



## **Regional Municipality of Waterloo**

### **Administration and Finance Committee**

#### **Minutes**

Tuesday, December 8, 2015

9:59 a.m.

Regional Council Chamber

150 Frederick Street, Kitchener

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Present were: Chair S. Strickland, L. Armstrong, E. Clarke, D. Craig, S. Foxton, T. Galloway, H. Jowett, K. Kiefer, G. Lorentz, J. Mitchell, J. Nowak, K. Redman, K. Seiling and S. Shantz

Members absent: D. Jaworsky and B. Vrbanovic

#### **Declarations of Pecuniary Interest under the “Municipal Conflict Of Interest Act”**

None declared.

Craig Dyer, Commissioner, Corporate Services/Chief Financial Officer, introduced Cathy Bulych, who has joined the Region as the new Director for Information Technology Services (ITS).

#### **Delegations**

COR-FSD-15-22, Request to Defer Regional Development Charges by GSP Group

Hugh Handy, GSP Group Inc., addressed the Committee; a [copy of his notes](#) is appended to the original minutes. He highlighted the opinion of GSP Group Inc. that a deferral would be revenue neutral and would not be a significant risk to the Region. He noted the short and long term benefits of the development project and thanked staff and the Committee members for consideration of their request.

The Committee inquired about the rationale for seeking financial support from the municipality rather than a bank and noted that local economic development should be

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supported but that property developers should be treated in a fair and consistent manner as related to development charges.

Moved by K. Seiling

Seconded by J. Mitchell

That the Regional Municipality of Waterloo uphold the existing policy and take no action on the request for the deferral of Regional Development Charges by GSP Group on behalf of Prica Group for the proposed development at Columbia St. and Albert St. in the City of Waterloo, as outlined in report COR-FSD-15-22, dated December 8, 2015.

Carried, Unanimously

COR-ITS-15-03, South West Integrated Fibre Technology (SWIFT)

C. Dyer provided introductory comments noting that no decision is being sought at this time. He stated that the project is subject to federal and provincial funding approval, at which time a staff report would come back to Committee for review and approval.

Geoff Hogan, Director of Information Technology, Grey County, provided [a presentation](#) to the Committee; a copy is appended to the original minutes. He highlighted the benefits of the project, the funding strategy and the project timelines.

The Committee discussed the potential benefits for local rural communities and inquired about the funding model and the participation of current and future service providers, as well as senior levels of government.

Received for information.

### **Request to Remove Items from Consent Agenda**

There were no requests to remove items from the Consent Agenda.

### **Motion to Approve Items or Receive for Information**

Moved by K. Kiefer

Seconded by H. Jowett

That the following item be approved:

- Minutes of the Audit Committee – November 25, 2015

### **Recommendation:**

That the minutes of the Audit Committee meeting held November 25, 2015 be approved.

And That the following item be received for information:

- COR –TRY-15-111, Property Tax Capping – Program Changes

Carried

### **Regular Agenda Resumes**

#### **Information/Correspondence**

Council Enquiries and Requests for Information Tracking List was accepted for information.

#### **Next Meeting – January 12, 2016**

#### **Motion to go into Closed Session**

Moved by K. Redman

Seconded by J. Nowak

That a closed meeting of the Administration and Finance Committee, Planning and Works Committee and Licensing and Hearings Committee be held on Tuesday, December 8, 2015 at 11:30 a.m. in the Waterloo County Room in accordance with Section 239 of the “Municipal Act, 2001”, for the purposes of considering the following subject matters:

- a) personal matters about identifiable individuals regarding committee appointments
- b) personal matters about identifiable individuals regarding committee appointments
- c) advice that is subject to solicitor-client privilege related to an agreement
- d) advice that is subject to solicitor-client privilege related to an agreement
- e) advice that is subject to solicitor-client privilege related to an agreement
- f) labour relations related to an investigation
- g) personal matters about identifiable individuals regarding committee appointments
- h) personal matters about identifiable individuals regarding committee appointments
- i) advice that is subject to solicitor-client privilege related to an investigation

Carried

**Adjourn**

Moved by G. Lorentz

Seconded by S. Foxton

That the meeting adjourn at 10:49 a.m.

Carried

**Committee Chair**, S. Strickland

**Committee Clerk**, S. Natolochny

**THE HUB (365 ALBERT AND 130 COLUMBIA STREET,  
WATERLOO)**

**PRESENTATION BY HUGH HANDY, ASSOCIATE, GSP  
GROUP**

**REGIONAL ADMINISTRATION AND FINANCE  
COMMITTEE**

**DECEMBER 8, 2015**

1. INTRODUCTIONS
2. THANK YOU FOR OPPORTUNITY TO ADDRESS YOU.
3. MY COLLEAGUE CAROLINE BAKER ADDRESS YOU ON OCTOBER 27<sup>TH</sup> – SHE IS NOW ON MATERNITY LEAVE.
4. I WAS ALSO IN ATTENDANCE, AS WELL AS OTHER MEMBERS OF THE PRICA TEAM TO HEAR THE DISCUSSION
5. WE TOOK NOTE OF YOUR COMMENTS/DIRECTION AT THAT TIME AND SUBSEQUENTLY ENGAGED ALTUS CONSULTING TO:

- a. LOOK AT PRECEDENTS IN OTHER JURISDICTIONS
  - b. RISK TO REGION IN TERMS OF CAPITAL FUNDING
  - c. ECONOMIC BENEFITS OF THE PROPOSED DEVELOPMENT
6. THE ALTUS MEMO (NOV 30, 2015) IS INCLUDED IN YOUR PACKAGE AND DARYL KELEHER IS HERE TO ANSWER ANY SPECIFIC QUESTIONS.
  7. A COUPLE OF BRIEF POINTS.
  8. PG 15 – COMMENT ABOUT THE REQUEST NOT BEING REVENUE-NEUTRAL.

RESPONSE: IT IS OUR OPINION AS INTEREST WILL BE RECEIVED THAT THIS WILL BE REVENUE-NEUTRAL FOR THE REGION.

9. PG 15 - CONCERNS ABOUT ISSUING DEBT ON BEHALF OF DEVELOPMENT CHARGES, USES UP DEBT CAPACITY AND REDUCES THE REGION'S FINANCIAL FLEXIBILITY.

RESPONSE: ACCORDING TO THE REGION'S 2014 FINANCIAL INFORMATION RETURN, THE

REGION'S DEBT PAYMENTS COMPRISE 9.9% OF ITS REVENUES, WELL BELOW THE 25% PROVINCIAL GUIDELINE. GRANTING THIS DEFERRAL IN OUR OPINION WILL NOT PUT THE REGION AT RISK OF APPROACHING THIS GUIDELINE OR THE REGION'S CREDIT RATING AT RISK.

10. THE HUB PROJECT IS A SIGNIFICANT MIXED USE PROJECT IN TERMS OF SCALE AND PRIVATE/PUBLIC AMENITIES BEING PROVIDED.
11. PROJECT WILL BRING CONSIDERABLE ECONOMIC BENEFITS (SHORT AND LONG TERM) AND BUILD A GREAT NEW NEIGHBOURHOOD.
12. WE REALIZE STAFF REPORT BEFORE YOU IS NOT SUPPORTIVE --- BUT WE ALSO NOTE THAT STAFF HAS SUPPLIED CONDITIONS IN THE 2<sup>ND</sup> PARAGRAPH ON PAGE 17 TO FACILITATE THE REQUESTED DEFERRAL.
13. IN SHORT, WE APPRECIATE YOUR TIME IN CONSIDERING OUR REQUEST AND WE WOULD BE HAPPY TO ANSWER ANY FURTHER QUESTIONS.



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SouthWestern Integrated Fibre Technology

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Region of Waterloo  
Administration & Finance Committee

[swiftnetwork.ca](http://swiftnetwork.ca)

[facebook.com/networkswift](https://facebook.com/networkswift)

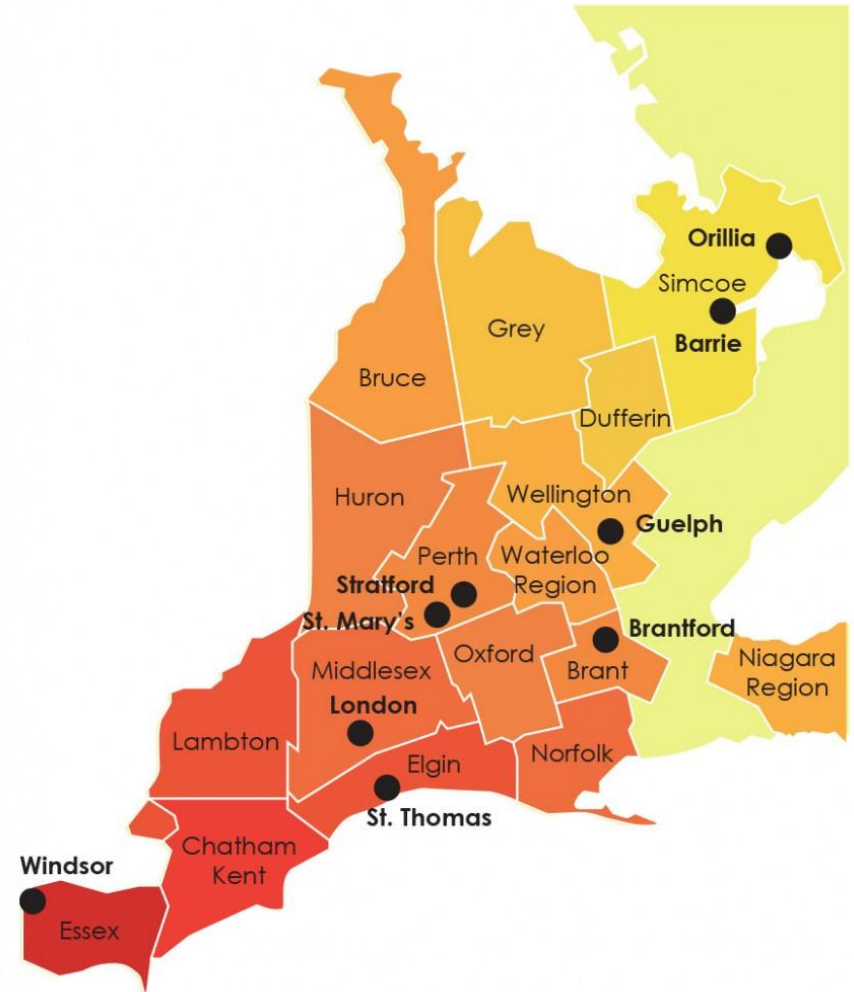
[twitter.com/networkswift](https://twitter.com/networkswift)

December 8, 2015



# SWIFT - Stakeholders

- 14 Counties and Chatham-Kent in Caucus
- Region of Niagara, Town of Caledon, City of Stratford, City of Orillia, Grey Bruce Health Services, SCAN and Georgian College have joined with a financial contribution
- Region of Waterloo is part of the feasibility study
- Plus in discussion with 7 other separated municipalities of Barrie, Brantford, Guelph, London, St. Mary's, St. Thomas and Windsor
- LDCC, Chippewa's of the Thames First Nation and Walpole Island First Nation support SWIFT.
- Other partners are educational institutions, healthcare organizations, First Nations, private sector enterprises



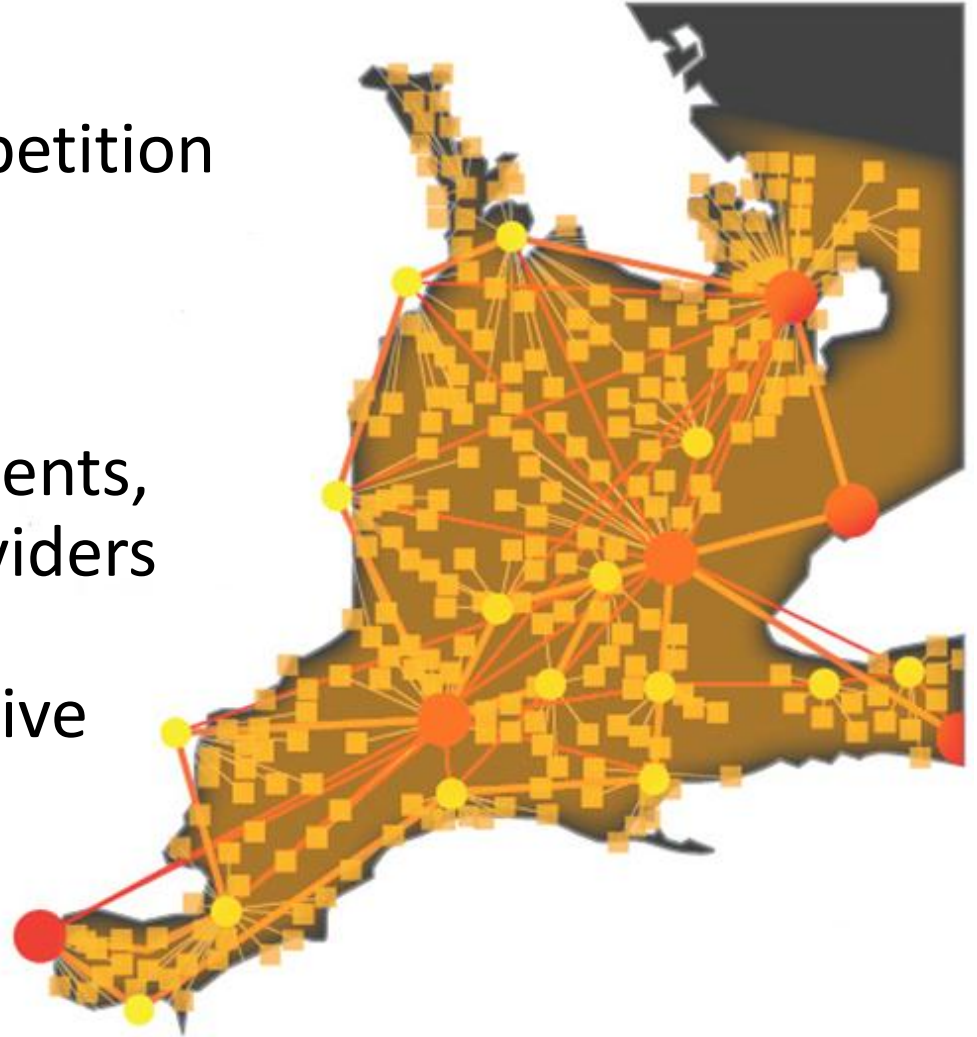
## WOWC's Mission:

*"enhance the prosperity and overall well being of our communities"*

*SW Ontario & Niagara has ~3.5 Million people – ~10% of Canada's population*

# Goal: Improve competitiveness through better connectivity

- Platform for competition
- Open Access
- Win-Win for residents, business and providers
- Globally competitive





# SWIFT Steering Committee

## Political Representatives:

- Chair: Gerry Marshall (Simcoe)
- Members:  
Ron Eddy (Brant), Mitch Twolan (Bruce),  
Trevor Thompson (CK), Laura Ryan (Dufferin),  
Cameron McWilliam (Elgin), Nelson Santos  
(Essex), Kevin Eccles (Grey), Roger Watt (Huron),  
Bev MacDougal (Lambton), Vance Blackmore  
(Middlesex), Noel Haydt (Norfolk), David  
Mayberry (Oxford), George Bridge (Wellington)



# SWIFT Advisory Committee

- Sonya Pritchard, CAO, Dufferin County
- Geoff Hogan, Director of IT, Grey County
- Mike Morgan, IT Manager, Waterloo Region District School Board
- Barbara Swartzentruber, Senior Advisor, Policy & Intergovernmental Affairs, City of Guelph
- Helen Hambly, Associate Professor, School of Environmental Design and Rural Development, University of Guelph
- Todd Sands, former Executive Director & CIO, Centre of Smart Community Innovation, WEDnet, University of Windsor
- Brad Gray, Director Business Development and Strategic Alliances, ORION (formerly LARG\*NET)
- Lance Thurston, President & CEO, Grey Bruce Health Services
- Jim Wilson, CIO, Middlesex Hospital Alliance
- Steve Benoit, Manager - Media Services & Network Communications Infrastructure, Georgian College
- Stuart Hendrie, CIO, Region of Niagara
- Jennifer Whiteye, Southern First Nations Secretariat, London District Chief's Council



# History

Milestone	Dates
Presentation to caucus on broadband including EOWC's EORN project	May 6, 2011
Contract awarded for feasibility study to CPC	September 14, 2012
Feasibility study presented	August 18, 2013
Feasibility study adopted, budget set (\$350K)	October 18, 2013
Stakeholder consultations	
SCF funding application submitted	December 19, 2014
Minister's letter received	April 2, 2015
<a href="http://www.r2b2project.ca/">http://www.r2b2project.ca/</a> funded by OMAFRA to study economic broadband impact (Helen Hambly, University of Guelph)	April 24, 2015
Very positive 3 <sup>rd</sup> Party (Dr. Rajabiun) review validating project	July 28, 2015
Southwestern Integrated Fibre Technology Inc. incorporated	November 12, 2015



# Dr. Rajabiun SWIFT review

“SWIFT offers an innovative, realistic and strong business model for ensuring that Western Ontario can catch up, and potentially surpass, urban Canada in broadband infrastructure quality and affordability,”

Full report available at [www.swiftnetwork.ca/materials](http://www.swiftnetwork.ca/materials)



SouthWestern Integrated Fibre Technology

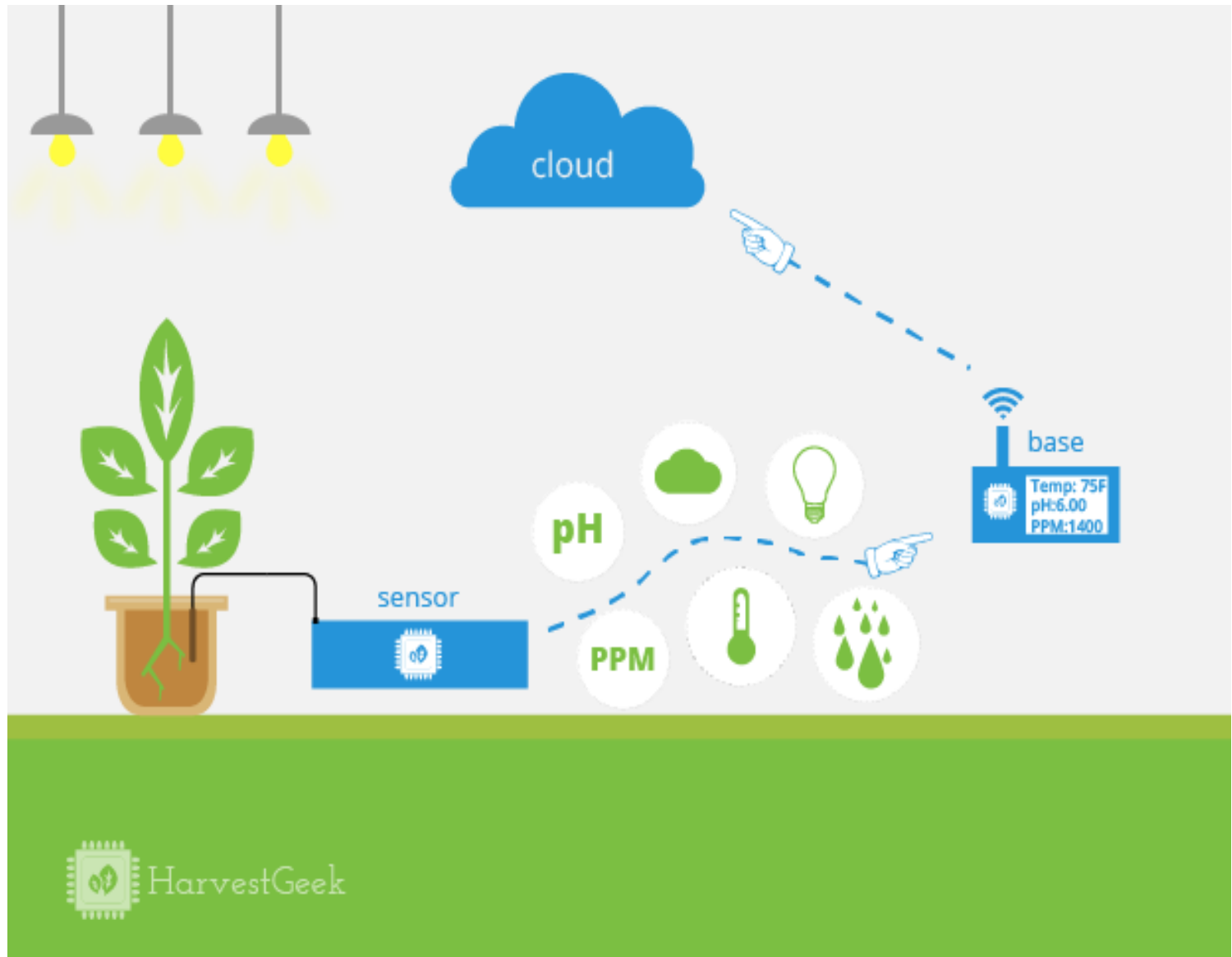
CONTEXT FOR THE PROJECT

# The Internet of Things (IoT)

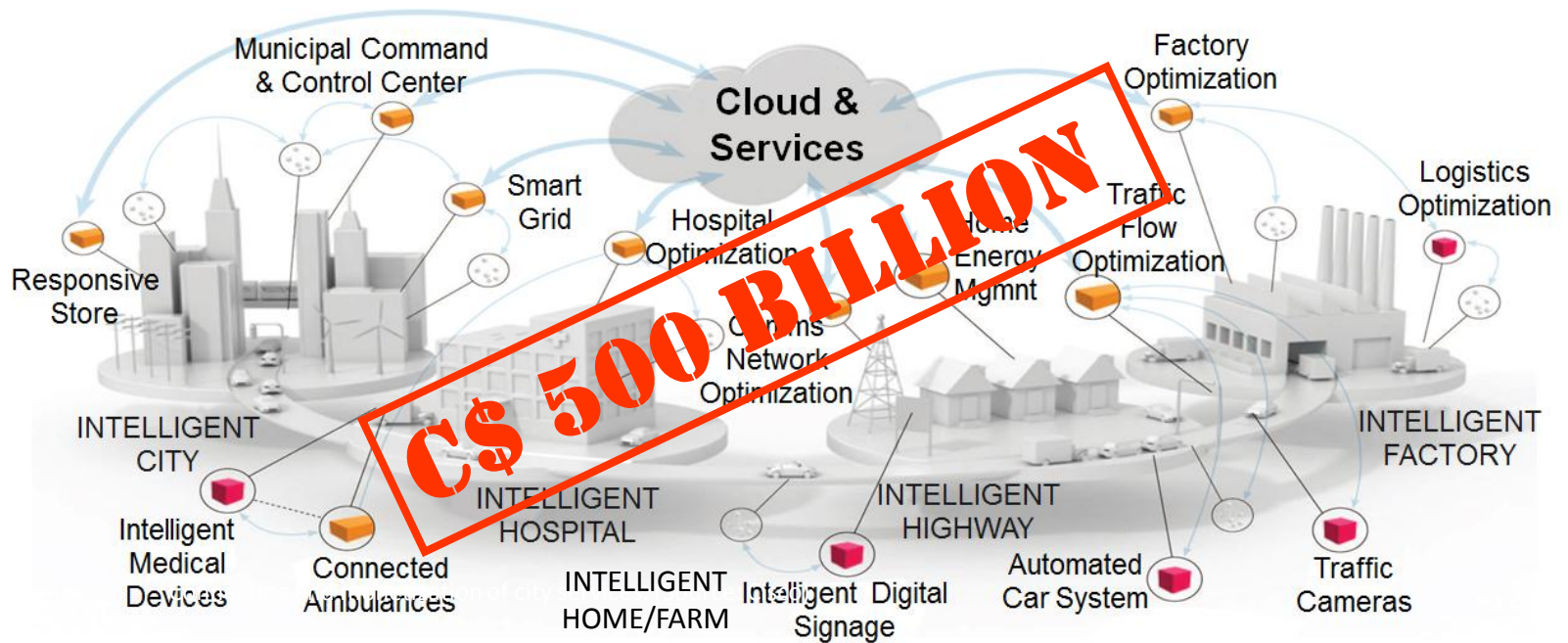




# Big Data is Everywhere



# Regional digital infrastructure

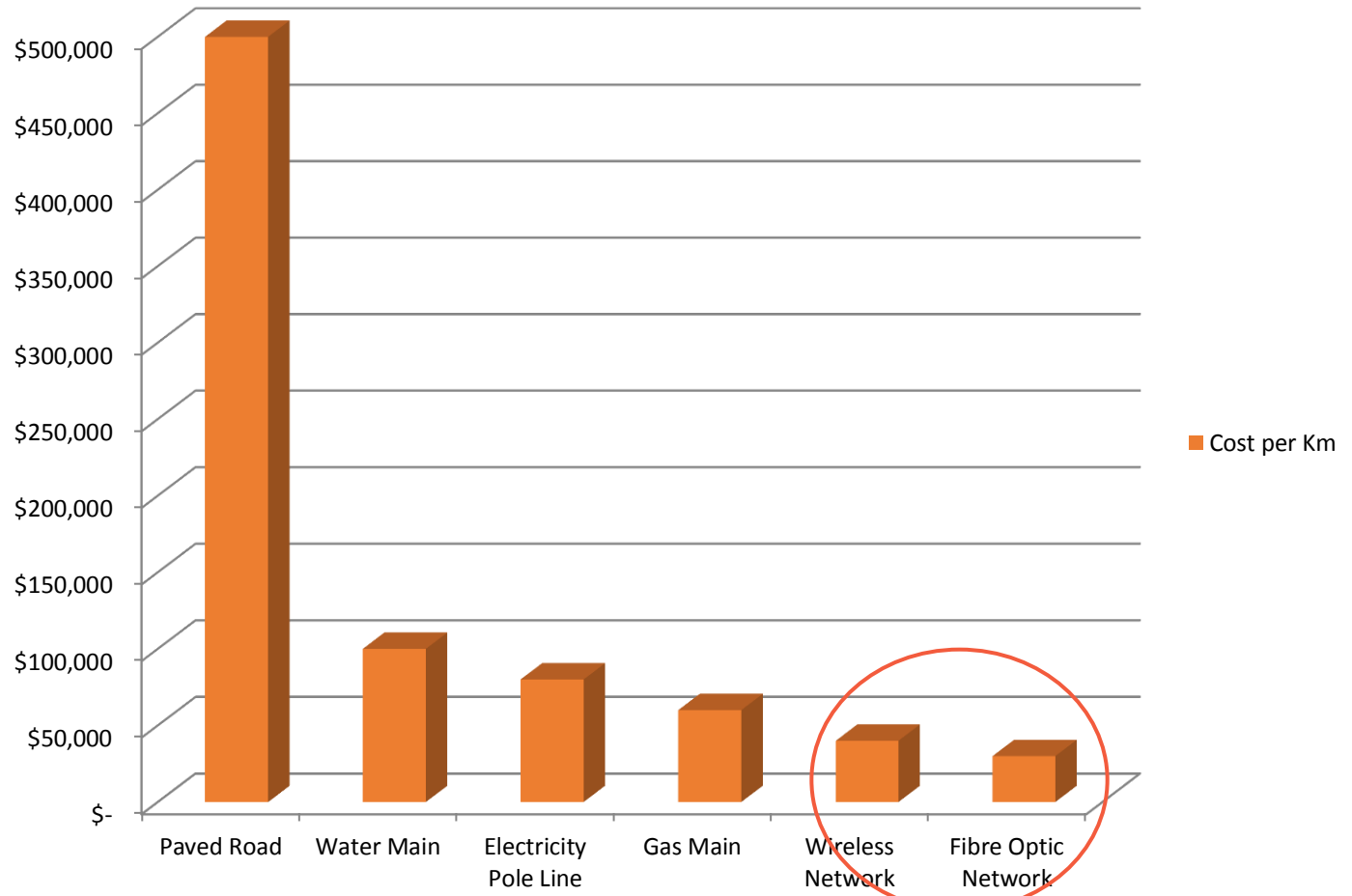


Source: Intel

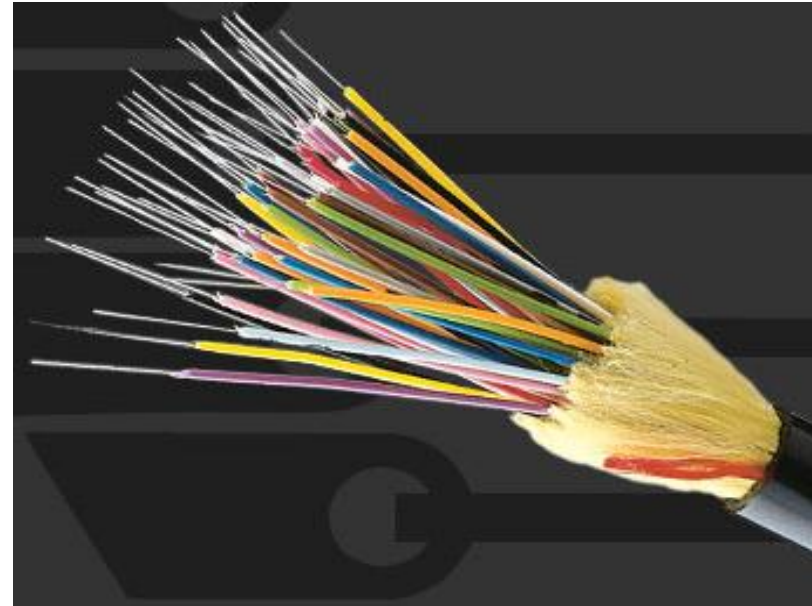
- High speed connectivity
- Sensors
- Cloud computing
- Big data
- Smart devices, Applications
- Video
- Wireless access
- Sharing (sensors, data)

# Fibre – Smaller Investment, Large Return

Cost per Km



# Copper/wireless vs. Fibre Optics?



The choice is clear....

Evaluation Criteria	Wireless	Copper	Fibre
Bandwidth (Information Carrying Capacity [Mbps])	70*	100	8,000,000
Distance Sensitivity (km)	50	0.5**	80 - 200
Immunity to interference (atmospheric or EMI)	✗	✗	✓
Power consumption per user (Watts)	7	10	2

\* Bandwidth is not typically made available to a single subscriber and is shared capacity

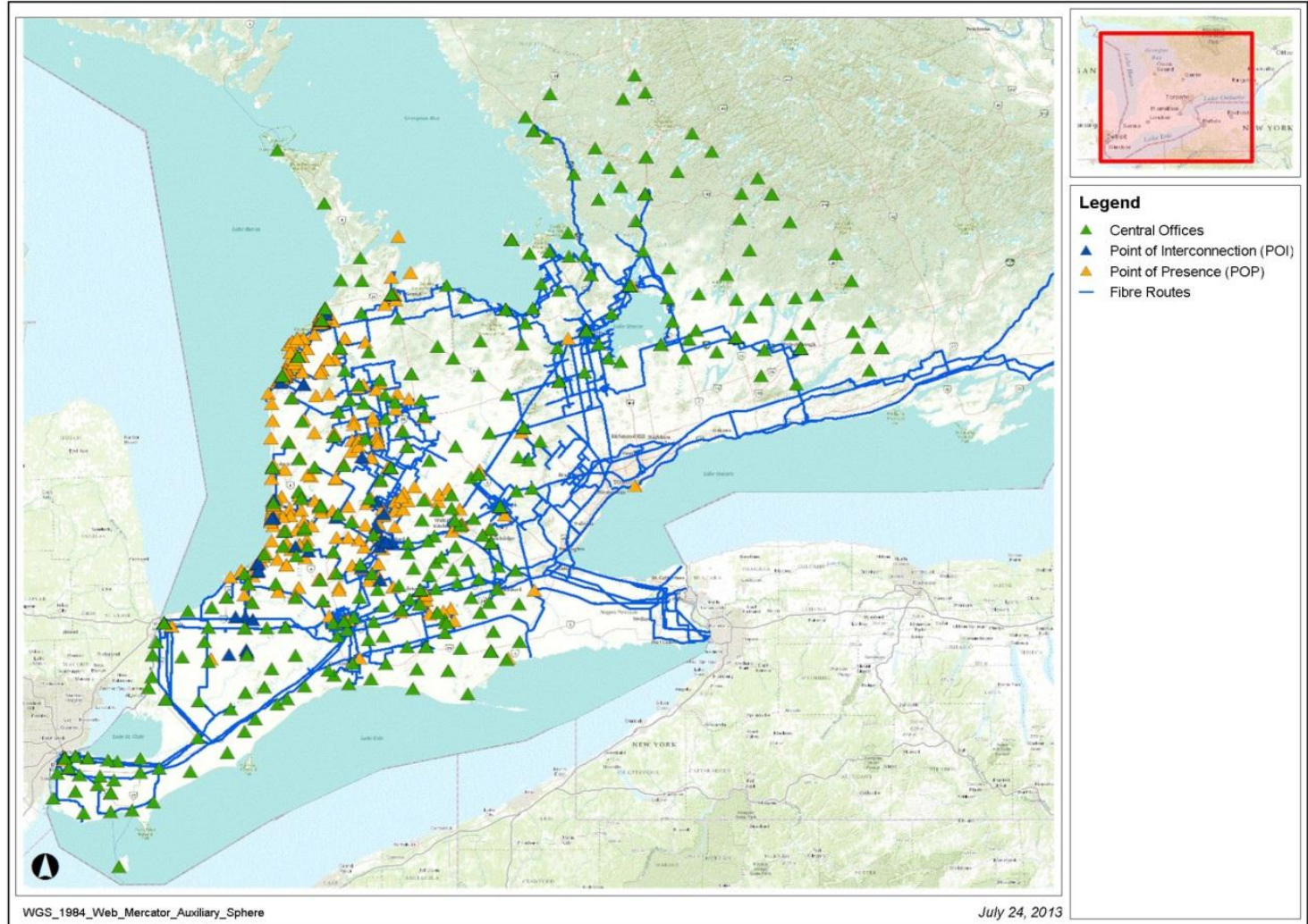
\*\* Assumes POTS cabling and is the maximum distance of the cable plant from the Central Office to realize 100 Mbps



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## FINDINGS OF THE FEASIBILITY STUDY

# Mapped users and providers

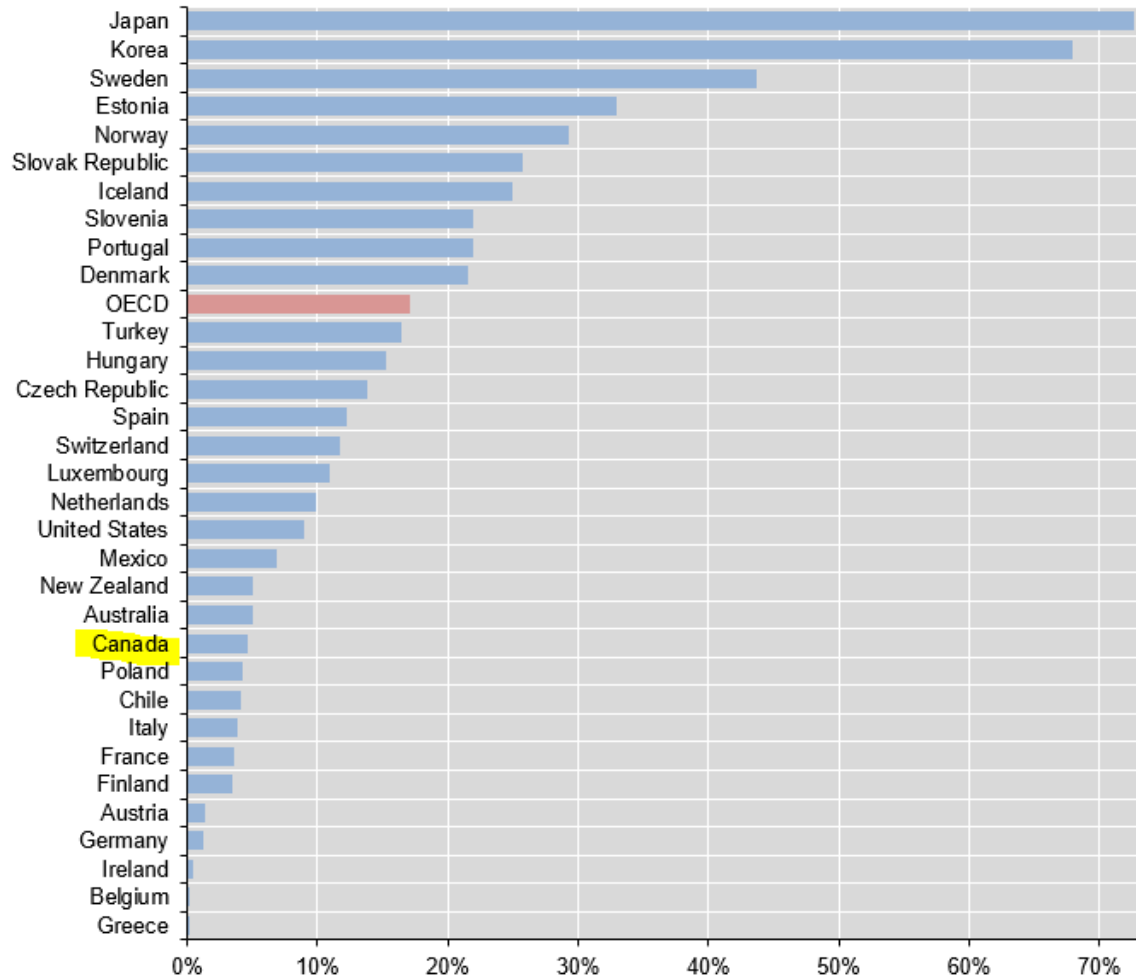


Study can be downloaded from <http://swiftnetwork.ca/materials/>

# Poor Fibre Broadband Penetration

- Japan 72.7%
- Korea 68.0%
- Sweden 43.7%
- Canada 4.7%
  
- OECD Average 17.1%

Percentage of fibre connections in total broadband subscriptions, Dec 2014





# Not enough consumer choice







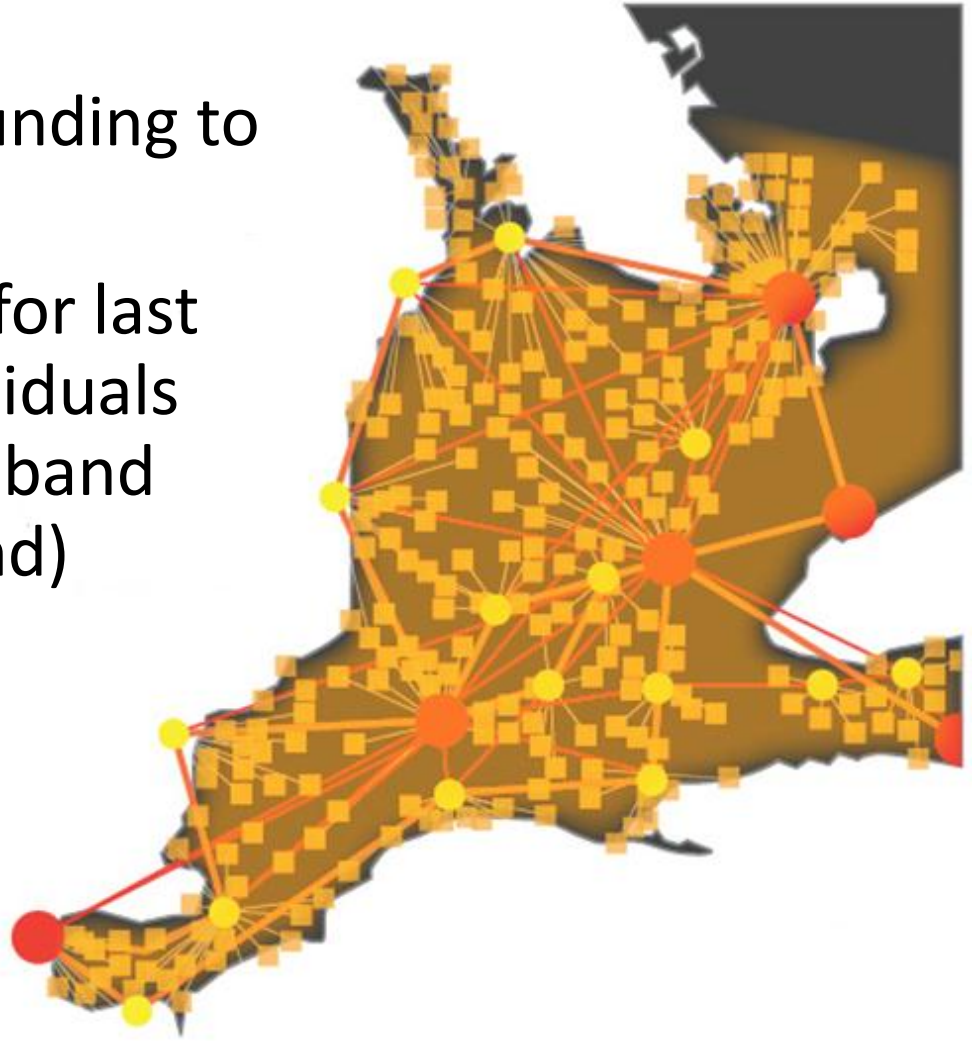
# Providers pick the broadband winners and losers



*Providers responsible to shareholders*

# SWIFT network is feasible to build

- One time NBCF funding to get started
- Ongoing funding for last mile based on residuals from rates (Broadband Development Fund)





# Why SWIFT?

- Modern economy (agriculture, home, MUSH, SME) requires fast, reliable broadband
- Fibre is only long term solution that scales to future needs of Internet of Things
- SWO needs a catalyst to spur broadband development to improve service quality / price
- SWIFT improves ROI for providers in rural areas (and many urban areas) to build fibre (due to density and demographics)
- SWIFT will subsidize fibre builds via RFP and has an ongoing subsidy mechanism (including further funding) so everyone gets connected

*“enhance the prosperity and overall well being of our communities”*



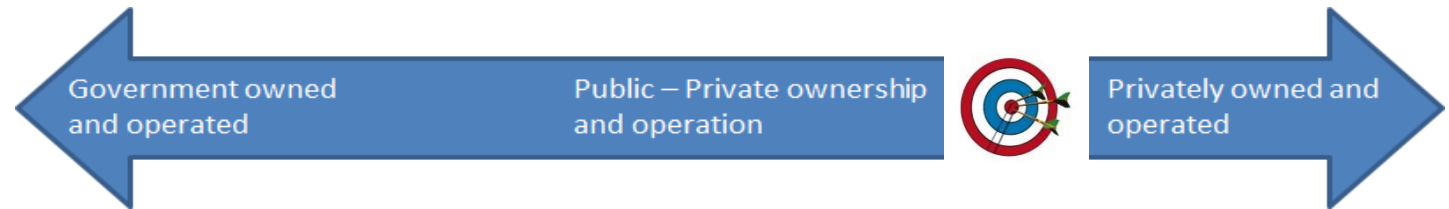
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## SWIFT ORGANIZATION

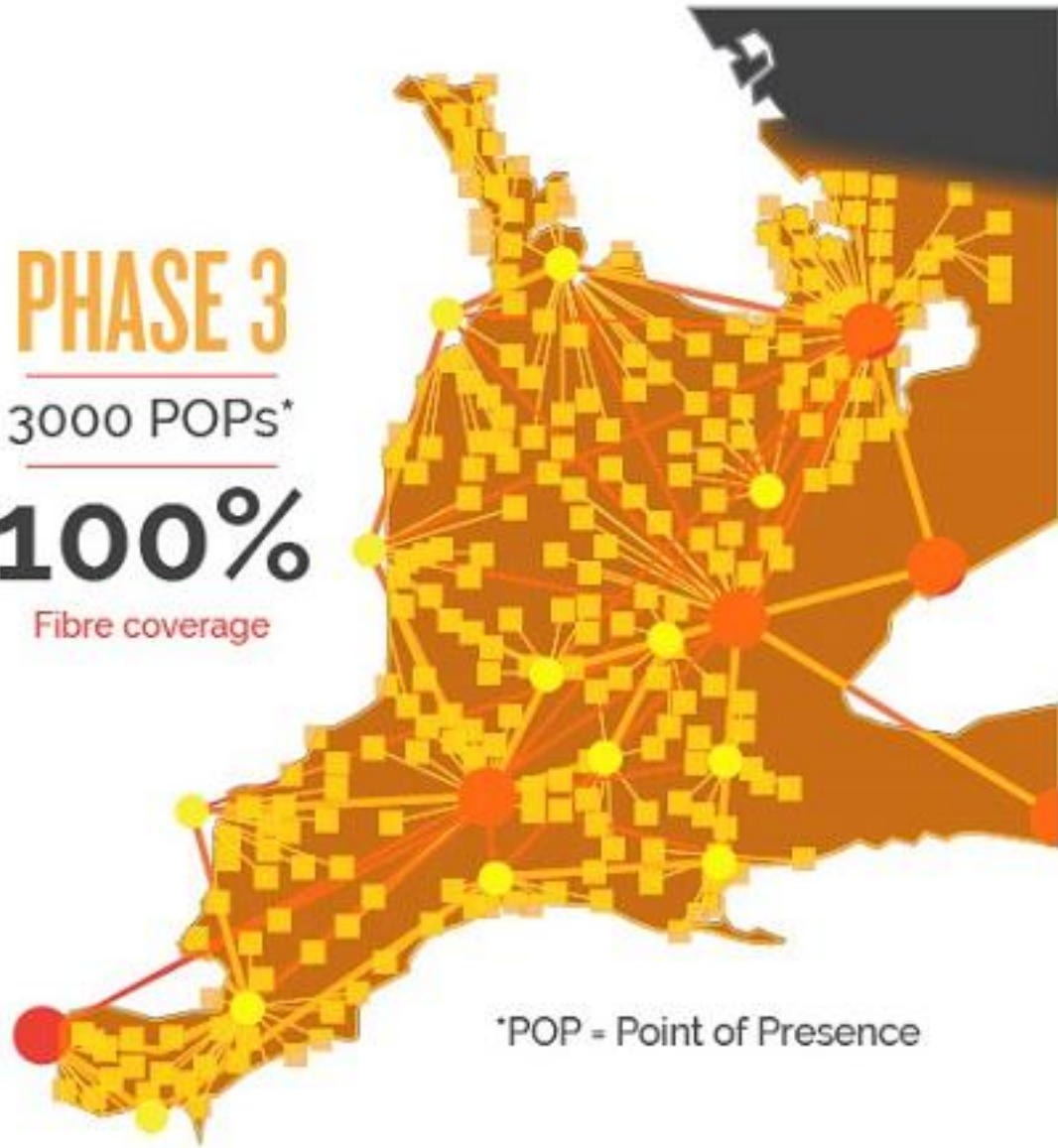
# SWIFT Organizational Structure



- SWIFT - Not-for-profit, non-share capital corporation
- Governed by board of directors (10 municipal, 5 other public sector)
- Providers build, own and run network – SWIFT oversees compliance with principles and subsidy
- Existing fibre assets employed wherever available, new fibre assets built to fill gaps
- SWIFT is funded ongoing by residuals from rates from providers

# The Plan – BDF funds ongoing builds

**PHASE 3**  
3000 POPs\*  
**100%**  
Fibre coverage



\*POP = Point of Presence



# Broadband Development Fund (BDF)

- \$281 M does not give everyone access to fibre \* – need ongoing funding/subsidy
- SWIFT partner provider pays a small (~3.5%) percentage of revenue back to SWIFT for each connection
- Funds are allocated by SWIFT board periodically to continue to subsidize providers until all of SWO has access to fibre based broadband

\* Total cost of FTTH for SWO and Niagara is \$4-7 billion



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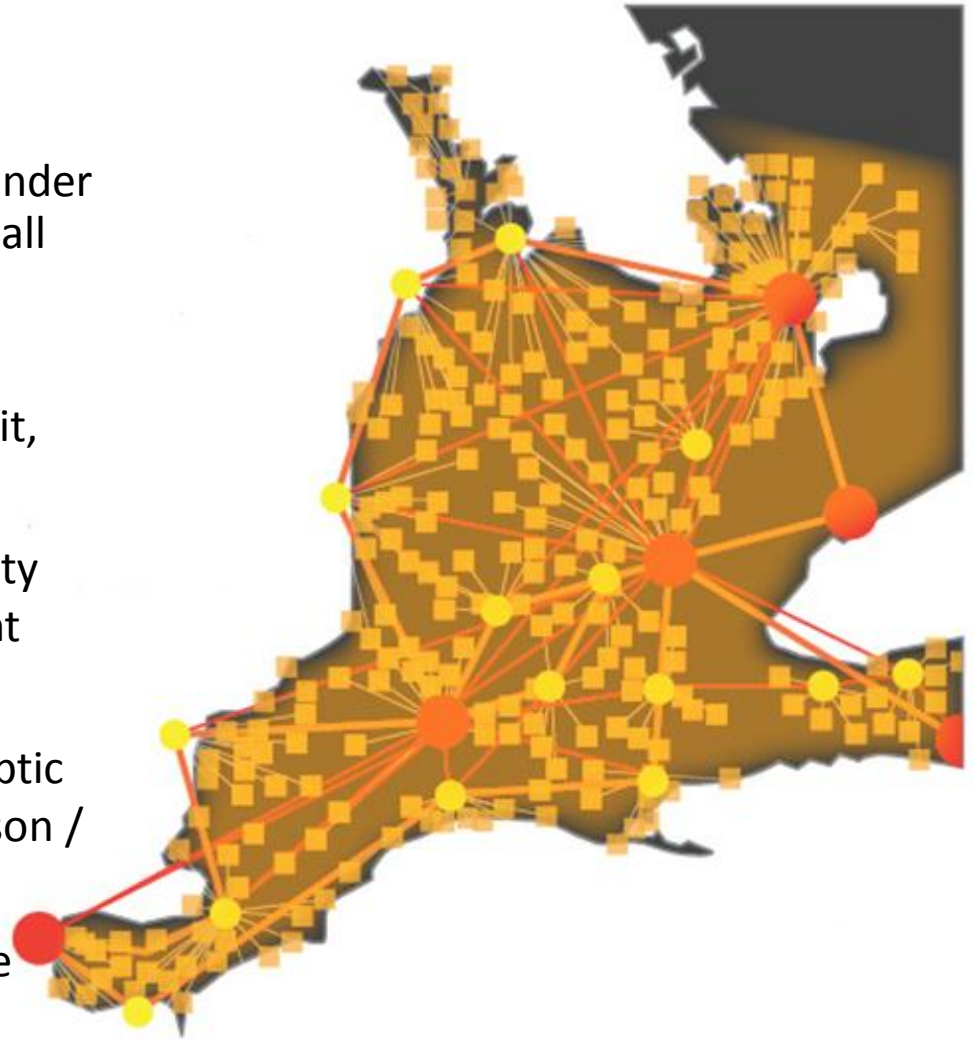
WHERE WE GO FROM HERE



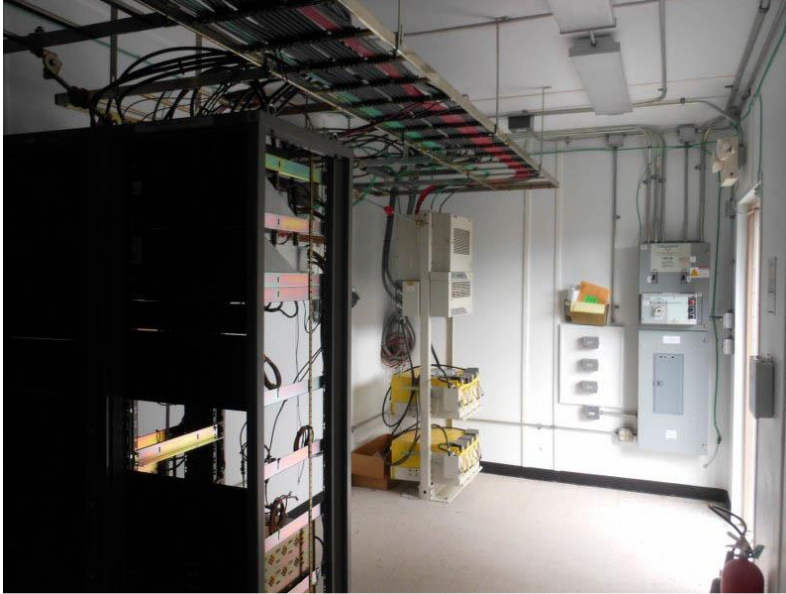
# The SWIFT Network Design

## Phase 1 Features

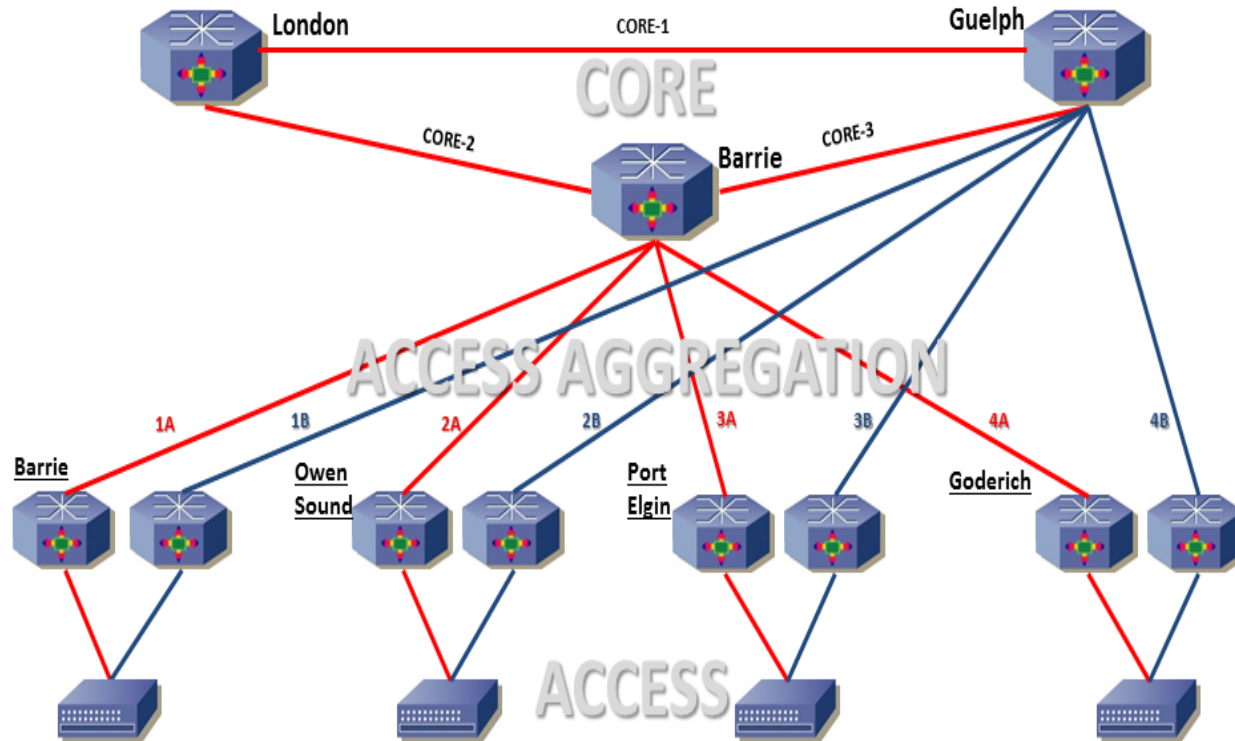
- Up to 1 Gbps access for under \$100/ month (target) for all business & residents
- IXP's like 151 Front St., Toronto, Windsor / Detroit, 350 Main St., Buffalo
- Path & electronics diversity from all POPs to 151 Front Street
- 350 Communities fibre optic access to as low as 4 person / km<sup>2</sup>
- Design does not duplicate existing fibre optic infrastructure



# Point of Presence (POP) “Orange Box”



# Not just ubiquitous and fast, **BETTER** Internet



Simcoe County			Grey County		Bruce County		Huron County	
Alliston	Elmvale	Port McNicoll	Ayton	Holstein	Adamsville	Mar	Auburn	Huron Park
Angus	Glencairn	Port Severn	Big Bay	Keady	Allenford	Mildmay	Bayfield	Morris-Turnberry
Balm Beach	Hawkstone	Sebright	Bognor	Kimberley	Barrow Bay	Miller Lake	Bluewater	Seaforth
Barrie	Innisfil	Severn Bridge	Chatsworth	Markdale	Cargil	Paisley	Blyth	South Huron
Beeton	Lafontaine	Stayner	Clarksburg	Meaford	Chepstow	Pike Bay	Brussels	St. Joseph
Borden	Lisle	Stroud	Craileith	Mount Forest	Chesley	Point Clark	Central Huron	Vanastra
BradfordWest	Midhurst	Thornton	Desboro	Neustadt	Chippewas of	Port Elgin	Centralia	Varna
Gwillimbury	Midland	Tottenham	Dundalk	Owen Sound	Nawash First Nation	Red Bay	Clinton	Walton
Brechin	Minesing	Victoria Harbour	Durham	Priceville	Dyers Bay	Ripley	Crediton	Wingham
Chippewas of	Moonstone	Wasaga Beach	Elmwood	Shallow Lake	Ferndale	Sauble Beach	Dashwood	Wroxeter
Rama First	Nottawa	Washago	Feversham	Stanton	Formosa	Southampton	Exeter	Zurich
Nation	New Lowell	Waubaushe	Flesherton	The Blue	Hepworth	Stokes Bay	Goderich	
Coldwater	New Tecumseth	Woodland Beach	Georgian Bluffs	Mountains	Holyrood	Tara	Corrie	
Collingwood	Orillia	Wyebridge	Grey Highlands	Thornbury	Inverhuron	Teeswater	Hensall	
Cookstown	Oro Station		Hanover	Williamsford	Kincardine	Tiverton		
Craighurst	Penetanguishene				Lions Head	Tobermory		
Creemore	Perkinsfield				Lucknow	Walkerton		
Duntroon	Phelpston					Wiarton		



# Project Capital Costs

## Costs

- Total Project Cost \$281M \*
- SCF Fundable \$269M
- SWIFT only subsidizes scalable fibre
- Partners have invested over \$800K on project to date

## Funding

- |              |         |   |     |
|--------------|---------|---|-----|
| • Federal    | \$89.7M |   | 1/3 |
| • Provincial | \$89.7M |   | 1/3 |
| • Municipal  | \$18.0M | } |     |
| • Private    | \$71.7M |   | 1/3 |

\* Includes communities over 100K population - Numbers are best estimates based on current knowledge



# Municipal Capital Contribution

- Municipal contribution based on formula
  - Need
    - Land area
    - Population
  - Capacity (FIR)
- Total annual contributions vary
  - Low: Brant County                      \$69,400
  - High: Simcoe County                    \$491,500
  - Region of Waterloo                    \$280,000

• Values are subject to change



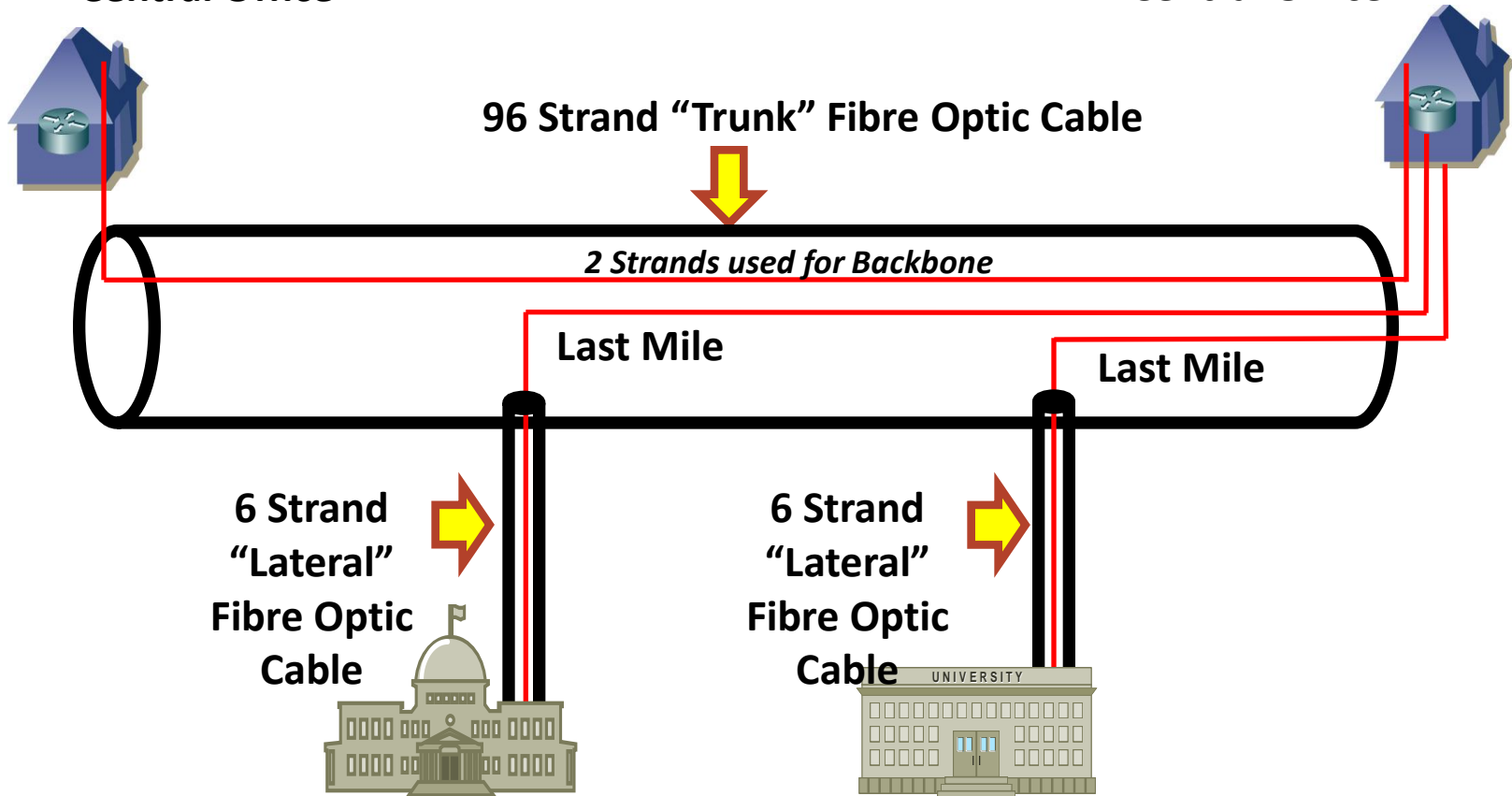
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SOLVING THE LAST MILE PROBLEM

# What is "Last Mile?"

Point of Presence (PoP)  
Central Office

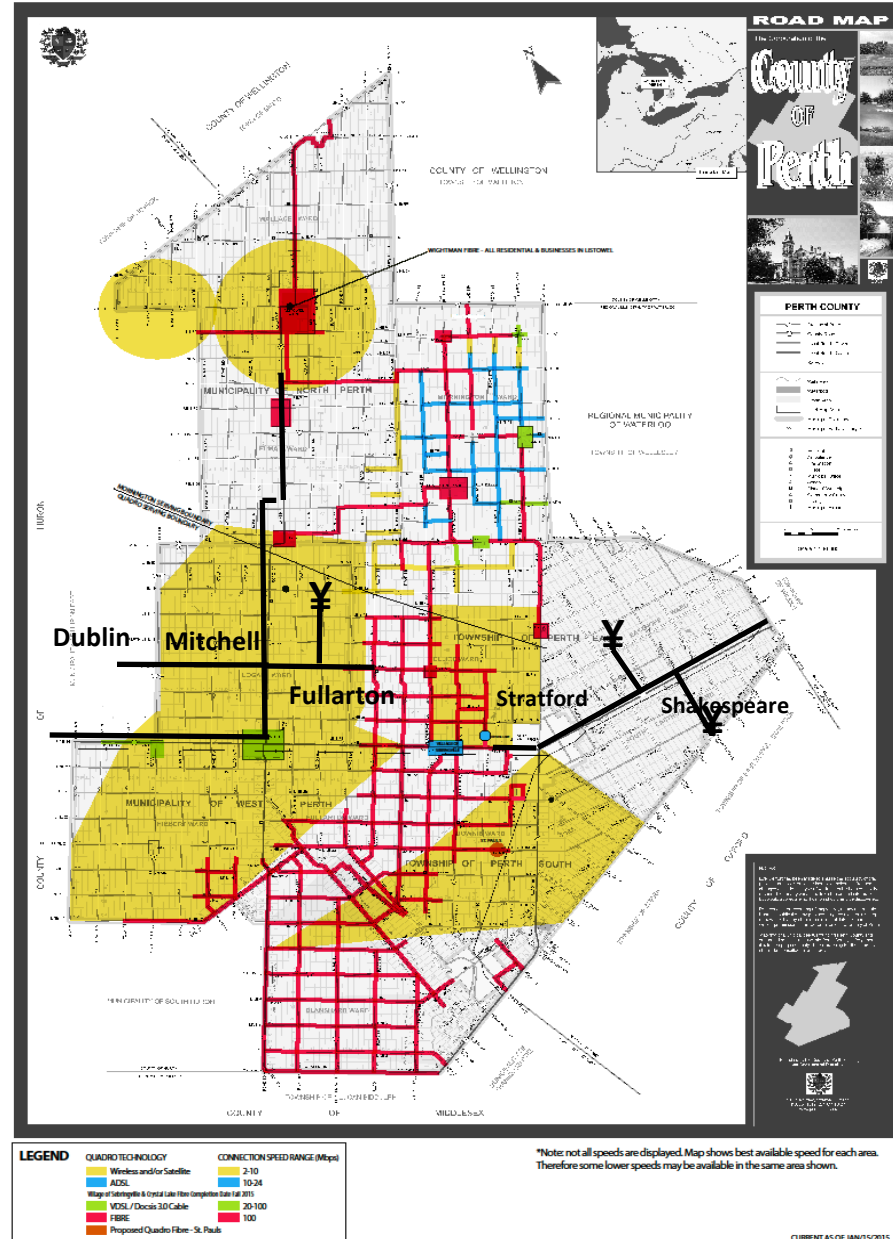
Point of Presence (PoP)  
Central Office



# The SWIFT Effect

- 120 km fibre build for core and aggregation
- Mitchell, Dublin, Fullarton, Shakespeare now have Points of Presence
- Substantial residual capacity exists to support further last mile build out
- Barrier to last mile investment has been substantially reduced
- Rural Schools connected (plus other MUSH)
- Over 2000 MUSH sector sites

## BROADBAND CONNECTION SPEEDS IN PERTH COUNTY







WATERLOO REGION EDUCATION & PUBLIC NETWORK

- WREPNet - Approximately 585 kilometres of fibre optic cable is installed to connect the 327 sites throughout Waterloo Region
- SWIFT leverages public sector connections with open access fibre – “SWIFT Effect”



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NEXT STEPS



# RFQ / RFP

- Funding announcement
- RFQ
  - Pre-Qualifies Financial, Insurance and Indemnity
  - Requires location of providers fibre and points of presence
- Analysis of RFQ data
- Provider / user consultation
- Construction Plan developed
- Business case finalized
- SWIFT members approval
- RFP's released

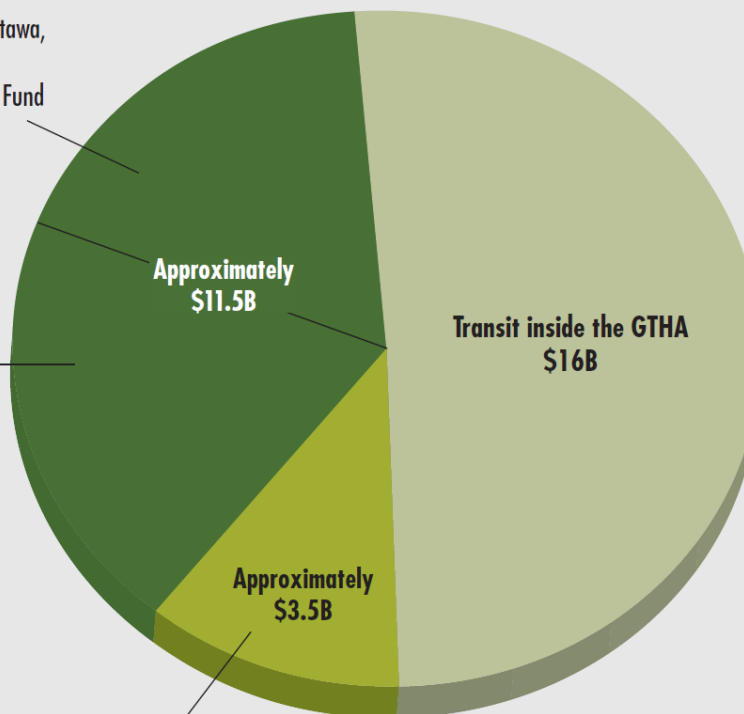
# Provincial Infrastructure Priorities

FIGURE 3 - Moving Ontario Forward: Approximately \$15 Billion for Infrastructure Outside the GTHA

## Potential Projects Include:

- Expanded Highway Investments
- GO Services Outside the GTHA
- Municipal Rapid Transit Projects, including Ottawa, Waterloo and London
- Expanded Ontario Community Infrastructure Fund

Next generation of signature investments that enhance economic growth and address critical needs (e.g. ultra high speed broadband)



## Regional Funding Allocated Includes:

- Connecting Links
- Natural Gas
- Ring of Fire
- Highway Investments
- Ontario Community Infrastructure Fund
- Small Communities Fund

(Source: MEDEI, Building Ontario Up, Discussion Guide for Moving Ontario Forward Outside the GTHA, May 2015)



# Timeline

Milestone	Dates
Business case review	April – August 2015
Contribution Agreements negotiated	September – Dec. 2015
Funding received *	December 2015
RFQ/RFPs issued to telecom service providers	January – May 2016
Telecom service provider MSA/SLAs signed	June – August 2016
End state report completed	September – October 2016
Operating plan	October – November 2016
Marketing plan	October – November 2016
Construction and deployment of SWIFT	December 2016 - Dec. 2021

\* estimated



# Testimonials

The SWIFT project has displayed a strong understanding of the major investment impediments preventing smaller rural communities from getting the FTTH networks built that will be required to remain competitive in the near future.

With the SWIFT vision of building an open access wide area fibre network with long term clarity of service offerings and pricing they will create an environment where competitive carriers may be confident in making long term investments in building FTTH networks within the SWIFT serving area.

Luke Gasteiger - Director of Engineering, Vianet

That is why our executive team unanimously, and enthusiastically, supports the South West Integrated Fibre Technology (SWIFT) project put forward by the Western Ontario Wardens' Caucus (WOWC). The WOWC is right to insist on access, for Southwestern Ontario, to the connectivity required to access innovative and modern healthcare, education, government services, employment opportunities and global marketplaces. TekSavvy believes that, without a project like SWIFT, our region will not reach the level of affordable, accessible, ultra-high-speed broadband it requires.

Marc Gaudrault – CEO, TekSavvy



Questions?

Geoff Hogan

[@geoffhogan](#)

[Geoff.Hogan@grey.ca](mailto:Geoff.Hogan@grey.ca)



# Support for Project

- Letters of support from
  - Providers, large and small
  - Other municipalities
  - Schoolboards, university's and business owners
- SWIFT Letter of Support – Bell
- SWIFT Letter of Support – Canning Perennials
- SWIFT Letter of Support – Cisco
- SWIFT Letter of Support – City of Brantford
- SWIFT Letter of Support – City of Guelph
- SWIFT Letter of Support – City of Stratford
- SWIFT Letter of Support – Cogeco
- SWIFT Letter of Support – GBHS
- SWIFT Letter of Support – HOT
- SWIFT Letter of Support – Joel Adams
- SWIFT Letter of Support – Niagara Region
- SWIFT Letter of Support – Rogers
- SWIFT Letter of Support – ROPS Lights
- SWIFT Letter of Support – SJHC
- SWIFT Letter of Support – Sophia Lemon
- SWIFT Letter of Support – SMGH
- SWIFT Letter of Support – TekSavvy
- SWIFT Letter of Support – University of Guelph
- SWIFT Letter of Support – University of Windsor
- SWIFT Letter of Support – Vianet
- SWIFT Letter of Support – Waterloo Region
- SWIFT Letter of Support – WECDSB
- SWIFT Letter of Support – WRDSB

<http://swiftnetwork.ca/scf-application/>





# Why SWIFT?

1. SWIFT is a non-profit corporation whose primary concern is the public interest.
2. SWIFT is a large buying group of users, giving it clout with telecom service providers on behalf of everyone in Southwestern Ontario.
3. An open network means you will have a wider selection of providers, creating competition, better services, and lower rates.
4. Regardless of population density, telecom providers will connect everyone with fibre using a hefty subsidy from SWIFT.
5. Telecom service providers will build, own, and operate the SWIFT Network so we don't have to reinvent the wheel.
6. The SWIFT board of directors will hold providers accountable for delivering on their promises as spelled out in the contracts for the project.
7. With your participation and others like you, SWIFT will be a sustainable system where users will have a say in when and where fibre optic infrastructure will be built, what services will be available, and how much those services will cost.

