

Clause 3 in Report No. 5 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on March 23, 2017.

3

York Telecom Network Review

Committee of the Whole recommends:

1. Receipt of the presentation by Doug Lindeblom, Director, Economic Strategy.
2. Adoption of the following recommendations, as amended, in the report dated February 24, 2017 from the Commissioner of Corporate Services and Chief Planner:
  1. The Region incorporate a wholly-owned Ontario Business Corporation Act corporation pursuant to Section 203 of the Municipal Act to operate the York Telecom Network, offering access to communications infrastructure.
  2. Council authorize expenditures up to \$500,000 to support the establishment and operations of the new corporation in 2017, and the Commissioner of Finance be directed to identify sources for this funding.
  3. The projected multi-year Regional funding for the new corporation be addressed as part of the 2018 budget process.
  4. *Staff report back to Council in early 2019 with a review of, and options relating to, the membership of York Telecom Network Corporation Board of Directors, including independent directors.*
  5. The Regional Clerk circulate this report to Federal, Provincial and local municipal governments, and all current York Telecom Network partners and subscribers, and local chambers of commerce and boards of trade.

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Report dated February 24, 2017 from the Commissioner of Corporate Services and Chief Planner now follows:

## 1. Recommendations

It is recommended that:

1. The Region incorporate a wholly-owned Ontario Business Corporation Act corporation pursuant to Section 203 of the Municipal Act to operate the York Telecom Network, offering access to communications infrastructure.
2. Council authorize expenditures up to \$500,000 to support the establishment and operations of the new corporation in 2017, and the Commissioner of Finance be directed to identify sources for this funding.
3. The projected multi-year Regional funding for the new corporation be addressed as part of the 2018 budget process.
4. The Regional Clerk circulate this report to Federal, Provincial and local municipal governments, and all current York Telecom Network partners and subscribers, and local chambers of commerce and boards of trade.

## 2. Purpose

This report recommends that Council establish the York Telecom Network as a York Region owned entity under the Ontario Business Corporations Act, pursuant to Section 203 of the Municipal Act, to develop, build and operate the Regions' fibre network assets.

## 3. Background and Previous Council Direction

Regional Council has recognized the importance of broadband access as an enabler of economic development

Regional Council has repeatedly recognized that broadband access for businesses, institutions and residents is a priority and an enabler of economic development. This is reflected in official documents, including Vision 2051, the York Region Official Plan – 2010, the 2015 to 2019 Strategic Plan; and the Economic Development Action Plan 2016 to 2019.

Council's recognition of the importance of broadband is particularly evident in its adoption of the York Region Broadband Strategy in 2014. The Broadband Strategy establishes objectives including maximizing the efficient investment of both public and private sector funding to improve connectivity throughout York Region.

The York Telecom Network was originally designed as a means of connecting Regional offices to each other

As indicated in a report adopted by Council on [June 25, 2015](#), the York Telecom Network was started in 2002 as a means of connecting Regional facilities to each other. These initial connections were lower cost than third party connections through Internet service providers. Since the first connection was made in 2002, the Region has continued to expand the network to improve control over the connectivity of its assets while reducing costs wherever possible.

The York Telecom Network evolved into a network serving numerous customers, which led to the need to develop a plan for the future

Since its beginnings in 2002, the York Telecom Network has evolved into a nearly 200 km fibre highway connecting a variety of regional buildings and assets including traffic control/cameras, Viva monitoring and payment systems, and water/wastewater monitoring systems. To date the Region has invested \$16 Million to build the current network.

The municipal, university, school and hospital (MUSH) sector have also recognized the benefits of the York Telecom Network and requested connections. Their rationale for connecting to the network includes cost-effectiveness, increased bandwidth, and simplified network monitoring capabilities.

The York Telecom Network's first non-Regional customer was connected in 2011. Now there are nine local MUSH sector subscribers with a total of 48 connections, including:

- Town of Newmarket
- Town of Georgina
- Town of Richmond Hill
- Town of Aurora
- King Township
- York Region District School Board
- York Region Police
- Southlake Regional Health Centre
- Ontario Research and Innovation Optical Network (ORION)

As the Regions' capital costs for the York Telecom Network rose over time and the number of MUSH sector requests to connect to the Network continued to climb, the

need to conduct a thorough review and develop a plan for the future became clear. A review of the York Telecom Network commenced in 2014. The outcomes and recommendations derived from this work are the subject of this report.

The Broadband Strategy Advisory Task Force was established by Council in 2015 to advise on implementation of the Broadband Strategy and the York Telecom Network Review

In 2015, Regional Council established the Broadband Strategy Advisory Taskforce. Its role is to provide guidance in the implementation of the York Region Broadband Strategy and to advise on the future of the York Telecom Network. Between September 2015 and February 2017 the Task Force received four presentations from staff and consultants relating to the York Telecom Network and its' review. Advice from those Task Force meetings has been incorporated into the review process and helped shape reporting to Regional Council on this matter.

In June 2016 Regional Council endorsed development of the York Telecom Network into a wholly-owned subsidiary to build and operate the Regions' optical fibre network

On [June 23, 2016](#) after an extensive review by staff and external consultants, Council endorsed a report recommending that the York Telecom Network be developed into a wholly-owned subsidiary to build and operate the Regions' optical fibre network. Council directed that further work be undertaken on the governance and business structure. This further work has been undertaken using both internal and external resources. IBI Group was hired to assist Regional staff in completing the required analysis, which involved research and gathering input from multiple sources using surveys, interviews and meetings. The consultant and staff connected with Regional Departments, current local municipal and MUSH subscribers of YTN, and internet service providers in the development of the recommendations.

Internal and external legal counsel was used to provide guidance regarding legal issues related to incorporating the York Telecom Network. Other municipalities that have developed and are managing optical fibre networks also provided valuable insights regarding best practices for developing a governance model and organizational structure for the York Telecom Network.

There are important policy reasons for continuing to develop the York Telecom Network

During the review of the York Telecom Network, several policy lenses were used to evaluate the work and understand the value in moving forward. Three important policy initiatives have been identified through this review that support advancing the York Telecom Network, including:

1. **Serving public sector operational needs effectively** – the original purpose of the York Telecom Network was to provide cost effective connectivity to Regional (and later MUSH partner) customers, and this continues to be relevant
2. **Driving economic and social benefits in communities** - research and discussion with other municipal broadband network providers clearly indicates the positive economic and social impacts of municipal broadband networks on communities
3. **Extending high speed broadband into under-served areas of the Region** – the Broadband Strategy recognized that there is a digital divide between urban and rural areas of the Region, primarily as a result of the cost hurdle to provide fibre to under-served areas. Regional fibre could be leveraged to help bridge the gap and help private service providers extend high speed service into the Regions’ rural areas

The Broadband Strategy Advisory Task Force received a presentation on the proposed York Telecom Network entity and has recommended it be brought forward for consideration

A summary of this work was presented during a meeting of the York Region Broadband Strategy Advisory Task Force, on February 16, 2017, which resulted in an endorsement to present the proposed governance and business to Committee of the Whole and Council.

#### 4. Analysis and Implications

It is recommended that the York Telecom Network be incorporated as a wholly-owned subsidiary of York Region under the Ontario Business Corporations Act

Based on a legal review, the York Telecom Network should be incorporated as an entity under the Ontario Business Corporations Act (OBCA) to provide the Region with the greatest flexibility to take advantage of opportunities to collaborate directly with industry. This structure allows the York Telecom Network to work effectively in the fibre network space and generate revenue, which can be used to finance ongoing expansion of the network or other investments approved by the Board of Directors.

The proposed structure for the York Telecom Network Corporation is similar to existing entities established by the Region

Both Housing York Inc. and York Region Rapid Transit Corporation have been established by the Region as OBCA corporations.

Table 1, York Region Corporation Structure Comparison, compares key elements of the corporate structures of Housing York Inc., York Region Rapid Transit Corporation and the recommended structure of the York Telecom Network Corporation. As noted in the table, the recommended structure for the new corporation is most similar to that of Housing York Inc.

Table 1

**York Region Corporation Structure Comparison**

<b>Comparative Measures</b>	<b>York Telecom Network</b>	<b>Housing York Inc.</b>	<b>York Region Rapid Transit Corporation</b>
Ontario Business Corporations Act (OBCA)	✓	✓	✓
Wholly owned subsidiary of York Region	✓	✓	✓
Board of Directors is comprised of Regional Council Members	✓	✓	✓
Separate Audited Financials – consolidated into York Region’s Financials	✓	✓	✓
Owens and operates assets	✓	✓	-
Employees are Regional Staff	✓	✓	-
Owner/operator & service delivery	✓	✓	-

The Board of Directors is proposed to be comprised of members of Regional Council

Other jurisdictions that have established open access optical fibre networks have been reviewed. Composition of the boards of directors for these entities varies greatly. Some are completely comprised of senior municipal staff while others include a mixture of staff, elected officials and/or industry experts.

It is recommended that the Board of Directors of the York Telecom Network Corporation be comprised of members of Regional Council. This is consistent with the governance models for Housing York Inc. and York Region Rapid Transit Corporation. The entity can be set up to allow the addition of non-Council members in the future should it be deemed appropriate.

The Region will obtain the expertise necessary to manage and operate the new corporation and advise the Board of Directors

It is recommended that the York Telecom Network entity be managed and operated by expert staff hired and employed by York Region, also in keeping with the Housing York Inc. structure. It will be critical to secure senior staff for the new organization that have industry expertise to build and operate the business and advise the Board of Directors on strategic direction. Upon approval by Council a process to recruit the appropriate expert staff would commence.

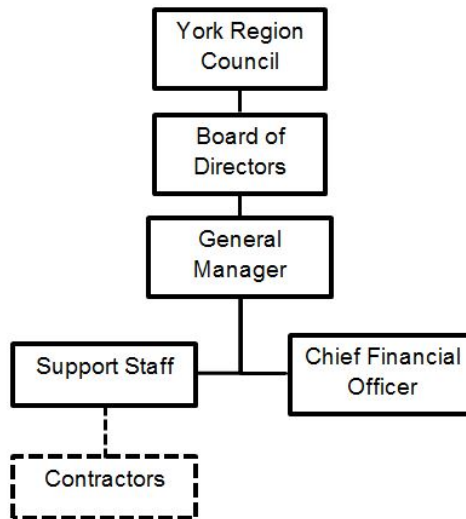
The staffing requirement for the corporation would include:

- a General Manager
- a Chief Financial Officer
- a Marketing and Business Development Manager
- staff to manage deployment and maintenance of the optical fibre and conduit network

A number of operational support services will be provided by other York Region divisions, including: Legal Services; IT Services; Finance; and Corporate Communications.

Figure 1, York Telecom Network Corporation Organizational Chart, shows the recommended structure for the new corporation.

**Figure 1**  
**York Telecom Network Corporation Organizational Chart**



The business plan for the York Telecom Network Corporation will be developed by the new entity, for Regional Council approval

The mandate, responsibility and scope of the new entity will be incorporated into the Articles of Incorporation. Once established, the management and Board of Directors will be responsible for development of a strategic direction within the agreed upon scope, as well as a new network and business plan that would initially come before Regional Council for approval as part of the 2018 budget and business plan process.

Once a General Manager is in place, one of the first priorities will be to develop the strategic direction of the York Telecom Network Corporation for presentation to the new Board of Directors. The strategic direction will assist in delivering broadband infrastructure across York Region that:

- serves the connectivity needs of York Region's departments and those of local MUSH partners
- supports economic development initiatives and business attraction, retention and expansion
- bridges the digital divide that exists between urban and rural areas by enabling the private sector in their efforts to provide services to businesses and residents in under-served areas.



The York Telecom Network entity will serve existing York Region and MUSH sector customers, and could also engage with the private sector

During the analysis, feedback was collected on current, planned and desired usage of the York Telecom Network from a variety of sources, including York Region departments, York Region Police, local municipalities, school boards, post-secondary institutions, hospitals, data centre providers, and Internet service providers.

The review identified demand for access to the Region's optical fibre and conduit network. This was used to estimate future demand and potential cash flows.

This interest in the York Telecom Network resulted in the identification of four categories of potential customers:

1. York Region departments and corporations
2. Local Municipalities and their boards and agencies (eg libraries, utilities)
3. Other Local MUSH partners (eg hospitals, school boards)
4. Internet Service Providers and Data Centre operators

Currently the York Telecom Network fees cover operating costs, with capital costs covered by various York Region departments. Modest revisions in the pricing structure can be set to continue covering operational expenses and assist the corporation in recovering capital expenses over time from the customer base.

The new business plan prepared by management of the York Telecom Network entity will include pricing, marketing and outreach tactics to maximize capturing this demand and recovering costs.

The York Telecom Network Corporation could facilitate Internet service provider "last mile" connections in under-served areas

By opening access to the York Telecom Network, it is intended that more Internet Service Providers will be able to cost effectively extend services throughout York Region. This is due to the fact that some may be able to avoid the capital costs associated with building additional optical fibre to reach new customers by leasing access to the York Telecom Network. The "last mile", or connection directly linking the customer to the backbone network, is most difficult to achieve in rural areas where the density of customer is lowest, limiting the business case for Internet Service Providers.

Transition to the new entity will occur through 2017

Throughout the transition from an internal operation to an external business entity, the Region will continue to provide service to existing customers and ensure MUSH partner connectivity needs continue to be met.

The following list of items summarizes the major tasks that are to be completed in the short term as the internal operation is transitioned to the separate entity. The intent is to aim for the York Telecom Network entity to be operational by 2018.

- Establish a Transition Team
- Hire Management Team and Staff
- Incorporate the new entity
- Establish Board of Directors
- Initial review of network plan for possible revisions
- Develop a Capital and Operating Budget submission for consideration during the 2018 Regional budget review process
- Develop corporate policies and procedures and revenue and expense management and tracking processes
- Engage existing internal and MUSH customers to revise existing agreements
- Engage potential new MUSH and private sector customers as appropriate

## 5. Financial Considerations

Operational and capital budget considerations for the York Telecom Network entity will result in the need for Regional financial support

Initiating the York Telecom Network as a business entity will require capital and potentially operating subsidies for the foreseeable future. The corporation's funding needs will be established by the management and Board of Directors of the new entity and addressed through the Region's budget process.

In addition, Regional departments that currently access the York Telecom Network without paying subscriber fees will now incur those costs for new fibre connections, impacting on the Regions' operating budget. Fees would be required to be paid to a service provider regardless, whether to York Telecom Network or a private Internet Service Provider, and decisions on selecting providers for connections will continue to be made on a competitive basis. While these additional costs are ultimately balanced by the York Telecom Network revenues that accrue back to the Region

through the consolidated financial statements, they will generate operating budget pressures that will need to be considered during the budget review process.

The York Telecom Networks' funding requirements will be revisited on an annual basis to take advantage of opportunities, including:

- Alignment with Regional capital projects
- Partnerships with the private sector
- Funding opportunities (e.g. the Federal Connect to Innovate Program)

There may be instances where engaging in arrangements such as fibre swaps or joint builds with the private sector can reduce capital costs. The new corporation will work closely with the Region, other levels of government, and network stakeholders to minimize costs, maximize revenues and take advantage of funding opportunities.

Funds are required in 2017 to establish the new corporation and hire staff

Funding in the amount of up to \$500,000 is required in 2017 to establish the new corporation. These funds will be used to cover the cost of management and staff, incorporating the organization, and developing the tools, processes and procedures necessary to launch the new entity by January 1, 2018. As these funds are not included in the current 2017 Budget, the Commissioner of Finance will identify sources and how they impact on the budget.

## 6. Local Municipal Impact

To date, the municipalities of Aurora, Georgina, King, Newmarket and Richmond Hill, York Regional Police, York Region District School Board, King Public Library, and Southlake Regional Health Centre are subscribers to the York Telecom Network. York Region has also received network connection requests from East Gwillimbury, Vaughan, York University and Seneca College.

The course of action recommended in the report will provide the ability for local municipalities and MUSH sector stakeholders to improve their Broadband connectivity by leasing access to the Region's optical fibre network. Internet service providers would also be able to leverage Regional optical fibre to cost-effectively expand their reach into new and underserved market areas.

## 7. Conclusion

Council has signalled that it recognizes the importance of broadband access as a key priority and an enabler of economic development.

The York Telecom Network originated as a means to connect Regional assets while saving connectivity costs. Demand has grown to leverage the York Telecom Network by the Region, MUSH sector partners and the private sector as a means to meeting connectivity needs. To ensure the network can be developed in an effective manner, Council directed Regional staff to complete a review of the York Telecom Network and recommend a governance and business structure for consideration.

Advancing the York Telecom Network will serve three important policy initiatives for the Region, including serving public sector operational needs effectively, driving economic and social benefits in communities, and extending high speed broadband into under-served areas of the Region.

This review has led to the recommendation to establish the York Telecom Network as a wholly-owned subsidiary of the Region, incorporated under the Ontario Business Corporations Act. The governance structure is similar to other Regional entities. It is recommended the new entity have a Board of Directors made up of members of Regional Council, and be managed by new staff hired as Regional employees, with expertise in broadband network development and deployment. This new corporation would offer dark fibre access to Regional departments, MUSH stakeholders, and Internet service providers and data centre operators.

There is a need to implement a transition plan from the internal operation to an external entity to ensure the smooth transfer of responsibility while maintaining existing service. Funding is required in 2017 to establish and staff the new corporation. Once established, the management and Board of Directors of the new York Telecom Network entity will develop a new network plan and business plan for Council's consideration during the 2018 budget process.

For more information on this report, please contact Doug Lindeblom, Director of Economic Strategy at 1-877-464-9675 ext. 71503.

The Senior Management Group has reviewed this report.

February 24, 2017

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Accessible formats or communication supports are available upon request

A photograph of a modern building at dusk. The building features a prominent clock tower with a glowing clock face. The sky is a deep blue, and the building's interior lights are visible through the glass facade. A flagpole with a flag is visible on the right side of the image.

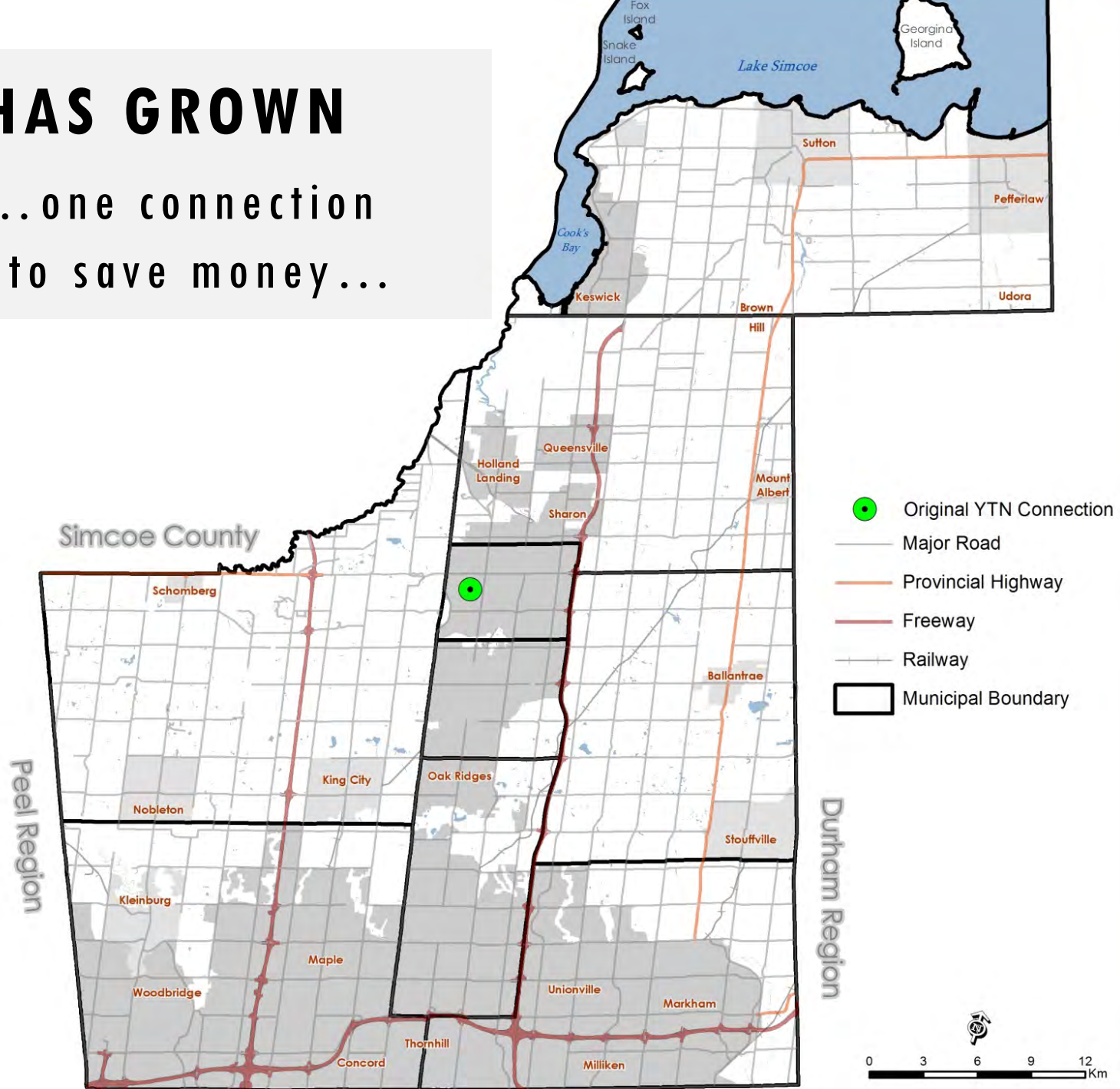
# YORK TELECOM NETWORK REVIEW

Committee of the Whole  
March 9, 2017

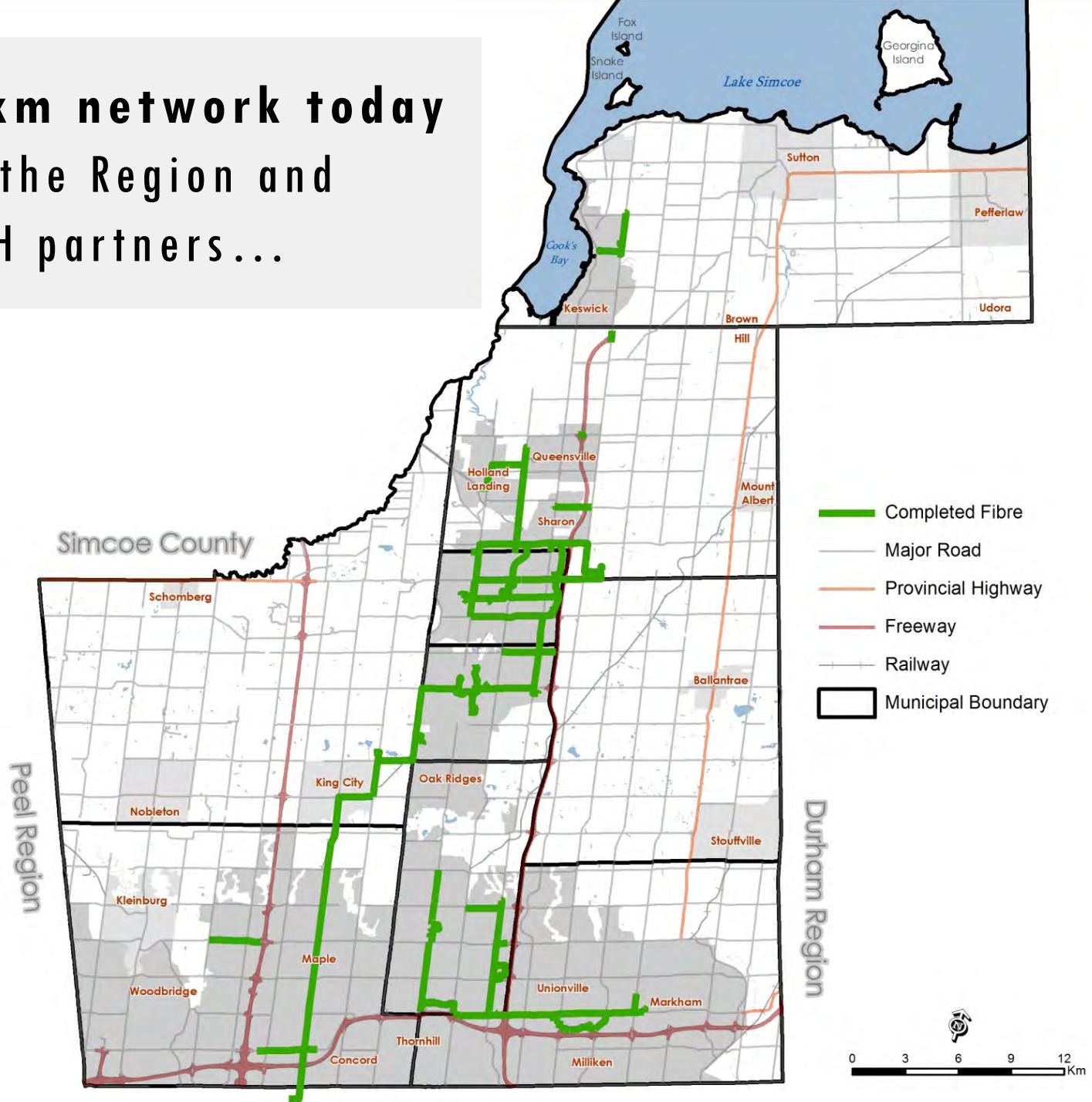
Doug Lindeblom

# YTN HAS GROWN

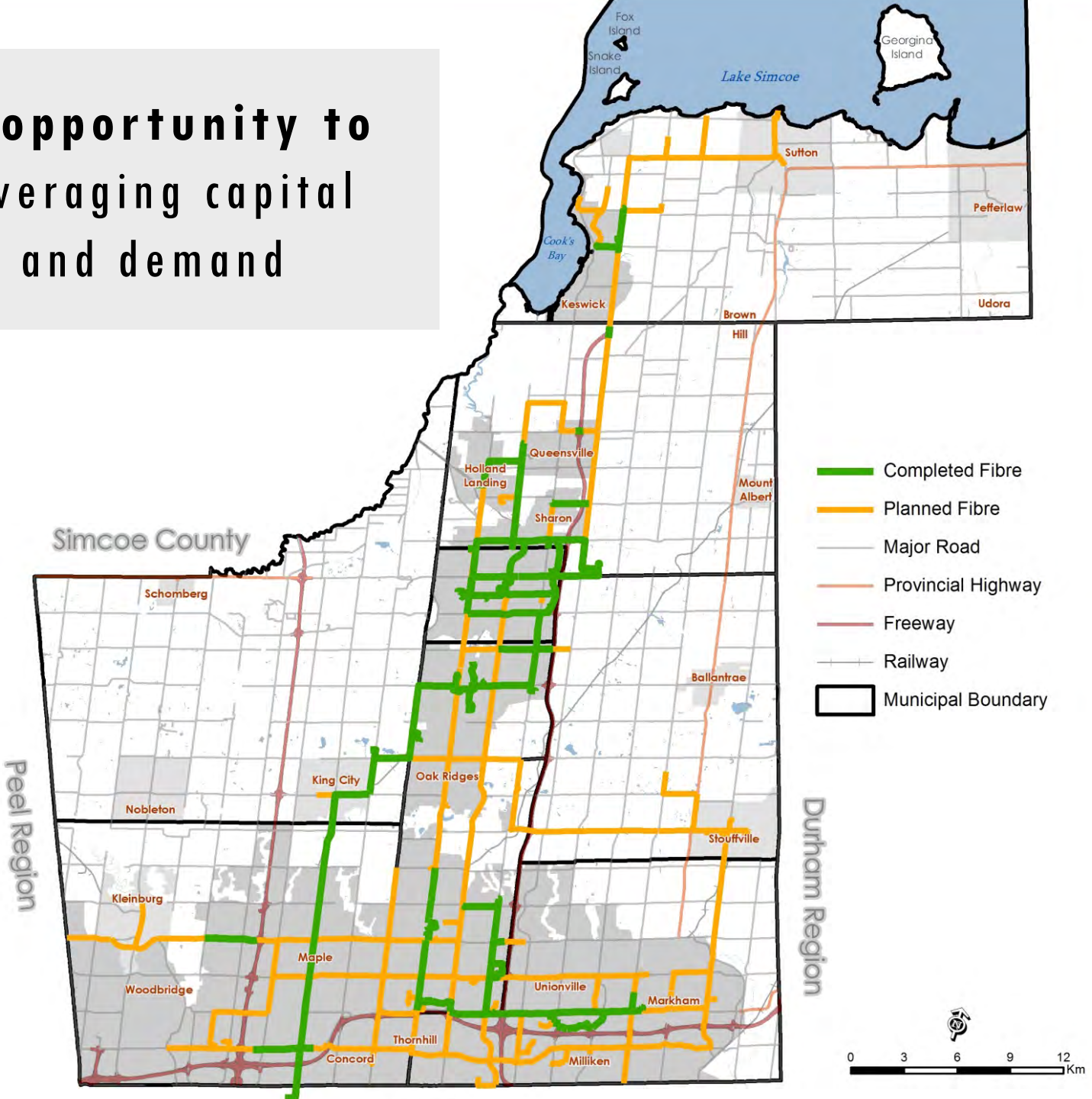
In 2002...one connection  
designed to save money...



...to a **200 km network today**  
serving the Region and  
**9 MUSH partners...**



...with the **opportunity to expand** leveraging capital projects and demand





# COUNCIL APPROVED PRINCIPLES – JUNE 2016

## **Establish York Telecom Network as:**

- **Arms length wholly-owned entity**
- **Providing Dark fibre only**
- **Serving Region and MUSH sector customers**
- **Consideration for private sector partnerships**

# YTN REVIEW SINCE JUNE 2016

- **Governance and business best practice review**
- **Legal review of authority and structure options**
- **Preliminary financial review**

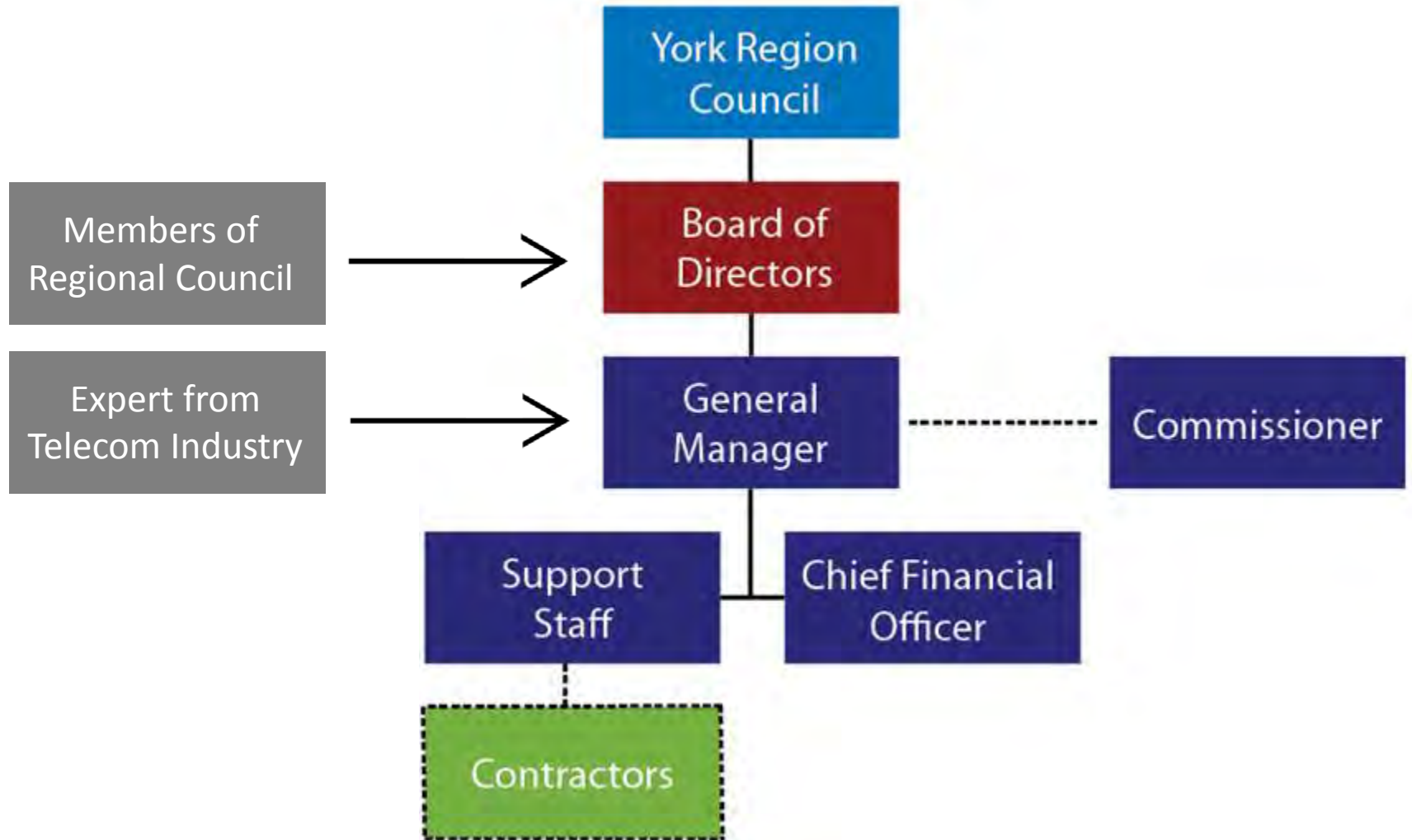
# POLICY REASONS FOR ADVANCING YTN

- 1. Serve public sector operational needs**
- 2. Support economic development initiatives and business growth/attraction**
- 3. Expand broadband service into under-served areas of the Region**

# YTN SIMILAR TO EXISTING REGIONAL ENTITIES

Set-up and Operations	York Telecom Network	Housing York Inc.	York Region Rapid Transit Corporation
Business Registration	✓	✓	✓
Owned by York Region	✓	✓	✓
Board of Directors	✓	✓	✓
Financials	✓	✓	✓
Asset Ownership	✓	✓	-
Staff	✓	✓	-
Function	✓	✓	-

# YTN PROPOSED STRUCTURE



# POTENTIAL YORK TELECOM NETWORK CUSTOMERS

- **Regional Departments**
  - **Municipalities**
  - **MUSH Partners**
  - **Internet Service Providers**
- Existing**
- New**
- 

# PRIVATE SECTOR PARTNERSHIPS

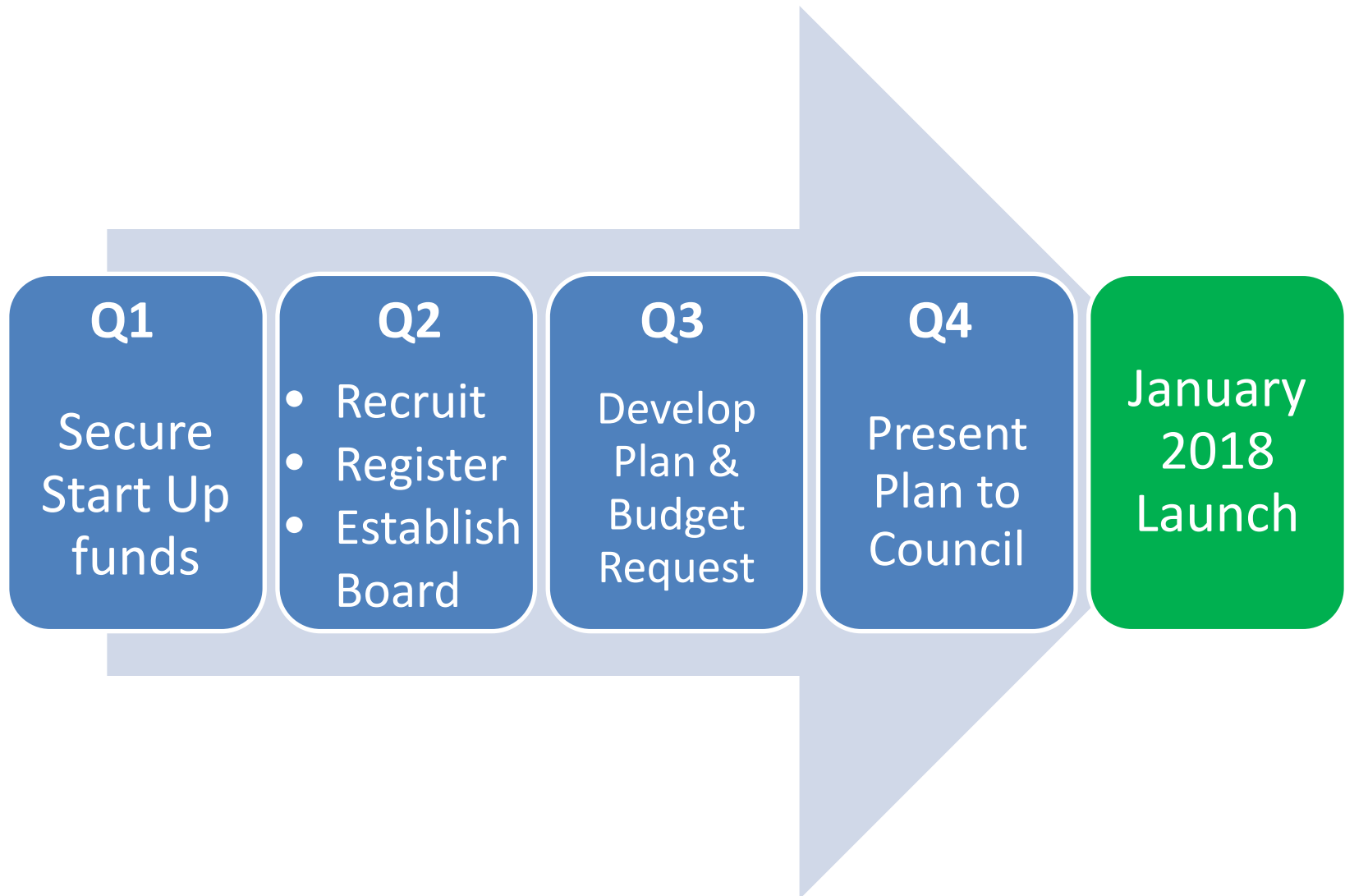
- Create new **cost sharing and revenue opportunities**
- Facilitate service to **out-of-reach locations**
- Senior Government broadband funding **requires direct link to Internet Service Providers**

# OPERATING BUDGET IMPACT

- **Region becomes a customer of York Telecom Network**
- **Shift from capital cost to operating cost in Regional budget**
- **Ultimately accounted for in Regions consolidated financial statements**



# 2017 IS A TRANSITION YEAR



# YORK TELECOM NETWORKS PRIORITIES

- **Develop a YTN business plan**
- **Formalize a network plan and funding requirements for Councils' consideration**
- **Secure current customers and begin reaching out to new ones**