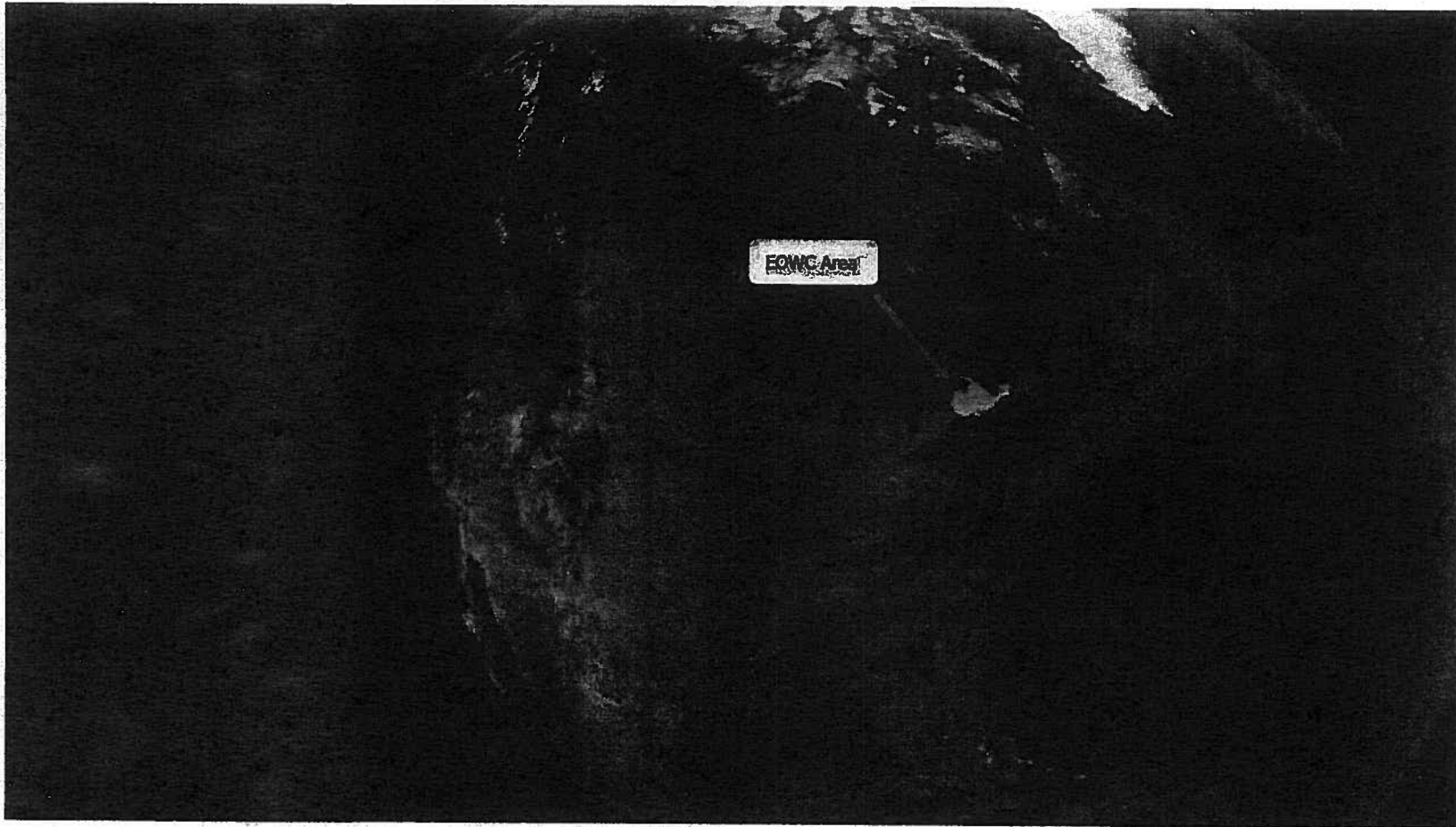
- 109 countries
- 9x PEI
- >Vancouver Island
- Equal to Nova Scotia
- 50,000 sq kms
- Home 6 First Nations
- Project Cost \$170 m

## EASTERN ONTARIO REGIONAL NETWORK



FURTHER...FASTER

**“Putting Eastern Ontario on the Map through Connectivity”**

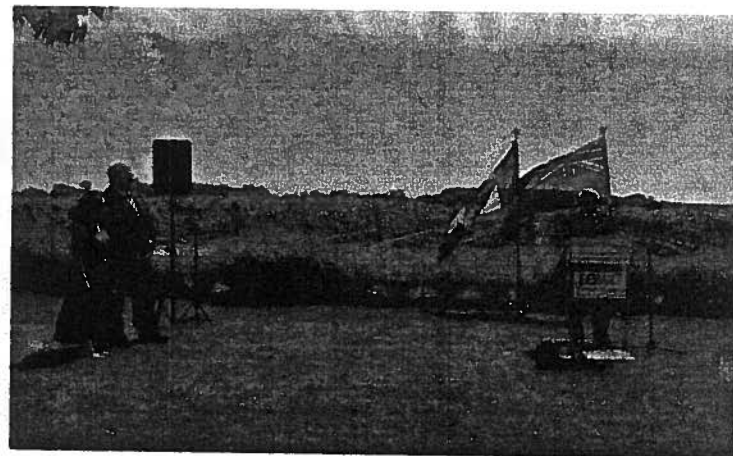
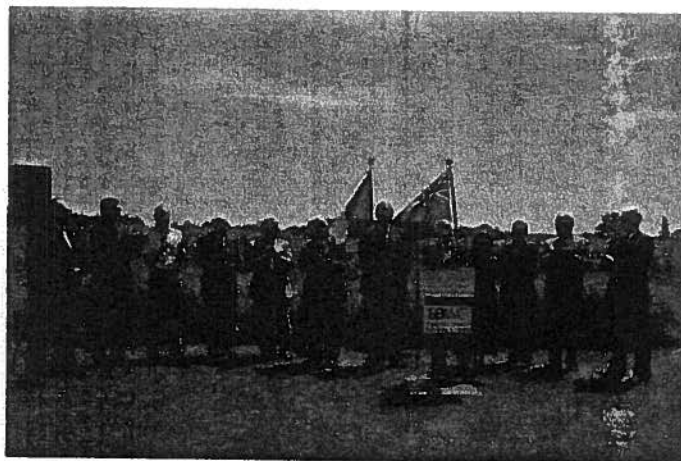


# EASTERN ONTARIO REGIONAL NETWORK



FURTHER...FASTER

## Funding Announcement July 30, 2009



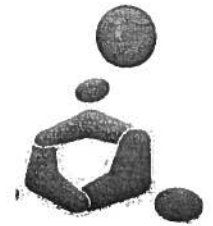
**EOWC**  
Eastern Ontario Wardens' Caucus



# Sharing Formula

|                  |   |        |
|------------------|---|--------|
| • Canada         | ➡ | \$55 m |
| • Ontario        | ➡ | \$55 m |
| • Private Sector | ➡ | \$50 m |
| • EOWC Inc.      | ➡ | \$10 m |

## **EASTERN ONTARIO REGIONAL NETWORK**



**FURTHER...FASTER**

### **Commitments**

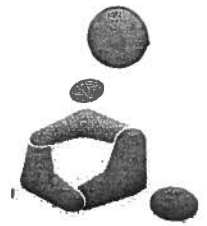
1. *Access* 95% of the population of E. Ont.
2. *Backbone* Optical Fiber 10G scalable to 100G
3. *Higher Speeds* 10 Mbps vs. 1.5 Mbps to end users
4. *Affordable rates* For rural and urban users



## **Why should we care about bandwidth?**

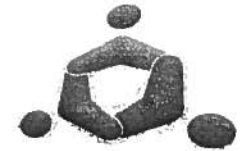
- ☐ In 2014, the Internet will be four times larger than it was in 2009. (equivalent to 12 billion DVDs crossing the Internet each month)
- ☐ Internet traffic will grow at an annual compound rate of 34% to 2014
- ☐ By 2014 Internet video alone will account for 57% of all traffic





## **Why should we care about bandwidth?**

- ☐ Video on demand (VoD) will double every
- ☐ Businesses are adopting video conferencing at an increasing rate
- ☐ By 2014 web-based video conferencing by businesses will grow 180 fold over 2009



FURTHER...FASTER

# Global Consumer Internet Traffic Forecast

*- Catillion!*  
Exabytes per Month

36% CAGR 2009-2014

45

22

0

2009

2010

2011

2012

2013

2014

- Online Gaming
- Video Calling
- VoIP
- Web and Data
- File Sharing
- Internet-Video-to-TV
- Internet Video

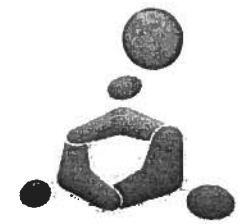
15%

27%

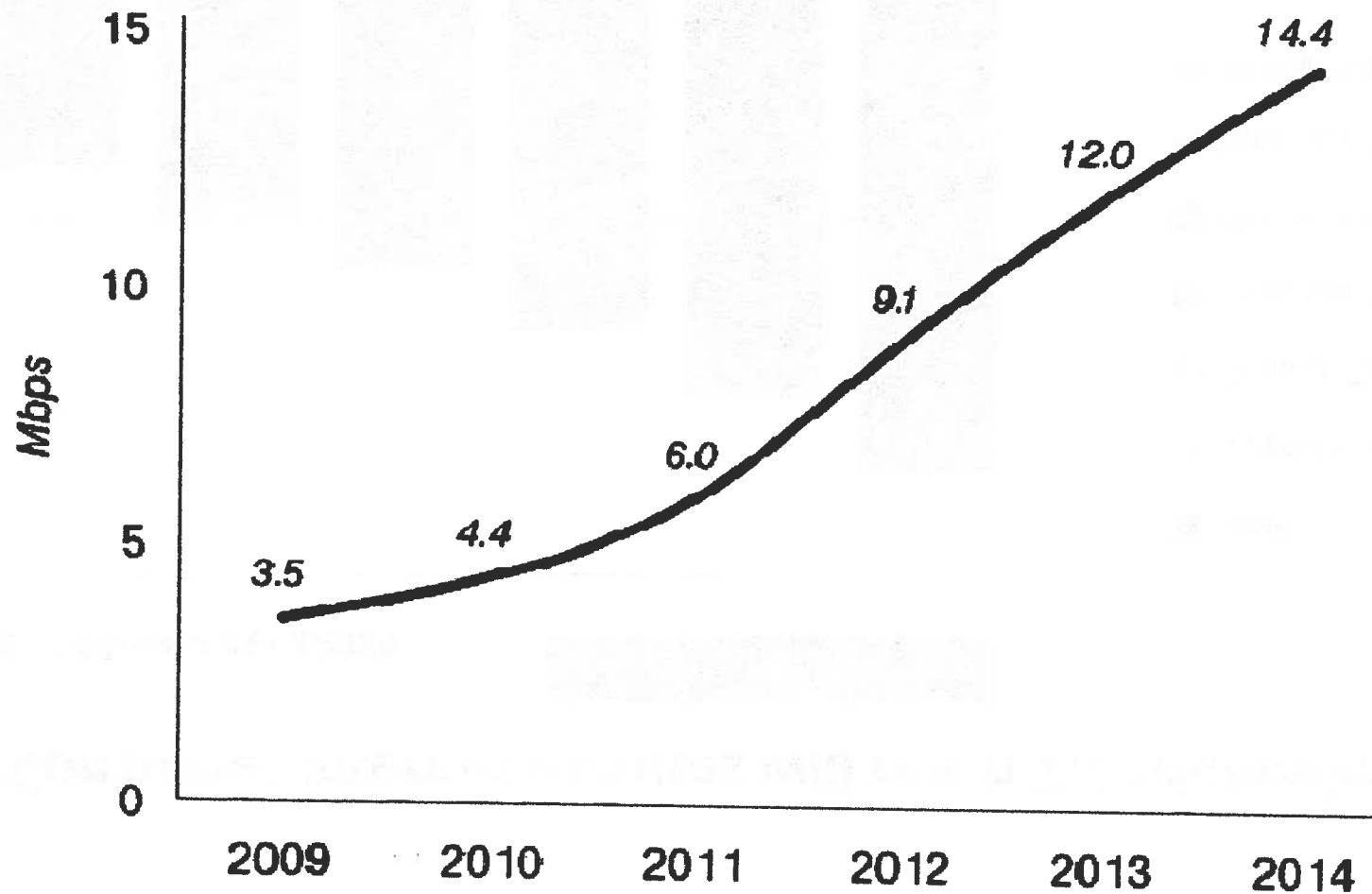
10%

46%

Source: Cisco VNI, 2010



## Average global broadband speed will double **FURTHER...FASTER**



Source: Cisco VNI, 2010

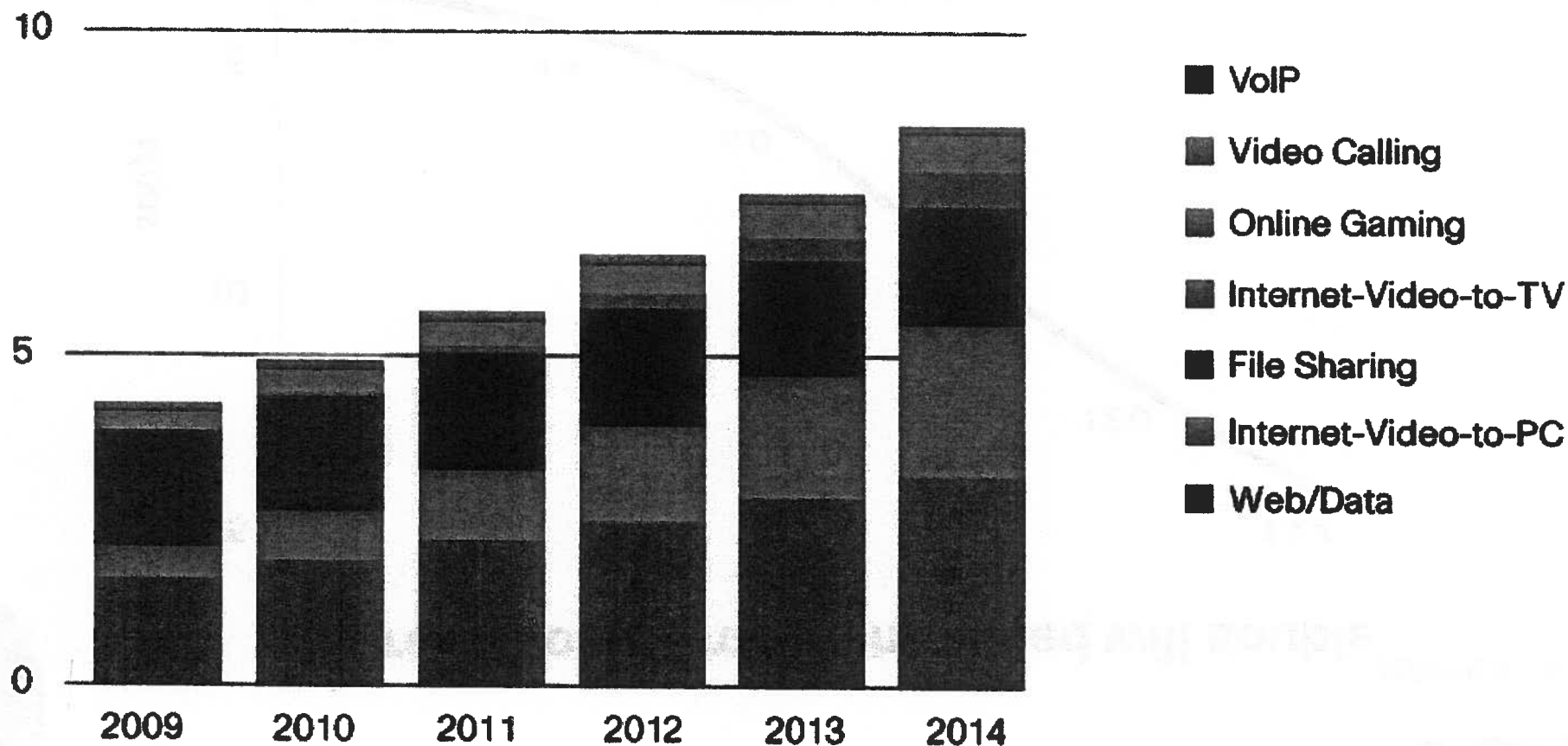


FURTHER...FASTER

## Consumer Internet minutes will reach 7.7 trillion/mo

Trillions of Minutes per Month

15% CAGR 2009–2014

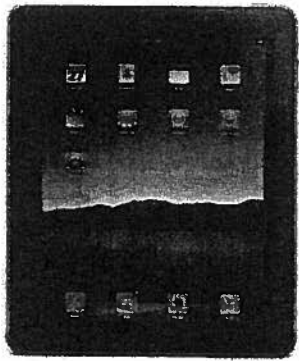


Source: Cisco VNI, 2010

# Massive User Expectation Change

Number of Days to Reach 1 Million Units Sold

28



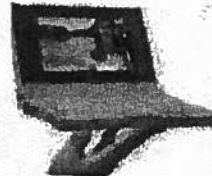
iPad

74



iPhone

180



Netbook

300



Blackberry

360



iPod

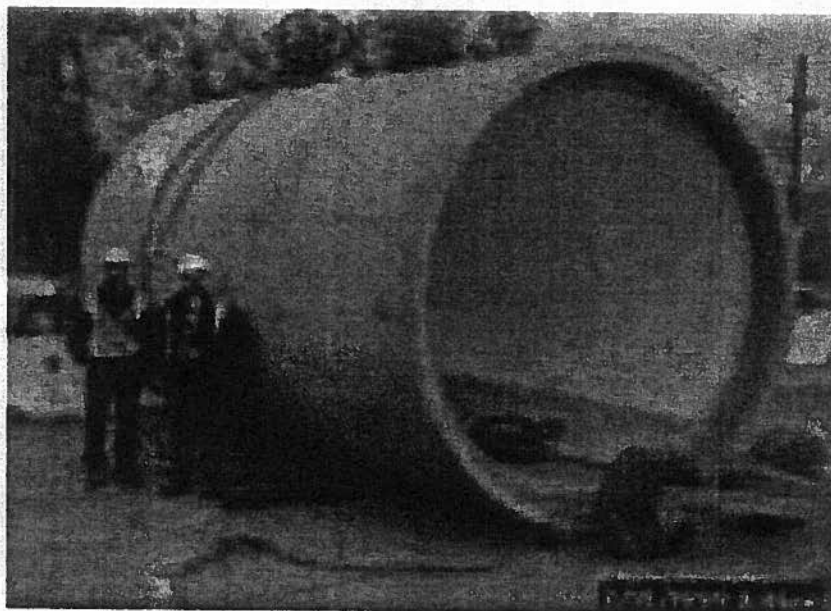
- Always-On Access with Super-Fast *Boot Time*
- Near Zero Latency Access to All Information
- Day-Long-Plus Battery Life in Elegant Portable Devices





**FURTHER...FASTER**

## Conclusions?



**Build it big enough for today and tomorrow!**

## **EASTERN ONTARIO REGIONAL NETWORK**

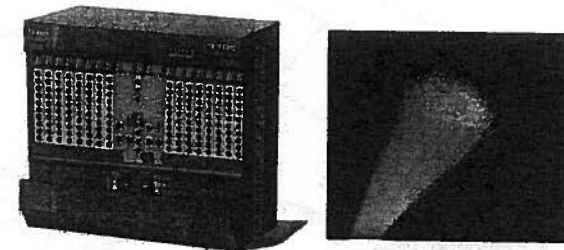


**FURTHER...FASTER**

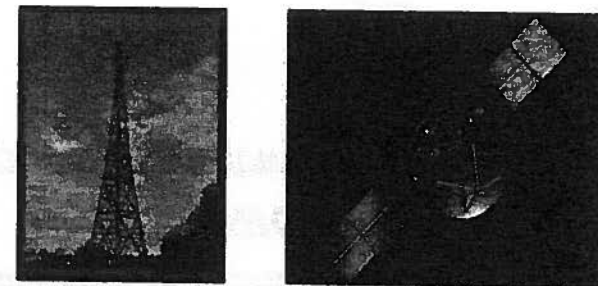
# Implementation

## **Two Major Phases**

### **A) Optical Fiber Backbone Transport**



### **B) Access to Residents and Businesses**



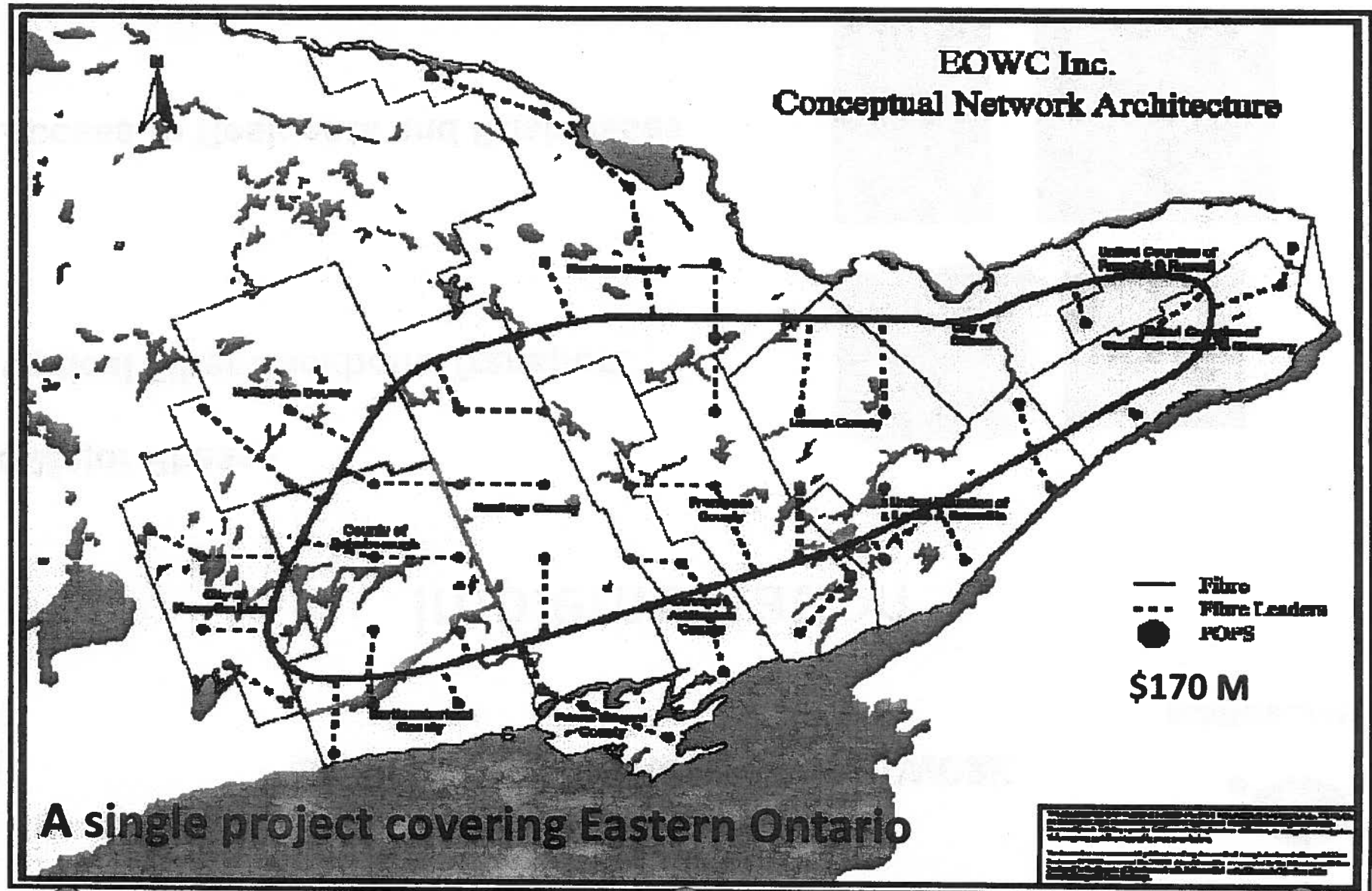
***Higher speeds, more capacity and greater reach***



# EASTERN ONTARIO REGIONAL NETWORK



FURTHER...FASTER







# **EASTERN ONTARIO REGIONAL NETWORK**

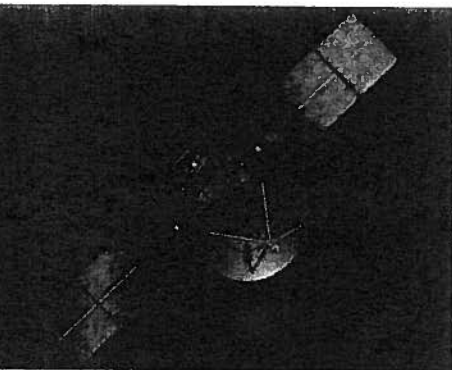


**FURTHER...FASTER**

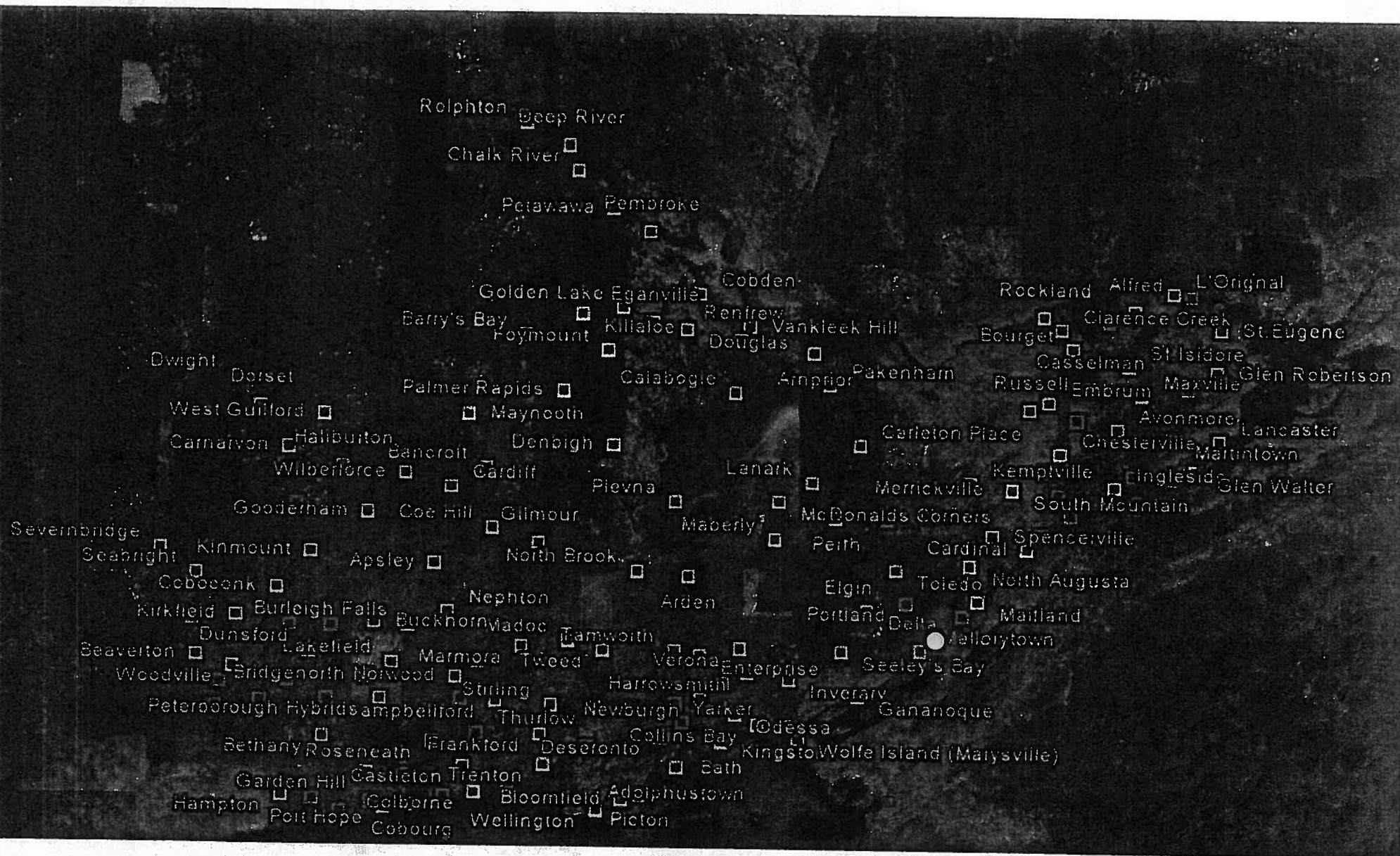
## **Phase 1 Partners**



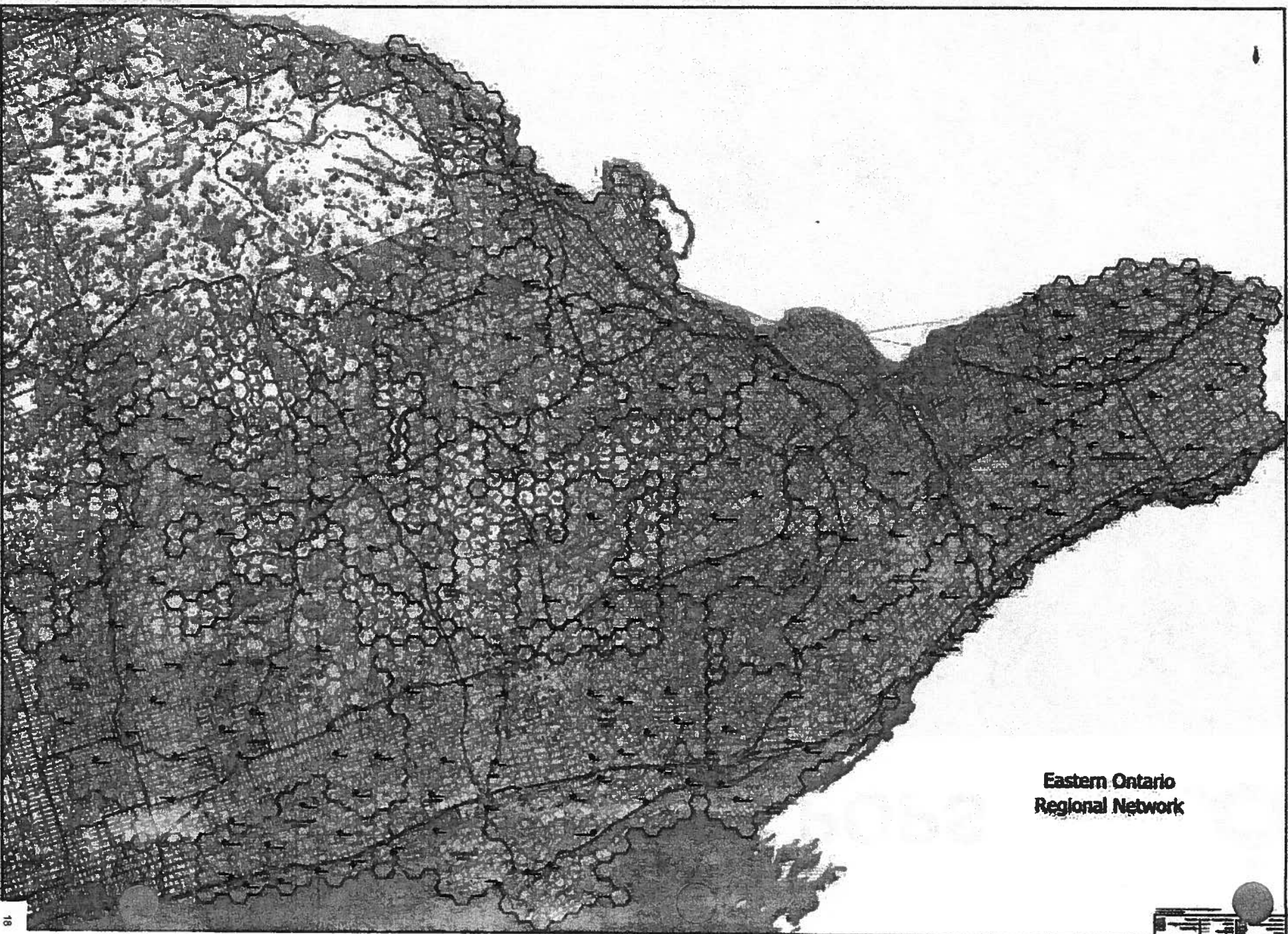
**Bell & Bell Aliant  
(\$27m)**



**Barrett Xplore Inc  
(\$21 m)**

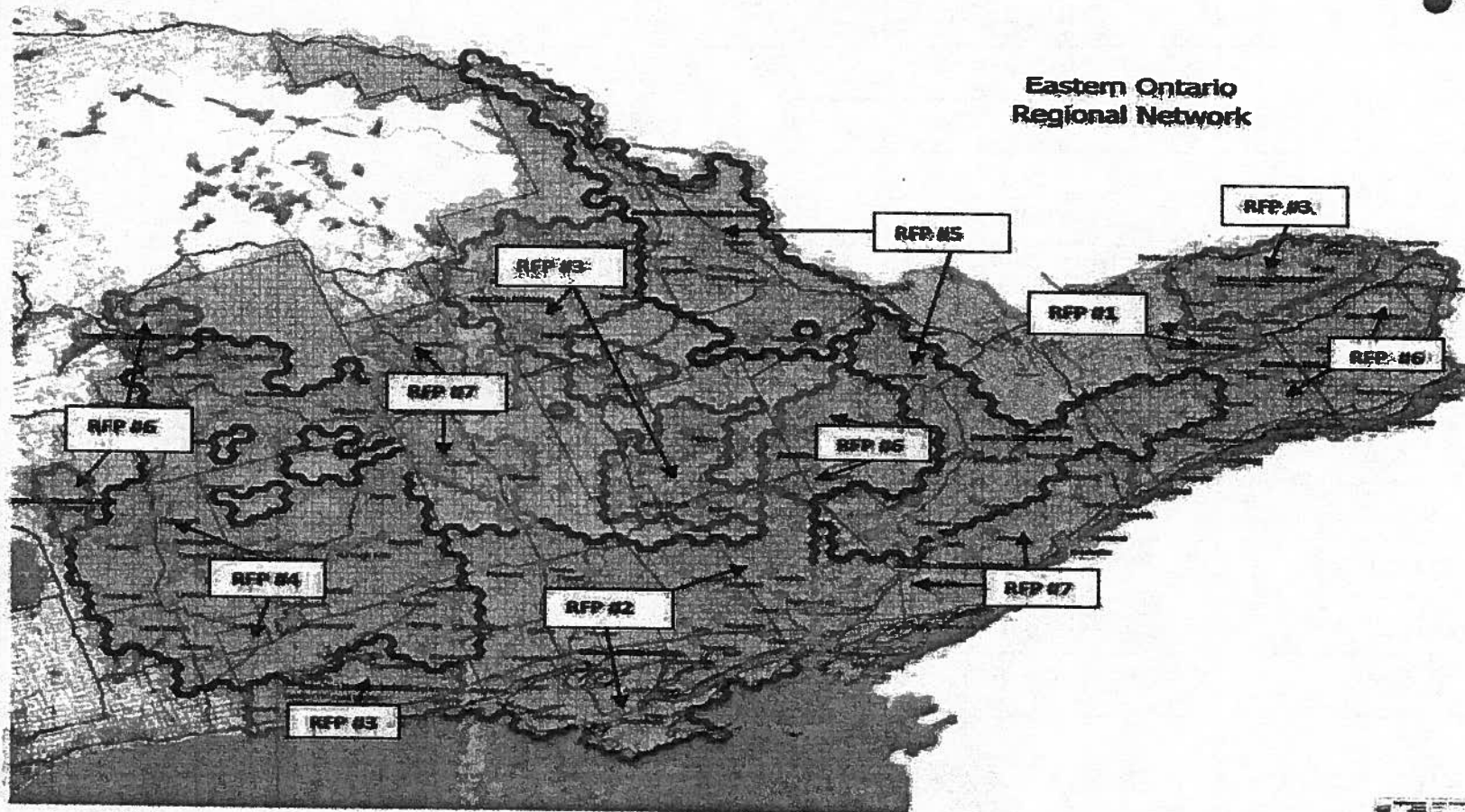






Eastern Ontario  
Regional Network

# Last Mile RFPs



## RFP Number & Zone Names

1. Embrun
2. Quinte Loyalist
3. Northumberland, Highlands, South Nation
4. Haliburton, Kawartha
5. Ottawa Valley North, Ottawa Valley South
6. Lanark, SD&G, Dorset, Seabright
7. Hastings North, Thousand Islands

(Note: Areas not covered by a Zone are covered by Satellite)



# EASTERN ONTARIO REGIONAL NETWORK



**FURTHER...FASTER**

## Project Implementation

|   | RFP Issue Date | RFP Due Date | POP Completion Date | EORN Zone Name      | Anticipated date services available to households |
|---|----------------|--------------|---------------------|---------------------|---|
| 1 | Nov 18, 2010   | Feb 1, 2011  | May 2011            | Embrun              | IIQ 2012  |
| 2 | Dec 17, 2010   | Apr 5, 2011  | IV Q 2011           | Quinte Loyalist     | IIQ 2012  |
| 3 | Jan 15, 2011   | May 3, 2011  | IQ 2012             | Northumberland      | IVQ 2012  |
|   |                |              |                     | Highlands           | IVQ 2012  |
|   |                |              |                     | South Nation        | IVQ 2012  |
| 4 | Jan 25, 2011   | June 7, 2011 | IQ 2012             | Haliburton          | IVQ 2012  |
|   |                |              |                     | Kawartha            |   |
| 5 | Apr 19, 2011   | Aug 11, 2011 | IIQ 2012            | Ottawa Valley North | IVQ 2012  |
|   |                |              |                     | Ottawa Valley South |   |
| 6 | May 17, 2011   | Sept 8, 2011 | IVQ 2012            | Lanark              | IIQ 2013  |
|   |                |              |                     | SD&G                |   |
|   |                |              |                     | Dorset              | IIQ 2013  |
|   |                |              |                     | Seabright           |   |
| 7 | July 5, 2011   | Nov 1, 2011  | IV 2012             | Hastings North      | IIQ 2013  |
|   |                |              |                     | Thousand Islands    | IIQ 2013  |

## **EASTERN ONTARIO REGIONAL NETWORK**



**FURTHER...FASTER**

### **Network Governance & Operation**

- ✓ Operated by private sector partners
- ✓ Oversight & contract management by EORN Board
- ✓ Board will have 9 members from public, EOWC Inc., First Nations and Eastern Mayors group



## What have we achieved so far?

- 256% more penetration of POPs (160 vs 60)
- 1000% more capacity (10G scalable to 100G vs 1 G)
- Erasing ISP pricing disadvantage vs GTA, SW Ontario

| POPS     | Today    | EORN     |
|----------|----------|----------|
| Price    | \$880/mo | \$840/mo |
| Capacity | 1.5 Mbps | 100 Mbps |

***Higher speeds, more capacity and greater reach***





# What Does This Mean For Eastern Ontario?

## Investment Leveraging

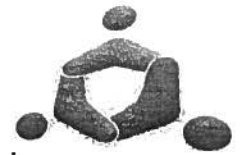
Provincial 3 to 1

Federal 3 to 1

Private 3 to 1

*Municipal 20 to 1*

***Higher speeds, more capacity and greater reach***



## **EOWC Contribution**

United Counties of Leeds & Grenville = \$974,967

Requested Contribution from Brockville = \$197,689\*

\*Payable to UCLG

***Higher speeds, more capacity and greater reach***

# EASTERN ONTARIO REGIONAL NETWORK



**FURTHER...FASTER**

Questions?

***Higher speeds, more capacity and greater reach***



**REVISED 2011**

**REPORT TO COUNCIL**

**February, 2011**

**BROADBAND INITIATIVE**

**DAVID C. PAUL  
DIRECTOR OF ECONOMIC DEVELOPMENT**

**RECOMMENDATIONS - DIRECTION of COUNCIL**

This report is intended to provide a backgrounder to the Eastern Ontario Broadband Network (EORN) presentation and updated data from the 2010 request/report.

**REQUEST**

The City of Brockville is requested to provide a onetime financial contribution to the Eastern Ontario Broadband Network in the amount of \$197,689 being expensed over a four year period commencing in 2011 in increments of \$46,922 annually, for the purpose of establishing an Eastern Ontario high speed bandwidth representing a total project cost of \$170 million; and further,

- Brockville has been assured that at least one new Point of Presence (POP) site will be located within the City limits and that no additional charges will be levied in the future for this POP.
- The EORN warrants and represents that any telecommunications supplier/company connecting to the POP will obtain the same pricing benefits as those available at any other POP that is a part of the EORN network as long as it exists and for no shorter a period that fourteen years from the completion of the POP construction;

**PURPOSE**

To partner with Eastern Ontario communities to ensure the establishment of a superhighway broadband network that will increase coverage to 98% of the Eastern Ontario population and enhanced connectivity up to 10Gb/sec capacity at highly competitive rates for both existing Internet Service Providers (ISP's) and residential and commercial users.

## BACKGROUND

- 1998 Runciman/Beatty roundtable forums noted broadband as an action to pursue for an economic development strategy
- The 2003 Eastern Ontario Prosperity Report noted the need to establish a high-speed network.
- In 2003, Eastern Independent Telecommunications Ltd. (EIT) presented a plan to Industry Canada in support of the Federal initiative to bring broadband connectivity to rural Canada. *The plan was given serious consideration and was revisited again in 2009 with discussions related to the funding for the Eastern Ontario network. The Eastern Ontario Wardens Caucus (EOWC) network could form a starting point for a national rural Broadband Highway in the future.*
- In 2005 the EOWC confirmed Broadband as the primary priority to advocate for funding new infrastructure.
- In 2009 the federal and provincial government responded by approving \$110 million on total project cost of \$170 million with the balance shared with the private sector representing \$50 million and \$10 million by Eastern Ontario municipalities.
- The City of Brockville is being requested to make a financial commitment of \$197,689 towards the Project. The United Counties of Leeds and Grenville is making a commitment of \$974,976. The City's contribution is currently part of the County's payment and if the City agrees to participate it will be paid to the United Counties.
- All contracts related to the construction and operation of the network will be managed by EORN Inc. The broadband system will be a not for profit corporation controlled by the EOWC Inc.
- No further fees are to be levied to contributing municipalities as confirmed by EORN
- Contributions from the private sector partners will be used to offset the cost of operations of EORN Inc. and no additional levies from any member of the EOWC Inc or other contributing municipalities will be required
- EORN Inc. currently has two offices; one in Prescott and one in the City of Peterborough.
- It has been confirmed by EORN that Brockville will be one of the designated POP sites.
- There are currently 3 primary Brockville telecommunication firms with total employment of 75 full time positions with 95% of their employees living in Brockville.
- The subject report was compiled from input by RipNet, Eastern Independent Telecom, City of Brockville's MIS Department, V.O.I.P Highway including several interviews with area stakeholders.

## ANALYSIS

Brockville currently has 100% broadband capacity of approximately 3 + megabits per second in an area extending to Jones Creek to the west, Tincap to the north and Maitland to the east from DSL, wireless and cable. There may be some specific parts of the community receiving up to 16 megabits/sec.

Brockville has 16 Gb/sec capacity for large corporate customers but a premium cost is evident per month for this level of broadband service. Cost to ISP's average about \$4000 per month per Gb to purchase broadband from national suppliers.

Brockville broadband service providers include RipNet, Xplornet, Primus, Bell Canada, Cogeco and MTS Allstream (formerly AT&T), with several fibre lines passing through the community.

The rural area outside the urban centres of Eastern Ontario and Leeds and Grenville average about 1.5 Mb/sec. Much of the rural areas of Leeds and Grenville are well serviced with Internet connections of up to 5mbps readily available.

The project could provide future access capacity needs for Brockville, the potential impact on ensuring a competitive rate structure for broadband services to both residential and corporate customers, indirect impacts associated with employment generation and business expansion of our primary existing telecommunication firms and the general marketing/promotional benefits positioning Eastern Ontario in the marketplace as the largest and highest capacity regional broadband service in Canada. We would derive spin off exposure from this market position and the potential for industry prospect referrals to the community.

Conversely, the existing providers of broadband services to Brockville could also enhance capacity competitive market rates to local residents.

Another variable is related to the proposed network being a closed loop system. The connection plans to both major interconnection sites in Montreal at CANix and Toronto at 151 Front Street are not known but would have a significant impact and advantage to our local ISP's and any clients of the network.

The major unknown and reservation relates to the inability of the EOBN to confirm the proposed rate structure and thus validating the competitive rate opportunity of the new network. This will not likely be achieved until the major contractor/backbone firm is confirmed, the governance model is ratified and the details of the business and market model are made public.

The Brockville telecommunication firms have invested already in this project and hope to secure contracts to build components of the network. Significant additional investment will occur should the local firms secure some of the contracting projects. To the best of our knowledge this has not occurred but one RFP is under review from a local supplier.

It is predicted by EOBN that its rate structure will be competitive for 10 Mb/sec service as of 2013. Wholesale rates for ISP's have not yet been determined

Local jobs will only be created if local telecommunication firms are awarded contracts to build, operate or maintain, in whole or in part, the transport or access network.

Reference to securing municipal contributions, most of the counties in Eastern Ontario have committed \$1million each to be expensed over a four years. Some municipalities have committed support due to their regional/rural jurisdiction and the need to expand services to meet basic service.

Quotes from other potential users of the system include:

**Brockville General Hospital- Ray Marshall** - No advantage to hospital envisioned as they are connected to Ministry of Health system. Could be beneficial to the clinics and private physician residences for file field transfers

**Brockville Police -Tom Reil** – Currently have capacity and see no need for service or benefit to police directly

**Brockville Chamber of Commerce-** Have had no contact and as such, no opinion

There are no major capital plans identified by the national providers such as Bell and Cogeco at this time. Bell is at capacity and Cogeco will likely be expanding their network

In terms of the formula calculation on the requested contribution from Brockville, private sector input confirms that the rate is fair and in the range of reasonableness based on industry comparisons on the typical costing associated with establishing a POP site which represents an allocation for transport, access and project management.

EOBN confirm that there is no further capital or operational financing request being proposed by the municipalities

## CONCLUSION

The Eastern Ontario Broadband Network will position the region favourably for investment attraction and related employment opportunity, and represents a significant economic development infrastructure for future prosperity. The network will be established with or without a contribution from the City of Brockville. A financial commitment to the project however, would demonstrate an inclusive partnership, and create a positive position in negotiating future contracting by our local telecommunication firms. It would also ensure maintaining good government relations with the development- oriented federal and provincial ministries at such time Brockville submits government funding applications for economic development projects.

The project is considered lower on the priority scale based on other economic development initiatives identified in the Brockville Economic Development Strategy approved by Council in June 2010.

Eastern Independent Telecom did not secure contracts and state marginal supplier benefits due to the awarding of the major contract to Bell Alliant who use external distributors outside of Eastern Ontario

12:37 PM

06/02/11

Accrual Basis

# Brockville Hydroplane Racing Inc. Profit & Loss

1 March 2010 through 6 February 2011

|                                | <u>1 Mar '10 - 6 Feb 11</u> |
|--------------------------------|-----------------------------|
| <b>Ordinary Income/Expense</b> |                             |
| <b>Income</b>                  |                             |
| Direct Public Support          |                             |
| Corporate Contributions        | 10,350.00                   |
| Total Direct Public Support    | 10,350.00                   |
| Other Types of Income          |                             |
| Advertising Sales              | 6,794.68                    |
| Miscellaneous Revenue          | 670.53                      |
| Total Other Types of Income    | 7,465.21                    |
| Special Events Income          |                             |
| Advance Ticket sales           | 453.74                      |
| ball hockey tournament         | 784.62                      |
| camping                        | 680.00                      |
| Convention ticket sales        | 325.00                      |
| curling                        | 100.00                      |
| Gate sales                     | 6,288.40                    |
| Honeymoon Suite concert        | 3,230.00                    |
| Pit Passes                     | 510.00                      |
| Racer registrations            | 1,810.00                    |
| Special Events Sales (Nongift) | 850.00                      |
| Total Special Events Income    | 14,831.78                   |
| <b>Total Income</b>            | 32,646.97                   |
| <b>Expense</b>                 |                             |
| Bank fees                      |                             |
| Item returned unpaid fee       | 9.00                        |
| Bank fees - Other              | 62.25                       |
| Total Bank fees                | 71.25                       |
| Business Expenses              |                             |
| Bad Debts                      |                             |
| Cheque returned                | 225.00                      |
| Total Bad Debts                | 225.00                      |
| Small claims court             | 100.00                      |
| Total Business Expenses        | 325.00                      |
| Cash on hand                   | 0.00                        |
| Donation                       | 400.00                      |
| Operations                     |                             |
| Cheque printing fee            | 20.66                       |
| Printing and Copying           | 4,085.24                    |
| Total Operations               | 4,115.89                    |



12:37 PM

08/02/11

Accrual Basis

**Brockville Hydroplane Racing Inc.****Profit & Loss****1 March 2010 through 6 February 2011**

|                                      | <u>1 Mar '10 - 6 Feb 11</u> |
|--------------------------------------|-----------------------------|
| Other Types of Expenses              |                             |
| Advertising Expenses                 | 4,225.00                    |
| Cranes                               | 3,200.00                    |
| Entertainment show                   | 4,725.00                    |
| Fencing                              | 1,366.23                    |
| GP Prize money                       | 7,500.00                    |
| Hang Banners                         | 273.00                      |
| Insurance - Liability, D and O       | 1,780.00                    |
| Materials for boat building          | 417.15                      |
| Officials for race                   | 3,400.00                    |
| permit                               | 200.34                      |
| Portable toilets                     | 945.00                      |
| Prize money other classes            | 4,625.00                    |
| Sanction Fees                        | 900.00                      |
| Security                             | 421.20                      |
| Sound System                         | 1,500.00                    |
| Towing                               | 450.00                      |
| Water for volunteers                 | 23.84                       |
| Wristbands                           | 138.80                      |
| <b>Total Other Types of Expenses</b> | <b>36,090.36</b>            |
| Uncategorized Expenses               |                             |
| Interest on late payment             | 32.76                       |
| <b>Total Uncategorized Expenses</b>  | <b>32.76</b>                |
| <b>Total Expense</b>                 | <b>41,035.26</b>            |
| <b>Net Ordinary Income</b>           | <b>-8,388.29</b>            |
| <b>Net Income</b>                    | <b>-8,388.29</b>            |

## **2011 Hydroplane Racing Budget**

### **Income Sources**

|                     |           |                  |
|---------------------|-----------|------------------|
| Advertising Revenue | 6,800.00  |                  |
| Sponsorship         | 15,000.00 |                  |
| Gate Reciepts       | 15,000.00 |                  |
| Festive Gardens     | 5,000.00  |                  |
| Valleyfield Regatta | 12,500.00 |                  |
| City of Brockville  | 15,000.00 |                  |
| Fundraising         | 5,000.00  |                  |
| <b>Total</b>        |           | <b>74,300.00</b> |

### **Expenses**

|                           |               |                  |
|---------------------------|---------------|------------------|
| Sanction                  | 1,000.00      |                  |
| Insurance                 | 4,000.00      |                  |
| Cranes                    | 6,500.00      |                  |
| Officials                 | 4,500.00      |                  |
| Announcer                 | 750.00        |                  |
| Coast Guard               | 2,500.00      |                  |
| Portable Washrooms        | 1,100.00      |                  |
| PA System                 | 1,000.00      |                  |
| Fencing                   | 1,050.00      |                  |
| Security                  | 500.00        |                  |
| Prize Money               | GP 20,000.00  |                  |
|                           | Oher 6,000.00 |                  |
| Advertising               | 10,000.00     |                  |
| Tent                      | 1,000.00      |                  |
| Entertainment             | 2,500.00      |                  |
| Licenses                  | 250.00        |                  |
| Other Insurance           | 900.00        |                  |
| Printing                  | 4,000.00      |                  |
| Wrist Bands               | 100.00        |                  |
| <b>Total (Operating )</b> |               | <b>67,650.00</b> |

### **Capital Expenditures**

|                        |          |                  |
|------------------------|----------|------------------|
| Docks                  | 2,500.00 |                  |
| Bouys and Anchors      | 350.00   |                  |
| <b>Total (Capital)</b> |          | <b>2,850.00</b>  |
| <b>Total Expenses</b>  |          | <b>70,500.00</b> |
| <b>Net</b>             |          | <b>3,800.00</b>  |