

4 INNOVATION UPDATE

The Planning and Economic Development Committee recommends the adoption of the recommendation contained in the following report dated March 22, 2012 from the Executive Director, Corporate and Strategic Planning.

1. RECOMMENDATION

It is recommended that Council receive this report for information.

2. PURPOSE

This report provides an update on the status of various innovation initiatives across the Region identified through the Economic Development Action Plan process.

3. BACKGROUND

The foundation of the new Economic Development Action Plan is being built on the identification and development of the innovation network

In September 2011, Council approved the process and direction for the development of a new Economic Development Action Plan with a focus on innovation. Innovation is defined as transforming ideas into useful commercial and social outcomes. Given the target of 280,000 new jobs in York Region by 2031, there is a need to develop a plan and programs to facilitate the creation and retention of jobs in the Region that maintains a healthy and sustainable live-work balance.

In the rapidly changing economic and social environment that exists, prosperity will depend upon the support and development of creative people, companies and institutions – the innovation network. The Economic Development Action Plan is designed to identify, map, connect and support this network and promote the development of new assets, including companies and people.

4. ANALYSIS AND OPTIONS

Action plan themes are emerging through consultations that suggest a path for achieving economic prosperity

Staff previously reported on key themes identified in the consultation process to build an Economic Development Action Plan. These continue to be refined as consultations progress, and currently include:

1. Providing infrastructure to support innovation, including bandwidth
2. Developing the innovation network and hubs that connect businesses to opportunities
3. Developing a greater post-secondary and research presence
4. Developing a strong, common marketing message
5. Creating THE place to live, work and invest, including appropriate real estate
6. Developing a viable workforce

In combination, the successful delivery of programs that support these themes will assist in creating a framework for companies to innovate and grow.

Innovation assets and initiatives are being identified that support the action plan themes

The research and consultation work being undertaken as part of the Action Plan development process is beginning to reveal a strong and extensive picture of innovation occurring across York Region. Some of the noteworthy assets and initiatives identified to date are summarized under the following key themes 1, 2, 3, and 6.

1. Providing infrastructure to support innovation, including bandwidth

Enhancing and extending network connections across the Region have been consistently identified as critical to support existing business growth, and to attract and expand research functions. Initiatives identified include:

- Introduction of direct connections (points of presence) for the Ontario Research and Innovation Optical Network (ORION) within the Region; ORION is an ultra high-speed (100GB) fibre optic network that connects Ontario's research and education institutions to one another, and to other research and development networks and partners across Canada and around the world, including advanced digital accelerator and incubation facilities. Points of presence would provide network "on-ramps" for research-focused companies and institutions, making York Region a much more desirable location for such activities. Discussions are underway with ORION to facilitate the establishment of key points of presence in the Region.

- Introduction of an Intelligent Communities initiative; the Intelligent Communities Forum (ICF) seeks to share the best practices of the world's Intelligent Communities in adapting to the demands of the next generation broadband economy, in order to help communities everywhere find sustainable renewal and growth. ICF recognizes the world's top seven Intelligent Communities annually. Last year, Windsor and Stratford received an international profile for being in the top seven. This year, three Canadian cities are in the top seven: Quebec City, Saint John NB and Stratford. Canada is the only country to have multiple cities in the top seven. To support this in York Region, the first Business Innovation in Changing Times event for 2012 will be held on May 23 and 24 at Kingbridge Conference Centre, and will be themed around developing York Region as an Intelligent Community.
- i-Canada community readiness evaluation tool: i-Canada is dedicated to the creation of smart communities across the country, through the use of ultra-high-speed networks, for a globally competitive economy. An evaluation tool developed in partnership with the ICF is available for communities to assess their current state and ability to support growth in the broadband economy. A partnership in the Region is being developed to identify and secure funding that will allow the communities to undertake the assessment as a step toward creating a sustainable network.

2. Developing the innovation network and hubs that connect businesses to opportunities

Significant activity is occurring across the Region relating to research, innovation and hub development. Innovation Hubs are defined as facilities, partnerships, and entities that form in a community to develop and promote innovation in a particular field. As initiatives are identified, staff is engaged in evaluating the level of support needed and how they might be connected to others.

- The Innovation Initiative: The Region is supporting the development of a thought leader forum designed to bring key business and community leaders together on a regular basis to identify areas of focus in innovation and help establish solution paths. Participants include current and former senior leaders from industry including IBM, Compute, and Iridium; from academia including York University and Seneca College; from the three hospitals in Region; from community agencies including the United Way, and from The Regional Municipality of York.
- Regional Hospital Network: The three Regional hospitals in York Region are meeting regularly to discuss ways to develop innovative healthcare delivery solutions that also take advantage of and help build local business innovation.
- Southlake Regional Health Centre Innovation Roundtable: Southlake conducted its first Innovation Roundtable, bringing together several small and medium sized private companies/start-ups from a variety of sectors with Southlake's senior leadership team. Community partners identified current research, development and

innovation initiatives in relation to Southlake's strategic areas of focus. The Roundtable served as an opportunity for dialogue on enablers to private sector collaboration with health care, barriers, systemic issues, opportunities and convergence potential.

- Emerging/potential hubs: Various locations across the Region have been identified as places and/or activities around which innovation hubs can be established. Some examples include the Kortright Centre for Conservation in Vaughan as a sustainable living/renewable energy hub, Southlake Regional Health Centre in Newmarket as a medical research centre, the proposed Water Centre in Georgina with an education and research focus; the Koffler Scientific Reserve in King for research and education in biodiversity, ecology and conservation biology, food production related centre around the University of Guelph research facility in the Holland Marsh in King.

3. Developing a greater post-secondary and research presence

The Action Plan consultations have raised the lack of a formal major university campus in York Region as an issue that needs to be addressed. Major centers of innovation globally are typically anchored by a significant post-secondary institution with a research mandate.

During the Fall 2011 throne speech, the Province unveiled plans to announce three new university satellite campuses in Ontario through a call for proposals sometime in early 2012. Several jurisdictions in proximity to the Greater Toronto Area are on record as intending to develop satellite campuses in partnership with existing universities, and in particular, Barrie, Brampton and Milton have been cited as potential sites.

- The Town of East Gwillimbury has announced their intent to put forward a proposal to the Province for a new university satellite campus through the proposal call. The desire to have a significant university presence has been expressed across the Region through the consultations. The level of interest identified in this kind of initiative suggests it may be beneficial to put forward a potential site or sites within York Region in a coordinated fashion.

The research and inventory work is identifying numerous post-secondary institutions operating within York Region in various capacities relating to research and innovation.

- Seneca College has two major campuses within York Region, and colleges in Ontario have recently been recognized as formal centres for provincial research funding through the Colleges Ontario Network for Industry Innovation (CONII).
- York University has embedded researchers in Southlake Regional Health Centre and York Central Hospital, and York University's Innovation York commercialization office is located at the Markham Convergence Centre.

- University research partnerships around sustainability and renewable energy are operating at the Kortright Conservation Centre with Ryerson University, University of Guelph, University of Toronto, York University, Humber College and George Brown College.
- The University of Toronto operates a biodiversity, ecology and conservation program at the Koffler Scientific Reserve in King.
- The University of Guelph operates the Muck Crops Research Station in the Holland Marsh in King.

In addition, there are significant private sector research facilities and initiatives operating within the Region. Four of Canada's top 10 corporate research and development spenders are headquartered in York Region. The identification and awareness of these activities will allow for better inter-connectivity and potential leveraging of efforts. Some significant examples include:

- **IBM Software Development Lab**
With over 2,500 employees, the Toronto lab is the largest software lab in Canada and the third largest in all of IBM worldwide. It is one of the only North American labs that house development for all five major software brands
- **GE Grid IQ™ Innovation Centre**
GE's Grid IQ™ Innovation Centre will drive research and development to create new innovation-related jobs. The 200,000 square foot Centre currently under construction will develop and manufacture grid modernization technologies and will encompass a global testing and simulation lab. The building is expected to open in July 2012.
- **AMD Research and Development Graphics Processor Facility**
Ontario government awarded AMD with a five-year grant of 56.4 million to fund and research and development activities for the development of AMD's leading edge Fusion family processors. This is the largest AMD R&D centre outside of the United States.
- **Magna Electric Vehicle Research**
Magna International in partnership with the Stronach Group joined to pursue opportunities in the vehicle electrification business. With the vision to be the worldwide leading partner for engineering, integration and production of innovative solutions for future mobility with regards to hybrids and electric vehicles. Magna E-Car Systems provides components and systems for electric mobility.
- **Wireless Technologies Research and Development**
The 46,000 square foot Huawei's headquarters includes sales and marketing capabilities as well as state-of-the-art test lab for wireless R&D

4. Developing a viable workforce

A sufficient and skilled workforce has been identified through consultations as another key to future prosperity. The competition for skilled workers is happening on a global scale. The Regions' future labour force will depend upon immigration.

- Economic Strategy Branch staff are collaborating with the Strategic Service Integration and Policy Branch of Community and Health Services to address the needs of internationally educated professionals through a conference scheduled for the Fall of 2012. The one day event is designed to build innovative networks between York Region's internationally educated professionals, newcomer entrepreneurs and stakeholders such as employers, educational institutions, government, licensing bodies and associations. Unique to the York Region IEP Conference is the additional focus on entrepreneurs and the supports needed to start and manage their own business.

Link to Key Council-approved Plans

The Region has taken positive Council adopted steps to recognize economic prosperity and vitality as key to the Region's future. The approved *2011 to 2015 Strategic Plan* identifies completion of the Economic Development Action Plan as a major activity for this term of Council under the section entitled "Increase the Economic Vitality of the Region".

Additionally, *Vision 2026* recognizes "A Vibrant Economy" as one of its eight goals stating **"In 2026, York Region will be renowned for its advanced technology, innovative businesses, supportive business infrastructure and highly skilled resident workforce."** Similarly, the draft version of *Vision 2051* includes "An Innovation Economy" as one of the eight goal areas.

5. FINANCIAL IMPLICATIONS

The Economic Development Action Plan is being undertaken primarily with in-house resources. External consultants and service providers are being engaged for portions of the research and process facilitation work. All related initiatives are included in the approved 2012 budget.

6. LOCAL MUNICIPAL IMPACT

Each of the local municipalities has existing assets and initiatives that support innovation and form part of the Regional network. Local municipalities are an integral component of the Region's economic strategic direction and will be key partners in developing the innovation assets and network.

7. CONCLUSION

The foundation of the new Economic Development Action Plan is being built on the identification and development of the innovation network. Action Plan themes are emerging through the consultations that suggest a path for achieving economic prosperity, including:

1. Providing infrastructure to support innovation, including bandwidth
2. Developing the innovation network and hubs that connect businesses to opportunities
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The research and consultation work being undertaken as part of the Economic Development Action Plan process is beginning to reveal a strong and extensive picture of innovation occurring across York Region. That picture will be utilized to develop common messages to market the Region as a leading jurisdiction.

A draft Economic Development Action Plan is scheduled to come before Committee in June of 2012.

For more information on this report, please contact Doug Lindeblom, Director, Economic Strategy at (905) 830-4444, Ext. 1503.

The Senior Management Group has reviewed this report.