Accelerating *Forward Momentum*

Eastern Ontario's 'Refreshed' Regional Economic Development Strategy

June 2019

Eastern Ontario's Leadership Council Economic Development

www.eolc.info

The Economic Development Vision for Eastern Ontario

*Eastern Ontario promotes **business growth** as the backbone of a **sustainable regional economy**. Our municipalities and counties use **best practices** to support this growth, and our region has earned a reputation as being **progressive and innovative** in our **collaborations** with the business community.*

*We have built a culture of **partnerships** with business, institutions and organizations to support the growth and development of our **workforce, business communities and entrepreneurs**.*

*Eastern Ontario will be known for its **highly skilled workforce** and **strong work ethic** combined with a strong and **diverse** regional economy. People of **all ages** will have economic **opportunity** and **choices** for exciting work and lifelong learning. The region's economy is fuelled by its world-class **educational institutions** and diverse and **innovative** business community, an **integrated and intelligent transportation system** that enables the effective and efficient **movement of goods, people and ideas** across the region, and a fibre-optic **broadband and cellular network** prepared for the changing landscape of technology, business and people needs in a **constantly changing** world.*

*Eastern Ontario will be a **dynamic** and **prosperous** place to live, work and play in harmony with the **natural environment**. The region's vibrant rural and urban **communities**, steeped in tradition and rich in history, will continue to attract people and visitors seeking a high **quality of place experience**. Growth of the region's communities will respect and incorporate the area's natural assets, ensuring a **positive legacy** for future generations.*

The Eastern Ontario Leadership Council wishes to thank the Ontario Ministry of Economic Development, Job Creation and Trade for their financial support for this strategy 'refresh' project. The EOLC also thanks the many community and business leaders that took part in the 'refresh' consultations, and Working Group members for their ongoing contributions to regional economic development.

The EOLC also wishes to thank MDB Insight for their work on refreshing the regional profile, facilitating in-region consultations, organizing both online and telephone business surveys, and shaping the strategy document.

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Executive Summary

Eastern Ontario has a long and productive history of multi-stakeholder collaboration on the economic development front. Over the last decade, this collaborative spirit has resulted in the convergence of five regionally-minded organizations into the Eastern Ontario Leadership Council (EOLC). The role of the EOLC is to lead the implementation of economic development initiatives that are more efficiently and effectively pursued on a pan-regional basis, and provide a platform for local action by businesses, local governments, economic development officials, post-secondary education institutions, and other organizations.

To update and build on the original (2014) regional economic development strategy, the EOLC partnered with the Ontario Ministry of Economic Development, Job Creation and Trade to take stock of strategy implementation progress, update knowledge and perceptions held by the region's businesses and other stakeholders, and identify which strategies should remain part of the go-forward plan and which might need revision in light of changing economic factors and trends, new information and developments. This report summarizes the results of that work.

Major Themes of 2014 Are Still the Regional Priorities for 2019 and Beyond

Based on extensive research and stakeholder input, the 2014 Eastern Ontario Economic Development Strategy identified three priorities, then laid out strategic objectives, recommended actions and potential partners to move each forward. These three strategic priorities reflect the EOLC's desire to pursue opportunities and address challenges in a cross-sectoral, region-wide way, providing ample opportunity for organizations to become involved in projects to which they could make a particular contribution or in which they had a particular interest or organizational mandate. These actions represented a step-by-step approach to achieving the strategic objectives and were classified as either short term (12-24) or medium term (36-60 months) opportunities.

Following formal approval of the 2014 Eastern Ontario Regional Economic Development Strategy, regional stakeholders went to work to constitute the EOLC as a regional partnership, find resources to kickstart implementation work, and structure three Working Groups (aligned to each theme) As their names imply, the Working Groups provide a mechanism for more in-depth discussion of the issues and opportunities within each Strategic Priority.

Strategic Priority
Workforce Development + Deployment

Strategic Priority
Technology Integration + Innovation

Strategic Priority
Integrated + Intelligent Transportation System

Two conclusions have emerged from the efforts to 'refresh' the Strategy in 2018-2019. First, the data, formal consultations and anecdotal evidence have confirmed that the three priorities identified in 2014 should remain the centrepieces of the regional strategy. Secondly, these same sources of feedback indicate that a fourth 'foundational' priority --- digital infrastructure --- should be added to the mix.

Early Progress on Strategy Implementation Positions Region for Future Success

By structuring itself as a forum through which stakeholders can be galvanized to tackle regional actions, Eastern Ontario has seen:

- Formation of the EOLC itself and securing operational funding for the first five years; creation of three working groups (with formal Terms of Reference), and a website at www.eolc.info.
- Creation of an Eastern Ontario Task Force focused on harnessing the region's post-secondary education assets in the service of regional economic development.
- The region's municipalities becoming an integral part of ONWARD (a province-wide municipal workforce initiative).
- Completion of an innovation ecosystem 'mapping' project that is now stimulating closer working relationships among the services available in the region. An eBusiness toolkit has also been created.
- Ongoing work by EORN Inc. to enhance regional broadband services and build the business case for a project to address gaps in mobile broadband/cellular services.
- Completion of the first project (Long Combination Vehicle Information Sheet) in a series of initiatives designed to better integrate and share region-wide transportation-related information and data.
- The launch of a multi-year initiative (through the Ontario East Economic Development Commission) to address workforce issues in the manufacturing sector.
- Development of regular information exchanges between the EOLC and provincial ministerial counterparts, to capitalize on shared priorities at a regional level.
- Continued advocacy by the Eastern Ontario Wardens' Caucus and the Eastern Ontario Mayors' Caucus on the need for significant infrastructure investment to support business and economic development as well as implementation of the regional Strategy.

As in other regions, the economy of Eastern Ontario continues to be reshaped by a combination of long-term trends (e.g. demographic shifts, a tightening labour market, pervasive digitalization) and the near-term effects of major decisions by other authorities (e.g. trade negotiations, VIA Rail's plans to introduce high-frequency passenger service through the northern part of the region, new approaches to stimulating business innovation and growth).

While the EOLC has made substantial progress, much remains to be done. The speed with which economic change is taking place suggests that it is more important than ever to retain a collaborative regional forum and governance like the EOLC.

Refresh Began with Update of Region's Current State and Its Aspirations

The 'refresh' of the regional economic development strategy included a statistical update to the region's economic profile, an online survey of the region's business community, targeted telephone interviews with businesses with potential for significant growth, and a range of consultation meetings with stakeholder groups, including First Nations communities.

Along with consultants retained for specific portions of the 'refresh' project, the EOLC itself has been deeply involved in reviewing results, interpreting their meaning, and translating the learning into refined Aspirational Objectives and associated Actions. This report consolidates all of this information and suggests a road map that the EOLC and its partners might follow to achieve the vision for Eastern Ontario, first articulated in 2014 (*see inside cover*).

Research and Consultation Generates Key Takeaways

While the following sections of this report --- and its appendices --- provide much more detailed information on the outcomes of the strategy refresh process, they are derived from the key takeaways from the research and consultation phase:

- The *three overarching priorities* that underpin the Strategy – Workforce Development and Deployment, Technology Integration and Innovation, and Integrated, Intelligent Transportation Systems --- should remain the focus of the EOLC's work in regional economic development.
- *Digital connectivity (high-speed internet and cellular/mobile broadband) is even more important now* than in 2014 and should be added to the Strategy as foundational infrastructure. Success in implementing initiatives for any of the strategic priorities depends on this infrastructure being in place. For the region to be competitive in attracting, growing and retaining businesses, continued Improvements to broadband and cellular services are essential.
- Businesses are *generally optimistic about the future of the region and their own business prospects*. and consider Eastern Ontario as a 'good to excellent' place to grow a business. Three-quarters (75%) of online survey respondents are 'somewhat' or 'very' optimistic that their own businesses will be stronger in the next 3 to 5 years than today. Nearly as high a proportion (71%) are 'somewhat' or 'very' optimistic that that the regional economy will be stronger in the next 3 to 5 years (53% and 18% respectively). The overall evaluation of the region's performance in advocating for improvements in Eastern Ontario appears to have improved since 2014.
- Businesses suggest the *top three issues* that, if addressed, could improve business performance in the region are:
  - Broadband (including cell service) and high-speed internet (57% of online survey respondents)
  - Improving workforce skills and education (34% of respondents)
  - Better access to capital/financing (28% of respondents)

- Both the hard data and anecdotal feedback from employers indicate that *workforce issues are an acute concern across the region*. Slow growth in the region's labour force, increasing competition for talent, automation and the need for a better match between available (or augmented) skill sets and the needs of contemporary workplaces suggest that, in the years ahead, Eastern Ontario will need a significantly greater emphasis on attracting, retaining and re-skilling workers.
- There is a *core group of businesses in the region that are investing in/integrating technology without displacing people*. These companies expect to make continued investments in technology and in hiring people. Supporting these businesses (and encouraging others to follow suit) could stimulate private sector growth and productivity, and expand the region's talent pool. In its workforce development and deployment strategies, the EOLC will have to address the impacts of large numbers of retirements, a labour force participation rate that is below provincial and national averages (even as unemployment is down), and the challenges of connecting employers with workers that 'fit' --- all as the workforce is distributed across a 50,000-square kilometre area.
- The need for *timely, accurate, labour market intelligence and data* remain priority action items for the EOLC. Addressing this issue is a key part of a broader set of initiatives to respond to changing employer and workforce needs, emerging skill requirements and future labour supply issues.
- The *regional economy represents at least $82.5 billion in annual production and provision of services*. Seventy (70) per cent of the region's production remains within the region. Opportunities exist to grow the region's export-based industries (given recent trade deals especially CETA) to shift the region's balance of trade (imports vs. exports) and make the case for investments in supportive physical infrastructure.
- Eastern Ontario is *still a region dominated by small businesses*, with a higher than average proportion of entrepreneurs. There are more than 85,000 self-employed individuals in the region across a wide range of sectors; their proactivity could be harnessed to 'grow our own' within the region
- Access to *capital/financing and business development support programs are essential* to help businesses start and expand in the region, and especially to help export-oriented businesses increase their presence --- and sales --- in out-of-region markets.
- Eastern Ontario's *innovation assets need to be more effectively networked and leveraged* to connect businesses and organizations, improve service offerings, and enhance the competitiveness of firms seeking to start or grow ('scale') in Eastern Ontario. Recent efforts to leverage the post-secondary education sector and other innovation services should be accelerated.
- *Ongoing attention must be paid to the region's transportation systems (all modes)* to ensure that every opportunity to move people and goods as safely and cost-effectively as possible is pursued. In particular, region-specific data and technology must be deployed to deliver seamless service to manufacturing, agriculture and food processing, and other natural resource businesses. The EOLC must identify gaps in service (or unmet needs), and position the region as a 'test bed' for technologies that will reshape the transportation sector in the years ahead (e.g. autonomous vehicles, technologies embedded in physical/fixed infrastructure).

Key Learnings Translated into Aspirational Outcomes and Recommended Actions

The EOLC's review of statistical data and the input from in-region consultation suggests that the 'refreshed' Eastern Ontario Regional Economic Development Strategy should still be built around the three strategic priorities identified in 2014, with an additional priority (given the 'working title' of Digital Infrastructure) incorporated into the Strategy. For each strategic priority, the EOLC has identified several (longer-term) 'Aspirational Outcomes' --- goals that the region would strive to achieve to fulfill the Vision for 2024 (*see page 54*).

While this report contains many recommended initiatives that could be undertaken to 'move the needle' on these Aspirational Outcomes, the first action by the EOLC upon receipt of this report will be to create a more detailed implementation plan to set priorities, bring stakeholders (partners) together to shape project plans, designate Lead Organizations for the projects, and assemble the necessary resources needed to move forward. The EOLC anticipates that strategy implementation will not be a 'clean', linear or sequential process; decisions by others may trigger rethinking or reorientation of plans, acceleration of attention to particular projects, or other adjustments to implementation plans. As a result, the EOLC expects that the regional economic development strategy will remain a 'living' document.

The Aspirational Outcomes and examples of potential actions to move toward them are as follows, with additional detail being presented in a subsequent section of this report.

- **Strategic Priority: Workforce Development and Deployment**
  - *Aspirational Outcome*: Eastern Ontario is recognized as having the capacity to identify and respond quickly to changing labour market conditions.
    - Examples of Actions: Work with the region's employers and intermediary services to help businesses identify, recruit and retain workers; design and develop ways to connect more employers and workers sooner --- through internships, co-op programs, mentoring or other similar initiatives; develop a workforce (re-) attraction program, particularly through the region's colleges and universities
  - *Aspirational Outcome*: Pan-regional data, analytical capability, and collaborative relationships are in place to accelerate match-making between employers and workforce talent.
    - Examples of Actions: Invest in --- and share --- third party data to improve labour market intelligence; encourage greater use of 'matching' platforms that target key sectors

- **Strategic Priority: Technology Integration and Innovation**
  - *Aspirational Outcome*: Increased numbers of businesses are starting, growing and moving into the region
    - Examples of Actions: work with upper levels of government, business and industry associations, specialized and conventional financing authorities and others to identify any/all sources of capital or other business development services; ensure that businesses can easily identify those that match their stage of development or needs

- *Aspirational Outcome*: Eastern Ontario is recognized as having a truly collaborative, client-centred innovation ecosystem
  - Examples of Actions: 'Sponsor' mechanisms that bring innovation ecosystem partners together to address specific challenges commonly faced by start-ups, early-stage companies or innovators; create a public sector-focused innovation certification program that innovators can access to find 'first customers'
- *Aspirational Outcome*: Productivity-enhancing technologies and other innovations are being introduced into existing businesses, thereby increasing their competitiveness, and enabling pursuit of larger markets
  - Examples of Actions: Design and launch a series of webinar briefings for business on advancing technologies and how they can be deployed; carry out --- and share results from --- regular aggregated business surveys to understand current and intended innovation practices and highest priority technology introductions

- **Strategic Priority: Integrated, Intelligent Transportation Systems**
  - *Aspirational Outcome*: Eastern Ontario's transportation systems are moving goods and people safely and efficiently, within the region and beyond.
    - Examples of Actions: Evaluate the region's transportation systems to identify gaps or cost-effective ways to increase the efficiency of goods movement; participate in the development of a commutershed-based strategy to improve mobility of people to/from work or vital appointments; continue to monitor (and support) VIA Rail's plans for high-frequency passenger service
  - *Aspirational Outcome*: Eastern Ontario's transportation systems are at the forefront of understanding and incorporating major technology and innovation developments and related opportunities into transportation modes and infrastructure
    - *Examples of Actions*: Participate in provincial and national initiatives to test autonomous vehicles and other ICT technologies; encourage communities across the region to undertake different types of pilot projects and case studies on deployment of emerging transportation-related technologies including those embedded in physical infrastructure

- **Strategic Priority: Digital Infrastructure**
  - *Aspirational Outcome*: Eastern Ontario's Cell Gap project is being implemented and opportunities to further improved broadband are also being pursued.
    - Examples of Actions: Continue to express support for improved digital infrastructure across the region, particularly improved cellular services and high-priority deployments such as Public Safety Networks; gather and share aggregated data on potential business applications of these technologies and the consequences of falling behind on access to them

- *Aspirational Outcome*: Eastern Ontario is recognized as being a highly 'connected' region, able to leverage technology to stimulate economic development across the region.
    - Examples of Actions: Working Groups stimulate the introduction of communications technologies that help businesses and residents interact across municipal boundaries (e.g. region-wide 511, on-demand transportation services, virtual or augmented reality experiences); test combinations of technologies to achieve connectivity less expensively or more comprehensively (e.g. autonomous vehicles).

Significant Effort, Coordination and Resourcing Required for Implementation

The level of effort, coordination and resourcing required to successfully implement the Eastern Ontario Economic Development Strategy remains significant. To marshal the commitments, human capital, financial resources and perseverance required for success will require that the Eastern Ontario Leadership Council ---and its partner organizations --- be seen by the stakeholder community as **thought-leaders** for regional economic development, as effective **advocates** for the region, as **champions** for collaborative approaches to advancing the region's economic prosperity, and as **an effective mechanism** through which the refreshed Regional Economic Development Strategy can be implemented.

For the EOLC to play an effective regional role, some 'soft' infrastructure is required including:

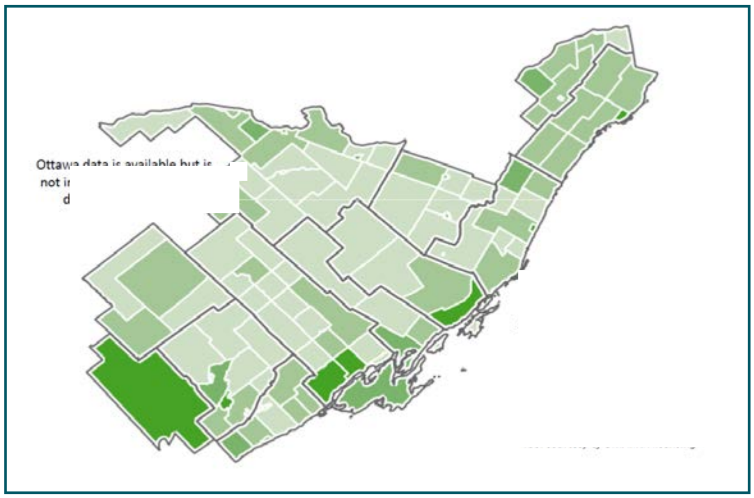
- Access to 'dynamic data' specific to the three themes and the overall performance of the regional economy
- Analytical capacity to tabulate, visualize and offer insights on data and other information that comes before the EOLC
- Collaborative software, through which the EOLC and its Working Groups can engage stakeholders from across the region and add value to their understanding of the linkages between local and regional priorities. One part of this software may be an Open Data Repository.
- The EOLC's ability to develop and utilize mechanisms for assessing its own performance against benchmarks and/or selected longitudinal performance indicators (these may be quantitative or qualitative or a mix of the two), and
- The EOLC's ability to finetune its organizational structure and processes to better deliver on its mandate as the regional economy changes in the years ahead.

The EOLC must continue to serve as a forum in which the initiatives of individual partners, the Working Groups, and other stakeholders (many of which may have a broader mandate than just the Eastern Ontario region) can come together to assess whether the EOLC has 'moved the needle' in relation to achieving the long-term vision as well as the theme-related outcomes. This assessment will be made over the next three to five years; few of the initiatives described in the Strategy would be expected to bear significant fruit in just a few months. As the refreshed Regional Profile shows however, the ongoing evolution of the regional economy will show discernible changes over a multi-year period.

1. Introduction

Eastern Ontario Leadership Council as a Collaborative Forum

Eastern Ontario has a long and productive history of multi-stakeholder collaboration. Over the last decade, this collaborative spirit has resulted in the emergence of five regionally-minded organizations, all playing significant roles in *regional* economic development. Like many other regions, Eastern Ontario has extensive local economic development resources in place, and some capacity to implement multi-stakeholder economic development-related marketing and targeted programs. However, Eastern Ontario has not had the capacity to address region-wide improvements that would benefit most, if not all, communities for shared ‘cross-border’ benefit.



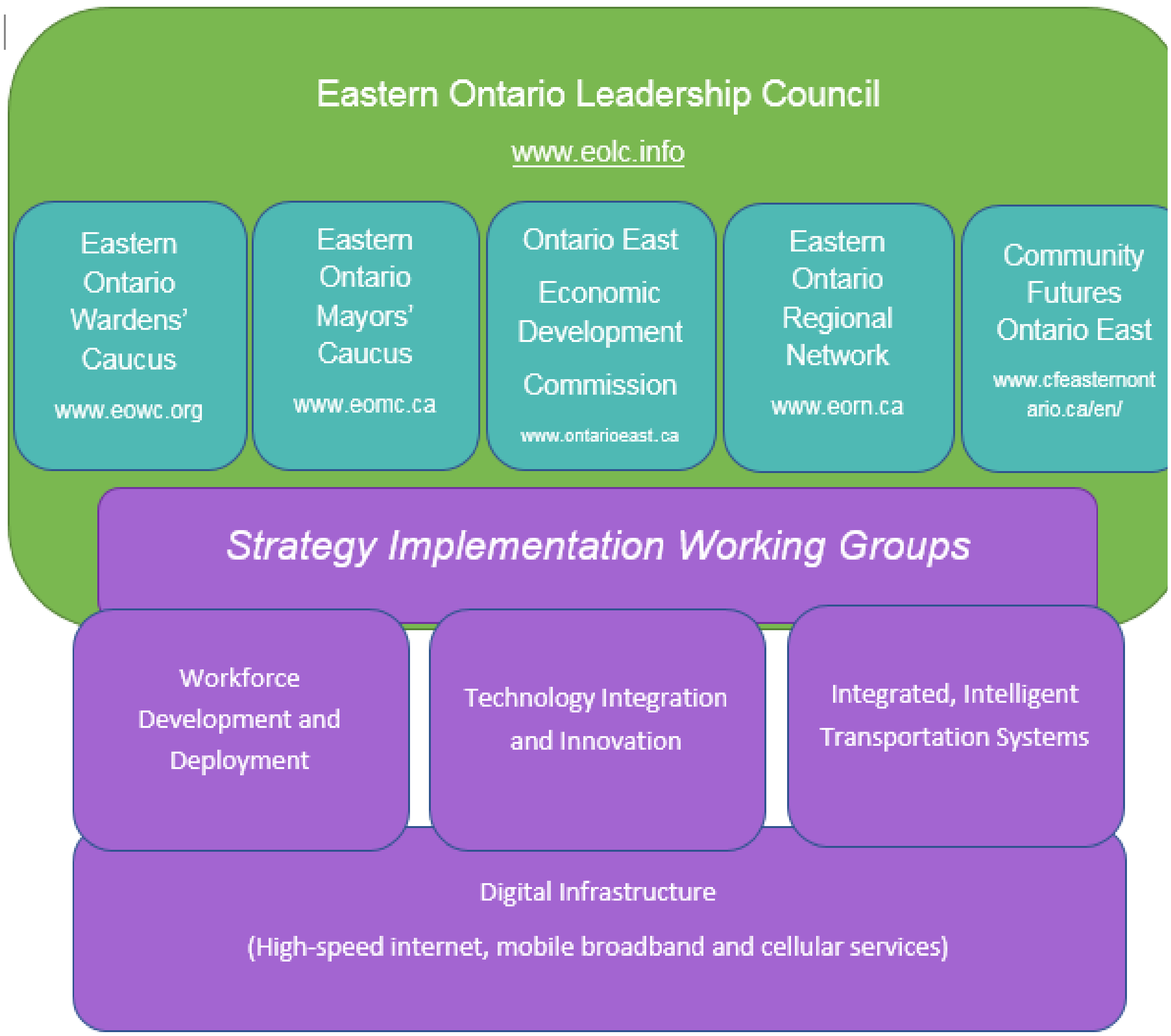
In 2013-2014, the Eastern Ontario Wardens' Caucus (EOWC), the Eastern Ontario Mayors' Caucus (EOMC), and several other regional stakeholders, spearheaded the creation of a regional economic development strategy, then acted on a key recommendation of the strategy: the creation of a regional economic governance model, tasked with coordinating strategic economic development for Eastern Ontario (excluding Ottawa). The Eastern Ontario Leadership Council (EOLC) was launched at the Ontario East Municipal Conference in Kingston in September 2015.

Today, the EOLC has developed into an ongoing partnership between five regional partners: the Eastern Ontario Wardens' Caucus, the Eastern Ontario Mayors' Caucus, the Eastern Ontario Regional Network (EORN), the Ontario East Economic Development Commission (OEEDC), and Community Futures Ontario East (CFOE).

The EOLC's mandate is to *lead implementation* of the regional economic development strategy, through its advocacy efforts (and those of its five partner organizations) and the actions of its three theme-based Strategy Implementation Working Groups. The EOLC serves as a *conduit for information and policy positions* with various stakeholders, including the Province of Ontario and the Government of Canada; *tracks and reports on performance* of the Eastern Ontario economy, as it relates to the priorities of the Economic Development Strategy; and *establishes priorities, identifies resources and provides recommendations on funding/financing opportunities* that advance the Strategy’s Action Plan.

How the EOLC Works: The following organizational chart shows how regional stakeholders have come together under the EOLC banner and the theme-based Strategy Implementation Working Groups. It also shows the primacy given to 'connectivity infrastructure' --- the information and communications technology that underpins most of the EOLC's work to advance the regional economy.

Figure 1: Eastern Ontario Leadership Council and Strategy Implementation Working Groups



Progress on the 2014 Eastern Ontario Economic Development Strategy

In addition to reflecting extensive, pan-regional consultations and research, incorporating a new regional profile, and recommending the formation of a regional economic development governance structure, the 2014 Eastern Ontario Economic Development Strategy identified three priorities together with relevant strategic objectives and associated actions. All three strategic priorities used a region-wide, cross-sectoral lens for addressing significant and far-reaching economic development challenges and pursuing opportunities for Eastern Ontario. The proposed actions identified to advance the objectives of each strategic priority, were prioritized as either short term (12-24 months) or medium term (36-60 months) opportunities. As the EOLC was created and began its work, it created three Strategy Implementation Working Groups with the recommended action plan as the starting point for each Group's activities.

Figure 2: 2014 Strategic Priorities for Eastern Ontario

Early Progress on Strategy Implementation

By serving as a forum through which stakeholders could be galvanized to tackle prioritized regional actions, the EOLC has seen progress on Strategy implementation. Through the efforts of the EOLC directly and those of other stakeholders, Eastern Ontario has seen:

- The creation of the *Eastern Ontario Task Force* --- an initiative by the universities and colleges in Eastern Ontario to engage the region's post-secondary sector with municipal governments, the private and non-profit sectors to foster economic prosperity and sustainable development in the region.
- Eastern Ontario's participation in the *ONWARD joint municipal associations' initiative* to address oncoming wave of retirements in municipal government and the changing nature of municipal government work.
- The completion of an *innovation ecosystem mapping project* identifying innovation assets and offering recommendations on ways to fill gaps and enhance innovation-focused collaborations among the region's innovation partners.
- The completion of an *eBusiness toolkit* to assist businesses evaluate and introduce information and communication technologies to their workspaces.
- The emergence of *collaborations and information-sharing* between the EOLC's working groups, the Ontario Provincial Inter-ministerial Council, the Ontario Ministry of Transportation, the Ontario

Ministry of Training, Colleges and Universities, and the Post-Secondary Education Task Force. Several of these collaborations involve data consolidation and analysis to support Working Group prioritization, business case development, and communications documents to share information across relevant stakeholder groups (e.g. a Fact Sheet on Long Combination Vehicles).

- Ongoing implementation of EORN's regional broadband network and the completion of a *business case to senior levels of government on mobile broadband* infrastructure investment support.
- *Advocacy for infrastructure investments* across the region as well as liaison with organizations focused on making significant infrastructure improvements in the region over the next few years (e.g. VIA Rail, municipal airports).

Additional information can be found in Appendix A under *2014 Eastern Ontario Economic Development Strategy Progress Report.*

Other Eastern Ontario Initiatives Related to the 2014 Strategy Priorities

Creation of Eastern Ontario Post-Secondary Education Task Force

The presidents of Eastern Ontario's five universities and four colleges have joined community and business leaders from the region to create a task force to identify and develop new approaches to taking full advantage of the expertise of post-secondary schools. The main objective of the task force is to build on the strengths and address the challenges faced by Eastern Ontario communities and by extension business.

To date, the Task Force is particularly engaged with the Workforce Development Strategy. It has been working with ONWARD to consider how best to prepare for the major generational shift in the municipal and community services sectors in Eastern Ontario.

Pursuit of Cellular Infrastructure Investment

The Eastern Ontario broadband project, managed by the Eastern Ontario Regional Network Inc. (EORN), was completed in fall 2014. It is a prime example of the collaboration and vision required to position the region for economic growth and the changing landscape for technology and businesses. The EORN project was funded jointly by the federal and provincial governments, the EOWC and six of the EOMC municipalities. Private sector partners also provided significant funding for the project.

While the broadband project was successful in building a high-capacity, fibre-optic backbone network for the region, the EORN team was aware that there is a significant gap in cellular services, including mobile broadband. Recent analysis shows that nearly one-sixth of Eastern Ontario is in a cellular "dead zone" – meaning there are homes, businesses and major roadways with no cell service at all, and equally important, 40 per cent of the region does not have enough capacity to support the growing data demands or the increased load from large groups of users in one location – i.e. at public events and tourism locations. To address this situation, EORN commissioned four independent studies, including: an engineering cell gap analysis, a costing study, cell market analysis and an economic impact study to prove market failure. These studies looked at current services, as well as forecasted growth by existing carriers.

Extensive coverage and capacity gaps of mobile infrastructure operators in Eastern Ontario reflect the extent of market failures and underinvestment in networks in the region. In response, EORN has proposed a $213 million public-private initiative (labelled as the Cell Gap and Capacity Expansion Project) that would to help close the gap in cellular services (calling upon the same partners that supported the broadband project). The intent of the investment is to keep products and services that create prosperity connected across the region, and to keep Eastern Ontarians connected to the world – at home, at work and on the road. The importance of the Cell Gap and Capacity Expansion Project was confirmed by the results of the 2018 online business survey, in which a majority of businesses surveyed suggested that broadband (including cell services) and high-speed internet would improve business performance across the region.

Uptake on a Job-Seeker-Employer Matching and Tracking Platform

Since the completion of the 2014 strategy, the EOLC partners have invested in the Magnet-Vicinity Jobs Communications Platform. The platform is intended to support the regional matchmaking between job seekers and employers in the region, ultimately providing close-to-real time data on the regional labour market. The communications platform is available on the EOWC and Ontario East websites. The success of the platform is yet to be determined. The continued marketing and dissemination of this data to economic development professionals across the region should provide a better understanding of the types of jobs being created across Eastern Ontario, the skill sets required for those jobs and the growing mobility of the workforce as they seek out employment opportunities. Vicinity Jobs Data reporting has been used to inform the strategy refresh as it relates to the challenges facing workforce recruitment and retention across the region.

Exploration of Projects Identified by the Eastern Ontario Transportation Needs Analysis

In 2016, the Eastern Ontario Transportation Needs Analysis (EOTNA) entered phase two of its implementation plan. The second phase of the EOTNA consisted of screening a list of projects in order to arrive at a smaller number of potential transportation-related improvements and investments which can then be subject to a preliminary business case/economic analysis. Six projects were identified from the results of first and second stage screenings. Two of the six projects focus on widening existing highway lanes, particularly widening the 401 corridor to six lanes from Cobourg to Quebec and widening Highway 7 to four lanes along the route from Brock Township in the west through to Carleton Place in the east. Two other projects focused on the development of multimodal transfer stations and deep-water port facilities. Both projects are in the process of further assessment.

The multimodal transfer station assessment is examining several potential candidate locations and the deep-water port facilities are focusing on the Cornwall Harbour, Iroquois Dock facility and Port of Oshawa. Implementing intelligent transportation systems was also identified as a project for phase two. The business case and scope for the intelligent transportation systems project is at a very early stage, with no defined scope as yet. Lastly, the ongoing improvement and maintenance of the regional road network remains a priority action item of the EOTNA, with particular focus on the road networks that service major manufacturing and tourism facilities. Together with the advancement of the idea of a pan-regional 511 service and the expected introduction of autonomous vehicles in the coming years, Eastern Ontario is assured of the need for an intelligent network.

2. Refreshing the Strategy

Why Now?

As with any strategy of this kind, it is crucial that the owners of the plan - in this case, the EOLC and its partners - from time to time undertake a review of the plan's intent to ensure its currency, reconfirm or modify its priorities for the plan, and map out the next steps for implementation. This enables the strategy to remain relevant to the Eastern Ontario Leadership Council, its partner organizations and Working Groups, constituent communities, and the region as a whole. At the same time, it affords the opportunity to acknowledge accomplishments thus far, and to highlight trends in the regional economy and economic development more generally. In so doing, the 'refresh' can address any knowledge or capacity gaps that may have emerged in the implementation of the 2014 strategy, and refine the approach to the Strategy's implementation as new information or opportunities become available.

What Did We Do?

In undertaking a refresh of the Eastern Ontario Economic Development Strategy, it was essential to gather input on how the regional economy may have changed since 2014, to validate the priorities of the plan and also identify any gaps in the action planning that may have emerged. The Strategy Refresh process began with updating the regional profile, then continued with four targeted consultations. The 2018 consultation program reflected aspects of the 2014 efforts including interviews and surveys with the business community, input from various industry associations and the stakeholder community, educators, and economic development professionals. The project team also engaged the various Working Groups, the Eastern Ontario Education Task Force, Community Futures, other partner organizations, ministry representatives, and First Nations Communities.

In addition, the project team identified the need to consult businesses operating within in the region's export sectors – manufacturing, agriculture and food producers and high tech. With input from the EOLC, a telephone-based survey was completed with 80 such businesses to better understand the performance of export-based industries across the region and how these businesses could be more effectively supported.

The approach to engagement provided the opportunity to examine and consider stakeholder input in light of the input received in 2014. The results of the Online Business Survey, the Eastern Ontario Exporters' Telephone Survey and the list of interviewees that provided input are available, respectively, in Appendices B, C and F.

Figure 3: Components of the Strategy Consultation Process

What Did We Learn?

… from the Working Group Discussions

In some ways, the volunteers serving as members of the three theme-based Working Groups are the EOLC's leading edge of strategy implementation. Since their creation in 2016, the Working Groups have received and considered their Terms of Reference, which describe their roles in relation to the EOLC's 12-person board, summarize the issues they are being asked to consider, and consolidate recommendations or policy positions that have been taken by various partner organizations. Because the Working Groups continued their efforts throughout the strategy refresh process, their feedback from early in the consultation process continued to evolve. The chart below summarizes key points from the Working Groups in mid-2018; their thinking has evolved since then, resulting in modifications to the following points, that have since been incorporated in the refreshed Strategy (*see section 5 of this report*).

Figure 4: Strategy Consultation Process

Workforce Development and Deployment (WD&D)	Technology Integration and Innovation (TI&I)	Integrated, Intelligent Transportation System (I2TS)
• Timely, granular data for planning purposes • Talent attraction initiatives to help fill gaps in the regional labour force • Undertake an initiative that would help Small and Medium Sized Enterprises address HR functions, especially recruitment, hiring, onboarding etc.	• Focus on helping start-ups/early stage companies to scale within the region • Strengthen the region's innovation ecosystem in improving start-ups/early stage companies' ability to undertake sales • Help start-ups/early stage companies to find 'first customers'	• Continue to monitor major initiatives such as VIA's plans for a high-frequency passenger-oriented Northern Route (with implications for the Lakeshore Route) • Work jointly with the WD&D Working Group on a commuter strategy; consider related initiatives such as encouraging telecommuting (where possible)

Several Working Groups are expected to work jointly on a commuter strategy to reduce mobility challenges for employees going back and forth to their workplaces, especially in areas where there is little or no public transit. This work will likely be executed using a commutershed lens.

… from Consultation Meetings with Regional Stakeholders

The consultation process identified a number of challenges and opportunities that stakeholders believed require a response from economic development leaders across Eastern Ontario. This includes:

- Timely, accurate, labour market intelligence data to better understand employer and workforce needs, emerging skill requirements and future labour supply.
- Opportunities to build partnerships between schools and high growth businesses through apprenticeships, mentoring programs and other training/resource sharing programs.
- Local and regional career pathway support for job seekers, particularly as it relates to the evolution of new occupations in traditional workspaces.
- Improved access to capital and other type of investment support programs and funds particularly for small business operations.
- Promoting and facilitating linkages between the existing post-secondary network, regional business networks and the economic development community.
- The rate of technology integration in key Eastern Ontario sectors (ex. education, manufacturing, agriculture, healthcare, tourism and retailing sectors).
- Improvements to broadband and cellular services.
- Need for an integrated and intelligent regional and local transportation network as goods movement crosses many municipalities before reaching markets.
- Opportunities to enhance Eastern Ontario's position as a strategic hub for international and domestic trade.
- Addressing major transportation challenges Eastern Ontario can expect to face over the next few decades, including the introduction of non-traditional infrastructure that may emerge from new technologies/innovation processes.
- Examining the region as a test bed for autonomous vehicles and other ICT applications associated with the transportation system.

…from Consultation Meetings with First Nations

Five consultation meetings with First Nations demonstrated that these communities have significant challenges and interests in common with other stakeholders across the region, including:

- An appreciation that digital infrastructure such as broadband is essential to success in developing their communities and their economies
- A need and desire for skills development and training
- A desire to go beyond basic consultations on specific development projects, into more active, ongoing participation including First Nations ownership and growth of businesses
- Improved access to capital, especially for First Nations business ventures; there was acknowledgement that First Nations communities have access to specific funding and financing that may be appropriate for some of the projects
- Collaboration in the development of targeted transportation services that will help First Nations workers get back and forth to work in other communities
- Ideas for new products and services that they may wish to bring to market, both within their own communities and beyond.

First Nations representatives noted that they have significant economic and social development assets that they can direct to projects that will benefit their communities, and they have experience in developing and operating programs for those communities. They are open to collaboration with non-First Nations stakeholders and asked to be kept in touch with the development of the 'refreshed' Strategy, so that they could determine if joining one or more Working Groups would be of interest to them. As a result, there are references in Section 5 (specific recommendations on initiatives) to First Nations as potential partners in all of the priorities.

… from the Online Business Survey (2018)

An online business survey was conducted to capture and understand the needs of business in the region. More than 250 participants ranging from business owners, managers and employees from diverse range of industry sectors have participated. The respondents expressed their opinions on a broad range of questions pertinent to current and future economic health of Eastern Ontario. A similar survey was administered in 2014. The analysis below presents the results from both surveys. Note: Because the respondents self-selected for participation (the sample was not randomly generated for either survey), conclusions about changes over time cannot be drawn. However, the results from the 2018 survey are generally positive and offer encouragement to the EOLC to continue its efforts on the region's behalf.

Figure 5: 2014 and 2018 Online Business Survey Results

Factor	2014	2018
Overall optimism for region's future?	66% 'somewhat' or very optimistic	**71%** 'somewhat' or very optimistic
Optimism for your own business?	79% "somewhat or very" optimistic	**75%** "somewhat or very" optimistic
Eastern Ontario as a place to grow a business?	60% "good to excellent"	**68%** "good to excellent"
Promoting eastern Ontario as a place to start/grow a business	27% "good to excellent"	**47%** "good to excellent"
Advocating for improvements for Eastern Ontario?	38% "good to excellent"	**50%** "good to excellent"

The business survey also suggests that:

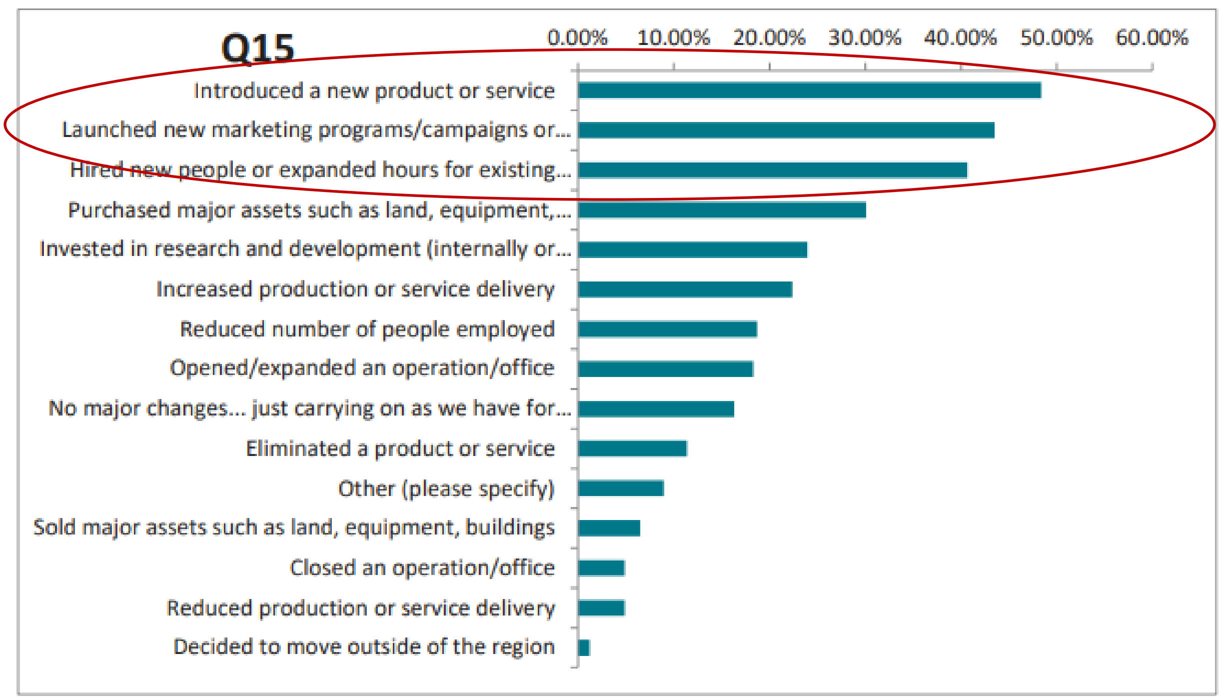
- **Quality of life and natural resources are viewed as the regional attributes offering the greatest advantage to businesses in today's marketplace.**
- The top three factors that put businesses at a **disadvantage** are the **lack of adequate high-speed internet/mobile broadband, the inadequate number of skilled workers and the region's transportation systems** (includes road, rail, air and water).
- The **top three priorities** that could improve business performance in the region are:
  - Broadband (including cell service) and high-speed internet (57% of respondents)
  - Improving workforce skills and education (34% of respondents)
  - Better access to capital financing (28% of respondents)

Online Survey Respondents Taking Business-Building Actions

Businesses responding to the online survey indicate that a significant percentage have taken specific actions to build their businesses or respond to changing economic or business climates. Nearly half have introduced a new product or service; nearly as many have launched new marketing programs/campaigns, hired new people or expanded hours of operation. Roughly a third say they have purchased major assets and a quarter have invested in R&D or increased production.

These percentages are much higher than the shares of businesses that are pulling back (e.g. eliminating products or services, selling assets, closing operations, or moving out of the region. However, the proportions of businesses reducing their employment base is close to 25%; it would be important for the economic development community to know if employment reductions are associated with acquisitions of new equipment (e.g. substituting equipment for labour) or economizing on costs in response to more difficulty business circumstances). Data from telephone interviews with export-oriented businesses suggests that most of the time, introduction of new technologies does not mean reduced employment.

Q15. Which, if any, of the following DECISIONS have been made in YOUR BUSINESS in the past 18 months?



n=246

… from the Eastern Ontario Exporters' Telephone Survey

Given the importance of export-based industries to the growth of the Eastern Ontario economy, a telephone survey of these businesses was also conducted. The results provide an understanding of the issues these types of businesses are facing and suggest where the Eastern Ontario Leadership Council can develop and support these types of businesses moving forward. In all, 80 export-based businesses ranging from ***manufacturers*** (33% of respondents), ***agricultural and food producers*** (27%of respondents) and ***high-tech*** industries (41% of respondents) participated in the survey. The respondents were asked questions relating to their current business performance, as well as their opinion on a broad range of questions considered relevant to the current and future exporting capacity of Eastern Ontario (*see Appendix B*).

Respondents to the survey can be characterized as Small and Medium-Sized Enterprises (SMEs) (72 per cent of respondents have fewer than 10 employees), which is consistent with the overall profile of businesses in the region. The results also suggest that ***only a small percentage of products and services from Eastern Ontario are reaching markets outside of Ontario or Canada***. The United States is the primary export market outside of Canada (11% of respondent businesses are exporting to this market) but respondents also suggest that Eastern Ontario exports are reaching markets in Europe, the U.K and Ireland, China, India, Japan and South America.

Of those businesses that had made investments in technology, 15 per cent indicated that those investments had replaced any employees. In other words, ***85 per cent of technology investments did not displace employees.*** This is an important survey learning since 10 to 24% of survey respondents in the manufacturing sector say they will be making more technology investments over the next two years. Most of these technologies will be 'off the shelf purchases' (35%), modifications to existing technologies (29%) or licensing (18%); 19% of technology introductions will be new technologies developed in-house.

The most common types of investments are expected to be design and engineering technology (24%), and processing, fabrication and assembly technology (21%). In this case, it does not appear that investments in these technologies will negatively affect employment. Overall, 37 per cent of responding businesses have no plans to add employees; 47 per cent of respondents intend to add 1 to 4 employees, and another 16% will add at least 5 employees. ***All told, two-thirds of respondents planned to add employees in the coming year.***

When asked about awareness and utilization of public funding and support programs, programs such as EODF, EODP, the Canadian Agricultural Partnership Program, and CFDC business counselling were all known to at least half of survey respondents. EODF, EODP and CFDC business counselling were the only programs that had actually been accessed by at least 19% of respondents. ***Overall awareness levels for all other programs were very low.***

Only 38 per cent of survey respondents had partnered with a college, university or other industry association; 63 per cent had not. ***This confirms findings from a 2016 review of the region's innovation ecosystem that more can be done to connect businesses with supports, programs and access to innovation services.***

This survey also demonstrated relatively ***high satisfaction ratings with the region's transportation system***; 82 per cent of respondents said they were satisfied; 18 per cent said they were not.

Research and Development Seen as Key to Success

The figures below provide an understanding of businesses' research and development capacity. This is a key consideration for improving the overall productivity of Eastern Ontario businesses, understanding the scalability of operations, the opportunities for forging stronger relationships with the region's post-secondary institutions and the need for programming support. Three quarters of the business survey respondents (77%) indicated an appreciation for the importance of R&D to their business success and more than 90% say their R&D spending will either remain the same (49%) or increase (43%) in 2019.

Business survey respondents indicated that small market size, the cost of capital and the cost of equipment are the biggest --- but not the only --- barriers to R&D.

When asked about their use of government programs, respondents suggested that the Eastern Ontario Development Fund, Eastern Ontario Development Program and Community Futures Business Counselling were the most accessed of the suite of programs identified. ***The majority of respondents had limited knowledge of the business support funds or programming that was available to them from the senior levels of government.***

Figure 6: Importance of Research and Development to Exporters

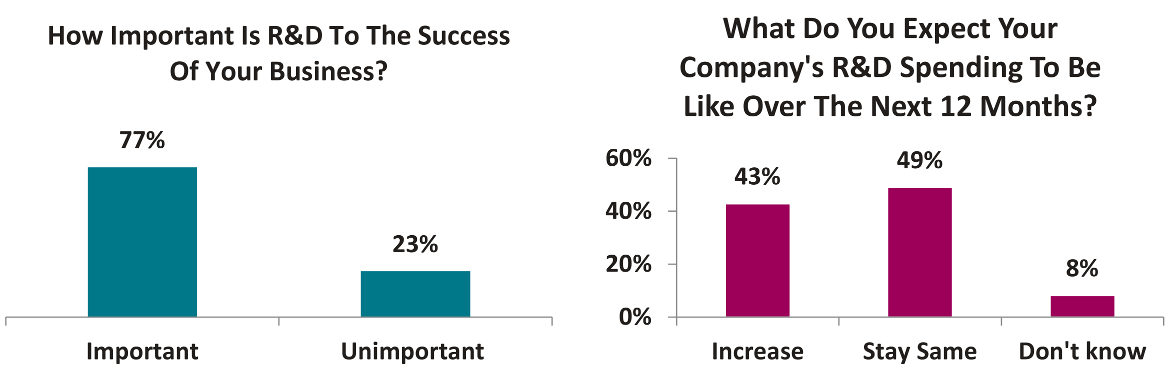
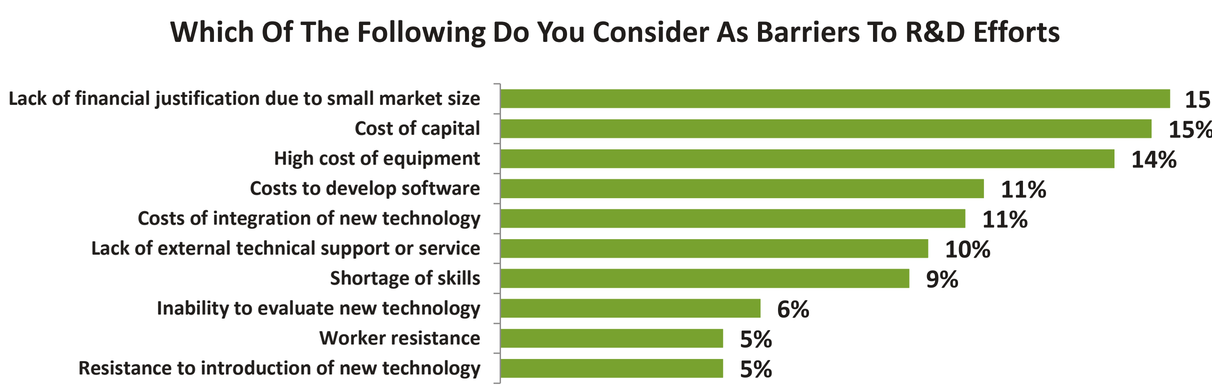


Figure 7: Barriers to Business Research and Development Efforts



The survey results highlight the challenges that must be addressed in order to grow the region's export-based companies and industries. Given their relatively small size of operation, access to capital and to additional markets become key considerations.

Overall Feedback is Positive

The positive consultation feedback, particularly from the online business survey, suggests generally high level of optimism across all sectors. Further, stakeholders frequently expressed the view that the region is well-positioned to attract and grow more businesses. In particular, stakeholders commented on the region's affordability when compared to other markets (both cost of living for employees and operating costs – rent/lease rates) and overall increased satisfaction with municipal policies, business programming and taxes. They did express concern however about digital infrastructure and being able to find both skilled and unskilled labour. ***The 'refreshed' Eastern Ontario Strategy should incorporate ways to leverage the region's advantages and mitigate or take action to address concerns.***

What Does the Economic Data Tell Us?

Updating the regional profile (based on secondary data such as census data, Canadian Business Patterns data etc.) offers further learnings for regional economic development work. It should be noted that while this is a refresh of the 2014 profile, available data is still a number of years old and lacks the granularity to give an up-to-the-minute understanding of the size and structure of the region's economy.

Eastern Ontario's GDP is Roughly $82.5 Billion A Year

In 2014, the total production of the Eastern Ontario economy was roughly **$82.5 billion,** split relatively evenly between the **EOMC area ($43**.7 **billion**) and the **EOWC area ($38.8 billion).** (If the regional economy grew by two per cent a year since 2014, the regional economy would exceed $83.4 billion today, with $47.3 billion in the EOMC area and $42.0 billion in the EOWC area). This total is roughly 10 per cent of the provincial total ($825.8 billion in 2017). This is in line with the ratio of regional to provincial population (about 8.3 per cent).

Both urban and rural areas are exporting (outside the region) more than half of their in-region production (61 per cent and 56 per cent respectively). Nonetheless, Eastern Ontario is still a net importer of goods and services (total imports: $56.8 billion). The EOMC area is supplying 37 per cent of its own internal demand (goods and services valued at $28.3 billion as compared to total demand of $76.4 billion). Similarly, the EOWC area is supplying 36 per cent of its own internal demand (goods and services valued at $28.5 billion with a total demand of $77.0 billion). ***Taken together, the two areas are exporting 59% of their area's production and supplying 37% of their area's Eastern Ontario's total demand (consumption***).

It is entirely possible --- indeed likely --- that at least some of the production is moving along supply chains that straddle the EOMC and EOWC boundaries, and that some of the imports coming into each area is coming in from the other area. This analysis demonstrates that Eastern Ontario is an 'open region', selling to and buying from other regions --- both within and outside of Eastern Ontario. As expected, ***manufacturing is the largest exporting sector ($21 billion) but Eastern Ontario imports a similarly large amount of manufactured goods as well: $19.5 billion.*** Export/import patterns have been calculated for public administration, healthcare and social assistance, construction, professional, scientific and technical services, and educational services.

Figure 8: Exports, Imports and Total GDP Estimates of Eastern Ontario Economy

			Locally Produced and Consumed		Locally Produced and Consumed		Locally Produced and Consumed
		61% of Local Prod	37% of Demand	56% of Local Prod.	36% of Demand	59%	37%
Export/Import Analysis (based on 2014 data)		EOMC		EOWC		Eastern Ontario	
NAICS	Industry	Exports (2014)	Imports (2014)	Exports (2014)	Imports (2014)	Exports (2014)	Imports (2014)
11	Agriculture, Forestry, Fishing And Hunting	$106,964,168	$741,442,381	$1,369,172,813	$1,098,430,317	$1,476,136,981	$1,839,872,698
21	Mining, Quarrying, And Oil And Gas Extraction	$25,006,804	$1,255,431,410	$310,652,328	$1,775,012,489	$335,659,132	$3,030,443,898
22	Utilities	$168,650,353	$343,262,863	$358,668,889	$231,754,057	$527,319,242	$575,016,920
23	Construction	$455,829,647	$2,349,248,687	$726,049,800	$1,301,352,910	$1,181,879,448	$3,650,601,597
31-33	Manufacturing	$12,683,456,558	$10,360,578,677	$9,269,976,384	$9,119,925,427	$21,953,432,942	$19,480,504,104
41	Wholesale Trade	$673,763,860	$889,141,316	$470,046,296	$1,124,952,395	$1,143,810,156	$2,014,093,711
44-45	Retail Trade	$608,757,880	$280,711,638	$468,585,239	$686,286,471	$1,077,343,119	$966,998,109
48-49	Transportation And Warehousing	$774,216,749	$1,093,388,922	$568,055,182	$1,231,521,900	$1,342,271,930	$2,324,910,823
51	Information And Cultural Industries	$169,851,751	$671,443,652	$118,576,456	$773,637,795	$288,428,206	$1,445,081,447
52	Finance And Insurance	$369,113,146	$1,205,240,139	$240,123,268	$1,594,971,583	$609,236,414	$2,800,211,722
53	Real Estate And Rental And Leasing	$306,561,241	$690,687,341	$127,027,505	$1,223,938,043	$433,588,747	$1,914,625,384
54	Professional, Scientific And Technical Services	$317,014,138	$1,129,677,793	$570,599,357	$1,141,499,167	$887,613,495	$2,271,176,959
55	Management Of Companies And Enterprises	$16,445,599	$118,222,251	$14,843,169	$108,384,829	$31,288,767	$226,607,080
56	Administrative And Support, Waste Management And Remediation Servic	$553,223,109	$440,668,551	$250,596,165	$357,861,762	$803,819,273	$798,530,313
61	Educational Services	$1,786,126,825	$1,234,587,995	$1,220,728,313	$1,171,117,084	$3,006,855,137	$2,405,705,078
62	Health Care And Social Assistance	$2,868,921,691	$1,568,904,015	$1,669,572,682	$1,495,385,465	$4,538,494,373	$3,064,289,480
71	Arts, Entertainment And Recreation	$64,058,038	$138,641,373	$82,870,326	$175,914,218	$146,928,364	$314,555,592
72	Accommodation And Food Services	$324,987,906	$264,845,217	$368,857,698	$593,312,264	$693,845,604	$858,157,481
81	Other Services (except Public Administration)	$202,060,117	$272,906,717	$169,192,359	$461,415,544	$371,252,476	$734,322,261
91	Public Administration	$4,179,550,194	$3,224,059,753	$3,366,347,128	$2,833,648,549	$7,545,897,322	$6,057,708,303
Total - All Industries		**$26,654,559,773**	**$28,273,090,692**	**$21,740,541,355**	**$28,500,322,270**	**$48,395,101,128**	**$56,773,412,962**
Total Production (Based on Exports) and Demand (Based on Imports)		**$43,695,999,627**	**$76,413,758,627**	**$38,822,395,278**	**$77,027,898,028**	**$82,518,394,905**	**$153,441,656,655**

Note: this export/import data only covers production by firms with employees. Self-employed persons are not included.

Continued Population Growth in Eastern Ontario… But Growing Share of Older Residents

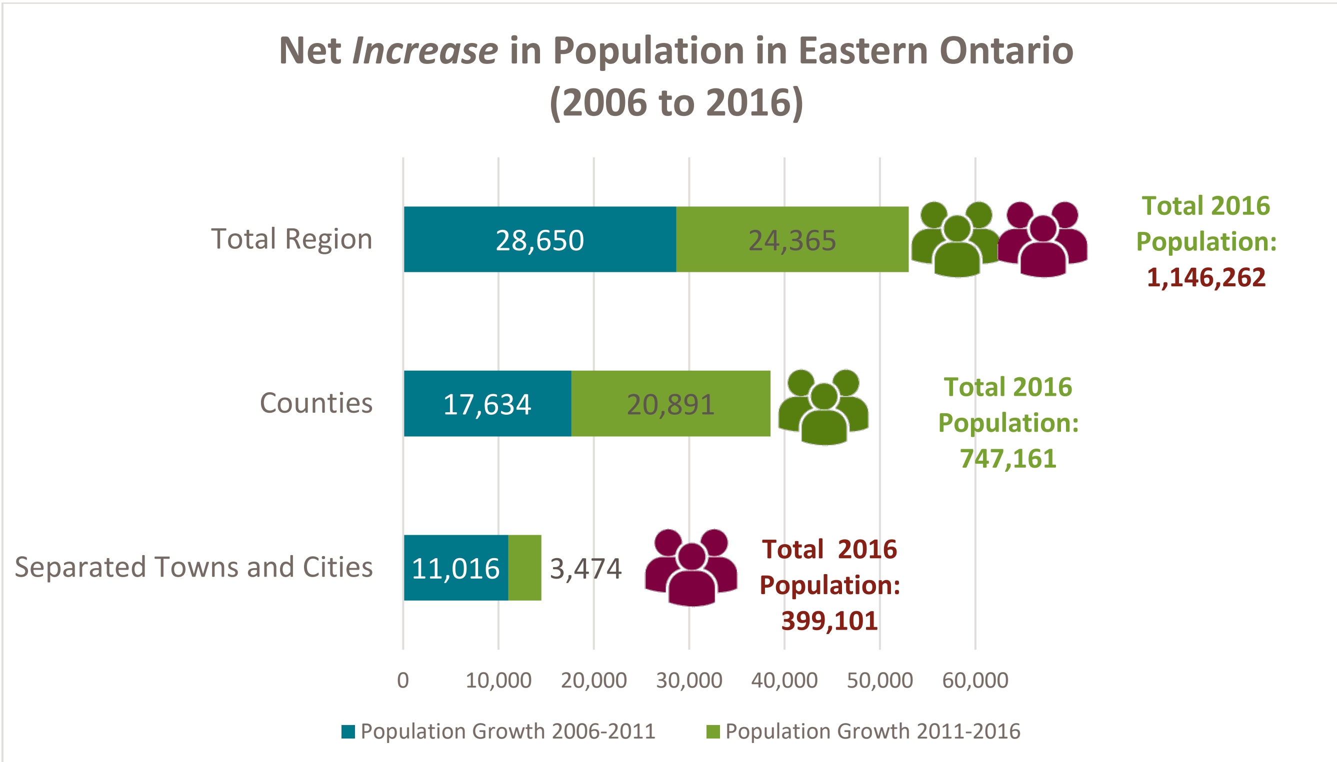
- Census data from 2016 suggests that the total population of Eastern Ontario was roughly 1.15 million; EMSI Analyst projections put the total population a year later at **1.18 million**. While the region is not growing dramatically in population, it is still growing --- an important observation for a region comprised of rural areas, small towns and cities. ***There may be untapped potential to stimulate in-migration, which would increase the size of the regional economy immediately, as well as potentially increasing the size and skills/expertise profile of the workforce.***
- Eastern Ontario is aging faster than the Province as a whole. In all age categories 55 years old or older, Eastern Ontario has a higher percentage of its population in these groups than the Province. ***An aging population, combined with low population growth rates, has important social and economic policy implications for the region***. An aging population puts increased pressure on the region's health care services, increasing demand for doctors, nurses, hospital beds, health care workers etc. The quality of a community's health care system can be a key consideration in the attraction of businesses and talent.

  An aging population also has implications for the region's workforce. As workers retire, new workers are sought to replace them. Otherwise, business and industry growth could be constrained. ***A concerted effort to attract more residents --- and in particular workers --- to the region should be considered. This should include the attraction of immigrants to the region.*** Capitalizing on students already arriving to attend college or university (encouraging them to stay if possible) is one way to increase the region's workforce. There is anecdotal evidence to suggest that significant numbers of students would welcome the opportunity to stay in or near the communities in which they received their education.

Population Growth Slowed Since 2011

- The 2016 Census, suggests that while Eastern Ontario's population continues to grow (71,483 new residents in the 2011-2016 period), the pace of growth has slowed since 2006-2011 (99,912 new residents). Comparatively, the population in rural areas (EOWC area) has shown a higher growth rate in the last five years (2.9 per cent up from 2.5 per cent in 2006-2011). The population residing in the urban areas (EOMC area), while still growing, has grown by less than 1 per cent recently, compared to 2.9 per cent in 2006-2011. Figure 9 summarizes the rural and urban areas population growth comparison over the two five-year periods.

Figure 9: Net Increase of Population in Eastern Ontario (2006-2016)



Source: Statistics Canada. Census of Population, 2006, 2011, 2016

Regional Labour Force of Roughly 570,000

- Of the 954,000 residents aged 15 years or older in 2016, roughly 60 per cent (570,000) were in the workforce and 383,760 were not. Only 41,190 were officially listed as unemployed (6.7% of the workforce). The active workforce (those employed) numbered 528,620 --- up from 429,875 over the past 15 years (2001).
- The total 'working age' population of Eastern Ontario --- everyone between the ages of 15 and 64 --- is roughly 751,000 people, although this includes 133,000 young people between the ages of 15 and 24. A significant share of this group is almost certainly in school and unavailable for full-time work, although some may be able to work part-time.

  The core working age population constituted 63 per cent of the total population in 2017 and had grown by just 28,000 over the preceding 16 years (see figure: Population by Age Cohort).
- Growth of the core labour force (those aged 15-64) in Eastern Ontario has been quite modest --- only 3.9% since 2001. ***The relatively slow growth rate in the workforce should prompt discussion across the region about ways to at least maintain the size of the workforce, if not grow it significantly*** in the years ahead. This is especially imperative in Eastern Ontario, given the demographic profile of this population.

- In Eastern Ontario, the participation rate is nearly four to six percent lower than the average Ontario community, which points to a challenging labour market. The trend is expected to continue further reducing the availability of workers to meet the demands of private and public sectors. Unless addressed, the ***low participation rate in the region could stall economic growth in Eastern Ontario, and suggests attention to workforce re-entry strategies***, **addressing any underemployment, or *targeting education or skills development that would encourage increased participation in the workforce.***
- The region's industry sectors that saw the greatest decline in workforce numbers were Public Administration and Manufacturing.

Population by Age Cohort

Age Cohort	2001 Population	2017 Population	Change 2001-2017	% Change 2001-2017	2001 % of Cohort	2017 % of Cohort
Under 5 years	57,286	54,828	(2,458)	(4%)	5.20%	4.64%
5 to 9 years	71,317	56,187	(15,130)	(21%)	6.48%	4.75%
10 to 14 years	76,757	56,304	(20,453)	(27%)	6.97%	4.76%
15 to 19 years	75,884	61,884	(14,000)	(18%)	6.89%	5.24%
20 to 24 years	63,314	72,738	9,424	15%	5.75%	6.15%
25 to 29 years	59,290	71,127	11,837	20%	5.38%	6.02%
30 to 34 years	68,234	65,915	(2,319)	(3%)	6.20%	5.58%
35 to 39 years	89,676	61,558	(28,118)	(31%)	8.14%	5.21%
40 to 44 years	91,263	61,915	(29,348)	(32%)	8.29%	5.24%
45 to 49 years	82,692	71,098	(11,594)	(14%)	7.51%	6.02%
50 to 54 years	76,967	93,581	16,614	22%	6.99%	7.92%
55 to 59 years	62,915	99,965	37,050	59%	5.71%	8.46%
60 to 64 years	53,085	91,646	38,561	73%	4.82%	7.75%
65 to 69 years	49,596	82,135	32,539	66%	4.50%	6.95%
70 to 74 years	45,026	66,866	21,840	49%	4.09%	5.66%
75 to 79 years	36,588	46,993	10,405	28%	3.32%	3.98%
80 to 84 years	23,659	33,035	9,376	40%	2.15%	2.80%
85 years and over	17,753	34,154	16,401	92%	1.61%	2.89%
Total	1,101,302	1,181,929	80,627	7%	100.00%	100.00%
Working Age Population						
!5 to 64 years of age	723,320	751,427	28,107	3.89%		
As % of Total Popullation	65.7%	63.6%				

Figure 10 - Population by Age Cohort - Eastern Ontario (EOMC and EOWC) Source: EMSI Analyst

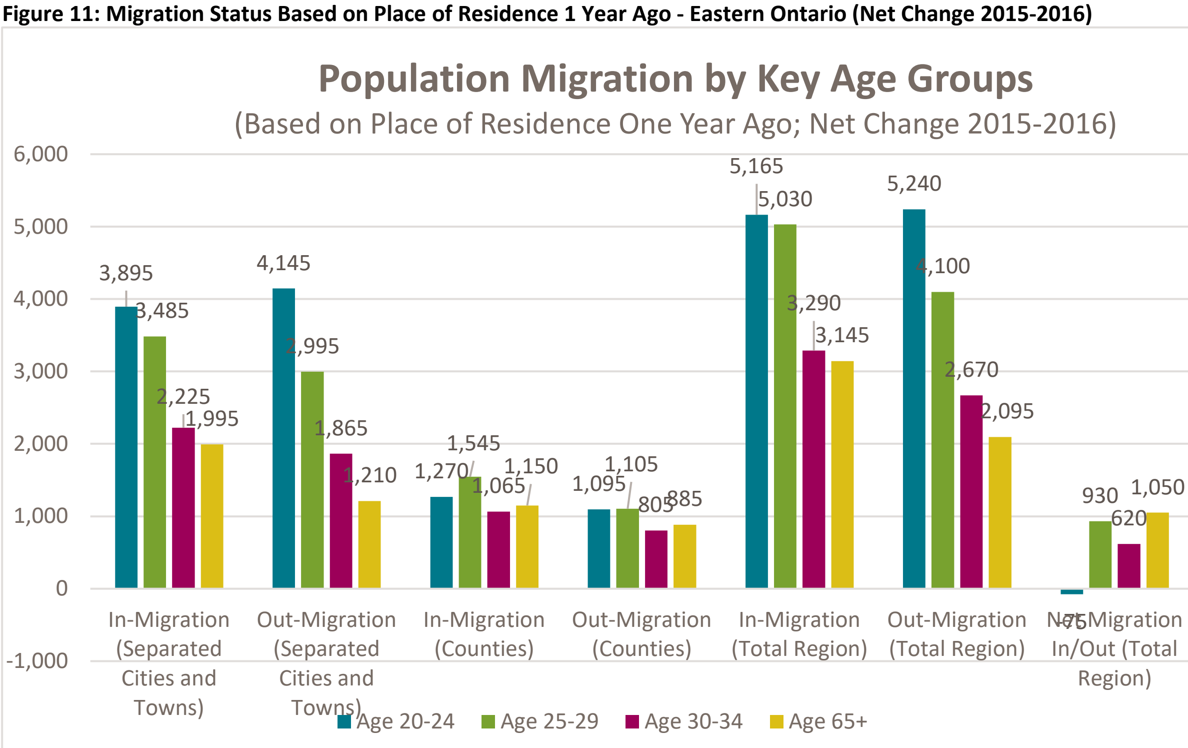
Young Adult Migration Patterns Favour Major Urban Centres; Retiring Adults Favour Rural Centres

- Young adult migration (aged 20-34) predominantly favours Eastern Ontario's separated cities. This may be attributable to the concentration of desired amenities, range of housing choices, better employment opportunities and access to post-secondary institutions. Likewise, retiring adults favour rural centres. ***Out-migration of young adults has implications for the future workforce --- reducing its growth rate and potentially depriving the region of new skill sets and the next generation of organizational leaders. It also means there is a more limited pool of people with interest and ability to take over existing businesses whose owners are reaching retirement age (succession planning).***

Consideration should be given to working with the region's colleges and universities, economic development community and businesses to ensure that graduates are exposed to employment and career opportunities in Eastern Ontario, as well as opportunities to buy an existing business.

Lifestyle considerations may be an important part of addressing young adult out-migration. Depending on stage of life, young adults may be interested in more affordable housing prices, easy access to outdoor recreation, cultural services and entertainment, or schools, healthcare services and amenities important to family life. Eastern Ontario may wish to create talent attraction strategies (as well as community infrastructure initiatives) that resonate with young adults or young families in large cities. For this group, housing costs alone may provide encouragement to look beyond the borders of large urban centres.

Figure 11: Migration Status Based on Place of Residence 1 Year Ago - Eastern Ontario (Net Change 2015-2016)



Source: Statistics Canada, Census, 2016

Place of residence data from the most recent census (2015-2016) reveals that there were slightly more people --- of all ages --- moving into the region (35,425) than migrating out of the region (29,040). The net increase in population is 6,385 people in one year.

Labour Demand and Existing Skill Levels

- Hiring demand from 2017-2018 fell 7.6%. But still twice the demand levels in 2014, 2015 and 2016.
- Education requirements of Eastern Ontario's 2018 job postings suggest that 21% of all jobs required university education, 21% required college education, and 25% required secondary school education. Based on the available sample size and support by consultation input, there is a skill gap emerging with knowledge-based occupations.
- Educational attainment trends are suggesting an increase of university and college educated labourers between the ages of 24-44 in all communities, indicating that the cohort that requires potential upskilling are in the second half of their working age lifespan.

Eastern Ontario's Innovation Ecosystem

- Based on data from 2015, Eastern Ontario can be said to have an entrepreneurial culture; there is a higher percentage of self-employment in the region (8.7%) than either Ontario (7.6%) or Canada (8.1%)
- There are a higher percentage of workers employed in small and medium-sized enterprises (SMEs) than the provincial average. Eastern Ontario has more than 11 percent of workers in SMEs compared to 10.3 percent for the province as a whole.
- The region has an overall lower percentage of residents with university education but has a higher percentage of residents with college education.
- Eastern Ontario's ability to attract and retain immigrants is lower than for the province as a whole (5.9 per cent compared to 13.6 per cent).

Digital Infrastructure

- Despite significant investment in broadband services over the past decade, EORN Inc. reports that one-quarter of the areas where there are homes, businesses or major roadways cannot access mobile data services from their major carrier of choice.
- Depending on the provider, anywhere from 28 to nearly 40 percent of areas where there are homes, businesses or major roads do not have capacity to handle current demand for data services. If no improvements are made, the capacity gap will grow to 65 percent by 2018.
- Access to and integration of technology continues to be a major issue whether in the support of home-based businesses or those businesses looking to grow their operations or market share.

Limited Information on Goods Movement within the Region

- Data on goods movement at the local level is limited. Roughly 13 per cent of municipalities across Ontario have conducted a freight audit or study in the last 10 years, and about one-third has or collects data on goods movement. The corresponding data for Eastern Ontario has not yet been compiled. Robust local and regional freight data is essential if municipalities are to generate evidence-based policy and measure the impact of interventions. ***While Eastern Ontario has access to some provincial data, there is far less data on freight within the region, particularly using regional roads.*** Similarly, data is not currently available on the total volume and value of goods being shipped out of the region (or imported into the region) using other modes of transportation (rail, marine, air).
- Absence of freight information in the region suggests that ***the efficacy of the region's transportation system may not have received significant study.*** With freight volumes growing strongly across Canada, and emissions from freight set to eclipse passenger emissions in Canada by 2030, attention to freight may hold opportunity for both increased efficiency in the movement of goods and reduction in emissions. This in-region data gathering could be undertaken in parallel with improving understanding of the movement of people. ***A place to start would be determining how many municipalities have transportation master plans as well as collecting Average Annual Daily Traffic (AADT) information for at least the main (non-provincial) highways.***

Commuting Patterns Dominate by Automobiles, Public Transit is Scarce

- As of 2016, nearly half a million people (482,830) in Eastern Ontario travel to get to/from work each day. More than four in five of these commuters are driving a car or are a passenger in a vehicle. Additionally, nearly 36,000 commuters in Eastern Ontario spend an hour or more getting to work each day, most of whom are in rural areas.
- Public transit in Eastern Ontario is sparse; as a result, transit is used for commuting just 2.7 per cent of the time, albeit three times as frequently in more urban areas than in rural ones. When comparing public transit to active transportation (walking/biking), public transit is significantly behind. Active transportation has higher usage: 30,780 commuters walk/bike to work compared to 13,045 commuters using public transit.

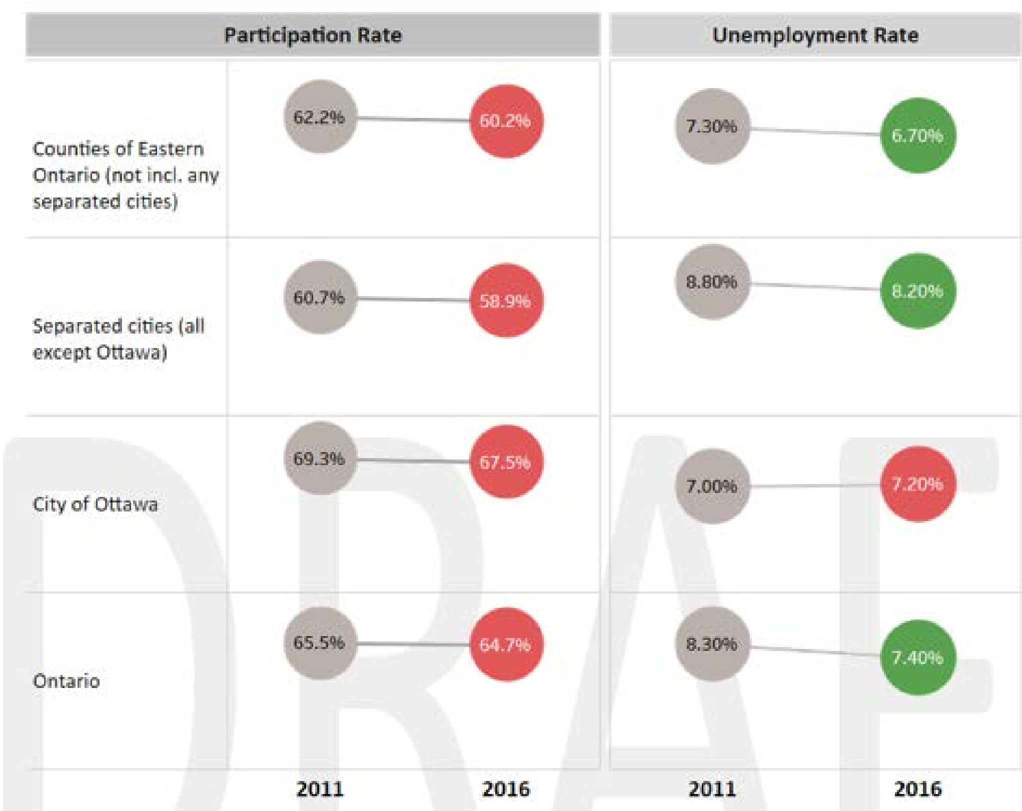
Declining Unemployment Rate, Declining Participation Rate

- Participation rates in Eastern Ontario --- in both the urban and rural areas --- are well below those of the province as a whole and the City of Ottawa, and have fallen in all of the areas (since 2011). The Labour Force Participation rate reflects the percentage of the working age population that is either employed or actively looking for a job. This measurement shows the proportion of the population that is available to work. The relationship of the Labour Force Participation rate to economic conditions is more complex than the unemployment rate. For example, participation rates can *increase* during difficult economic times if those who have given up on finding a job leave the community in search of opportunity elsewhere (the pool of available labour decreases). In contrast, the participation rate could *decrease* in periods of economic growth if a portion of community members have accumulated significant wealth and opt for early retirement, or if workers from other places arrive to find work in a 'hot' market (the pool of available labour increases).

- In Eastern Ontario, the participation rate is nearly four to six per cent lower than the average Ontario community, which points to a tightening labour force which in turn could reduce the region's competitiveness over time. Because it is likely that demographic shifts (particularly the region's aging population) accounts for a significant share of the suppressed participation rate, outreach and attraction campaigns targeting younger age cohorts should be considered.
- The Unemployment Rate measures the number of people of working age (15-64) who are not working. Unemployment rates tend to increase during periods of economic decline and decrease during periods of strong economic performance.

  As a rule, a rising Labour Force Participation rate combined with a declining unemployment rate is most desirable. This means local jobs are being created and local residents are filling those new positions. However, as Figure 9 indicates, the province as a whole --- and ***Eastern Ontario --- has seen a declining unemployment rate (local people are finding work/jobs are being filled) along with a declining participation rate (either the total labour force is expanding or local residents are not finding employment in the region. This phenomenon is explored in greater detail in a following section (see Labour Flows).***

Figure 12: Participation Rates and Unemployment Rates (Change from 2011 to 2016)



Source: Statistics Canada, Census, 2011, 2016

3. Challenges and Opportunities in Eastern Ontario's Economy

This section provides further insight into some of the opportunities and challenges that Eastern Ontario will confront in advancing a regional economic agenda. A complete analysis of the region's economic performance is provided in Appendix D *Eastern Ontario Regional Profile*.

The regional profile was completed using select demographic, economic and innovative indicators and was intended to provoke thinking on the state of Eastern Ontario's competitive position in a global landscape. Every effort has been made to obtain the most up to date information available. The information presented is based on a review of available Statistics Canada data, Canadian Business Counts, Vicinity Job data as well reports and studies considered relevant to refreshing the 2014 strategy.

Long-Term Trends in Employment (Jobs)

Urban Areas: Since 2001 (to 2017), the EOMC area has seen a 13.2% increase in employment across all industries --- well below the national average of 22.8%. The rate of employment increase peaked in 2008, slowing significantly through to 2013, then began to pick up steam again until at least 2017. The EMSO Analyst predictive model used to estimate future trends suggests continued slow growth to 2025, again well below both federal and provincial levels.

Rural Areas: A similar, but less pronounced, phenomenon has been at play in the EOWC area (rural Eastern Ontario) with the area seeing a 19.2% increase (just below the national average). The rural areas, while seeing an upward tick in 2008 followed by a drop thereafter, has tracked the provincial and national employment growth rates fairly closely through to 2017. Like their urban counterparts, the rural areas are expected to see a continued steady growth in employment, but below the growth rate of the province and the country as a whole.

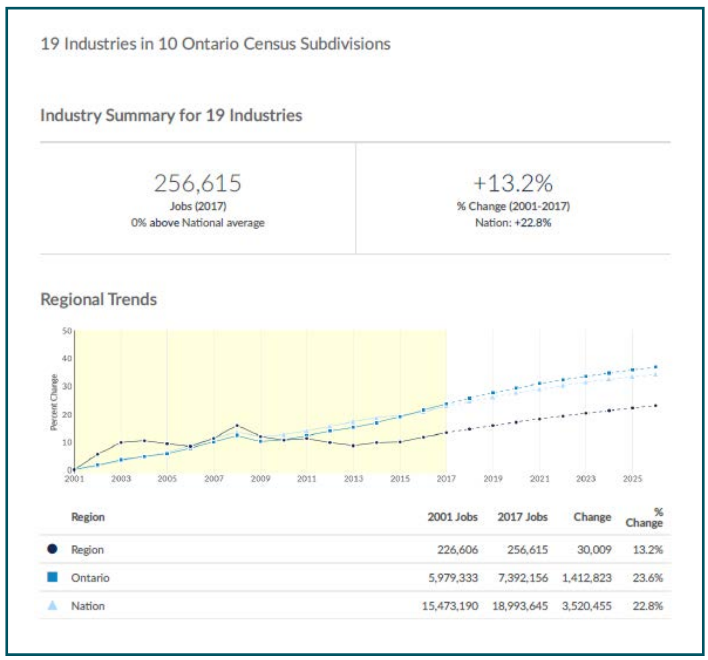


Figure 13 - Long-Term and Projected Employment in Urban Areas (Eastern Ontario Mayors' Caucus); Source: EMSI Analyst

Interestingly, the total number of jobs is quite similar in the two areas. ***Note that the jobs totals are for employees only; self-employed individuals are not included.***

Taken together, the urban and rural areas represent a combined employment opportunity landscape of more than **510,000 jobs with growth expected to continue through to 2025.**

When self-employed individuals are added into the mix, total employment approaches 600,000. As is shown on the following page, self-employment is much more volatile than working as an employee.

Eastern Ontario is Home to at Least 85,000 Self-Employed Individuals

- Roughly 85 per cent of the region's workforce are classed as employees; the other 15 per cent is considered self-employment. There are more than 56,500 self-employed persons in the rural areas of Eastern Ontario (the EOWC area) and another 29,250 in the more urban areas (the EOMC area).
- As the two graphs below demonstrate, the numbers of people in self-employment has fluctuated significantly over the past decade. For both urban and rural areas, self-employment is not projected to grow significantly through to 2025 --- at least not without a different approach to starting and growing these businesses.
- Rural areas saw growth in self-employment of 7.7 per cent in the 2001-2017 period, less than half the national rate (19.7%). The urban areas saw slightly more robust growth (12.8%), again well under the national rate.
- Growth rates for urban self-employment in Eastern Ontario are expected to exceed rural self-employment for the next decade.

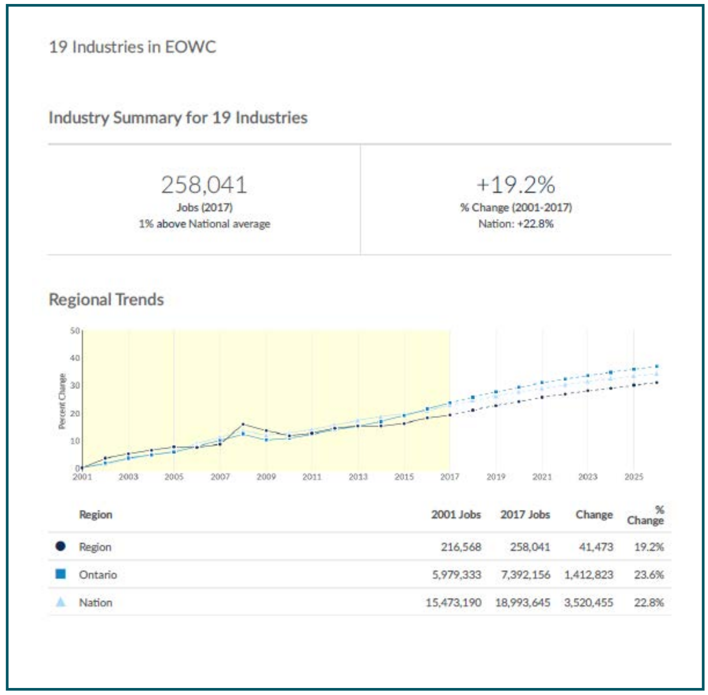


Figure 14 - Long-Term and Project Employment in Urban Areas (Eastern Ontario Wardens' Caucus); Source: EMSI Analyst

Figure 15 - Self-Employment Across Eastern Ontario 2001 to 2017; Projections to 2025; Source: EMSI Analyst

Job Postings Fell Slightly in 2018 Compared to 2017, But Still Well Above 2016

In examining the impact of potential workforce decline and availability, a real-time jobs demand reporting exercise was completed using Vicinity Jobs[1] data. The Jobs Demand Report, generated by Vicinity Jobs, as at the end of December 2018, is available in Appendix E. The Jobs Demand Report demonstrated that

- There were ***29,423 different postings*** on digital job boards in 2018. This was down roughly seven (7) per cent from 2017, but up 23.3 per cent from 2016. On a month-by-month basis, it appears that postings tend to drop off as the end of the calendar year approaches.

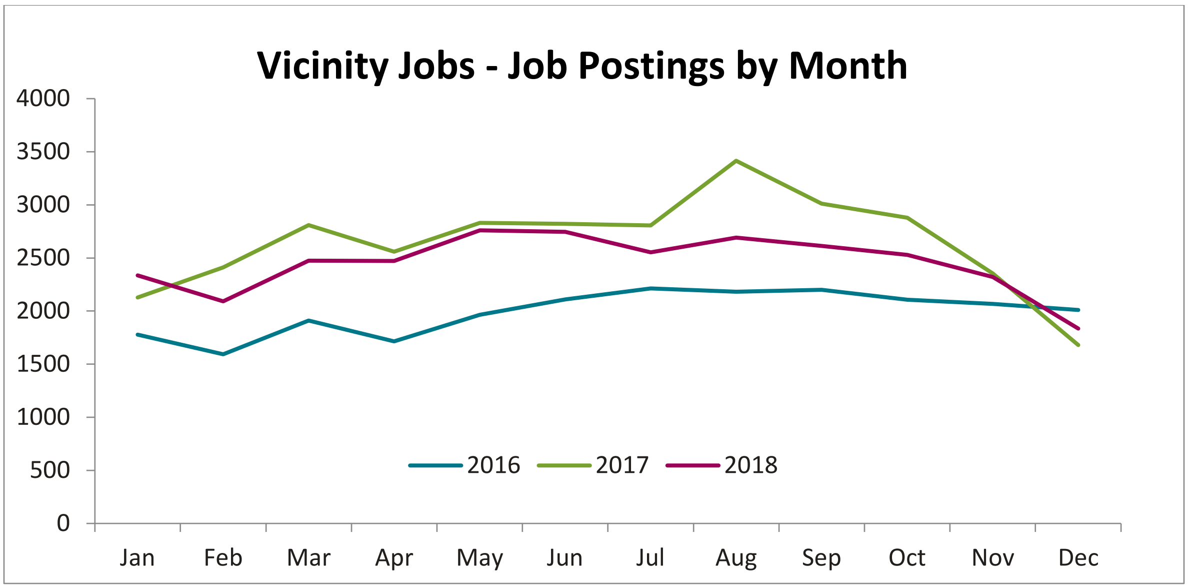
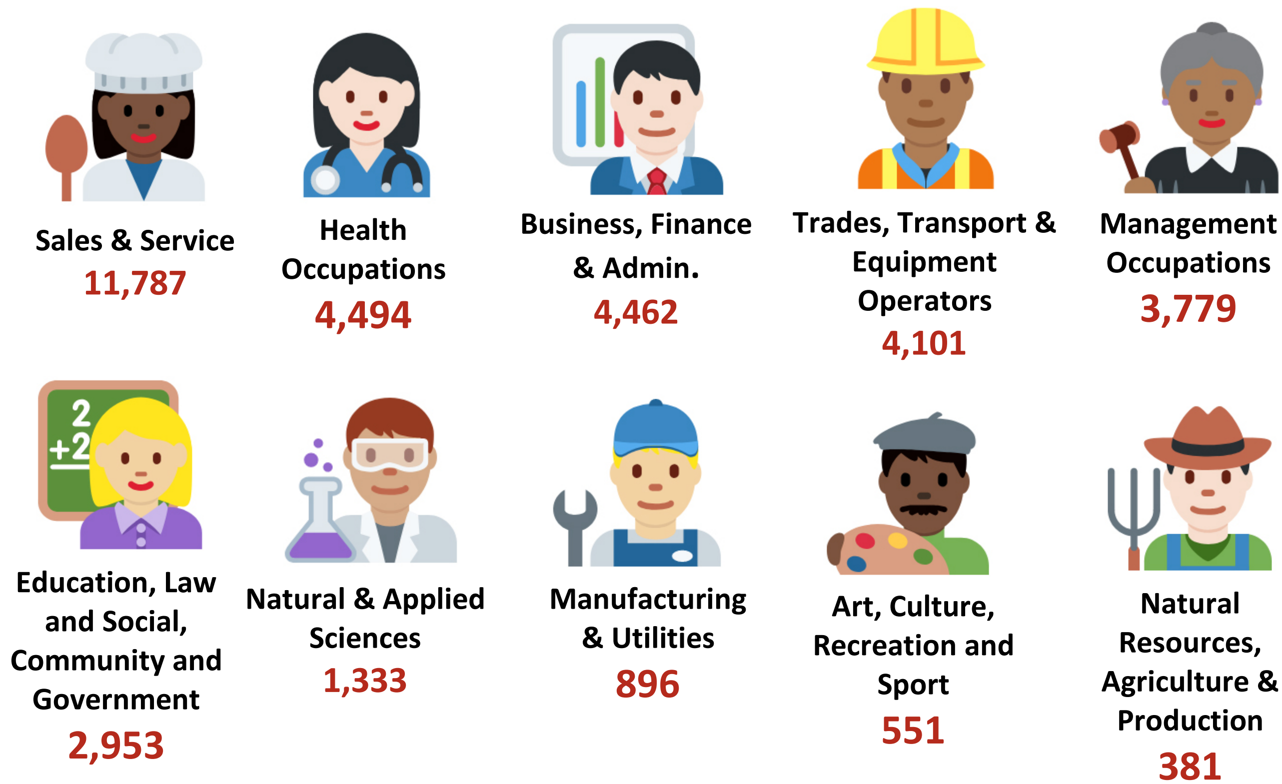


Figure 16 - Job Postings by Month: 2016 to 2018; Source: Vicinity Jobs

- Over 2018, the strongest sectors for job postings was the ***Health Care and Social Assistance*** sector and Retail trade, both with 22% of the Region's job postings classified to a sector. ***Educational Services, Finance and Insurance, and Accommodations and Food Services*** each had more than 1000 job postings, translating into at least six per cent of postings for each sector.
- The ***Sales and Service*** Occupation category, which accounted for 30% of all job postings (8,008 postings in total) was the strongest occupational category. ***Health occupations, business, finance and administration occupations, and trades, transport and equipment operators & related occupations*** each had at least 4,000 postings or a minimum of 10 per cent of the postings.
- Of the 39,307 total job postings in 2018 (some jobs were posted more than once), one in five (21%) required a University degree and an equally large share (20.5%) required a college or vocational education or apprenticeship training. A quarter of the job postings (25%) called for secondary school or occupation-specific training. Less than 10 per cent of the job postings listed on the job training or not formal education requirement. 34% of job postings required secondary school and/or occupation-specific training.

[1] The Jobs Demand Report is a real-time intelligence gathering system that provides ongoing monitoring of online job postings with extensive quality assurance to analyse and compile each local/regional job demand report.

Figure 17: Job Demand by Occupation Category (2018)



Source: Vicinity Jobs, 2018

Existing Skill Levels Are Not Meeting Job Posting Requirements

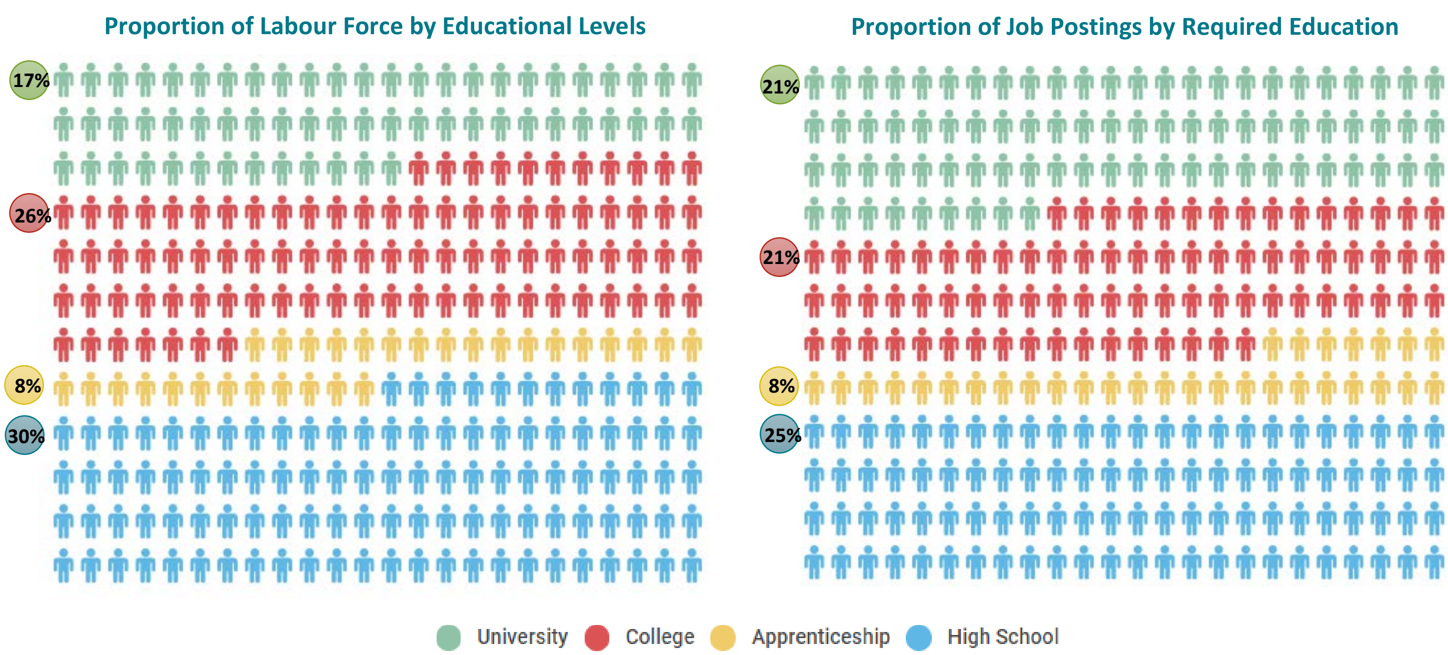
Analysing the skill level of the current labour force is important in identifying potential skill gaps that may exist in Eastern Ontario. The analysis of skill levels can help identify if the current workforce meets the employer demand or if a skills gap exists, informing what skills need to be targeted, and any recommendations on training that can contribute to closing the gap. A first look at the skill levels of Eastern Ontario's workforce used:

- Educational Attainment, and
- Job Postings by Education Requirement

Educational attainment is an important socio-economic indicator to consider when evaluating a community's economic growth potential, as it speaks directly to its ability to staff new and existing businesses. As of 2016, more than 55 per cent of Eastern Ontario's total labour force had either a completed a College-based education (25.7 per cent) or a high-school equivalent diploma (30.1 per cent). The proportion of the labour force that had a completed a University-based education was 17.1 per cent, while the proportion of the labour force that had completed apprenticeship or trade certificates was 8.4 per cent.

When compared to the recent education requirements of Eastern Ontario's 2018 job postings, 21% of all jobs required university education, 21% required college education, and 25% required high school education. Based on these postings and elaborated on through the consultation input, there is a skill gap associated with knowledge-based occupations (that predominantly require university-based education). This skill gap increases as job positions become more sophisticated through the introduction of technology and innovation into traditional workplaces. However, educational attainment trends suggest an increase of university and college educated workers between the ages of 24-44 in all communities, indicating that the cohort that requires potential upskilling are in the second half of their working age. More of an effort is required to retain the university and college educated workers if the region is to be able to attract and higher value employment opportunities.

Figure 18: Educational Attainment Levels (2016) and Job Postings by Level of Education (2018)



Source: Statistics Canada, Census, 2016 and Vicinity Jobs, 2018

Commuting Patterns Suggest Reliance on Vehicles Dominates and Has Increased

As of 2016, nearly half a million people (482,830) in Eastern Ontario travel to get to/from work each day. More than 4 in 5 of these commuters are driving a car or are a passenger in a vehicle. Across the counties, 93.2% of all commuters are using a vehicle to get to work. Comparatively, the separated cities and towns have 83.8 of all commuters using a vehicle. A third of the same commuters who drive a car or are a passenger in a vehicle are spending at least half an hour getting to work. Additionally, nearly 36,000 commuters in Eastern Ontario spend an hour or more getting to work, most of who are in rural areas. While average commute times are shorter in Eastern Ontario than for the province as a whole, Ottawa or Toronto, the average commute time is rising in Eastern Ontario.

Public transit in Eastern Ontario is sparse; in Eastern Ontario, transit is used 2.7% of the time, three times as much in separated cities and towns as the counties. Given the low value attached to some employment opportunities, the lack of public transit can place a burden on workers and businesses as they seek employment and workers. The results of the commuting patterns analysis and the regional interest in alternate modes of transportation, are recognition of the interplay between the accessibility of work and available transportation options.

Workforce is Growing in Accommodation, Construction and Health Care Sectors, Declining in Manufacturing, Public Administration and Retail/Wholesale Trade

As is the case with the rest of the province, the industries in Eastern Ontario that saw the greatest decline in workforce were Public Administration and Manufacturing. During the five-year span 2011-2016, the ***manufacturing sector in Eastern Ontario (excluding Ottawa) saw a loss of more than five thousand jobs*** (either due to closures, restructuring, or efficiencies made in-house). This extended the significant losses experienced from 2006 – 2011.

Eastern Ontario's ***public administration sector also saw the loss of over six thousand jobs*** (predominantly through retirement or cost savings on certain administrative functions). Other sectors to see significant losses were: Wholesale Trade (-2,065), Retail Trade (-1,935), and Educational Services (-3,025). Industries with significant growth include: Accommodation and Food Services **(+5,145)**, Construction **(+4,855),** Health Care and Social Assistance **(+4,685)**, and Administrative Support Services **(+2,235)**.

Figure 19 shows that in 2010 demand for labour remains particularly strong in retail trade, and healthcare and social assistance. Figure 20 provides a proportional summary (total out of 100) of the total net growth in labour force by industry from 2011-2016.

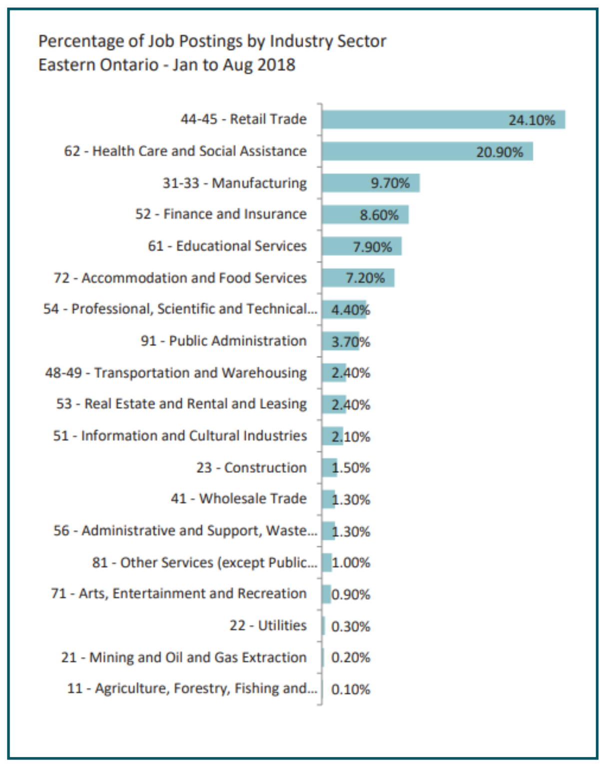
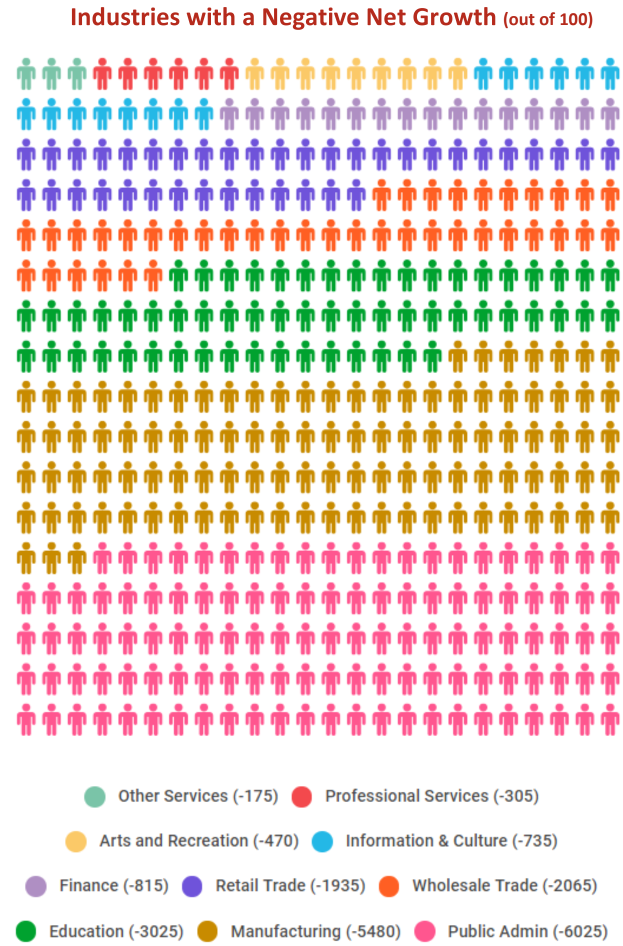


Figure 19 - Online Job Postings by Industry Sector - January to August 2018; Source: Vicinity Jobs

Figure 20: Eastern Ontario's Proportional Representation of Labour Force Growth by Industry (2011-2016)



Source: Statistics Canada. National Household Survey 2011; Census 2016.

Number of Self-Employed Businesses Continues to Grow Significantly Across Eastern Ontario

- In June of 2018, Statistics Canada identified 103,169 employment locations in Eastern Ontario; these were split roughly two-thirds, one-third between the rural areas (67,842) and more urban areas (35,326). From January 1, 2015 to the end of June 2018, Eastern Ontario saw a net growth of 5,683 employment locations. *The majority of this growth (5,472) can be attributed to 'indeterminate' businesses --- home-based businesses or the self-employed*. By comparison, new establishments with employees grew by 211 across the region.
- A major task for economic developers will be connecting with and assisting the 70,000 plus self-employed businesses to grow their businesses. For those desiring to grow, there will be a need to find workspace, address requirements for employees (and associated HR practices), introduce digital technologies, and support businesses in pursuing the necessary working capital or public funding support. Similarly, business retention and expansion for firms that already have employees is expected to be important to the success of businesses and the region's future prosperity. For start-ups or early stage companies seeking to grow in the region, these services --- including finding 'first customers' will be particularly important, and will require close collaboration of innovation ecosystem partners.

Employment Locations by Size - Eastern Ontario Total				
Category	December 2015 Locations	December 2016 Locations	December 2017 Locations	June 2018 Locations
1-4 Employees	17,029	16,977	16,915	16,957
5-9 Employees	6,996	7,103	7,105	7,127
10-19 Employees	4,407	4,630	4,602	4,654
20-49 Employees	2,796	2,662	2,632	2,675
50-99 Employees	794	810	810	796
100-199 Employees	332	319	348	363
200-499 Employees	166	163	166	163
500+ Employees	60	56	56	56
Indeterminate	64,906	64,912	67,551	70,378
Total	**97,486**	**97,632**	**100,185**	**103,169**

Figure 21 - Employment Locations by Size; Source: EMSI Analyst

Significant 'Cross-Border' Labour Flows Within the Region… and Outside It

- Given anecdotal information (and concrete data on this matter from the 2006 census) about the degree to which *members of the workforce cross municipal boundaries to get to work*, the following charts quantify this phenomenon for both urban and rural areas ---- the areas represented by the Eastern Ontario Mayors' Caucus and the Eastern Ontario Wardens' Caucus. Key points to consider are:
    - More than 33,000 workers in the EOMC area come from outside those communities, especially for work in retail, healthcare and social assistance, manufacturing and educational services.
    - Rural communities, on the other hand, see more 110,000 of their workforce members leave their area for work. Those most likely to work 'elsewhere' are in the construction, public administration, healthcare and social assistance, retail, manufacturing and educational services settings.

It is clear that ***Eastern Ontario has a regional workforce with significant 'cross-border' commuting***. ***This phenomenon may well signal a need to consider the adequacy of commuter transportation options (beyond conventional public transit).*** At this time, it is not known how much of the cross-border flow is within Eastern Ontario, and how much represents commuting to work in major proximal centres such as Ottawa, Toronto and the GTHA, or Montreal. It is likely that there are significant rural-urban flows both within and outside the region, on a commutershed basis. It would be in the interests of the entire region to better understand these flows so that employers needing talent and talent seeking opportunity will know where to look and what barriers need to be addressed to maximize the potential of the region's talent pool.

Labour Flows (based upon 2016 National Household Survey data, as tabulated by EMSI Analyst)

Eastern Ontario Mayors Caucus Area

NAICS Code	Description	Employed in Region	Resident in Region	Net Import
48-49	Transportation and warehousing	7,221	7,323	(102)
56	Administrative and support, waste management an	10,175	9,982	193
54	Professional, scientific and technical services	8,379	7,414	965
81	Other services (except public administration)	9,011	7,762	1,249
72	Accommodation and food services	16,321	14,455	1,866
91	Public administration	23,079	19,267	3,812
61	Educational services	22,697	18,681	4,016
31-33	Manufacturing	20,168	15,038	5,130
62	Health care and social assistance	33,134	25,229	7,905
44-45	Retail trade	31,742	23,215	8,527
Total - EOMC Area		**181,928**	**148,365**	**33,561**

Eastern Ontario Wardens Caucus Area				
NAICS Code	Description	Employed in Region	Resident in Region	Net Import
23	Construction	9,860	31,310	(21,450)
91	Public administration	17,275	37,257	(19,982)
62	Health care and social assistance	25,509	41,705	(16,196)
44-45	Retail trade	28,708	43,175	(14,467)
31-33	Manufacturing	20,261	32,579	(12,318)
61	Educational services	15,103	25,217	(10,114)
54	Professional, scientific and technical services	11,259	18,201	(6,942)
81	Other services (except public administration)	9,198	14,972	(5,774)
72	Accommodation and food services	12,857	16,040	(3,183)
11	Agriculture, forestry, fishing and hunting	13,072	13,850	(778)
Total - EOWC Area		163,100	274,305	(111,204)

Figure 22 – Labour Flows Across the Region: EMSI Analyst

Average Wages Lower in Eastern Ontario than for Canada as a Whole

- As demonstrated in Figure 23, the ***average annual wage for all industries and all parts of Eastern Ontario is nearly $42,000.*** This is roughly 17.5 per cent below the comparable statistic for the country as a whole. Wages are generally higher in more urban areas than in rural ones.
- ***Utilities, public administration, mining, quarrying, and oil and gas extraction, and management of companies and enterprises have the highest annual wages***. Accommodation and food services, arts, entertainment and recreation, and agriculture, forestry, fishing and hunting have the lowest annual wages (see Figure 23).
- ***Annual payrolls exceed $18.3 billion dollars across the region***, split as $9.9 billion in EOMC areas and $8.4 billion in EOWC areas (see Figure 24)

Any talent attraction strategy would have to address these wage levels; contrasting lower wage levels to lower costs of living and attractive amenities could be an effective strategy. Data would have to be gathered in compare Eastern Ontario to the target communities from which the region hopes to draw new residents and talent. Similarly, any initiatives that help to increase the average annual wages (e.g. emphasis on high-wage sectors, integration of technologies that make employees more productive) could close the regional-to-national gap.

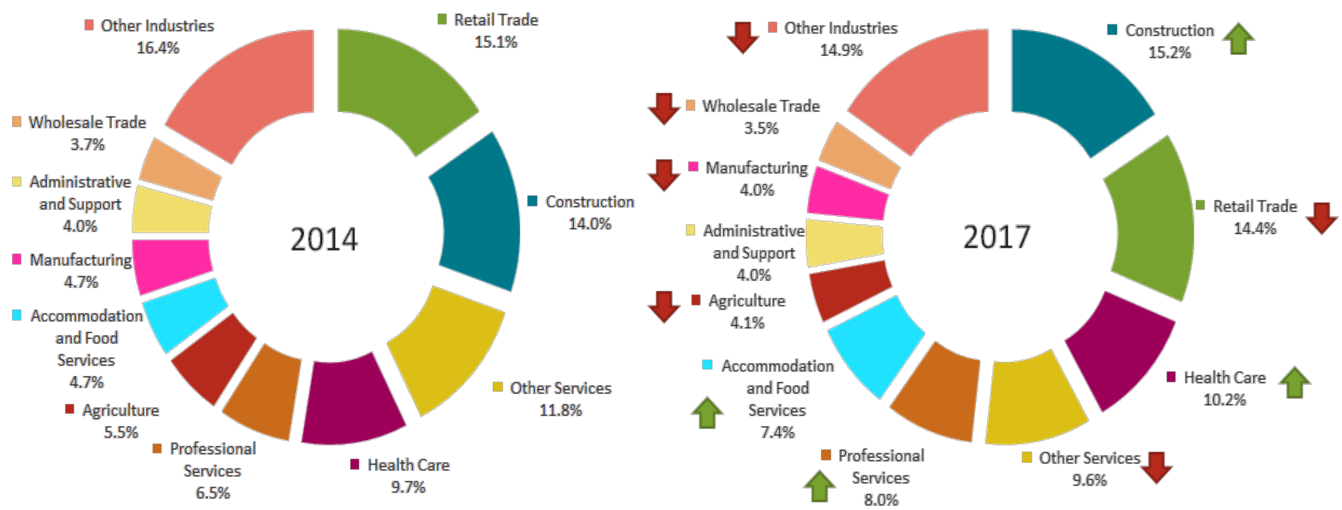
NAICS	Industry	2017 Average Wages - EOMC Areas	2017 Average Wages - EOWC Areas	Average Eastern Ontario (EOMC and EOWC; excludes Ottawa)
X0	Unclassified	$51,785	$51,785	$51,785
11	Agriculture, forestry, fishing and hunting	$29,199	$27,421	$27,597
21	Mining, quarrying, and oil and gas extraction	$61,749	$65,908	$65,423
22	Utilities	$86,727	$84,213	$85,183
23	Construction	$56,665	$47,501	$50,929
31-33	Manufacturing	$53,805	$51,021	$52,406
41	Wholesale trade	$52,420	$50,709	$51,674
44-45	Retail trade	$24,039	$24,107	$24,073
48-49	Transportation and warehousing	$43,354	$38,426	$41,115
51	Information and cultural industries	$41,143	$41,657	$41,343
52	Finance and insurance	$46,199	$42,343	$44,556
53	Real estate and rental and leasing	$33,575	$31,926	$32,985
54	Professional, scientific and technical services	$48,552	$57,829	$53,648
55	Management of companies and enterprises	$58,125	$64,689	$60,759
56	Administrative and support, waste management and remediation servi	$31,938	$33,027	$32,309
61	Educational services	$54,626	$56,770	$55,439
62	Health care and social assistance	$46,105	$41,209	$43,966
71	Arts, entertainment and recreation	$26,284	$25,033	$25,588
72	Accommodation and food services	$16,135	$15,911	$16,030
81	Other services (except public administration)	$30,585	$31,362	$30,960
91	Public administration	$62,501	$61,562	$62,094
Averages Wages - All Industries, For Areas and for Region as a Whole		**$42,651**	**$41,019**	**$41,885**
As Percentage of National Average		84	81	~ 82.5
Source: EMSI Analyst - Data is Employees Only (Not Self-Employed Persons, as at the end of 2011; EMSI Analyst does not have data on earnings for self-employed persons				

Figure 23: Average Wages (by sector across Eastern Ontario); Source: EMSI Analyst

NAICS	Industry	Total Payroll by Industry/Sector - EOMC Area	Total Payroll by Industry/Sector - EOWC Area	Total Payroll by Industry/Sector - Eastern Ontario
X0	Unclassified	$243,707,580	$215,938,670	$459,646,250
11	Agriculture, forestry, fishing and hunting	$17,783,110	$151,596,160	$169,379,270
21	Mining, quarrying, and oil and gas extraction	$8,373,552	$67,640,083	$76,013,635
22	Utilities	$106,740,315	$164,961,163	$271,701,479
23	Construction	$562,299,979	$788,739,423	$1,351,039,402
31-33	Manufacturing	$1,105,951,565	$1,058,423,057	$2,164,374,622
41	Wholesale trade	$447,032,510	$334,099,045	$781,131,555
44-45	Retail trade	$730,064,385	$700,449,933	$1,430,514,318
48-49	Transportation and warehousing	$374,577,315	$276,513,980	$651,091,295
51	Information and cultural industries	$118,946,328	$76,839,382	$195,785,709
52	Finance and insurance	$220,677,931	$150,055,186	$370,733,117
53	Real estate and rental and leasing	$128,258,524	$68,044,939	$196,303,464
54	Professional, scientific and technical services	$305,687,421	$443,791,118	$749,478,539
55	Management of companies and enterprises	$13,149,416	$9,806,893	$22,956,308
56	Administrative and support, waste management and remediation servi	$481,014,088	$257,287,187	$738,301,275
61	Educational services	$1,213,362,044	$770,130,190	$1,983,492,234
62	Health care and social assistance	$1,717,494,077	$1,191,219,739	$2,908,713,816
71	Arts, entertainment and recreation	$81,462,971	$97,298,392	$178,761,363
72	Accommodation and food services	$333,213,249	$287,897,657	$621,110,906
81	Other services (except public administration)	$248,223,105	$237,162,461	$485,385,566
91	Public administration	$1,449,632,463	$1,092,708,900	$2,542,341,363
Averages Wages - All Industries, For Areas and for Region as a Whole		**$9,907,651,927**	**$8,440,603,559**	**$18,348,255,485**

Figure 24: Total Payroll (by sector across Eastern Ontario); Source: EMSI Analyst

Figure 25: Share of Eastern Ontario's Business Establishments with Employees by Industry (2014, 2017)



Source: Canadian Business Counts. December 2014 and 2017

Opportunities to Grow Export Based Industries

A final consideration in an assessment of the Eastern Ontario economy is the role and impact of its export-based industries. Data from OMAFRA's EMSI Analyst's Input-Output Model calculates Eastern Ontario's exported and imported dollars by industry. The latest data (2013) indicating that as a whole Eastern Ontario, industries spend more money on importing goods and services ($54.2 Billion) than they do exporting goods and services ($46.7 Billion) makes Eastern Ontario a net importer. This suggests that Eastern Ontario might have deficits or gaps in its local and regional supply chains. Nonetheless, from 2011 to 2013, total exports in Eastern Ontario grew by about 15 per cent --- from $40.7 Billion to $46.8 Billion.

Despite the decline in the number of manufacturers and employment in the sector, manufacturing by itself continues to account for nearly half (48.6 per cent) of all Eastern Ontario exports. Four sectors, manufacturing, agriculture, information & culture, and professional services) account for 91 per cent of the region's exports. Nonetheless Agriculture, Information & Culture, and Professional Services imported over $5 billion dollars' worth into their industries, while only exporting $2 billion. Similar to other sectors, these statistics suggests that these industry groups may have gaps in local and regional supply chains which could hamper their ability to grow and export goods and services beyond Canada.

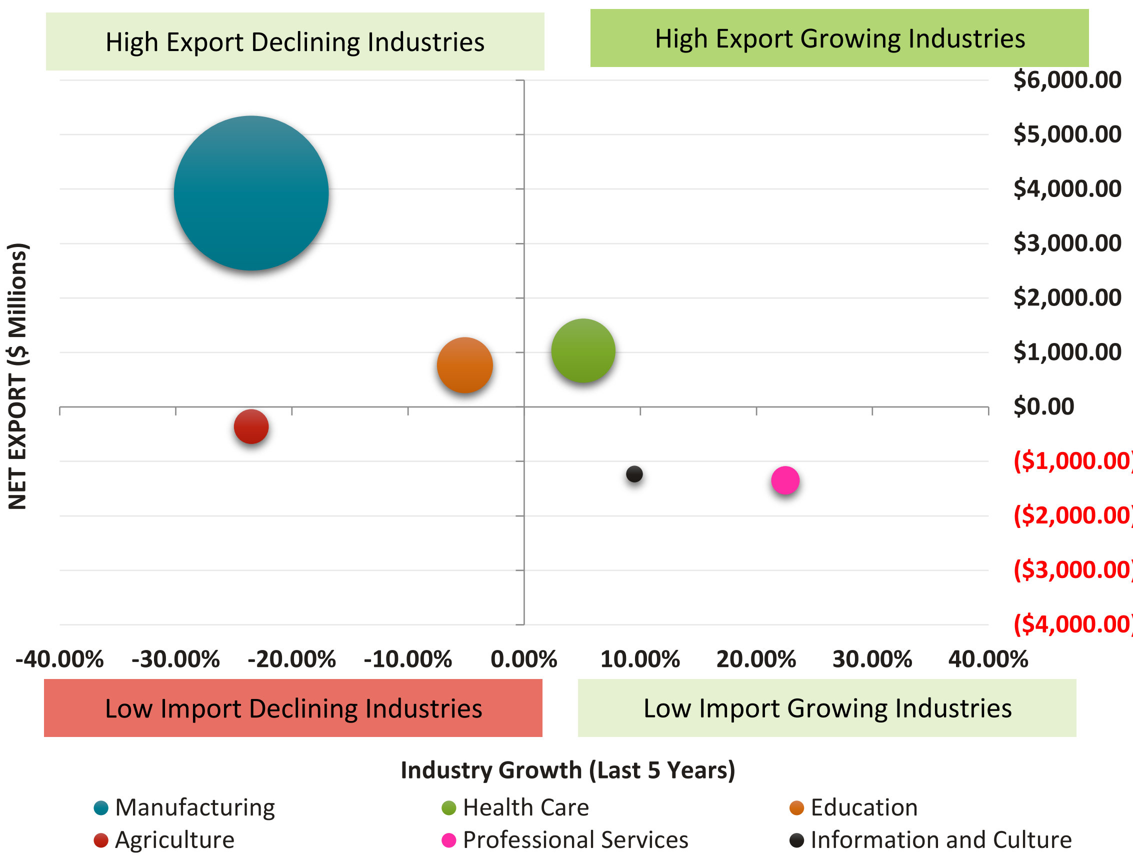
Lastly, two other non-traditional exporting industries brought significant revenues ($6.9 billion) into the region, thereby qualifying them to be considered as 'export' industries. These two public sector economic engines account for 14.7 per cent of all 'exported' monies in the regional economy.

Figure 26 illustrates the current status of Eastern Ontario's export-based industries in relation to stage of growth and net export characteristics. The four quadrants of the graph indicate the stage of growth for that industry. The size of the bubble indicates the size of the industry's export market.

- In an ideal scenario, Eastern Ontario would want its exporting industries to reside in the top right quadrant. (Industries in the top right quadrant demonstrate both industry growth and high export value).
- Industries in the top left quadrant demonstrate a high export value industry but a declining industry base (total number of businesses). These industries may require additional attention by the economic development community, in order to sustain or grow exports.
- The bottom right quadrant demonstrates high growth, import-focused industries. These industries are potential export industries but may require stronger supply chains, better marketing and sales or even new business models to expand their exports.
- The bottom left quadrant demonstrates a declining, import-focused industry. Industries in this quadrant may also lack a stronger regional supply chain, better access to out-of-region markets or may be in a sector with limited growth potential.

Overall, Eastern Ontario demonstrates potential to develop five export-based sectors (including associated supply chains) – manufacturing, health care, education, professional scientific and technical services, and to a lesser extent information and cultural industries.

Figure 26: Eastern Ontario Export Industries, Industry Growth vs Exported Dollar Totals vs Net Exports (2013)



Source: OMAFRA EMSI Analyst Input-Output Models, 2013, Adapted by MDB Insight

4. Trends Facing Eastern Ontario

As noted in the 2014 strategy and reflected in the findings from the Eastern Ontario regional profile, changes in the provincial and indeed global economy are having an impact on the growth of Eastern Ontario's economy. The recovery from the 2008 recession appears to have plateaued and the origins of future economic growth are now seen as being linked to the integration of technology --- in many different ways --- into the workplace. These technologies are intended to bring a wide array of benefits --- from increasing productivity, improving the movement of goods and people, adding value to the delivery of human services, protecting or restoring the natural environment, and increasing accessibility to information and opportunity. The following discussion reflects on several key trends and illustrates how these trends may affect economic growth in Eastern Ontario.

The Impact of Digitalization on Business and Industry Through Automation

Many reports[2] and analyses, particularly in the past five years, have identified a trend toward automation in many organizations, and raised concerns about how these technologies might transform workplaces and affect employment.

In *Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation,* McKinsey Global Institute makes the case that: [3]

- Automation will displace existing occupations but also create new occupations.
- Automation will be introduced slowly across the economy.
- Manufacturing and Agriculture Sectors will experience the greatest levels of automation, which will create a demand for a workforce with new skills.
- Policy leaders and business leaders will need to embrace automation's benefits.

Across Canada --- and therefore in Eastern Ontario --- the potential for automation varies greatly across industries. Nationwide, the impact could range from30 percent of work activities in educational services to 69 percent in the accommodation and food services sector. Overall, 46 percent of work activities in Canada have the potential to be automated, across all industries; this is equivalent to 7.7 million jobs[4]. To some extent, employment impacts on a country or a region will depend not just on the prominence of vulnerable sectors but also on the degree of concentration or diversification of those economies.

Of particular interest to Eastern Ontario is the work of the Brookfield Institute, that examined how factors --- such as industrial diversity --- could exacerbate or lessen the employment impact of automation. on the labour force. Brookfield Institute suggests that the less diversified a community's economy is, the more exposed that community becomes to automation risk. In other words, cities and towns that are reliant on one industry or employer will feel the impact of automation more than communities with

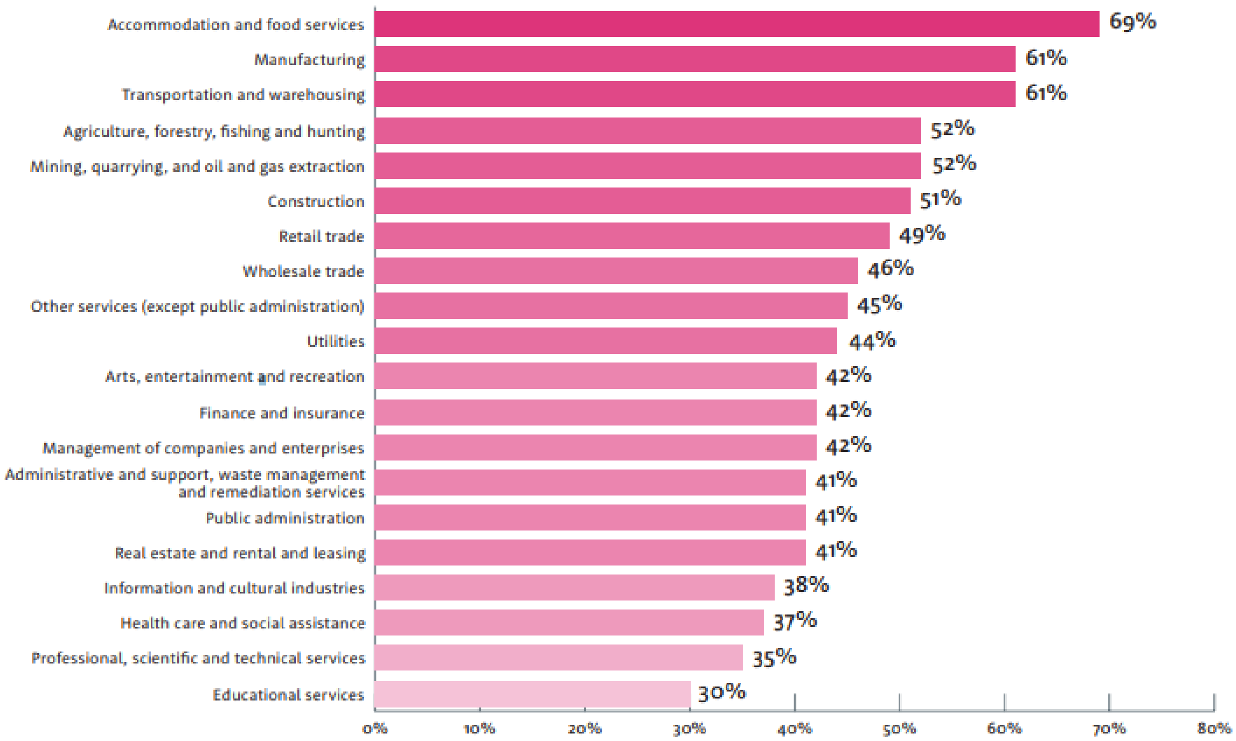
[2] Reports over the past five years from McKinsey Global Institute, Boston Consulting Group, and Brookfield Institute have noted that recent advances in automation technologies, including artificial intelligence, autonomous systems, and robotics has raised job loss fears again - and with new urgency.

[3] Ibid.

[4] BII+E analysis. McKinsey Global Institute. June 2017

multiple industries or employers. In part, this may be related to the ease with which displaced labour is reabsorbed into the local labour market.

Figure 27: Percent of Work Activities with the Potential for Automation, by Industry

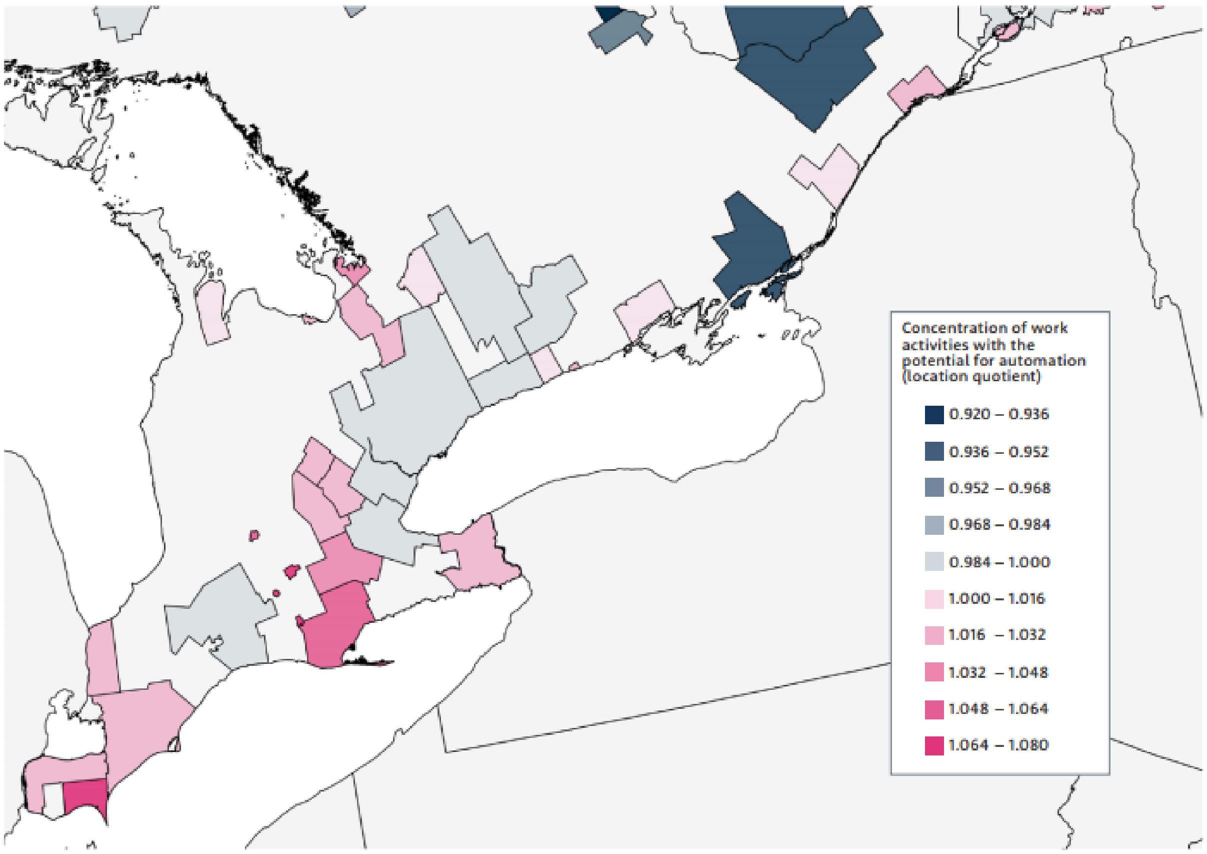


Source: McKinsey Global Institute (2017), BII+E analysis

Using industry location quotients, Brookfield Institute completed a nationwide assessment of Canada's Census Metropolitan Areas and Census Agglomerations identifying the level of automation susceptibility in each CMA/CA. Examining Southern Ontario, ***Eastern Ontario is shown to have a more diverse industry base (more blue) compared to Western Ontario (predominantly pink) suggesting it may not experience the same level of impact attributed to automation.*** This can be seen in **Figure 28.**

Automation is, however, only one impact of technology. Data analysis and consultation results suggest that Eastern Ontario's economy might be strengthened by additional introductions of a range of technologies, helping to close what appears to be a roughly $45,000 a year 'productivity gap' between Eastern Ontario and the province as a whole. Technology may enable smaller organizations to scale more quickly, augment the knowledge bases of employees to enable them to provide better customer service or make better decisions for their organizations, route the movement of goods more efficiently, reduce human area in a wide range of work tasks, and enable business leaders to better understand how their markets are changing --- and where the new opportunities are. ***A singular focus on possible job losses due to automation risks distracting decision-makers from capitalizing on technology's benefits, and the opportunity to improve existing jobs and add new ones.***

Figure 28: Susceptibility of Southern Ontario CMAs and CAs to Automation, 2011



Note: A location quotient above one indicates a higher concentration of work activities with the potential to be automated, compared to the Canadian average.

Source: Brookfield Institute, *Automation Across the Nation* (2015)

A Focus on Innovation

Both federal and provincial governments have articulated approaches to economic development that centre on innovation --- from new products, services and processes, to new business models/structures and marketing strategies. The rationale for this approach is to support the development of high-growth businesses (those with fast growth trajectories and scalable business models, that help them reach global markets). Typically, high-growth businesses are associated with 'disruptive' innovations --- those that fundamentally change an industry. However, there is also evidence that 'incremental' innovations can be a productive source of business growth as well as community resilience (because the innovations better prepare existing businesses for perturbations in their industries or sectors). There is also some evidence that 'disruptive' innovations may be more likely to emerge from larger urban settings whereas 'incremental' disruption may be more likely to arise in small towns or more rural settings.

A better understanding of the different types of innovation and the degree to which it is present across Eastern Ontario will be important to marshalling the partners in the region's innovation ecosystem to support business innovation of all types, as well as connecting innovators to the right resources to help them succeed (e.g. access to capital/public sector funding programs, intellectual property protection, expertise in penetrating foreign markets.)

The following figure describes the four major types of innovation identified by the Organization for Economic Co-operation and Development (OECD). By keeping its definition of 'innovation' broad enough to encompass all of these types, Eastern Ontario may be able to respond to a wider cross-section of innovators' needs and stimulate different kinds of economic development in different parts of the region.

Figure 29: Types of Innovation (OECD)

Source: OECD

The 2016 *Mapping the Innovation Ecosystem in Eastern Ontario* report produced by the Institute for Innovation & Technology Management at the Ted Rogers School of Management at Ryerson University, indicated that ***Eastern Ontario possesses critical assets (such as post-secondary education institutions) that can be better engaged to stimulate and support innovation-oriented business development. T***he report identified a specific gap that could be addressed: eligibility for certain programs or supports was linked to a business' life stage (e.g. start-up vs established Small/Medium Enterprise). A recommendation emerging from the mapping project was for Eastern Ontario's innovation ecosystem partners to have an eligibility guidance tool or consolidated information resource that could help businesses at different life stages easily find programs and resources that match their needs at that point in their development.

Business Models Are Changing

In today's disruptive age, established business models are under attack and completely new ones are emerging. The basic rules of the game for creating and capturing economic value were once fixed in place for years, even decades, as companies tried to execute the same business models better than their competitors did. In many ways, this approach could be characterized as more incremental strategy than disruptive. The emerging business models are now more likely to be --- or least incorporate --- platforms than traditional vertically integrated supply chains. Businesses may offer 'anything-As-A-Service' and price it on a subscription basis rather by units purchased. Rather than using traditional market research methodologies, companies may choose to engage prospective (or current) customers more intensively in product or service development, treating them as co-creators more than targets for an eventual marketing campaign.

These new businesses can be fertile ground for identification of new markets, rapid iteration of potential solutions to customer challenges, new ways of adding value (in customers' eyes), and new ways of monetizing that additional value. Working with innovation ecosystem partners, Eastern Ontario can help existing and new businesses understand the opportunities that may exist for them in adapting their business models for this new era. These considerations are just as important for established businesses as for start-ups --- especially in a region with large numbers of owners/founders who are now approaching retirement age.

Skills Development and Talent Attraction Being Addressed in New Ways

Speak to any economic development officer in Eastern Ontario and "talent attraction and reskilling existing talent" is identified as the most powerful tool for increasing competitiveness and enabling inclusive growth within a community. For businesses to be able to innovate, compete, and scale, they require people with the right technical, business and entrepreneurial skills combined with real-world and relevant experience.

Preliminary research out of Canada's Economic Strategy suggests that ***neither Canada or Eastern Ontario has enough people with the types of skills and experience needed to help businesses to scale up***. In addition, even when businesses have the skilled workers they need, investing continuously in reskilling and professional development for these workers will be necessary. There is a need to work within the formal education system (especially secondary and post-secondary) to introduce the concept of life-long learning in new ways, create new mechanisms for experiential learning and easier transitions to the workforce, and help existing and future members of the workforce with an understanding of the new skills that all members of the talent pool will require.

5. Priority Recommendations

Key Takeaways from the Current State and Upcoming Trends

In reviewing the current state of Eastern Ontario and trends facing the region, three significant takeaways emerge. These takeaways inform the broader strategic priorities that underpin the strategy and guide the development of the action plans.

Broadband and Cellular Investment Is Critical to Growing the Economy

The demand for broadband and cellular data is growing exponentially, but the region lacks the needed infrastructure to remain competitive. Businesses and individuals are making decisions to locate or relocate into areas of Eastern Ontario where broadband and cellular investment has occurred. Existing businesses have commented on the challenge the lack of broadband and cellular investment is having on their operations and productivity.

The industry analysis suggests that businesses in the region's key sectors (manufacturing, health care, professional services, education and information and cultural industries) will require ongoing broadband investment to ensure their products, services and communications are managed effectively.

The trends analysis revealed that investment in future infrastructure needs to prepare for the integration of smart technology and smart measures. Without appropriate broadband networks, these applications cannot be introduced appropriately and will further delay a community's ability to competitively attract future talent or businesses.

For a region like Eastern Ontario with a widely-dispersed population and business sector, upgrading digital infrastructure will be much more expensive than for a highly-concentrated region. EORN is currently undertaking financial analyses to better understand the real costs of remaining competitive on the digital infrastructure front. There will almost certainly be a need for innovation in the way we address this fundamental economic development need.

Public and Private Sector Employers Are Struggling to Find Talent

Employers across the region --- and indeed across the province --- are struggling with a problem that threatens to stall economic growth: job vacancies – and lots of them. Demand is high for a variety of skills, particularly those workers with the right mix of education and technical aptitude/training. As the job market continues to tighten, some employers and public agencies have begun to develop their own reskilling programs where they are training employees and developing mentoring programs to support workforce retention.

The industry analysis highlighted that while the unemployment rate of Eastern Ontario has declined, the participation rate has also declined, leading to ***competition for talent across all sectors***. Commuting patterns also suggest that the ***workforce is travelling further*** from home (longer commute) to access employment.

Businesses also want to see more effective collaboration with the region's post-secondary institutions. Opportunities for workplace learning incorporated into post-secondary programming through such channels as co-ops, internships, etc. will help to educate young people/students about the jobs available, and the skills, experience, and education needed to realize these opportunities.

Like their private sector counterparts, public organizations are also struggling to find enough skilled people to operate efficiently and deliver high-quality services. Local government is an obvious example.

Economic Development Partnerships Are Critical to Sustaining Regional Growth

In understanding how best to fulfill its mandate for regional economic development, the EOLC is considering what functions might be addressed at the local level (left hand column of the following chart) and which might be addressed at the regional level (right hand column). The emphasis in the EOLC's work is on building collaborations and partnerships across the region, creating digital and other types of infrastructure that support pan-regional work, and making the case for attention to economic development issues that affect the entire region. This articulation of functions has informed the Strategic Priorities and associated actions found in this report.

Figure 30: Strategic Priorities for Eastern Ontario

Local Economic Development Functions	Regional Economic Development Functions
• Investment Attraction	• Securing investments in Infrastructure, including Digital, Transportation and IT Platforms
• Investment Aftercare	• Networking through EOLC and Working Groups
• Business Retention and Expansion	• Provision of Business Intelligence • Digital Infrastructure • Platforms for In-Region Networking
• Economic Gardening	• Collaborations among Innovation Ecosystem Partners
• Entrepreneurial Support	• Collaborations among Innovation Ecosystem Partners
• Workforce Development for Local Needs	• Encouraging the introduction of platform(s) for Job-Seeker-Employer Matching • Pan-Regional Workforce Statistics and Skills/Education Gap Analysis
• Incubation, Acceleration and Technology Transfer	• Collaborations among Innovation Ecosystem Partners
• Community/Sector-Specific Marketing and Promotion	• Advocacy with Upper Levels of Government • Umbrella Marketing and Promotion for the Region

The challenge with this long list of potential activities is that there are never enough resources to do each item well. However, when consideration is given to how commuting patterns, supply chains, industry clusters, goods movement and labour markets spread across a region, it is easy to understand why it may make sense to tackle some activities collaboratively and regionally (e.g. marketing and promotion). A regional approach also enables local communities to leverage limited resources to achieve economies of scale and make more substantive progress on economic development initiatives than they could on their own (e.g. labour market assessment). A regional approach may also prove a more effective vehicle for advocacy on issues of a collective concern (e.g. workforce development).

Achieving progress around many of the issues facing the Eastern Ontario economy will require a network of partnerships between EOLC, its partners, the region's post-secondary community, innovation centres, the private sector, senior levels of government and economic development professionals. By definition, these networks may be 'fluid', changing as the issues and opportunities to take effective action change.

Revisiting Vision 2024

In developing the 2014 Eastern Ontario Economic Development Strategy, a vision statement was created, describing how stakeholders envisage Eastern Ontario in 2024. Many of the expectations articulated at that time remain valid today, with the exception of an added component focusing on the importance of continued investments in broadband and cellular services. For the purposes of the refreshed Strategy, the vision remains as follows:

Eastern Ontario promotes business growth as the backbone of a sustainable regional economy. Our municipalities and counties use best practices to support this growth, and our region has earned a reputation as being progressive and innovative in our collaborations with the business community. We have built a culture of partnerships with business, institutions and organizations to support the growth and development of our workforce, business communities and entrepreneurs.

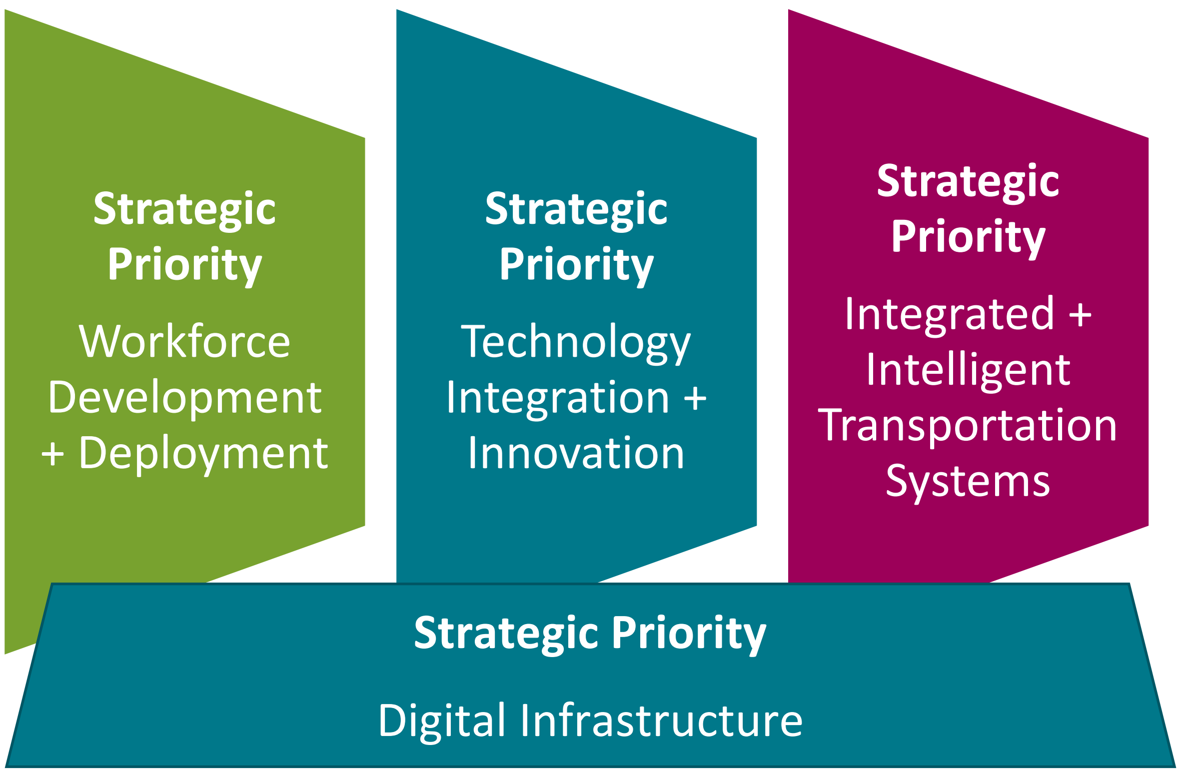
Eastern Ontario will be known for its highly skilled workforce and strong work ethic combined with a strong and diverse regional economy. People of all ages will have economic opportunity and choices for exciting work and lifelong learning. The region's economy is fuelled by its world-class educational institutions and diverse and innovative business community, an integrated and intelligent transportation system that enables the effective and efficient movement of goods, people and ideas across the region, and a fibre-optic broadband and cellular network prepared for the changing landscape of technology, business and people needs in a constantly changing world.

Eastern Ontario will be a dynamic and prosperous place to live, work and play in harmony with the natural environment. The region's vibrant rural and urban communities, steeped in tradition and rich in history, will continue to attract people and visitors seeking a high quality of place experience. Growth of the region's communities will respect and incorporate the area's natural assets, ensuring a positive legacy for future generations.

Strategic Priority Recommendations

The 2014 Eastern Ontario Economic Development Strategy priorities were examined and tested with the stakeholder community during the completion of this refresh. They were also considered in light of new data and research that wasn't available in 2014. Based on that input, it was determined that the Economic Development Strategy would continue to be underpinned by the three strategic priorities centred on cross cutting regional economic development opportunities that have implications for all sectors of Eastern Ontario's economy.

Figure 31: Strategic Priorities for Eastern Ontario



The associated actions contained in the strategy serve to advance activities around each the three priorities and are provided and prioritized as **SHORT TERM (12-24 months)**, and **MEDIUM TERM (36-60 months)**. In reflecting on the input for the strategy refresh, the action plan has been updated to address new issues and opportunities that have emerged and efforts to implement the 2014 strategy. The activities of the EOLC and its Working Groups associated with each priority have also been reflected in the action plan to illustrate the needed commitment to the Strategy's implementation.

It should be noted that prioritization of these recommendations is intended to reflect a logical sequence of activities, with longer term efforts building on the work and results of the short-term actions. More detailed implementation plans, developed in conjunction with the Eastern Ontario Leadership Council, the various Working Groups and partner organizations that have a role in advancing each priority, will be required to address needed resources, partnership needs and detailed timing of each action.

- **Strategic Priority: Workforce Development and Deployment**
    - *Aspirational Outcome*: Eastern Ontario is recognized as having the capacity to identify and respond quickly to changing labour market conditions
    - *Aspirational Outcome*: Pan-regional data, analytical capability and collaborative relationships are in place to accelerate match-making between employers and workforce talent."

  Strategic Priority: Technology Integration and Innovation
    - *Aspirational Outcome*: Increase in the number of businesses starting, growing and moving into the region
    - *Aspirational Outcome*: Eastern Ontario is recognized as having a truly collaborative, client-centred innovation ecosystem
    - *Aspirational Outcome*: Productivity-enhancing technologies and other innovations are being introduced into existing businesses, increasing competitiveness and enabling pursuit of larger markets
- **Strategic Priority: Integrated and Intelligent Transportation Systems**
    - *Aspirational Outcome*: Eastern Ontario's transportation systems are moving goods and people safely and efficiently, within the region and beyond.
    - *Aspirational Outcome*: Eastern Ontario's transportation systems are at the forefront of understanding and incorporating major technology and innovation developments and opportunities into transportation modes and infrastructure
- **Strategic Priority: Digital Infrastructure**
    - *Aspirational Outcome*: Eastern Ontario's Cell Gap project is being implemented and opportunities to further improve broadband are also being pursued.
    - *Aspirational Outcome*: Eastern Ontario is recognized as being a highly 'connected' region, able to leverage technology to stimulate economic development across the region.

Strategic Priority: Workforce Development + Deployment

Aspirational Outcomes

Eastern Ontario is recognized as having the capacity to identify and respond quickly to changing labour market conditions

Pan-regional data, analytical capability and collaborative relationships are in place to accelerate match-making between employers and workforce talent

Recommendations	Potential Partners (Leads to be designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Near-Term (12-24 months)		
1. Continue to invest in labour market intelligence by purchasing 3rd party data and analytical tools. Connect with existing job vacancy portals that target key sectors (ex. ONWARD for municipal government job vacancies). The additional labour market intelligence should inform: a. Employer One Survey Results b. Local Workforce Development and Skills Training Strategies and Programs c. Local Economic Development Programs (i.e. BR+E) d. Post-Secondary Curriculum Development e. Employer search strategies f. Region-wide talent attraction strategies and programs	**Partners** Eastern Ontario Workforce Training Boards Ontario East Economic Development Corporation Post-Secondary Education Institutions Municipal/County Economic Development Offices Government of Ontario First Nations communities	• [EOLC] Arrange access to supplementary financial, economic and business data for monitoring regional economy • [EOLC] Organize and operate an event through which to practice rapid deployment of analytics and foresight techniques • [WG] Participate in the proposed rapid deployment of analytics/foresight event, including on-site development of insights and actionable ideas on a chosen workforce issue

Recommendations	Potential Partners (Leads to be designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Near-Term (12-24 months)		
2. Working alongside the Eastern Ontario Workforce Training Boards, the Post-Secondary Task Force, regional school boards, and municipal economic development organizations provide essential data and workforce services to support Eastern Ontario's Workforce Development objectives. Specific tactics can include: a. Identifying and promoting sources of funding to support businesses/industries' capabilities towards the recruitment and retention of workers. b. Working with regional school boards to improve educational facilities and curricula for pre-K-12 and higher education that reflect the diversity of career pathways in the EO economy. c. Identify opportunities to build partnerships between schools and high growth businesses through apprenticeships, mentoring programs and other training/resource sharing programs. d. Continue to collect and gather current (real-time) labour demand and labour supply data to determine where gaps are anticipated and evaluate the strength of the regional talent pipeline. e. Working with the Workforce Training Board, address training and adult skills development (reskilling) associated with technology investment and innovation in the workplace.	**Partners** Ontario East Economic Development Commission EOLC Workforce Development Working Group Eastern Ontario Workforce Training Boards Post-Secondary Education Institutions Regional School Boards Municipal/County Economic Development Offices First Nations communities Private Sector	• [EOLC] Create and populate an open data repository, with appropriate data descriptions and access/protection processes • [WG] Execute at least one workforce attraction program/campaign/tactic into a proximal city/urban area • [WG] Take the pulse of the region's labour market (in 2020) to identify shifts in employment patterns and models, gaps by type of worker/skill sets, and opportunities for skills upgrading

Recommendations	Potential Partners (Leads to be designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Near-Term (12-24 months)		
3. Monitor and develop initiatives to act on insights from available labour market information (both demand and supply). Data should be collected on: a. Migration patterns of Eastern Ontario residents who leave for post-secondary. Track where they go, what programming they complete, and if/when they return (to Eastern Ontario). b. Occupations and skills associated with Eastern Ontario residents who commute for employment outside of their main resident community. c. Current labour supply trends, training and post-secondary preferences of students, and the emergence of new jobs as a result of technology and economic shifts. d. Current and probable labour demand trends across businesses (i.e. emergence of new skillsets required across industries and sectors)	**Partners** Ontario East Economic Development Corporation Post-Secondary Education Institutions Municipal/County Economic Development Offices Eastern Ontario Workforce Training Boards Private Sector First Nations communities Government of Ontario	• [WG] Develop a workforce retention/re-attraction strategy focused primarily on graduates of post-secondary education or economic sectors in other jurisdictions (e.g. 'oil patch', military, or the UK.) • [WG} Develop a *commuter strategy* that identifies specific *commutersheds* that are operating ineffectively due to workforce *immobility,* and develop *unconventional (non-public transit) models* that would connect workers to employers

Recommendations	Potential Partners (Leads to be designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Near-Term (12-24 months)		
4. Engage area municipalities in the promotion of preferred job posting services across the region. The marketing campaign should address: a. Local and regional job posting services available to businesses (approved by local and regional economic development offices). b. Local and regional career pathway support for job seekers (workforce boards).	**Partners** EOLC Workforce Development Working Group Eastern Ontario Workforce Training Boards Municipal/County Economic Development Offices First Nations communities Chambers of Commerce Industry Associations Private Sector	• [EOLC/WG] Develop and implement a workforce development program/project for three high-importance sectors (as determined by the EOLC)

Recommendations	Potential Partners (Leads to be designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Mid-Term (25-60 months)		
5. Continue to regularly engage regional businesses and high growth potential businesses on the impact of technology and automation on productivity and job creation and retention. The discussion should seek to inform: a. Local success stories on the positives of technology introduction/ innovation in the workplace and use of existing programs and supports. b. Local approaches to multi-skilling (constant retraining/rotation of duties) existing labourers and the opportunities/challenges associated with that process. c. Innovative ways to address unemployment caused by technology investments. d. Opportunities to enhance business productivity through the integration of technology and automation.	**Partners** Chambers of Commerce Industry Associations Private Sector Innovation Ecosystem Partners/Support Services Technology companies and other suppliers Eastern Ontario Workforce Training Boards Ontario East Economic Development Corporation First Nations communities	• [WG] Execute an additional workforce attraction program/campaign into another jurisdiction (beyond Eastern Ontario)

6. Advocate for increased and improved career pathway counselling and training for teachers/guidance counsellors through consistent education on jobs in the region's key sectors (ex. Health Care, Public Administration, Manufacturing, Retail, Tourism and Agriculture). Consider opportunities to: a. Develop a program of business tours, seminars, and hands-on learning opportunities for students to demonstrate the broad range of employment opportunities in Eastern Ontario (ex. improve student perceptions on "dirty" manufacturing jobs by showcasing modern manufacturing facilities and higher-skill jobs) b. Share employee experiences as testimonials that can be shared through local economic development marketing campaigns that are targeting new residents and families.	**Partners** EOLC Workforce Development Working Group Eastern Ontario Workforce Training Boards Post-Secondary Education Institutions/Regional School Boards Economic Development Offices First Nations communities	• [EOLC] Arrange meetings with upper levels of government (both provincial and federal) to determine how to advance 'next' priorities • [WG] Develop and implement two additional workforce development programs/projects in two additional high-importance sectors
Recommendations	**Potential Partners (Leads to be Designated by Working Group)**	**Leadership Roles for EOLC and/or Working Group**
Mid-Term (25-60 months)		
7. Convene an annual summit with economic development, employment agencies, chambers, employers and post-secondary institutions to evaluate skill and occupation needs and opportunities in the region and match those needs with available training programs.	**Partners** Eastern Ontario Workforce Training Boards Ontario East Economic Development Corporation Post-Secondary Education Institutions First Nations communities	• [WG] Implement at least two projects to increase workforce mobility in two different commuter sheds that do not have (in 2018) comprehensive public transit

8. Explore opportunities to increase the migration of new residents (ex. immigrant attraction, Indigenous integration) and re-entry to the labour force as a means to supporting local workforce demand and address declining population. Consideration should be given to: a. Becoming a major partner in the Ontario Labour Market Partnerships' immigrant focused workforce development project. b. Building relationships between Toronto, Ottawa and Montreal's international airports to increase Eastern Ontario's presence at the airports' international student and newcomer booths. c. Supporting workforce related content on regional immigration portals. d. Supporting the development of second career opportunities through better integration of First Nations workers, former entrepreneurs, individuals returning from social assistance programs.	**Partners** EOLC Workforce Development Working Group Local Immigration Partnerships First Nations communities Eastern Ontario Workforce Training Boards Post-Secondary Education Institutions Municipal/County Economic Development Offices Private Sector First Nations communities	• [WG] Execute the retention/re-attraction strategy focused on PSE graduates for at least one full year

Defining Successes
• At least one workforce *attraction* program/campaign has been executed into a proximal city/urban area • A workforce *development* program/project has been developed and implemented for each of five high-importance sectors • At least two projects have been implemented to increase *workforce mobility* in commuter sheds without comprehensive public transit Possible Performance Metrics • Net change in employment • Number of job vacancies and hires • Number of workers with defined qualifications • Number of qualified workers for target sector and occupations • Educational/skill levels of jobs by industry • Jobs filled by graduates in the community • Employment by sector and by location • Hiring patterns of growing sectors • Employment gap by age

Strategic Priority: Technology Integration + Innovation		
Aspirational Outcomes		
Increase in the number of businesses starting, growing and moving into the region		
Eastern Ontario ecosystem is recognized as having a truly collaborative, client-centered innovation ecosystem		
Productivity-enhancing technologies and other innovations are being introduced into existing businesses, increasing competitiveness and enabling pursuit of larger markets		
Recommendations	**Potential Partners (Leads to be Designated by Working Group)**	**Leadership Roles for EOLC and/or Working Group**
Near-Term (12-24 months)		
9. Continue to advocate and push for ongoing investments related to broadband and cellular infrastructure.	**Partners** Eastern Ontario Regional Network Technology companies Innovation ecosystem partners/support services	• [EOLC] Continue advocacy for EORN Cell Gap and other ICT initiatives; establish strong regional presence on federal front

Recommendations	Potential Partners (Leads to be Designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Near-Term (12-24 months)		
10. Work with the Government of Ontario, Community Futures Ontario East, Ontario East Economic Development Corporation, Ontario Network of Entrepreneurs and local Chambers to improve access to capital (ex. government funds, angel investment funds, financial institution funds) by developing a regional applicant guide that identifies a list of all available investment support programs and funds. The applicant guide should be made available online across various partner websites. The guide should seek to inform: a. Available investment support programs and funds by business sector and size. b. Case studies of existing businesses that are currently or have used investment support programs or funds. c. Instructions on successful application bids.	**Leads** EOLC Technology Integration + Innovation Working Group Ontario East Economic Development Corporation Community Futures Ontario East Government of Ontario Ontario Network of Entrepreneurs **Partners** Municipal/County Economic Development Offices Chambers of Commerce Eastern Ontario Regional Network Financial Institutions Angel Investors Network	• [WG] Develop and implement an innovation-ready certification process, targeted initially at the MUSH sector • [WG] Develop and share informational and training resources on all forms of *innovation* as well as *sales* to assist existing businesses and early stage companies

Recommendations	Potential Partners (Leads to be Designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Near-Term (12-24 months)		
11. Support innovation in SMEs by promoting and facilitating linkages between existing post-secondary institutions, regional business networks, existing incubators and accelerators, and the economic development community. This should address: a. Increasing R+D capacity within SMEs. b. Improved support for start-ups and early stage companies. c. Support for commercialization activities. d. Increased business model innovation and process innovation.	**Leads** EOLC Technology Integration + Innovation Working Group Eastern Ontario Regional Network **Partners** Ontario East Economic Development Commission Community Futures Ontario East Post-Secondary Education Institutions Chambers of Commerce EO Post-Secondary Task Force	• [WG] Design and launch a program/process through which existing businesses can transition to new ownership and management (*succession*) • [WG] Develop and share informational and training resources on all forms of *innovation* as well as *sales* to assist existing businesses and early stage companies • [WG] Design and launch a series of regular advancing technologies *webinar briefings* for the region's innovators and receptor organizations

Recommendations	Potential Partners (Leads to be Designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Mid-Term (25-60 months)		
12. Work towards the implementation of a Regional Innovation program through potential tactics such as: a. Host an innovation summit or conduct workshops or other mind-gathering events that showcases the existing innovation ecosystem to Eastern Ontario businesses, and how the innovation ecosystem can assist their R&D operations, product innovation, marketing innovation, or customer relationship models. b. Conduct an bi-annual business survey that tracks markers of innovation (all types) and gathers case study information c. Recommends priorities for innovation support. This could include an examination of government policies and budget resources as it relates to investing in 'soft' infrastructure (ex. business coaching. Prototyping and lab resources, data repositories, incubators, and accelerators). d. Establish a methodology and tracking system that evaluates the community impact associated with innovation.	**Leads** EOLC Technology Integration + Innovation Working Group **Partners** Municipal/County Economic Development Offices Ontario East Economic Development Corporation Eastern Ontario Regional Network Post-Secondary Education Institutions Private Sector	• [EOLC] Arrange access to supplementary financial, economic and business data for monitoring regional economy • [WG] Participate in the proposed rapid deployment of analytics/foresight event, including on-site development of insights and actionable ideas on a chosen technology or innovation-related issue • [WG] Create an ongoing forum or platform, open to all innovation ecosystem partners, to leverage in and out of region expertise in service to innovators, potential first customers and receptor organizations

Defining Successes
• A forum or platform has been created, open to all innovation ecosystem partners, to leverage in and out of region expertise in service to innovators, potential first customers and receptor organizations • An innovation-ready certification has been developed and implemented with at least 20 members participating • Developed and shared resources on all forms of *innovation* and *sales* to assist existing businesses and early stage companies • Developed and launched a program/process through which existing businesses can transition to new ownership and management Possible Performance Metrics • Number of new business starts • Number of jobs created by new businesses • Number of businesses registered or licensed • Tech transfer activity from local post-secondary institutions to area businesses • Number of R&D grants for assisted businesses • Number of innovation awards • Number of new products/processes adopted in Eastern Ontario municipalities

Strategic Priority: Integrated + Intelligent Transportation Systems		
Aspirational Outcomes		
	**Improve Eastern Ontario's access to major domestic and international markets**	
	**Ensure regional and local transportation infrastructure is responsive to the major technology trends**	
Recommendations	**Potential Partners (Leads to be Designated by Working Group)**	**Leadership Roles for EOLC and/or Working Group**
Near-Term (12-24 months)		
13. Assess Eastern Ontario's position as a strategic hub for international and domestic trade through an evaluation of the region's transportation system (ports, roads, air, and rail). This should include: a. Transportation infrastructure projects that may be needed to help advance critical economic development opportunities associated with port, highway and rail development. b. Encourage municipal economic development offices to promote the region's transportation system as a key regional advantage that will support growth of businesses and investment. c. Prioritize transportation investments that support the growth of supply chains associated with key sectors of the regional economy.	**Leads** EOLC Integrated + Intelligent Transportation Systems Working Group Ontario East Economic Development Corporation **Partners** Municipal/County Economic Development Offices Government of Ontario	• [WG] Gather data from municipalities to validate vehicular traffic patterns across the region • [WG] Organize discussions with stakeholders representing multiple modes of transportation to identify barriers to movement of goods within the region, and infrastructure investment opportunities

Recommendations	Potential Partners (Leads to be Designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Near-Term (12-24 months)		
14. Conduct research, development and in site testing on smart transportation infrastructure and its applications across multiple government boundaries. Research should focus on: a. Examining the region as a test bed (feasibility and readiness) for autonomous vehicles and other ICT applications associated with the vehicular transportation system. b. Pilot projects and case studies demonstrating smart transport real-time dynamic signalling to manage vehicle flow of goods and services, congestion and commuter patterns. c. Working with research partners, transport providers, technology vendors and other potential users to identify emerging technologies that could be explored and deployed in Eastern Ontario.	**Leads** EOLC Integrated + Intelligent Transportation Systems Working Group Ontario East Economic Development Corporation Eastern Ontario Regional Network **Partners** Municipal/County Economic Development Offices Government of Ontario Post-Secondary Education Institutions Technology companies	• [WG] Develop the concept for a regional test bed for transportation-related technologies and networks; test the concept with potential funders • [WG] Achieve an 'open access' integrated, pan-regional 511 system that also includes MTO data • [WG] Introduce a pan-regional permitting system for over-sized overload shipments through the region, including via provincial highways

Recommendations	Potential Partners (Leads to be Designated by Working Group)	Leadership Roles for EOLC and/or Working Group
Mid-Term (25-60 months)		
15. Undertake Region-wide Transportation Initiatives that targets the movement of both goods and people. The strategy should seek to: a. Address major transportation challenges Eastern Ontario expects to face over the next few decades, this should include anticipating non-traditional infrastructure that may emerge from new technology/innovation processes. b. Encourage sustainable modes of transportation such as multiple person transportation, carpooling, goods and services transport across the region. c. Optimize the use of existing and new transportation infrastructure and services through innovative technologies. d. Inform and support local governments on connecting local transportation systems into region-wide transportation initiatives. e. Build the business cases for, and articulate needed upgrades to **regionally beneficial** transportation infrastructure (e.g. airports, rail, ports, highways 401, 17/417/ 7,2) f. Explore creative financing solutions that support the effective integration of existing and planned region-wide transportation infrastructure across Eastern Ontario.	**Leads** EOLC Technology Integration + Innovation Working Group Municipal/County Economic Development Offices Ontario East Economic Development Corporation **Partners** Government of Ontario Chambers of Commerce Eastern Ontario Regional Network VIA Rail	• [WG] Develop and launch expedited shipping 'channels' for moving goods from or across the region to Europe and the Eastern Seaboard of the U.S. • [WG] Implement the first phase of the Near Term regional test bed concept with specific reference to autonomous vehicles or other forms of mobility • [WG] Continue to advance the region's interest in VIA's 'northern route' and lakeshore route optimization with VIA and federal decision-makers

Defining Successes
• Achieved an 'open access' integrated, pan-regional 511 system • Introduced a pan-regional permitting system for over-sized overload shipments through the region, including via the 401 • Data analysis is complete and business case is built for two major *regional* transportation infrastructure investments • Region's interest in advancing VIA's 'northern route' and lakeshore route optimization is known to VIA and federal decision-makers Possible Performance Metrics • Number and % of road network for which dynamic traveller information (ex. notice of upcoming hazards, construction, real-time traffic) is made available to the public • Carriers' satisfaction with time and cost to get goods through the region • Reduced commuting time and cost for people travelling back and forth to work • Capital investment in transportation and related infrastructure

6. Governance and Implementation

The 2014 Strategy noted that the level of effort and coordination required to successfully implement the Eastern Ontario Economic Development Strategy would be significant. For that reason, the strategy recommended a governance structure that would allow key stakeholders to the implementation process to regularly come together to make well informed, strategic and regional contributions to economic development.

The EOLC itself is a membership-based organization with representation from the Eastern Ontario Wardens' Caucus (EOWC), the Eastern Ontario Mayors' Caucus (EOMC), the Eastern Ontario Regional Network (EORN), the Ontario East Economic Development Commission (Ontario East), and the Community Futures Ontario East. Each organization designates its representatives to serve on the Council; those representatives are expected to serve as an information conduit between their members and the EOLC.

The Eastern Ontario Leadership Council was created to oversee the implementation of the Eastern Ontario Economic Development Strategy but it is also intended to function as a forum for thinking and acting regionally and enable decision-making and effective collaboration between various agencies and organizations. It also provides a focal point for the implementation and monitoring of the long term regional economic development strategy.

In light of the feedback received during the refresh consultation effort these parameters have been adjusted to reflect the need to better leverage the leadership and influence of the EOLC. Specifically, the EOLC should be responsible for:

- Overseeing the creation and efforts of any related Working Groups;
- Serving as a conduit for information and policy positions with stakeholders and senior levels of government;
- Tracking and reporting on the performance of the Eastern Ontario economy using agreed upon metrics;
- Tracking and reporting on the overall progress of the implementation of the Strategy using agreed upon metrics;
- Undertaking evidenced based advocacy on key issues as necessary or as informed by the Working Groups;
- Fostering more collaboration among innovation ecosystem partners; and
- Providing ongoing input on the approach to EODF/EODP programming and recommend resource allocation priorities based on the Eastern Ontario Economic Development Strategy

Three Working Groups have been formed to assist with the implementation of Economic Development Strategy – Workforce Attraction, Development and Deployment, Technology Integration and Innovation and Integrated and Intelligent Transportation Systems. Terms of Reference have been prepared for each of the Working Groups. These groups are comprised of a Chair/Co-Chair responsible for maintaining membership on the Working Groups drawing from a wide variety of local and regional stakeholders including industry associations and business representatives. While the Working Groups are still in the early stages of determining their approach/plans to implementing the Economic Development Strategy, it will important to provide regular communication of these efforts to EOLC to ensure effectiveness and accountability. Updates on the progress of the Working Groups should be provided to the EOLC quarterly.

The Working Groups are intended to act as:

- Catalysts for engaging on pertinent issues related to each of the strategic priorities; and
- To further develop, prioritize and advise the EOLC on actions related to the implementation of the Economic Development Strategy.

The operation of EOLC will continue to need to be supported financially by both the upper and single tier municipalities, as well as senior levels of government. While there are opportunities to contract out some of the needed services to a stakeholder or outside organization (e.g. Ontario East Economic Development Commission, Eastern Ontario Regional Network) this would need to be done in consideration of their mandates and the longer-term sustainable funding that will be required to ensure the effective implementation of the Eastern Ontario Economic Development Strategy.