

2017 - 2022 ECONOMIC DEVELOPMENT STRATEGY

GLOBAL
INVESTMENT ATTRACTION
GROUP

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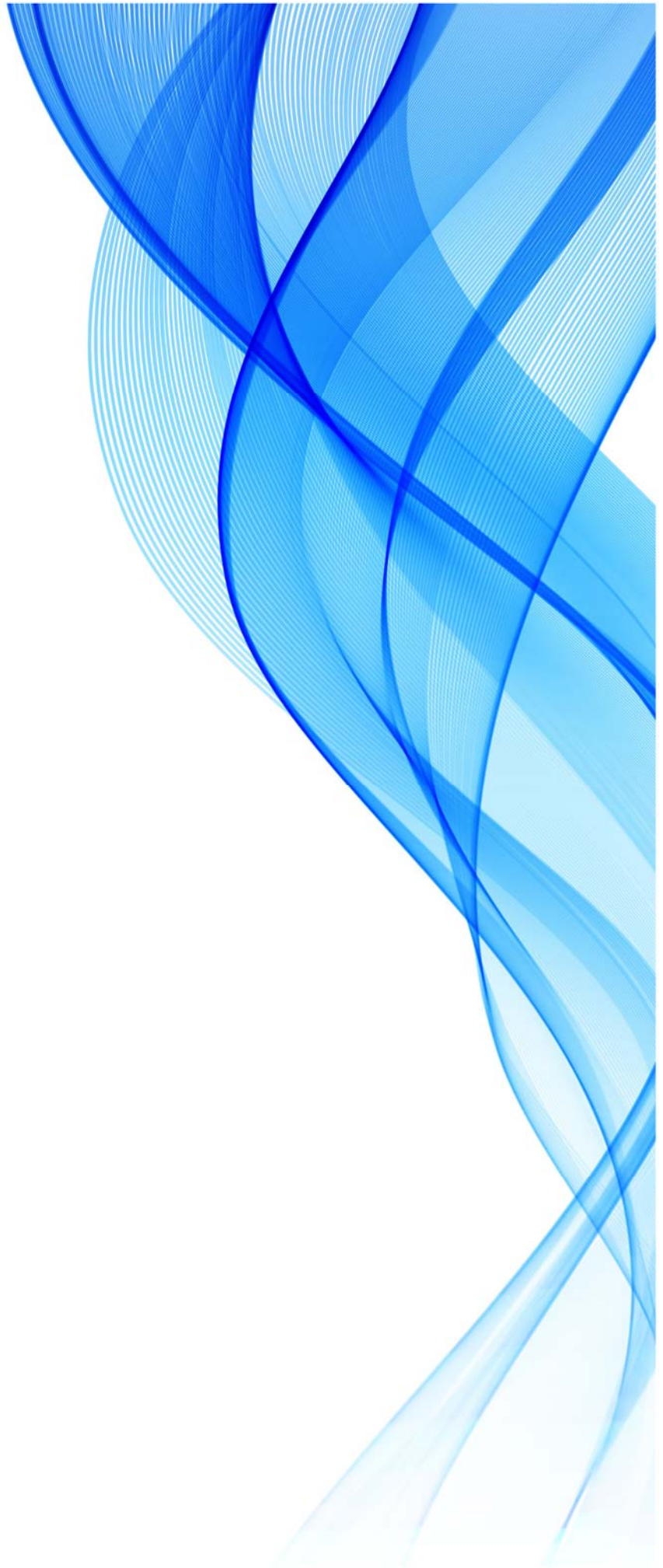


Table of Contents

EXECUTIVE SUMMARY

A. Introduction.....	1
B. The Broader Context for the St. Catharines Economic Development Strategy.....	2
1. Global Economic Trends and Policies	2
2. Foreign Direct Investment.....	2
3. Trade and Economic Agreements.....	4
4. Relative Competitiveness.....	4
5. Livability	8
C. St. Catharines: Building on Strengths, Adapting to Change.....	10
1. St. Catharines: Niagara's Urban Centre and Business Hub.....	10
2. Population.....	14
3. Jobs.....	16
4. Economic Structure.....	17
D. Positioning St. Catharines for Success: Investor and Visitor Readiness.....	19
1. Place Making	19
2. Availability of Industrial and Commercial Sites and Buildings	23
3. Economic Development and Investment Readiness.....	27
E. Key Economic Development Program Thrusts.....	35
1. Business Retention and Expansion.....	35
2. Innovation and Entrepreneurship	38
3. Attracting New Investment	48
4. Talent and Workforce.....	52
5. Marketing	58
F. Sectors of Focus.....	65
1. Introduction: Cross-cutting Technologies and Forces of Change	65
2. Professional, Engineering, Scientific, Business Support and Technical Services.....	70
3. Tourism.....	75
4. Agriculture, Food and Beverages.....	81
5. Health Care	87
6. Manufacturing	90
G. Implementation Plan	96
H. Resource Implications	99
I. SWOT Analysis	101

St. Catharines Economic Development Strategy and Action Plan (2017-2022)

EXECUTIVE SUMMARY

A. Introduction

The vision adopted by the St. Catharines City Council in its 2015 Strategic Plan is “for St. Catharines to be the most dynamic, innovative, sustainable and livable city in North America.” The Plan’s economic sustainability goal included development of this integrated Economic Development Strategy “to incubate, retain and attract businesses complete with annual reporting to Council and metrics to demonstrate impact and success.”

This Economic Development Strategy and Action Plan for St. Catharines, a successor to the last full strategy completed in 2009, covers six years and provides goals, objectives and actions. The Action Plan concentrates on the forthcoming four years.

B. The Broader Context for the Economic Development Strategy

1. Global Economic Trends and Policies

Since the 2008-2009 financial crisis, the global economic setting has been uncertain. Levels of growth are lower, and the outlook has been tentative. Emerging protectionist and nationalist tendencies are unsettling to markets and threaten to reverse or inhibit movement toward open international trade and investment policies and influence investment decisions. A consequence is a need to retain a high degree of flexibility in strategies and plans to accommodate changing circumstances.

Ontario is likely to be among the provinces enjoying higher – though still historically low – rates of GDP growth in Canada. The Conference Board of Canada forecasts that the St. Catharines-Niagara CMA will grow at 1.7 % in 2017, compared to 2.4% for Ontario. From 2018 to 2021, the outlook is for 1.4% growth annually in St. Catharines-Niagara while the Ontario rate will be 2.0% and the national rate 1.8%.

Major cross-cutting Federal and Ontario policy initiatives that will create economic and business development opportunities include actions to stimulate innovation and entrepreneurship, to mitigate climate change, and to increase infrastructure investment. These present opportunities and will have consequential impacts that the Strategy needs to take into account.

2. Foreign Direction Investment

Global greenfield foreign direct investment (FDI) trends have been tentative since the recession, though global mergers and acquisition activity spiked during 2014 and 2015 when major US corporations sought to benefit from lower taxes by acquiring foreign firms in low tax jurisdictions and shifting the headquarters of the merged firm overseas. Actual annual greenfield FDI levels have however been relatively flat since the global financial crisis and well below pre-crisis highs. For economic development organizations, this invites emphasis on the opportunities to grow existing foreign investments.

Since the global recession, investments in expansions in Ontario by existing foreign investors appear likely to have accounted for notably more FDI than new greenfield projects, though no reliable statistics are available. An existing foreign-owned firm tends to have more confidence that it can access the needed additional talent for an expansion. Typically, as well, it has previous experience with Canadian and Ontario tax incentives and financing for innovation and R&D. This further underlines the importance of business retention and expansion activities.

In Canada, the total stock of FDI rose 30% from 2010 to 2015. Though the US was the source of half of Canada's FDI stock at the end of 2015, its share was declining while Europe's and Asia's were rising. FDI levels in Canadian manufacturing increased at only about half of the overall rate of growth. Among manufacturing sub-sectors, however, FDI in food processing nearly doubled from 2010 to 2015, with Europe being the main source, while the US share declined. FDI in transportation equipment manufacturing was flat over the 2010 – 2015 period, with the Asian share increasing. The US share is likely to rise however as a result of the 2016 automotive labour agreements with the Detroit Three. Overall, Europe and China merit attention, though the US remains the principal FDI source.

3. Trade and Economic Agreements

At a time when other countries show signs of looking inward, Canada and the European Union have moved forward with the Comprehensive Economic and Trade Agreement (CETA), potentially positioning Canadian locations as preferred North American sites for European, Asian or US firms doing business across the Atlantic. The test however will be the extent to which advantageous access to the US under NAFTA can be assured. Canada's openness to new Asian agreements and economically-driven inward immigration may similarly differentiate it, making Canada an attractive location for investment, provided that the US market remains open.

4. Relative Competitiveness

Niagara Region is a cost competitive location. Applicable Federal and provincial corporate tax rates offer an advantage vis a vis most major developed countries, particularly when it comes to the effective corporate tax rates that encompass not only corporate income tax but property, capital, sales and miscellaneous local taxes, plus statutory labour costs. The substantial tax advantage may be at risk, however, if the US Administration and Congress act on promised corporate tax reductions. While Niagara Region is cost competitive, it scored lower in a recent assessment with selected US and Canadian locations in areas such as education, training and research, the business support environment, transportation and distribution and labour force and employment.

5. Liveability

St. Catharines and the surrounding Niagara area offer close-to-nature lifestyle advantages while still being part of one of North America's most rapidly growing mega-economic regions. With the cost of housing in the Greater Toronto Area (GTA) reaching unaffordable levels, locations such as St. Catharines are increasingly attractive to talent that is seeking amenities and more spacious accommodation. As well, for entrepreneurs and micro-employers who are attracted by lifestyle and greater affordability and whose main business requirement is high-speed fibre and flexible work arrangements, St. Catharines can be an attractive location.

C. St. Catharines: Building on Strengths, Adapting to Change

1. St. Catharines: Niagara's Urban Centre and Business Hub

St. Catharines is Niagara's principal urban centre and business hub, strategically located on the Queen Elizabeth Way (QEW), alongside the St. Lawrence Seaway's Welland Canal, near to all Canada-US border crossings in the corridor. Access to multiple Canadian and US airports, promised GO commuter rail service to Toronto and the anticipated Inter-Regional Transit system all contribute to connectivity. City locations can access major broadband fibre optic trunks that run through the region, service that will be strengthened by the SouthWestern Integrated Fibre Technology (SWIFT) Network.

St. Catharines is part of the Greater Golden Horseshoe (GGH), with 9.4 million people – a quarter of Canada's population and the destination of one in three immigrants. The GGH ranks fifth in population among super-metropolitan areas in the US and Canada.

In the online survey associated with the development of the Strategy, the community identified the City's top competitive strengths as access to major markets, location, proximity to the US, post-secondary education, cost of living, and broader Niagara Region amenities.

With the Niagara corridor handling one-quarter of all Canada-US trade reaching Ontario by land, the City is optimally situated to benefit from cross-border business, trade, investment, tourism, academic, research and people-to-people interactions. Of special note is the designation in 2016 of Niagara Region as the first Foreign Trade Zone (FTZ) Point in Ontario, providing an opportunity to facilitate advantageous customs and bonding arrangements.

Three institutions of higher learning – Brock University, Niagara College and the Niagara Campus of McMaster University's School of Medicine – strengthen the community through their talent generation and research, innovation and incubation partnerships. Brock has an enrollment of 16,000 full-time and 2,250 part-time students in seven faculties, while Niagara College's three campuses have 9,000 full-time students pursuing diploma, certificate, apprenticeship and degree programs, along with 15,000 part-time registrants.

A notable aspect of Brock's presence is the \$112 million Cairns Family Health and Bioscience Research Complex with advanced laboratories (including a Containment Level 3 lab), and six of Brock's ten Canada Research Chairs. The complex also houses McMaster's Niagara Medical campus which further underlines the growing potential of the health care sector.

St. Catharines health care capacity has been strengthened markedly recently, especially with the opening in 2013 of the Niagara Health Systems' new acute care hospital site featuring state-of-the-art technology and patient-centred features. Notable centres are the Walker Family Cancer Centre, the kidney care hub, mental health and addiction department, the Hotel Dieu Shaver rehabilitation centre and the Steve Ludzik Centre for Parkinson's Rehabilitation.

2. Population

St. Catharines population has grown only slightly over the past two decades. The 1.7% growth registered over the twenty years from 1996 to 2016 is below Niagara Region, Ontario and Canadian rates. City growth is constrained by limited availability of developable residential land.

Consultations associated with the development of the Strategy brought forward concerns about younger people leaving the City and Region for post-secondary studies and attractive entry-level jobs elsewhere. Closer analysis is required of data, especially yet-to-be-released analysis of the 2016 Census data. Some suggest that the most productive group to target to attract back may be former residents in their 30s or 40s who are raising children and who have families in the area.

3. Jobs

Just over one-third of all Niagara CMA jobs are in St. Catharines. The number of jobs is roughly equal to the workforce residing in the City. Job growth in the City was 3.6% from the recent low in 2011 until 2016. This is the lowest rate of growth among Niagara CMA municipalities, though job generation outpaced local population growth. The 2015 level of jobs (67,751) remains below pre-recession levels in 2006 to 2008 which ranged from 69,000 to 71,000 jobs.

4. Economic Structure

In line with trends across advanced economies, there is a shift in St. Catharines from growth in manufacturing jobs to the service sector, notably toward retail, health care and education. Other strongly growing sectors are accommodation and food services and professional, scientific and technical services. St. Catharines lost 37% of manufacturing jobs between 2006 and 2016, though it has seen a slight growth in jobs of 1% in the sector since 2011, while provincial employment levels dropped 0.3%. Manufacturing now ranks fourth in employment among the major sectors in St. Catharines.

D. Positioning St. Catharines for Success: Investor and Visitor Readiness

A primary goal for St. Catharines should be to strengthen its position as the business and service hub for Niagara Region. Evidence of the City's role as the Region's centre is that St. Catharines is home to a disproportionately high share of the Niagara CMA jobs in sectors that cater to the needs of residents in the Region – such as retail, finance and insurance, real estate, and educational and health services.

1. Place Making

St. Catharines 2008 Downtown Creative Cluster Master Plan has provided the blueprint for redevelopment of the city core. The principal anchor elements of this transformative plan are in place – the Meridian Centre, the FirstOntario Performing Arts Centre, Brock's Marilyn I. Walker School of Fine and Performing Arts, the McMaster Family Medicine Teaching Site, and the Carlisle Parking Garage.

Innovation and incubation spaces Downtown have established an environment that favours the creation, attraction and growth of start-ups, creative entities, food and hospitality ventures, tourism-related businesses, and software, digital media, information technology, advertising and marketing, engineering and professional services firms. Many participants in the consultations held as part of the Strategy development endorse the efforts, though a number felt that continued effort was needed to fully realize the expected benefits.

Having realized most aspects of the original 2008 Downtown Master Plan, an update and renewed Master Plan represents a timely next step. Areas for focus include encouraging the shift from public investment to private commercial development; the attraction of commercial tenants in key service sub-sectors such as engineering,

information technology, architecture, human resources and accounting, and finance and insurance; stimulating the innovation ecosystem and creative sector; broadening the retail offerings; sustaining festivals and cultural events; attracting hotel and accommodation spaces; and considering what targeted incentives may be required and when.

The City is taking steps to be able to address other significant place making initiatives involving Port Dalhousie and the former General Motors property on Ontario Street. Future place making opportunities also need to be evaluated, including commercial developments near the St. Catharines train station to capitalize on GO commuter rail service, any redevelopment of St. Lawrence Seaway controlled lands that may become surplus, and encouragement of destination-type retail and tourism developments along the QEW or Highway 406 that will encourage travellers to explore St. Catharines. Acknowledging that post-secondary educational institutions are major catalysts for economic development, Niagara Region has taken a lead in presenting an outline for a Brock District Plan for the 827-acre area encompassing the Brock campus, Regional headquarters, Thorold city hall and the Brock Business Park in Thorold.

2. Availability of Industrial and Commercial Sites and Buildings

St. Catharines had only two major vacant serviced industrial properties available in early 2017 – one 12.41 acres, the other 4.5 acres. The larger property benefited from Ontario government designation as a Certified Site. When it comes to industrial and commercial buildings for sale or lease, listings provided a good mix of industrial and light commercial and office locations.

The Niagara Region Economic Development Site Finder is designed to be the “go-to” website where all St. Catharines industrial, commercial and investment (ICI) properties will be found. The St. Catharines Economic Development team should ensure that full details on all City properties are included. As well, to create awareness of future employment land, infill and adaptive use possibilities, the City’s Economic Development team should also post information on the status of these projects.

Independent data on average sales and lease rates for industrial and commercial properties that compares St. Catharines and other Niagara municipalities with Greater Golden Horseshoe (GGH) municipalities is a valuable tool in attracting interest. Niagara Region Economic Development should be encouraged to contract with a realty firm’s consulting group to provide the data on a quarterly basis.

Competitiveness of St. Catharines Industrial and Commercial Property Taxes: Unlike other jurisdictions in the Greater Golden Horseshoe, St. Catharines does not have development charges, meaning that only Regional charges are applicable. This is a competitive advantage to be actively promoted.

The City’s industrial and commercial property taxes per square foot (as calculated for comparative purpose by BMA Management Consulting) are almost universally lower than nearly all Greater Golden Horseshoe municipalities, though some other neighbouring Niagara municipalities have lower comparable rates in certain situations.

Incentives: Applications for incentives under the St. Catharines Community Improvement Plan’s four programs are now invited annually, with awards limited to the available budget. The competitiveness of these incentives needs to be monitored to ensure desired outcomes with as required. Evaluation of the need for appropriately tailored incentives will also be an important aspect of the development of a renewed Downtown Master Plan. Niagara Region will review incentives in 2017, potentially leading to more strategically focused marketing and promotion programs in partnership with area municipalities. St. Catharines should take the opportunity to

identify and advocate for incentives that will advance its goals, including future Downtown commercial office occupancy and development.

3. Economic Development and Investment Readiness

The highly competitive environment for investment retention, expansions and attraction demands full investment readiness. Key areas for attention are a Customer Relationship Management (CRM) system; in-depth socio, economic, demographic and workforce information; and robust value propositions for high priority sub-sectors and niches. Companies pursuing expansions and new investment need an “expeditor” or “champion” on the Economic Development team to offer concierge service that facilitates all aspects of the approval process up to a final decision regarding the investment. A parallel requirement is a Development Approval Flow Chart that outlines the procedures, processes, people and timelines involved in approvals for new investments at the City and Regional level, as well as in independent entities like the Niagara Escarpment Commission (NEC).

Niagara Region’s designation by the Federal government as a Free Trade Zone (FTZ) Point in 2016 is a selling point that St. Catharines should promote to benefit local businesses and investment attraction initiatives.

Though currently adequate, relationships and dialogue with and among the City and its economic development stakeholders should be taken to a higher level through the establishment of more structured dialogue mechanism designed to build a common agenda, decide on joint efforts and focus on shared actions. Optional consultative models need to be evaluated, including their relationship to the City’s on-going business retention and expansion activities and the development of the Economic Development team’s annual business plan.

E. Key Economic Development Program Thrusts

1. Business Retention and Expansion

The retention and expansion of existing business are fundamental to economic development efforts, with local expansions almost certain to be the greatest source of job growth. In addition, close relationships with the existing business and agriculture base provides valuable insights, information and allies that inform workforce, investment attraction and other civic policy and economic development activities.

Key Observations and Recommendations

- Initiate a systematic business retention and expansion call program that reaches out to local businesses and gather information and provides summary reports on opportunities, concerns and issues, workforce issues, and expansion and hiring plans; and
- Support initiatives that respond to and are tailored to the needs of local companies in areas such as increased competitiveness, access to funding, government procurement, export diversification, and research partnerships.

2. Innovation and Entrepreneurship

New business creation and the encouragement of entrepreneurship are at the centre of healthy and vibrant economies today. St. Catharines has a growing constellation of specialized incubation organizations and a valuable network of post-secondary research, development and commercialization centres devoted to creating

an innovation ecosystem to support and nurture creative talent, business formation and the scaling of promising new ventures. Encouraging innovation and entrepreneurship was identified as the second greatest challenge relating to economic development (after high electric costs), on the part of respondents to the online survey associated with development of the Strategy, suggesting that this is an important priority that will enjoy community support and buy-in.

Key Observations and Recommendations

- Develop initiatives within the St. Catharines innovation ecosystem that will support companies seeking to scale rapidly to achieve their full potential;
- Support internationalization efforts, especially ones which offer a temporary physical presence in other markets, and reciprocal arrangements that will attract early-stage foreign start-up ventures to St. Catharines;
- Support well-founded Buffalo-Niagara and Hamilton-Niagara corridor partnerships that bring together the critical mass that will favour success;
- Monitor the evolution of Federal and Ontario visa programs for international entrepreneurs and start-ups with a view to ensuring that St. Catharines becomes a potential destination;
- Encourage closer linkages between established St. Catharines firms and the growing research, development, testing, advisory and incubation facilities at Brock and Niagara College and at McMaster, Mohawk and other nearby post-secondary educational institutes;
- Play a collaborative leadership role with partners to ensure St. Catharines capitalizes on and maximizes the financial support, involvement and linkages with Federal and Ontario government innovation and entrepreneurship programs; and
- Encourage the development of new City of St. Catharines procurement initiatives designed to offer the City as a first or early public sector client for innovative companies that have products or services that offer solutions for municipal needs and challenges.

3. Attracting New Investment

Direct investment attraction is exceptionally competitive. As such, it requires thorough preparation, in-depth research, careful targeting of companies, compelling value propositions, direct engagement with prospects, and sustained effort. In two-tier Canadian municipalities like Niagara Region, the approach invariably is a collaborative one in which the Region takes the lead role, as represented by the TeamNiagara model.

Key Observations and Recommendations

- Contribute and work proactively within the TeamNiagara framework on external investment attraction – foreign and domestic – including direct involvement in selected initiatives offering promise, in collaborative investment attraction partnerships where the Region’s participation provides access for St. Catharines, and in pursuing selected leads;
- Ensure that St. Catharines’ assets, interests, differentiators and sites are reflected in the TeamNiagara investment attraction efforts;
- Work with Niagara Region Economic Development to create a new Regional Economic Development Growth Strategy; and
- Implement an integrated Customer Relationship Management (CRM) system, strengthen data bases, and develop value propositions.

4. Talent and Workforce

Highly qualified personnel are the assets that globally competitive firms frequently seek above all and want access to when choosing where to expand or undertake new investments in advanced economies such as Canada's. As workplaces rapidly adopt advanced design, production and testing technologies, companies require adept talent that exposes itself to continual skill upgrades. The post-secondary institutions present in the community and nearby are important sources of talent; providers of training and reskilling; and partners in research, innovation, testing and prototype development. The Niagara Workforce Planning Board and Niagara Region are important partners in the development of initiatives, including data on workforce availability; matching skills and jobs; retaining and attracting talent, entrepreneurs, and immigrants; and addressing youth unemployment.

Key Observations and Recommendations

- Support, collaborate with and benefit from the Niagara Workforce Planning Board (NWPB) activities, initiatives and research, especially related to the workforce data, structure and trends; alignment of labour force skills and demand; retraining and reskilling; and talent attraction;
- Work with partners to undertake in-depth analysis of the 2016 Census data on labour, commuting patterns, and mobility (to be released in November 2017) to identify talent pools that can be accessed by firms with expansion plans or locating in St. Catharines;
- Support and engage in talent attraction initiatives, including the Region-led Global Attractiveness Initiative, targeting appropriately skilled or entrepreneurial immigrants, people with Niagara roots now in their 30s and 40s with children inclined to return, and youth retention with post-secondary institutions;
- Monitor and support opportunities to strengthen full-time, youth, and "silver" employment generation opportunities; and
- Work with Niagara Region to bring St. Catharines within the Regional physician recruitment model that is in place for other municipalities.

5. Marketing

St. Catharines needs to achieve more coherence to its branding, marketing and messaging, including websites, covering the multiple interrelated dimensions of economic development – retention and attraction of business and talent and the promotion of tourism. A branding review is recommended for 2018, with tourism branding to be addressed as part of the new Strategy due in 2020. Though each with distinctive features, the branding and marketing should consider interrelationships among economic development, the City and Niagara Region.

Key Observations and Recommendations

- Rationalize economic development website presences, drawing on the best of the www.investinSTC.ca website;
- Undertake a comprehensive review of the St. Catharines economic development branding, marketing collateral, website and social media tools in 2018;
- Develop selected robust value propositions focused on priority sub-sectors and niches;

- Develop marketing automation campaigns¹ coordinated with events and focused initiatives; and
- Use business retention and expansion call programs to identify potential testimonials, while building consensus around common messaging as part of new dialogue mechanisms with local economic development stakeholders.

F. Sectors of Focus

1. Introduction: Cross-Cutting Technologies and Forces of Change

St. Catharines must judiciously focus its efforts to create, grow, retain, support, expand and attract businesses. Accelerating technological shifts argue, however, for modified approaches to longstanding sector-centred priorities. Across nearly all the standard sector categories, digitally-based technologies are converging powerfully to lead product and service evolutions and change – along with rapid, disruptive, business model change. The effect is to blur traditional product sector boundaries. As well, digitally-skilled employees of many types are in demand across many fields that once were siloed. Emblematic of this is the wide acceptance that the convergence of many largely digitally-based technologies is propelling the fourth industrial revolution.² The analytical, sensing, simulation, learning, wireless and communications technologies that are converging bear various labels, including the Internet of Things, Big Data, the Cloud, 3D printing, 3D visualization imaging, GPS, cyber security, machine learning and artificial intelligence, among others. The result is that a community's digitally-based skills and technological capabilities are foundational and paramount, cutting across all sectors. Inventorying these skills and capabilities and fostering their development should be a first order of priority, prior to becoming preoccupied with more narrow sectors.

Additional influences cutting across sectors are also originating in the creative sector and from important broadly-based government policy initiatives such as climate change, innovation and infrastructure investment.

Beyond that, the Strategy focuses on five sectors.

2. Professional, Engineering, Scientific, Business Support and Technical Services

The shift in employment growth from manufacturing to services sectors invites St. Catharines to define and pursue the opportunities to target and attract specialized services businesses, notably higher skilled engineering, finance, technical, professional and scientific services. The City has been a location of choice for regionally-based engineering and accounting firms, and for internationally-oriented business support services, as represented by CTFS, SITEL and the more recent arrival of Ting Mobile. The availability of Downtown St. Catharines office space is an asset.

Key Observations and Recommendations

- Retain and encourage growth in the business support services sub-sector;

¹ Marketing automation refers to software platforms and technologies designed for organizations to streamline, automate, and measure marketing tasks and workflows more effectively, market on multiple channels online (such as email, social media, websites, etc.) and automate repetitive tasks to increase operational efficiency.

² According to this analysis, the first industrial revolution was mechanical power from steam (end of the 18th Century); the second the assembly line and mass production (start of the 20th Century); and the third electronics, computers and automated production (1950s on).

- Define the best near-term prospects for St. Catharines among services sectors such as consulting engineering, construction, architecture, design, financial services, communications technology, software, and human resources, payroll and accounting;
- Identify and ensure pursuit of growth opportunities for St. Catharines as a consequence of the Ontario Climate Energy Action Plan, whether led by local post-secondary institutions, innovation-oriented entities, or existing businesses or new investors; and
- Consider measures that encourage and promote the attractiveness of available Class A commercial office space which will meet the demand of services enterprises coming to or growing in St. Catharines.

3. Tourism

An important part of the City's economic development mandate, tourism is one of the largest and fastest growing sectors in the world, with increases in global revenue in the travel industry in recent years exceeding GDP growth. Canada's travel industry has registered significant gains in the last five years. International tourism has grown significantly, regaining pre-9/11 levels during 2016. Key growth segments are millennials (ages 18-34) and the growing middle classes in emerging economies such as China. Domestic travel has also grown as the lower Canadian dollar encourages travellers to pursue options in Canada.

Niagara has strong name recognition. The area covered by the Tourism Partnership of Niagara (TPN), Ontario Regional Tourism Organization 2 (RTO2), ranks just behind the Toronto area RTO in share of visitor spending among Ontario regions. Data shows that significant numbers of tourists drawn to the Niagara area seek to participate in the types of activities that St. Catharines offers. The City's opportunity is to grow its own authentic identity and attractions – in the words of the tourism vision – as “a sophisticated regional centre with unique cultural and heritage attractions.” Among attractions, the City offers a critical mass of arts, culture and heritage destinations, parks and trails, wineries, craft breweries, and culinary offerings – a number being part of the Downtown revival and initiatives such as the Niagara Wine Route and the Ale Trail. A new tourism website, designed with social media in mind, is being launched in the first half of 2017. The attraction of sports tourism merits greater attention and investment, building on signature events such as the Royal Canadian Henley Regatta, PanAm Games, Scotties Tournament of Hearts and the forthcoming 2021 Canada Summer Games to attract tournaments and competitions at all levels. Niagara College hospitality, food and beverage programs are an asset. Continued support for industry programs in hospitality training and management and workforce development will ensure a high quality visitor experience.

Key Observations and Recommendations

- Focus on building capacity with projects offering attractions that reflect St. Catharines' authentic identity and offerings that include culture, arts, heritage, Black History, wineries, craft breweries, and parks, trails and the outdoors;
- Build on the sports tourism initiative, drawing on the success of the PanAm Games, the Scotties Tournament of Hearts, and Niagara Region's selection as the site of the 2021 Canada Summer Games;
- Encourage hospitality training and management and workforce development that will ensure a superior visitor experience;
- Attract additional hotel and accommodation spaces; and
- Revisit branding and develop a new multi-year tourism strategy to follow on the current one which runs through 2019.

4. Agriculture, Food and Beverage

Thirty percent of St. Catharines' land area is designated Agricultural Area. Gross farm receipts in 2011 represented 5% of the total in the Golden Horseshoe, averaging over \$1 million per farm. Greenhouses predominate, with St. Catharines' gross farm receipts per hectare being the highest of any municipality in Niagara Region. The greenhouse sector has faced the challenges of a Canadian dollar at par with the US, a thickened border post 9/11, and increased market dominance by big-box retailers. Surviving firms are regaining pre-recession levels but face high energy costs and the need to invest in technology to remain competitive.

The food and beverage segment offers substantial further promise for St. Catharines, especially if well-equipped incubation and acceleration spaces are available and if the linkages with tourism, culinary and the creative industries can be fostered. St. Catharines' location at the centre of Niagara Region and as part of the population intensive Great Golden Horseshoe region offers access to upscale consumers looking for natural, organic, nutrient-dense foods within the magic 100 miles. Speciality and artisanal foods, craft brewing, micro-distilling and hard cider production are taking hold. College and university programs and facilities are vital assets. St. Catharines offers an attractive location for Toronto food processors looking for less congested environments closer to their inputs, and for US food manufacturers seeking a Canadian production base. European investment may also be a prospect if access to the US is assured.

Key Observations and Recommendations

- Promote and encourage new ventures, expansions and new investment in food processing, bakeries and beverages, including through access to purpose-equipped incubation and acceleration spaces;
- Support profile-building partnerships and opportunities for wineries located in St. Catharines, especially Downtown and associated with tourism;
- Undertake business retention and expansion outreach to the greenhouse and primary agriculture sector.

5. Health Care

A critical mass of health care assets is coming together in St. Catharines, through the strengthening of the Niagara Health System's presence in the City, Brock University's Cairns Family Health and Biosciences Research Complex, Brock's soon to be expanded incubation spaces, and McMaster University's satellite medical campus. The critical next steps to realizing commercialization are to strengthen collaboration and networks and to build a critical mass through partnerships in the Hamilton-Niagara-Buffalo corridor.

Key Observations and Recommendations

- Create and build networks, awareness and collaboration that can identify and commercialize opportunities and grow a health care sciences base;
- Encourage and support efforts to build a critical mass of players through alliances and partners with McMaster and partners in Buffalo-Niagara; and
- Articulate and promote the case for St. Catharines, as part of the Buffalo-Niagara-Hamilton corridor, to be a hub that facilitates access to both the US and Canadian markets and exports to

Europe spurred by the Canada-European Union Comprehensive Economic and Trade Agreement (CETA).

6. Manufacturing

Manufacturing employment in St. Catharines has stabilized since 2011, though at levels below those prior to the 2008-2009 recession. The deep tradition of manufacturing in the City provides a workforce that is attractive to firms that have adapted to provide specialized and innovative products and solutions. Business retention and expansion with existing manufacturers is critically important.

Key Observations and Recommendations

- Retain and strengthen the presence of existing firms, including in the automotive sector (e.g. General Motors Powertrain Operations, THK and Venest);
- Evaluate whether there is a business case that St. Catharines can make to be a player in the connected car, automated vehicles, vehicle electrification and alternative power trains;
- Promote and facilitate supply chain opportunities associated with aerospace and defence and new investment (such as GE Brilliant in Welland and Solar City in Buffalo); and
- Accord high priority to defining opportunity and to attracting businesses that manufacture and supply systems for greenhouses, horticulture and vineyards, seizing the research and partnership opportunities with the Vineland Research and Innovation Centre (VRIC), Niagara College and Brock University.

St. Catharines: Technologies and Sectors of Focus – 2017 - 2022			
SECTOR/TECHNOLOGY	RETAIN Existing Firms	NURTURE Existing Capabilities	ATTRACT Additional Investment
Digitally-Based Technologies	✓	✓	✓
Creative	✓	✓	✓
Professional, Engineering, Scientific, Business Support & Technical Services			
• Professional, Engineering, Scientific & Technical Services	✓	✓	✓
• Business Support Services	✓		
Tourism	✓	✓	✓
Agriculture, Food and Beverages			
• Agriculture	✓		
• Food and Beverages	✓	✓	✓
Health Care		✓	✓
Manufacturing			
• Automotive/Mobility	✓	✓	
• Supply Chain Opportunities	✓	✓	
• Greenhouse-Related Systems		✓	✓

A. Introduction

The purpose of the Strategy and Action Plan is to provide a framework for support for economic development in the City of St. Catharines.

The Economic Development Strategy and Action Plan has been developed in the context of the City of St. Catharines Official Plan (“The Garden City Plan”) and City Council’s broader 2015 Strategic Plan. The Official Plan upholds and promotes the policies and directions contained within Provincial and Regional planning policies.

The overall vision articulated by the City Council in its 2015 Strategic Plan is “for St. Catharines to be the most dynamic, innovative, sustainable, and livable city in North America.” In the City Strategy, a principal goal in terms of economic sustainability is to “attract public and private investment, support local businesses and provide excellent customer service to demonstrate we are open for business.” Specific actions envisaged as part of this goal are the development of an integrated Economic Development Strategy “to incubate, retain and attract businesses complete with annual reporting to Council and metrics to demonstrate impact and success;” a focus on the redevelopment of the commercial core of Port Dalhousie, the former GM lands on Ontario Street; and the development of a funding formula for the Community Improvement Program, brownfield improvement programs and other development enhancement programs. The City Strategy also accords priority to actions to “encourage growth in arts and culture . . . to attract new investment and retain young professionals.”

The last full economic development strategy was completed in 2009, in the immediate wake of 2008-2009 global financial crisis which significantly impacted the St. Catharines economy. The new strategy covers six years (2017 - 2022) and provides goals, objectives and actions. It sets out an Action Plan for each objective that covers the next three years. An Implementation Plan outlines the key phases and steps to realize the actions. It is accompanied by a discussion of the Resource Implications.

The work for this regional economic development strategy was undertaken between September 2016 and April 2017 and included extensive analysis, and public and stakeholder engagement. The City of St. Catharines and the consultants retained to assist in the development of the strategy, the Global Investment Attraction Group, are extremely grateful for the contribution of the many stakeholders and members of the public who were involved.

B. The Broader Context for the St. Catharines Economic Development Strategy

1. Global Economic Trends and Policies

The global economy has shifted to a lower and often more tentative growth trajectory during its extended recovery from the 2008-2009 financial crisis and recession. Though job creation has generally erased the marked declines during the downturn, concerns have arisen with respect to job quality, higher levels of part-time work, and levels of compensation for workers. Given the extended length of the recovery especially in the US, caution may also grow over the increasing probability of some form of correction, potentially presenting challenges to continued growth over the economic development strategy's horizon.

The economic outlook is also unsure and unsettled in the face of emerging protectionist and nationalist tendencies and economic policy uncertainties. Faced with such circumstances, business tends to delay, defer or influence new investment decisions. The policies adopted by the US Administration and Congress and how they are implemented will be consequential. The probable impacts will be to make the US more competitive and to stimulate the US economy on one hand, while implicitly or explicitly inhibiting cross-border flows of goods and people and influencing companies to invest in the US on the other. Given the extensive economic ties, Canada gains to some extent from higher US growth. A more competitive and inward US, however, poses major threats that will require policy responses and economic development initiatives to support companies to adjust and refocus and to realign support programs to seize any opportunities.

Ontario is likely to be among the provinces enjoying relatively higher rates of growth in Canada. And, within Ontario, the Greater Golden Horseshoe (GGH) region normally has moderately higher growth than the rest of the province. The Conference Board of Canada forecast that the St. Catharines-Niagara economy will grow by 1.7% in 2017, following 2016's 2.5% increase. From 2018 to 2021, annual growth in the range of 1.4% is expected, a level just below the 2.0% forecast for Ontario and 1.8% nationally.³

Climate change policies of the Federal and Ontario governments introduce new initiatives with important implications, challenges and opportunities for companies and economic development. Federal and Ontario infrastructure spending will have a stimulatory effect overall and will support the construction and engineering sectors.

Both the Ontario and Federal governments are placing a very high priority on encouraging innovation, making it a major policy thrust and an area of opportunity for matching funding for municipalities. An aspect for particular attention will be support to earlier-stage companies to rapidly scale and grow.

2. Foreign Direct Investment

International greenfield foreign direct investment (FDI)⁴ flows – though significant in absolute terms – have yet to recover to pre-2008-2009 recession levels. They remain uneven and well below the annual levels registered prior to the global downturn. On the other hand, global merger and acquisition activity grew notably in 2014

³ Conference Board of Canada, "Metropolitan Outlook 2," Winter 2017.

⁴ "Greenfield" investment projects involve investment at entirely new locations or involve an expansion of an existing investment. Greenfield investment does not include mergers and acquisitions (M&A).

and 2015 and to a lesser extent in 2016, with tax inversions⁵ by US acquirers being a major influence until recently.

The United States has been the largest source of foreign direct investment (FDI). China's outward FDI has increased significantly however. In 2015, China ranked third in outflows of FDI after the US and Japan, having previously challenged the US for the number one spot. So far, Chinese FDI has mainly sought out foreign acquisitions, especially those that secure needed resources and agricultural commodities. Chinese investment in North American manufacturing (including automotive) and in the technology sector has emerged as a growing if still relatively modest segment. Some recent Chinese manufacturing investments have been greenfield investments.

FDI in Canada: Canada's total stock of inward FDI at the end of 2015 was \$Cdn 768 billion. This represents an increase of 30% since 2010. The principal source country for FDI in Canada is the US, though its share declined from 54% in 2010 to 50% in 2015. Europe's proportion of the Canadian FDI stock rose to 34%, compared to 31% in 2010, while Asia increased from 9% to 10%.

Immediately after the 2008-2009 recession, growth in FDI was strongest in the Canadian resource sector. In Canada's manufacturing sector, the stock of FDI declined between 2009 and 2011, but picked up moderately in 2012. Since 2010, the rate of growth in manufacturing FDI (16%) was still only about half of the overall pace of growth in the FDI stock, reaching a total of \$Cdn 205 billion at the end of 2015.

One of the most robust rates of FDI growth in Canada was in food manufacturing – nearly doubling from 2010 to 2015 to account for about 14% of all FDI in manufacturing. Europe had the largest share of the stock of FDI in food manufacturing at the end of 2015 (65% versus 28% from the US), having shown a marked increase since 2010 (253% compared to a decline of 9% for the US).

The stock of FDI in Canada in transportation equipment manufacturing – a category dominated by the auto sector – remained essentially level overall between 2010 and 2015. The US holds the majority of the FDI stock in this segment, but its 2015 level was 10% lower than in 2010. The stock of FDI held by Asian firms, by contrast, increased by 18% over the same time span. Additional investment in the Canadian operations of GM, Ford and Fiat Chrysler Automobiles following the 2016 labour settlements is likely to increase the US share in the near-term.

Though reliable statistics are not available, strategic expansions by existing foreign investors appear to have been the most notable source of increased FDI in Canada in recent years, especially in manufacturing. Foreign investors already present in Canada know their own milieus well and possess strong relationships that allow them to move quickly and confidently to scale-up existing operations, including being well positioned to hire highly qualified people and to take advantage of tax rates, incentives and arrangements that support innovation. This underlines the importance to the St. Catharines Economic Development team of business retention and expansion activities.

Foreign Firms Located in St. Catharines: Foreign investors present in St. Catharines include General Motors, THK, Ampco-Pittsburgh, the Apex Tool Group, Haver & Boecker (W.S. Tyler), Asahi Holdings (Niagara Investment

⁵ Tax inversion is the practice of relocating a corporation's legal domicile to a lower tax jurisdiction, often through a merger or acquisition of a firm headquartered there, while maintaining its material operations in its higher tax country of origin.

Castings), Ting Mobile, and Kemira. Many of these have involved acquisitions of successful St. Catharines firms. Also becoming apparent is Taiwanese and Chinese interest in real estate, tourism and wineries in Niagara.

3. Trade and Economic Agreements

The Canada-European Union Comprehensive Economic and Trade Agreement (CETA) will largely come into effect in 2017 and give Canada an edge in investment attraction compared to the US considering the preferential access it grants to Canada to which the US is not privy. Under CETA, globally-oriented firms may find specific provisions that favour production at Canadian rather than US locations to gain preferred European access, while also benefiting from being part of the integrated North American market. This is obviously subject to assurances that Canada's NAFTA access will not be materially reduced by US instigated negotiations.

While Canada must give prime attention to guarding and hopefully enhancing its existing access to the US and Mexican markets, Canada has an interest in steps that would further liberalize trade – especially with Asia – as an antidote to the protectionist sentiment, dramatized by the British vote to leave the European Union and President Trump's rejection of the Trans-Pacific Partnership (TPP). Canada already has one bilateral free trade agreement with an Asian country – South Korea. In the current climate, export-oriented St. Catharines firms will welcome opportunities to diversify their export markets and government initiatives and programs of support.

Canada's greater openness to immigration to meet economic needs is also likely to differentiate it – positively – in the North American context.

4. Relative Competitiveness

Independent analyses of Niagara Region's relative competitiveness compared to locations in Canada, the US and major developed countries rank the Region rather favourably overall, especially when it comes to the costs of doing business. In such comparisons, it is important to note that the degree of variation in the costs among cities in developed countries has tended to narrow substantially over the last two decades, meaning that the differences are now relatively modest.

St. Catharines-Niagara Region is Among the Most Competitive Canadian and US Locations: Competitive Alternatives,⁶ a biennial KPMG study that benchmarks costs for more than 100 business locations in the North America and in leading mature market economies in Europe and Asia Pacific, showed the Niagara Region to be among the most competitive locations surveyed.

Niagara Region performed extremely well overall. Among the communities surveyed in the most recent 2016 KPMG analysis, the Niagara Region ranked as being:

- More cost competitive than every US city surveyed (See examples in Exhibit 1);
- The second most cost competitive location in KPMG's Northeast US/Canada grouping (after only Quebec City); and
- Fifth most cost competitive overall among all the nearly 90 US and Canadian cities featured by KPMG (with only Quebec City and three Atlantic Canada cities ranking as lower cost).

⁶ KPMG LLP, "Competitive Alternatives: KPMG's Guide to International Business Location Costs," 2016 Edition (www.competitivealternatives.com). Accessed on February 6, 2017.

In KPMG's detailed breakdown of costs, Niagara Region was generally higher cost than US locations for electricity, property taxes, and transportation costs; and lower cost than US locations for income tax rates and employee benefits. Net profits are generally higher in the Niagara Region in the KPMG manufacturing sector business models.

An important caveat is that the KPMG analysis did not consider discretionary incentives such as loans, grants and tax forgiveness that vary from project to project and jurisdiction to jurisdiction. The survey only includes statutory incentives available to all who meet stated criteria.

The following chart (Exhibit 1) takes a conservative approach by adopting a Canada-US exchange rate of 85 cents to the US dollar, a rate that is slightly above the average for the prior 20 years. International businesses are unlikely to make plans based on historically low exchange rates, especially at a time of global economic volatility.

Exhibit 1				
KPMG Competitive Alternatives 2016 Guide - Relative Cost Competitiveness				
St. Catharines/Niagara versus Selected US Locations				
Average of All Types of Operations				
City/Region	Index		City/Region	Index
St. Catharines/Niagara	87.3		Raleigh (NC)	95.1
Shreveport (LA)	91.7		St. Louis (MO)	96.1
Youngstown (OH)	92.5		Dallas-Fort Worth (TX)	96.2
Montgomery (AL)	93.4		Minneapolis (MN)	96.8
Nashville (TN)	93.8		Detroit (MI)	96.8
Charleston (SC)	93.8		Pittsburgh (PA)	97.0
Orlando (FL)	94.4		Houston (TX)	97.6
Spartanburg (SC)	94.5		Rochester (NY)	98.3
Cleveland (OH)	94.6		Chicago (IL)	98.3
Oklahoma City (OK)	94.7		Boston (MA)	101.2
Index of 100 = USA Baseline Average of 4 Largest Cities (NYC, LA, Chicago & Dallas-Fort Worth)				
Canada-USA Exchange Rate Adjusted to \$US 1.00 = \$Cdn 0.85				
Source: KPMG Competitive Alternatives 2016				

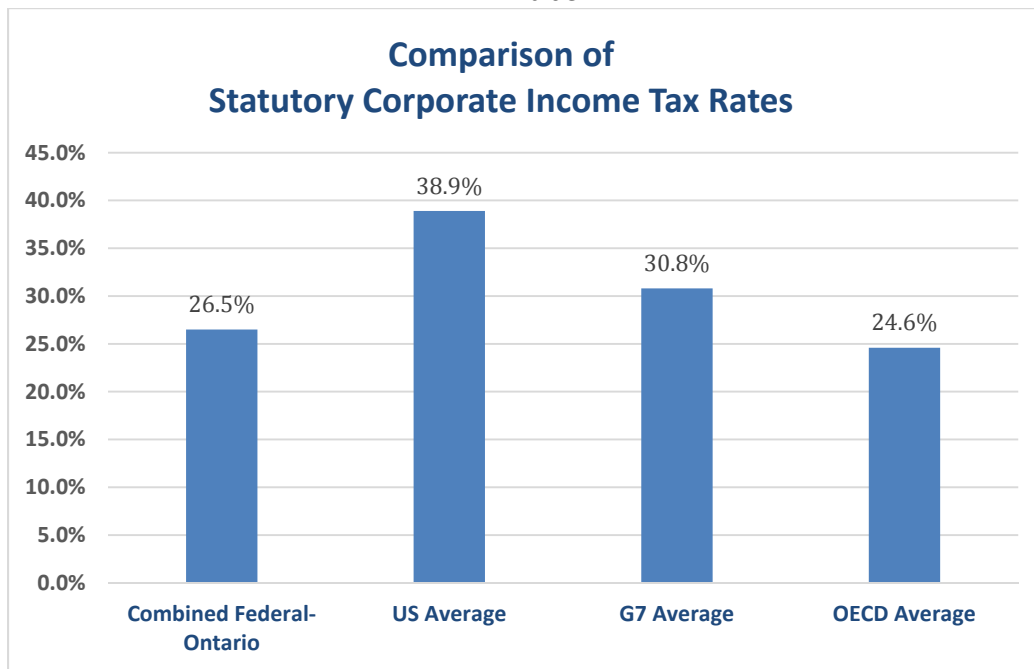
Niagara Region's Competitiveness for Business Investment and Location Decisions: A more comprehensive assessment of Niagara Region's competitiveness for business investment and location decisions, undertaken in early 2016, ranked the Region in the middle-of-the-pack in overall competitiveness as compared to two other Ontario and five US locations chosen as benchmarks (Exhibit 2). According to the study done for Niagara Region Economic Development, Niagara Region was less competitive overall than Waterloo, Boulder (CO), Buffalo (NY) and Hamilton, but ahead of Dayton (OH), Winston-Salem (NC) and South Bend (IN). As with the KPMG Competitive Alternative Analysis, Niagara Region was ranked favourably for costs associated with industrial and commercial development and businesses. In the Niagara Region study, Niagara ranked second for costs, behind Dayton in the industrial area, and second after South Bend in the commercial category. Niagara Region came out less favourably in evaluations in areas where factors other than cost were assessed, such as education, training and research; the business support environment; transportation and distribution; and labour force and employment. The exception was the ranking for quality of place where the Region came in second to neighbouring Hamilton.

Exhibit 2 Assessment of Niagara Region's Competitiveness for Business Investment & Location Decisions Rankings from a Report for TeamNiagara Economic Development, February 2016									
Area of Relative Competitiveness	Some of the Assessment Factors Covered	Niagara Region	Waterloo	Hamilton	Buffalo (NY)	Dayton (OH)	Winston-Salem (NC)	South Bend (IN)	Boulder (CO)
Overall	Composite score	5	1	4	3	6	7	8	2
Industrial Development & Business Costs	Initial development costs and ongoing business operating costs, including land costs, lease rates, tax rates, construction costs, development costs, and utility costs	2	6	8	5	1	4	3	7
Commercial Development & Business Costs	Labour force participation rates, employment & unemployment rates, the cost of labour, educational attainment, & the presence of key demographics such as youth or immigrants	2	5	7	6	4	3	1	8
Labour Force & Employment -- Manufacturing	Local economic growth, levels of productivity, inward & outward investment trends, & metrics related to the ease of doing business	4	2	3	6	7	8	5	1
Business Support Environment	Metrics of lead times and logistics, infrastructure quality, & the availability of third-party trucking & warehousing support	5	2	6	3	4	8	7	1
Transportation & Distribution	Research & development capacity, the support for skills upgrading or training of staff, and the quality of connections between post-secondary institutions & the private sector, including the availability of technical & vocational programs, the relative rankings of universities, & the presence of research facilities	5 (T)	1	4	3	5 (T)	2	8	5 (T)
Education, Training & Research	Factors related to quality of life & quality of place, including housing-related metrics, crime rate statistics, & healthcare measures	7	3	1	4	5	6	8	2
Quality of Place		2	3	1	4	8	6	5	7

Ontario's Attractive Corporate Tax Rates: Ontario's statutory corporate tax rates have been markedly lower than US states and compare very favourably with the principal overseas counterparts. The combined Federal-Ontario rate of 26.5 percent is more than 12 percentage points below the US average (Exhibit 3). The Ontario

advantage compared to the US may be eroded by the corporate tax cuts that are anticipated from President Trump and the Republicans who control the US Congress.

Exhibit 3



Source: 2017 Ontario Budget, April 27, 2017

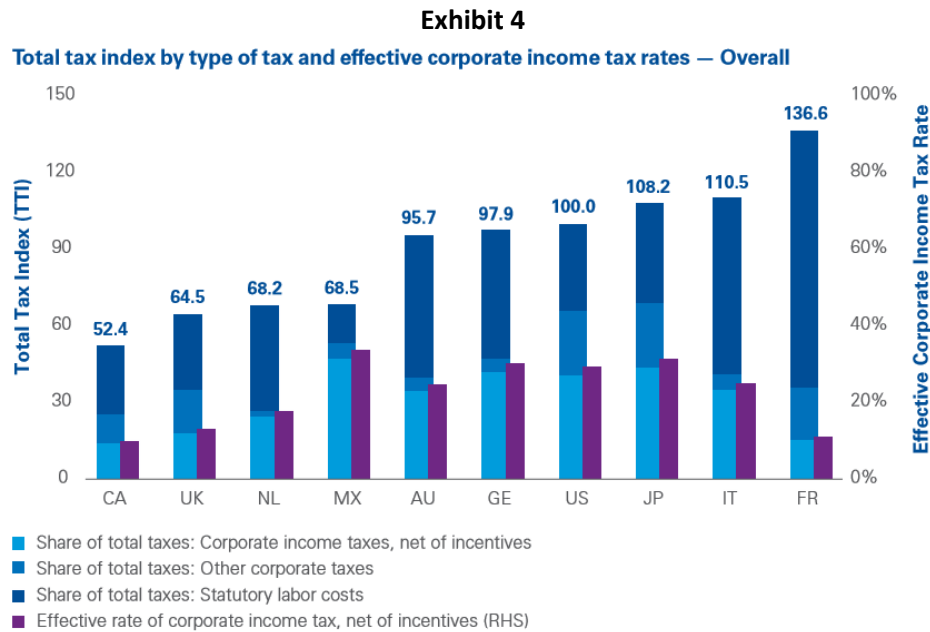
Note: Rates are based on legislation and information available as of March 30, 2017.

Effective Corporate Tax Rates: Comparisons that hone in on effective – rather than just statutory – corporate tax rates similarly show Canada in a very favourable light. Canada has a low effective total corporate tax burden as of January 1, 2015, compared to major cities in all the 10 countries surveyed in the 2016 KPMG Competitive Alternatives Special Report, Focus on Tax (Exhibit 4).⁷ The comparator countries are the United States, United Kingdom, Netherlands, Germany, Italy, France, Japan, Australia and Mexico.

The KPMG study adopts a Total Tax Index (TTI) to measure of the total taxes paid by corporations, expressed as a percentage of total taxes paid by corporations in the US. The taxes include not only corporate income tax but property, capital, sales, statutory labour costs, and miscellaneous local taxes.

Among the countries studied, Canada has the lowest Total Tax Index (TTI) at 52.4, as shown in Exhibit 4. A TTI of 52.4 means that total tax costs in Canada are 47.6 percent lower than in the United States, which has a TTI of 100.0, the benchmark against which all locations are scored.

⁷ KPMG, "Competitive Alternatives Special Report: Focus on Tax," 2016 Edition (http://mmkconsulting.com/compalts/reports/compalt2016_report_tax_en.pdf). Accessed on February 15, 2017.



5. Livability

As the world's advanced economies like Canada shift to service and light manufacturing jobs, more and more attention is focused on providing the working and living environment that will attract and retain the workforce and create connected, centralized, and collaborative living, working and free-time spaces. Vibrant, walkable, bike-able, mixed-use urban clusters are expected to be the magnets that will attract and retain millennial talent, particularly where these places are safe, offer public transit options, and feature family care and recreational amenities.

The diversity of businesses of all sizes that seek this type of live/work/play milieu is notable. They span the financial, information technology, software, engineering and professional services, research and development, design, advertising and marketing sectors. Firms welcome being close to customers and partners. In the case of St. Catharines, this is also met by being able to readily access other Greater Golden Horseshoe business hubs – such as downtown Toronto, Hamilton, Burlington, Oakville and Mississauga. The Ontario government has committed to providing GO commuter rail service that will expedite access.

St. Catharines is home to world class natural amenities, including the shoreline of Lake Ontario and the Niagara Escarpment which offer year-round recreational opportunities. The City maintains more the 1,000 acres of parks and trails and 250 floral displays within the parks. Protection of sensitive lands and waterways will put a growing premium on the available residential and commercial locations and developments, especially in light of the Niagara Region's place in one of North America's most rapidly growing metros. St. Catharines can attract many entrepreneurs and micro-employers who identify with the lifestyle and who can be agnostic about physical location if they can access broadband, flexible work spaces, and home-based businesses, which are permitted in the zoning by-law.

Key Takeaways

- Global economic growth can be expected to continue at a moderate overall rate. The outlook is uncertain in the face of emerging protectionist and nationalist tendencies. Unpredictability inhibits global investment. Policies to be adopted by the Republican dominated US Congress are likely to make the US more competitive. Within Canada, Ontario and especially the Greater Golden Horseshoe (GGH) will likely have marginally stronger growth than elsewhere in the country, pending higher energy and commodity prices.
- Additional foreign direct investment (FDI) in Ontario and St. Catharines will take place most significantly through the expansion of existing foreign-owned operations that typically know how to connect to highly qualified talent and to capitalize on support for innovation. New greenfield investment, while important, can be expected to represent a lesser proportion.
- Provisions of Canada's new economic and trade agreement with the European Union makes Canada a preferred location in a number of situations for new North American investment by European, Asian and US firms, something that St. Catharines can potentially lever given its proximity to the border. An important caveat is assured access for Canadian products and services to the US market. The agreement will also potentially provide opportunities for St. Catharines firms to diversify their markets away from the US.
- Studies of Niagara Region's relative competitiveness shows that it ranks favourably, especially on overall costs of the doing business. Statutory and effective corporate tax levels in Ontario were lower than other major developed countries at the end of 2015.
- Walkable, mixed-use clusters in cities provide the working and living environments that attract talent and companies. In St. Catharines, access to nature, recreational possibilities, performing arts festivals and historic communities can appeal to entrepreneurs and micro-employers.

C. St. Catharines: Building on Strengths, Adapting to Change

1. St. Catharines: Niagara's Urban Growth Centre and Business Hub

St. Catharines is Niagara Region's only Urban Growth Centre and business hub. The city's advocacy and economic development strategies should give primacy to retaining and building its position, including ensuring an unequalled urban lifestyle choice.

St. Catharines – Provincial Context: The Provincial Policy Statement, Greenbelt Plan, Niagara Escarpment Plan, and Places to Grow establish the landuse policy and parameters for St. Catharines. Provincial policy gives direction on growth, future housing needs, employment lands, protection of agricultural lands and natural heritage.

The Provincial Policy Statement is the base planning and landuse policy that gives direction for all Ontario Municipalities. It promotes strong communities, a strong economy, and a clean and healthy environment.

The Greenbelt Plan dictates which areas should be protected and where expansion and development should not occur. It ensures that appropriate lands are preserved for agricultural uses and natural heritage. It works in conjunction with Places to Grow. The Greenbelt governs all of the City's agricultural lands. They are designated as Speciality Crop Area, which is the highest designation for protection of agricultural lands afforded in the Greenbelt Plan.

The Niagara Escarpment Plan ensures the protection of lands within the Niagara Escarpment world biosphere. Escarpment lands within the Urban Area are designated either "Escarpment Natural Area" or "Escarpment Urban Area". All development within the area is review by the Niagara Escarpment Commission, and subject to their regulations and a development permit.

Places to Grow designates the boundaries of the City's Urban Area, and establishes policies and direction for the accommodation of growth. It promotes intensification, mixed use development and transit supportive planning. Places to Grow dictates minimum housing and employment density target of 50 people and jobs per hectare for vacant lands. Places to Grow designates St. Catharines' downtown as an Urban Growth Centre. It is the only Urban Growth Centre in Niagara Region, and one of only 25 in the Golden Horseshoe.

St. Catharines – Niagara's Urban Hub: The geographic location of St. Catharines in Niagara Region reinforces its central position in the Region's life and economy. The City's role as Niagara's business and urban hub and its location near the US border were identified as major assets in the consultations on the Strategy. The City straddles the widened Queen Elizabeth Way (QEW) where 400-series highways in the Region connect, providing ready access to all the Canada-USA border crossings in the Buffalo-Niagara corridor and convenient links to the US Interstate highway network. St. Catharines offers a choice of multiple nearby airports with excellent cargo and passenger services, among them Buffalo Niagara (US), Niagara Falls (US), Niagara District Airport, Hamilton International, and Toronto Pearson International. Flight frequency has been increased for 12 minute scheduled FLYGTA flights between Toronto's downtown Billy Bishop Airport and Niagara District Airport that avoid possible traffic hassles. The Ontario government has committed to daily GO Transit commuter rail service between Toronto and St. Catharines, already a VIA Rail stop for the daily Toronto-New York passenger service. Concurrently, St. Catharines, Welland, Niagara Falls and Niagara Region are moving toward establishment of an integrated inter-municipal transit service. The St. Lawrence Seaway's Welland Canal is on the City's eastern border, while Hamilton's significant Great Lakes port is nearby. Fibre optic connectivity for digital- and

communication-dependent companies is assured by the fact that St. Catharines is serviced by a major fibre optic hub providing connection to both north-south and east-west trunk lines. Service will be strengthened by Niagara Region's participation in the Western Ontario Wardens' Caucus (WOWC) \$281 million SouthWestern Integrated Fibre Technology (SWIFT) Network that will deliver fibre optic coverage to communities throughout southwestern Ontario. The initiative is supported by \$90 million in funding from each of the Federal and Ontario governments.⁸

Part of a Major Mega-Region: Looking beyond the Niagara Region, St. Catharines is also part of a North American economic mega-region, the Greater Golden Horseshoe (GGH). Anchored by the city of Toronto, this population concentration of 9.4 million people extends into Niagara Region,⁹ ranking it fifth among major US and Canadian metropolitan regions.¹⁰ It contains over one-quarter of Canada's population and attracts one in three new immigrants to Canada. As one of North America's fastest growing regions, it is forecast to have a population of 13.5 million by 2041.¹¹ Niagara is the connector for the Greater Golden Horseshoe with Buffalo, Rochester, Syracuse and Albany.

Canada-US Crossroads: St. Catharines is well placed to be the substantive leader in Buffalo-Niagara cross-border business, trade, investment, tourism, academic, research, talent, people-to-people and intergovernmental interactions. Its attractiveness as an internationally-oriented location will be enhanced where it can facilitate linkages, partnerships and channels. One-quarter of all Canada-US trade that reaches Ontario by land passes through the Niagara corridor.¹² The designation of Niagara Region as the first Foreign Trade Zone (FTZ) Point in Ontario emphasizes this role and may facilitate advantageous customs arrangements.

Health Care System: The Niagara Health Systems' new acute care St. Catharines hospital site, opened in 2013, showcases state-of-the-art technology and its patient-centred design features representing the future of healthcare in Canada. The Walker Family Cancer Centre provides comprehensive cancer care for the first time in Niagara. Other notable centres that are housed in the nearly one million square foot facility include the Heart Investigation Unit, the kidney care hub for dialysis patients and the Mental Health and Addiction Department. Unique features include the highest proportion of single-patient rooms in Ontario (80%) and the largest wireless installation in a Canadian hospital. In addition, the centre of excellence in the Niagara Health System for rehabilitation services, the Hotel Dieu Shaver Health and Rehabilitation Centre is also located in St. Catharines. The Steve Ludzik Centre for Parkinson's Rehabilitation, opened in June 2013, is housed within Hotel Dieu Shaver and is funded 100% through private donations. The Parkinson's program is a unique time-limited six-week program that uses an inter-professional evidence-based approach to improve the functional abilities of people living with Parkinson's disease.

Institutions of Higher Learning: The presence of Brock University in St. Catharines gives the City an anchor opportunity in higher education, supported by the City's proximity to campuses of Niagara College of Applied Arts and Technology. Brock is also the site of the Niagara Campus of the McMaster University's School of Medicine. The pattern across the US and Canada has been the emergence of mid-size urban areas that have

⁸ St. Catharines Standard, "Niagara logs onto high-speed Internet funding," July 26, 2016 (<http://www.stcatharinesstandard.ca/2016/07/26/niagara-logs-on-to-high-speed-internet-funding>). Accessed on February 6, 2017.

⁹ Canadian Census 2016.

¹⁰ Based on a comparison with US "Combined Statistical Areas" in 2015 US Census. New York-Newark NY-NJ-CT-PA, Los Angeles-Long Beach CA, Chicago-Naperville IL-IN-WI, and Washington-Baltimore-Arlington DC-MD-VA-WV-PA are the four ahead, while San Jose-San Francisco-Oakland CA, Boston-Worcester-Providence MA-RI-NH-CT, Dallas-Fort Worth TX-OK and Philadelphia-Reading-Camden PA-NJ-DE-MD follow.

¹¹ Ontario Ministry of Municipal Affairs (<http://www.mah.gov.on.ca/AssetFactory.aspx?did=10852>). Accessed on February 17, 2017.

¹² Region of Niagara, "Niagara Region Economic Development Business Plan 2017," March 2, 2017.

leading institutions of higher learning as high-growth innovative clusters, especially where they are near large metropolitan areas.

Brock University: Founded in 1964, Brock has a full-time enrollment of 16,000 and 2,250 part-time undergraduate and graduate students attending seven faculties – Applied Health Sciences, Mathematics and Science, the Goodman School of Business, Education, Social Sciences, Humanities, and Graduate Studies. Brock’s co-op program ranked as the fifth largest in Canada. Brock is known for its pursuit of transdisciplinary research.

A notable part of Brock’s main campus, as a prospective engine for economic development, is the \$112 million Cairns Family Health and Bioscience Research Complex, a 16,400 square meter (176,000 square foot) building, completed in 2012, that contains the University’s most advanced research labs. Six of Brock’s ten Canada Research Chairs are among the researchers associated with the complex whose world-class research covers areas such as cancer treatments, infectious disease, biotechnology and green chemistry. The complex includes a research-dedicated Containment Level 3 (CL3) laboratory with an insectary to investigate vectors of disease as well as treatments for deadly infectious diseases like SARS, tuberculosis and West Nile virus.

In addition to its main St. Catharines campus, Brock’s Marilyn I. Walker School of Fine and Performing Arts has 50 faculty and over 500 students located Downtown in a 97,000 square foot \$45.5 million renovated textile factory that is adjacent to the City’s new \$60 million FirstOntario Performing Arts Centre

Exhibit 5			
Brock University Programs - 2014	Bachelor's/First Professional Degree	Master's Degree	Doctoral Degree
Agriculture & Biological Science	113	11	7
Business & Commerce	536	279	0
Computer Science	35	9	0
Education	774	144	6
Fine & Applied Arts	109	0	0
Humanities	393	54	0
Kinesiology, Recreation & Physical Education	470	0	0
Mathematics	32	7	0
Nursing	100	0	0
Other Arts & Science	207	0	0
Other Health Professions	112	49	*
Physical Science	29	14	*
Social Science	806	140	6
TOTAL DEGREES CONFERRED	3,716	707	24
Source - CUDO Common University Data Ontario			

Niagara College: Niagara College of Applied Arts and Technology, founded in 1967, has more than 9,000 full-time students studying in over 100 diploma, graduate certificate, apprenticeship and Bachelor's Degree programs. In addition, there are over 15,000 part-time studies registrants who take the over 600 credit, vocational and general interest programs. The College has three campuses: the main Welland site and locations in Niagara-on-the-Lake, adjacent to St. Catharines, and in Niagara Falls.

Exhibit 6			
Niagara College Full-Time Student Enrolment – By School Autumn 2015			
School	Enrolment	School	Enrolment
Business & Management	1,233	Justice & Fitness Studies	904
Hospitality, Tourism & Administration	789	Allied Health	458
Canadian Food & Wine Institute	641	Trades	483
Liberal Arts & Science	491	Media	945
Environmental & Horticultural Studies	441	Technology	740
Community Studies	957	Nursing & Personal Support Worker	686
Source: Niagara College Canada, Annual Business Plan 2016-2017			

Niagara Campus of McMaster University's School of Medicine: Brock University's Cairns Family Health and Bioscience Research Complex is the site of the Niagara Regional Campus of McMaster University's Michael G. DeGroote School of Medicine which has about 100 students. The presence of the McMaster Campus strengthens the health care system locally through partnerships with Brock and the Niagara Health System, including through involvement in research in areas such as scoliosis, dehydration in elite athletes, and hyperactive children. The School has developed a niche in medical practice research, the results of which are being implemented in all DeGroote School of Medicine facilities as well as hospitals in Ireland. Residency

specialties include family medicine, surgery and obstetrician, anesthetist and emergency. Located in Downtown St. Catharines, The McMaster Family Health Team's participation in the family medicine residency strengthens the case for Downtown.

Competitive Strengths According to the St. Catharines Community: The online survey that was available to the community as part of the Strategy development asked respondents to identify the top five competitive strengths of St. Catharines. The following six choices garnered the most notable response:

1. Access to major markets (chosen 90 times);
2. Location (84);
3. Proximity to the US (80);
4. Post-secondary education (71);
5. Cost of living (68); and
6. Broader Niagara Region amenities (58).

2. Population

The population of St. Catharines has grown only slightly over the last twenty years – by 1.7% over the twenty years from 1996 to 2016 (Exhibit 7). Forecasts also point to lower future growth expectations in St. Catharines as compared to elsewhere in the Region and Ontario. Growth is constrained by the limited developable greenfield land available for residential development. Nonetheless, participants in the consultations on the Strategy stressed the need to attract people to the City.

Exhibit 7				
Population of St. Catharines & the Niagara CMA				
Recent Censuses				
Census	St. Catharines Population	% Change	Niagara Region Population	% Change
1996	130,926		403,554	
2001	129,170	-1.3%	410,574	+1.7%
2006	131,989	+2.2%	427,421	+4.1%
2011	131,400	-0.4%	431,346	+0.5%
2016	133,113	+1.3%	447,888	+3.8%

Source: Statistics Canada, Annual Censuses

There is concern that younger people leave St. Catharines and Niagara Region for post-secondary education, appealing entry-level jobs and more vibrant living environments. Apprehension about this outward flow of talent was voiced during the consultations on the Strategy.

The analysis in a Policy Brief by Brock University's Niagara Community Observatory shed some interesting and positive light on the situation in the Niagara Region with respect to the 20-29 age cohort. The brief, published in January 2017, analyzed the age cohorts of Niagara Region's population profile to identify who the Region should be targeting for attraction and retention. The brief concluded:

"Niagara has proportionally fewer young people and young families than the Ontario average. We know Niagara has proportionally the fewest working-age people in the country and is home to more seniors than youth. This has implications for economic growth as well as program funding particularly as baby boomers enter retirement and there are fewer in the workforce to financially support the growing demands. The numbers show us that Niagara's population since 2001 has grown in the 20-29 age cohort, and it is actually the 0-14 and 30-44 age cohorts that have declined, suggesting that the focus of "youth" retention and attraction be broadened. The Ontario government's population estimates also show that the numbers

currently in the 15-29 age cohorts will remain steady as they shift into the 20-34 cohorts in 2020. Population growth has become a competitive arena as communities across Canada face similar challenges and vie for young skilled workers from across the country. Niagara is in a unique position – with a university, a college and in a world-renowned location with such proximity to the border – to leverage its strengths and take the lead in establishing itself as a desirable destination for people of all ages.”¹³

To better assess the comparable age distribution of the St. Catharines population, Exhibit 8 provides the age distribution of the City population, and provides comparisons with the St. Catharines-Niagara CMA and Ontario. The proportion of the St. Catharines population in the 20 to 29 years' cohorts are higher than both the Niagara CMA and the province, but it then declines to shares less than Ontario until 55 years. Also notable is the fact that the cohort in St. Catharines under the age of 20 years is lower than both the CMA and Ontario, meaning that over the next two decades a relatively lower share of St. Catharines residents will be coming into the City's labour force. This translates into more dependence by St. Catharines employers on a younger workforce from neighbouring municipalities and on attracting more immigration than it has been from elsewhere in Canada and internationally.

Exhibit 8				
Age Distribution in St. Catharines Compared to the CMA & Ontario				
2016 Census				
Age Cohort	St. Catharines Population	St. Catharines %	Niagara CMA %	Ontario %
Under 5 years	6,020	4.5%	4.5%	5.2%
5 to 9 years	6,385	4.8%	4.9%	5.6%
10 to 14 years	6,435	4.8%	5.1%	5.6%
15 to 19 years	7,445	5.6%	5.7%	6.0%
20 to 24 years	9,515	7.1%	6.3%	6.7%
25 to 29 years	8,875	6.7%	5.7%	6.5%
30 to 34 years	7,770	5.8%	5.4%	6.4%
35 to 39 years	7,025	5.3%	5.3%	6.3%
40 to 44 years	7,500	5.6%	5.8%	6.5%
45 to 49 years	8,310	6.2%	6.5%	7.0%
50 to 54 years	10,105	7.6%	7.9%	7.9%
55 to 59 years	9,790	7.4%	7.8%	7.4%
60 to 64 years	9,060	6.8%	7.4%	6.3%
65 years and over	28,875	21.7%	21.8%	16.7%
Prime Working Age Cohort - 25 to 44 years	31,170	23.4%	22.1%	25.7%
Mean age	43.7	-	44.1	41.0
<i>Source: Statistics Canada, 2016 Census</i>				

Immigration – A Critical Contributor and Differentiator: With the numbers of Canadian-born entrants to the workforce plateauing, immigration becomes a critical contributor to skilled workforce availability and to new business creation. A plan for Niagara Region's Global Attractiveness Project, a strategic priority for the Regional Council, is being developed by a cross-functional Regional team to position Niagara as a choice for new immigrants. The initiative seeks to counter a multi-year decline in the number of immigrants selecting Niagara

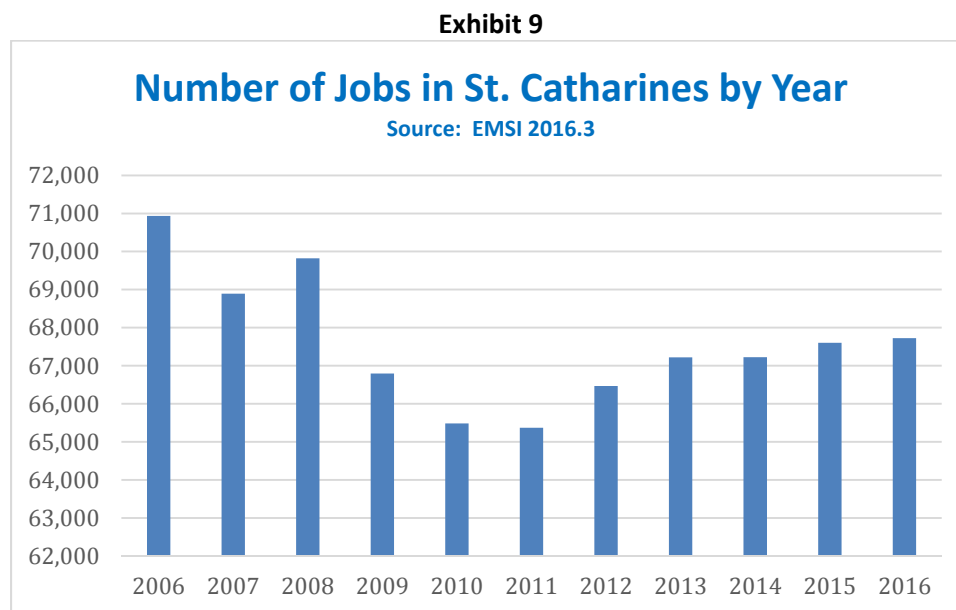
¹³ Phillips, Carol and Adam Durrant, Brock University Niagara Community Observatory, "Growing Niagara: A Closer Look at Niagara's Aging Population, Policy Brief #26, January 2017.

from 2005 to 2014, to a point that only 850 came to the Region in 2014.¹⁴ The formation of a Niagara Chinese Business Council affiliated with the Greater Niagara Chamber of Commerce is an example of a group that could play a role.

3. Jobs

St. Catharines had 67,751 jobs in 2016, just over a third (34.3%) of all the jobs in the Niagara CMA.

Over the past decade, the number of jobs in St. Catharines has hovered in the 65,000 to 70,000 range (Exhibit 9). By 2016, the slow recovery in the number of jobs in St. Catharines since the recession had not yet brought the level back to the 2008 pre-recession levels.



From 2011 to 2016, the jobs growth in St. Catharines was 3.6%, the lowest increase among individual Niagara CMA municipalities and below the average of the rest of the CMA (6.0%) (Exhibit 10). However, the increase in jobs over that five-year period was larger than the City's population increase (1.3%) and very similar to the Region's growth rate (3.8%), indicating that job generation is outpacing the local population growth.

¹⁴ Niagara This Week, "Immigrants seen as key driver of Niagara's economy," September 20, 2016 (<http://www.niagarathisweek.com/news-story/6866613-immigrants-seen-as-key-driver-of-niagara-s-economy/>). Accessed on February 7, 2017.

Exhibit 10				
Job Levels by Community in St. Catharines-Niagara CMA				
Community	2016 Jobs	2011 - 2016 Change	2011 - 2016 % Change	% CMA Jobs
St. Catharines	67,751	2,381	3.6%	34.3%
Niagara Falls	45,970	2,072	4.7%	23.3%
Welland	25,453	1,855	7.9%	12.9%
Niagara-on-the-Lake	12,359	725	6.2%	6.3%
Fort Erie	11,937	587	5.2%	6.0%
Lincoln	11,827	816	7.4%	6.0%
Thorold	9,008	479	5.6%	4.6%
Port Colborne	6,526	339	5.5%	3.3%
Pelham	4,957	317	6.8%	2.5%
Wainfleet	1,560	135	9.5%	0.8%
Source: EMSI Q1 2016				

The number of jobs in St. Catharines is roughly equal to the workforce residing in the City. More precisely, data for 2011, the latest comparative data available, indicates that St. Catharines had enough jobs for the equivalent of 98.7% of its workforce. Not surprisingly, however, given the fluidity of the job market, only 56% of the St. Catharines resident labour force worked in the City. Some of the St. Catharines commuters, as well as residents of nearby communities, could undoubtedly be attracted to work within St. Catharines if new investment and expansions occur. In 2011, the main source municipalities for St. Catharines for workers were Niagara Falls (4,495), Thorold (3,130), Welland (2,845), Pelham (1,565) and Niagara-on-the-Lake (1,235). The commuter flow was roughly equal between St. Catharines and each of Niagara Falls, Welland, Lincoln, West Lincoln and Grimsby. On balance, there was an outflow from St. Catharines to Niagara-on-the-Lake and net inward flows from Thorold, Pelham, Port Colborne, Fort Erie and Wainfleet. There were 2,150 St. Catharines residents that commuted to work in Hamilton, while 870 travelled from Hamilton to jobs in St. Catharines. Release of the 2016 Census data on these commuting patterns in November 2017 will provide an update and likely greater detail on the occupation and sector categories.

4. Economic Structure

Like other cities in advanced industrialized countries, St. Catharines is witnessing a broad and continuing shift from manufacturing to service sector jobs. In St. Catharines, the most significant growth in jobs from 2011 to 2016 was in service sectors. The dominant three sectors are retail, health care, and education which each grew from 5.1% to 7.6% over the five year span (Exhibit 11).

Manufacturing, which now ranks fourth among the major sectors, has historically been at the heart of the St. Catharines economy. Manufacturing's deep roots still represent a major asset despite the decline in manufacturing jobs since the early to mid-2000s. Manufacturing jobs took severe hits in the first decade of this Century, first from the rising Canadian dollar against its US counterpart, and then even more tellingly during the 2008-2009 financial crisis and economic recession. St. Catharines lost 38% of its manufacturing jobs between 2006 and 2011. From 2011 to 2016, jobs in manufacturing showed a marginal increase, a benefit of the recovery.

Job growth has been strong in accommodation and food services, the fifth ranking sector, and in professional, scientific and technical services, which is the ninth largest.

Location Quotients (LQs) indicate the concentration of jobs compared to Ontario as a whole, with an LQ greater than 1.0 indicating a higher concentration in St. Catharines than provincially. Cities that serve as regional business and service hubs tend to have LQs above 1.0 for the key service offerings such as retail and health care. Tradeable sectors, such as manufacturing and some professional, scientific, technical and financial services, provide goods and services which are exported and bring revenues back into the community. Some sectors that benefit from visitor spending – such as accommodation and food services – also have tradeable aspect. The concentration of manufacturing activity in St. Catharines is now on par with the provincial average, while professional, scientific, technical and financial services are below.

Exhibit 11				
St. Catharines – Eleven Largest Two-Digit NAICS Sectors by Jobs				
With Job Change 2011-2016 & 2016 Location Quotients				
Sector Description (NAICS)	Jobs 2016	2011-2016 % Change	2011-2016 % Ontario Change	Location Quotient 2016
Retail Trade (44-45)	10,720	5.1%	6.7%	1.41
Health Care & Social Assistance (62)	8,916	7.6%	10.0%	1.17
Educational Services (61)	6,076	6.8%	9.2%	1.29
Manufacturing (31-33)	5,710	1.0%	-0.3%	1.02
Accommodation & Food Services (72)	4,825	12.1%	16.0%	1.06
Construction (23)	4,100	6.0%	12.4%	0.82
Administrative & Support & Waste Management (56)	3,941	-3.8%	5.9%	1.14
Public Administration (91)	3,643	-4.0%	-2.4%	0.89
Professional, Scientific & Technical Services (54)	3,570	19.2%	10.2%	0.76
Other Services (81)	3,390	-7.0%	0.6%	1.07
Finance & Insurance (52)	2,399	1.9%	8.0%	0.85

Source: EMSI Q1 2016

Key Takeaways

- St. Catharines is Niagara Region's business and service hub, centrally located with ready access to major forms of transportation and to the principal Canada-US border crossings. St. Catharines and Niagara Region are part of the Greater Golden Horseshoe (GGH), a North American mega-region having a population of nearly nine million.
- St. Catharines is benefiting from Niagara Region's growing institutions of higher learning – Brock, Niagara College and the McMaster Medical Campus – and the strengthened Niagara Health Systems presence, especially the new acute care hospital site.
- The population of St. Catharines has increased by only 1.7% over the twenty years from 1996 to 2016. Attraction of immigrants to Niagara Region has been in decline for at least a decade.
- St. Catharines is the location of more than a third of Niagara Region jobs. The number of jobs in the City is equivalent to its resident workforce, though, given widespread commuting among Niagara municipalities, only 56% of that workforce works in St. Catharines.
- The number of jobs in St. Catharines declined significantly as a result of the 2008-2009 global recession, bottoming out in 2011. Since, the job recovery has been occurring at only a moderate pace and has not yet reached the 2006, 2007 and 2008 levels.
- St. Catharines, as elsewhere, is experiencing a shift from manufacturing to service sector jobs. Manufacturing, which now ranks as the fourth largest sector, lost 38% of its jobs from 2006 to 2011. Recently from 2011 to 2016 the largest three sectors – retail, health care, and education – each grew from 5.1% to 7.6%. Other sectors with strong growth include accommodation and food services and professional, scientific and technical services.

D. Positioning St. Catharines for Success: Investor and Visitor Readiness

To position St. Catharines for future success, the City must distinguish itself as THE premier Niagara Region location that will attract and retain talent and provide a competitive, welcoming, facilitative, and predictable environment for business.

1. Place Making

The City of St. Catharines has committed itself to place-making as a central catalyst for change, to attract investment and talent, and to create an innovative, future-oriented community.

Niagara's Business and Service Centre: A reflection of St. Catharines' central role as the major business and service centre for Niagara Region can be seen in the relatively high proportion Niagara CMA jobs that are found in the City in sectors that cater to the needs of the residents in Niagara. Across all sectors, just over a third of all jobs (34%) in the CMA are in St. Catharines. A higher proportion of jobs is found however in retail (41%); finance and insurance (43%); real estate, rental and leasing (41%); management of companies and enterprises (68%); educational services (44%); and health care and social assistance (40%). This indicates that St. Catharines operations in these sectors serve clients beyond City residents. The St. Catharines headquarters site for Ontario Ministry of Transportation is another plus.

Downtown Creative Cluster Master Plan: The June 2008 Downtown Creative Cluster Master Plan outlined an integrated framework for a comprehensive multi-year Downtown revitalization. The Plan was developed to respond to the Ontario Government's 2005 Places To Grow which designates St. Catharines Downtown as Niagara Region's only Urban Growth Centre, and which, on one hand, emphasizes urban intensification, and, on the other, protection of Greenbelt lands.

Urban Growth Centres are designated to support the highest concentration and mix of transit supportive residential, employment, institutional, and civic uses, and are intended to promote public and private investment. A minimum density target of 150 people and jobs per hectare to be accommodated by 2031 is established for Urban Growth Centres.

Important dimensions of the Master Plan were a focus on a creative and cultural role in the city-core chemistry, the presence of institutions of higher learning, attracting new urban entrepreneurs, creating live/work spaces and pedestrian-friendly spaces, and positioning the Downtown as a signature tourism destination, including as part of the Niagara Wine Route.

The major anchor projects for the transformative plan are in place – Brock University's Marilyn I. Walker School of Fine and Performing Arts, the neighbouring FirstOntario Performing Arts Centre, the 5,400-seat Meridian Centre, the McMaster University Family Medicine Clinical Teaching Site as a walk-in clinic, and the Carlisle Parking Garage. The estimated public and private investment in the Downtown since 2013 is \$300 million, including these projects and the Burgoyne Bridge replacement. A Downtown way finding signage project was completed in 2016. Streetscaping is proceeding. Recommendations of the parking study are being pursued. A hotel feasibility study undertaken in 2016 focused especially on the Downtown business case. The realization of a few intended parts of the Plan are pending and may need to be reimagined as future steps – such as the proposed city square and free Wi-Fi connection zones.

The presence in the Downtown of Innovate Niagara, its interactive digital media space (Generator at one), the FueledMinds co-working space, and the announced private-sector-driven Tech HUB in the former Niagara

Regional Police headquarters building are instrumental nodes in the growing innovation ecosystem. More than a half-a-dozen graduating companies and early-stage ventures working with Innovate Niagara have taken space in the Downtown. The ambiance and vibe that has emerged is attracting the creative class and other service sector employers in fields such as software, digital media, marketing and advertising, information and computer technologies, engineering, and business support and technical services.

Since 2013, property transactions in the Downtown have increased, with over 20 having been sold at a value of approximately \$21 million. Over 100,000 square feet of commercial retail and office space has been filled. Over \$200 million has been invested in residential condo, townhouse, retirement and student developments. A very evident indicator of success is the string of international and national sporting events that have been attracted – ice hockey, basketball, curling and a central role in the 2021 Canada Summer Games.

In the consultations that were held in connection with the Economic Development Strategy, many endorsed the efforts underway in the Downtown. Some spoke of a vision that showed signs of being realized. Others spoke positively and hopefully, but still felt that, despite the great progress, continued effort was required to fully achieved the benefits.

Updated and Renewed Downtown Master Plan: Having completed the principal elements of the 2008 Downtown Creative Cluster Master Plan, the original Plan and the accomplishments to date should be revisited, evaluated and an updated and renewed Downtown Plan developed and adopted, focusing on what more is needed to sustain the momentum and accelerate further private sector involvement and investment. Areas for attention are:

- Continuing and accelerating the shift from public investment toward private commercial development, while still recognizing City involvement;
- Broadening the range of retail stores, including attracting grocery and produce outlets whose offerings align with the Downtown vibe and the preferences of residents;
- Desirable commercial office space with access to high-speed broadband that will attract additional professional services firms (engineering, architecture and design, information technologies, finance and insurance, human resources and accounting and media and public relations);
- Creating and having available space for lease that will attract early-stage firms that graduate from Innovate Niagara and other shared spaces;
- Providing leasable spaces that will attract digital video, film and marketing firms for the GTHA looking for more affordable, creatively-oriented, urban-feel locations;
- Encouraging ventures that will complement and strengthen the Wine Route and Ale Trail tourism initiatives;
- Support the further growth of ecosystem, through new private-sector directed share and soft landing spaces;
- Attracting hotel and accommodation capacity;
- Revisiting the City Square and Wi-Fi connection zone concepts.

The further evolution of incubation, soft landing and shared spaces should remain a central focus for the next phases of the Downtown, potentially supported by the considerable Federal and Ontario government funding directed to innovation. An aspect of the innovation agenda, as noted elsewhere (E.2), is the increasing attention being given to “super clusters” that bring together a wider economic region or corridor, such as Niagara Region and St. Catharines have already initiated with Hamilton.

An assessment of the impact of tax incentives to date and the need for targeted programs on a go forward basis will also be a critical input.

As part of the development of a new Plan, comprehensive metrics will need to be developed that will dispassionately record the progress in Downtown across a range of measures that assess – among other aspects – safety, environmental gains, private sector investment, the return on tax incentives, commercial vacancy rates, retention of start-ups, pedestrian foot traffic counts, and Downtown events.

The anticipated connections to Niagara Falls and Welland that will result from the Inter-Municipal Transit project and the inauguration of GO commuter rail service will add to the lure of Downtown and enhance the ability of Downtown businesses to attract talent and customers. The services will also enable Downtown businesses to reach out more easily on a personal basis to prospective clients in the Region and the broader Greater Toronto and Hamilton Area (GTHA).

The development of the next phases of the Downtown project will benefit from the benchmarking of other successful initiatives that have breathed life, vigor and growth into other city-centres. A Comparative Analysis in the appendix to the Economic Development Strategy and Action Plan profiles comparable Southern Ontario communities and notes major projects in their urban cores. Kitchener and Hamilton are among the examples. The experience elsewhere indicates that downtown reinvestment tends to take more than ten years to gain desired momentum. This underlines the importance of a new plan to sustain and grow the gains Downtown now that St. Catharines is reaching the ten-year mark.

Even before steps are taken toward the new Downtown Plan, two new initiatives announced in the 2017 Federal Budget should be examined to see if either or both align with future ambitions for the Downtown and should be pursued. The programs are:

- A Smart Cities Challenge Fund,¹⁵ involving \$300 million over 11 years, entrusted to Infrastructure Canada, to support winning merit-based urban plans for greener buildings, smart roads and energy systems, and advanced digital connections for homes; and
- The Canadian Cultural Spaces Fund,¹⁶ provided with \$300 million over ten years to construct, renovate and equip creative space and hubs that will bring together artists, cultural entrepreneurs and organizations to take ideas to new heights.

Other Place Making: Four other important development initiatives are highlighted in the 2015 City Strategy: the commercial core of Port Dalhousie, the 54-acre former General Motors (GM) property on Ontario Street, the former Hotel Dieu site on Ontario Street that is being redeveloped as retirement communities, and the previous General Hospital site on Queenston Street.

From an economic development perspective, Port Dalhousie and the former GM site are especially relevant. To be able to move forward expeditiously as fuller information is received from the property developers, the City expects in 2017 to complete and release a Secondary Plan for the Port Dalhousie commercial core and harbour areas. Related in part to the former GM property, the City will undertake an Employment Lands Review Study in 2017 which will guide the City in dealing with any employment land conversion requests. Such steps are part of

¹⁵ Finance Canada, Budget Plan 2017, “Building a Strong Middle Class,” March 22, 2017, Chapter 2, Page 118.

¹⁶ Finance Canada, Budget Plan 2017, “Building a Strong Middle Class,” March 22, 2017, Chapter 2, Page 142.

ensuring full readiness to move assertively and quickly. To this end, a new contract staff position for a project manager has been added in Planning and Building Services.

Port Dalhousie Secondary Plan: The Port Dalhousie Secondary Plan is currently underway for the Port Dalhousie Commercial Core and Harbour area. The Plan is to examine heritage conservation, built form, public spaces, transportation and parking management and provide an effective framework for the district. As part of the study the Port Dalhousie Heritage Conservation District and guidelines will be updated.

Former GM Lands (Ontario Street) Secondary Plan: The proposed Secondary Plan for the former GM lands on Ontario Street is expected to begin in the summer of 2017. The Secondary Plan would examine potential future land uses for the properties, setting out planning and urban design policies to guide future development of the lands. PBS staff anticipate a more appropriate vision for this area to be a vibrant mixed use neighbourhood that maximizes the assets of the neighbourhood (e.g., the Twelve Mile Creek valley, the proximity to downtown, potential adaptive reuse of certain GM iconic buildings, including the west side of Ontario Street, the forge and smokestack). Subject to an Employment Lands Review Study being completed in conjunction with the Secondary Plan, it is anticipated that the site would be converted from traditional employment uses to variety of mixed-use and residential uses.

Employment Lands Review Study: The city is undertaking an Employment Lands Review Study (ELRS) to assess the current employment land supply at a City-wide level. The ELRS will provide the City with data to use in evaluating where employment lands throughout the City should be retained and expanded and where employment land conversions may be considered. ELRS will also inform the land use decisions to be made through the Former GM Lands Secondary Plan.

The ELRS will examine the City's current inventory of lands designated for employment purposes within the context of the ongoing Regional Municipal Comprehensive Review (MCR) and the new Provincial Plans. The ELRS will determine if the current inventory of lands designated for employment purposes will support the employment forecasts and density targets established at the Provincial and Regional levels. It will inform the employment policy review to be completed as part of the Regional MCR. The ELRS will assist the City in evaluating whether employment forecasts allocated to the City can be met, and whether all current employment lands are required over the long term for employment purposes.

GO Hub Transit Station Secondary Plan: St. Catharines has been selected as one of four municipalities within the Region of Niagara that is being planned to accommodate two-way, all-day GO train service to better connect Niagara to the Greater Golden Horseshoe, along with Grimsby, Lincoln and Niagara Falls. The GO station is planned to be located at the existing VIA rail station. The GO Secondary Plan is being led by the Region of Niagara in conjunction with the City. The purpose of the Plan is to provide the vision and planning framework that will guide future development and redevelopment in and around the St. Catharines GO Station.

Brock District Plan: In 2016, Niagara Region undertook the Brock District Plan to guide development within the area surrounding and including Brock University's main campus, including lands in both St. Catharines and Thorold. The Brock District Plan recognizes the opportunity for significant development and intensification within the district, with the university serving as the major catalysts for economic development. The plan seeks to leverage the district's setting within a UNESCO Biosphere Reserve and to promote the evolution of the district into a more compact urban neighbourhood through the construction of mixed-use mid-rise building forms and an improved pedestrian environment. Land use permissions to implement the vision of the Brock District Plan are largely in place. A technical advisory committee with representation from St. Catharines, Thorold, Brock

University, the Region, the Ontario Ministry of Transportation and the Niagara Escarpment Commission (NEC) will support implementation of the plan

2. Availability of Industrial and Commercial Sites and Buildings

The City of St. Catharines does not have municipally-owned industrial or business parks. The City depends on the private sector to respond to market requirements. Many of the opportunities to deliver industrial land involve remediation of sites previously occupied by heavy industry.

Current Availability of Industrial and Commercial Sites and Buildings: A complete inventory of available land, industrial buildings, and commercial office space in St. Catharines is not available in any one location. This makes it difficult for a site selector or investor to have a clear snapshot of the industrial, commercial and investment (ICI) property supply in St. Catharines.

An early 2017 search using the Niagara Region Economic Development Site Finder (<http://niagararegion.zoomprospector.com/>) provided 38 listings of properties for sale or lease, with the majority (34) being under 5,000 square feet. A concurrent property search on the Niagara Association of Realtors website found 47 “For Sale” and 115 “For Lease” listings. Many of the latter listings were retail and commercial, but the search provided a good mix of industrial and light commercial and office listings. The issue from an investor or site selector perspective is that the listings from the Niagara Association of Realtors database are difficult to put into report format and do not provide adequate detail in all areas.

Available commercial office space in Downtown St. Catharines in three significant buildings – 60 James Street, 55 King Street, and 80 King Street – was not listed in either of the main property data bases. The buildings are well located and offer plentiful and attractive office space. Given the emphasis on Downtown and opportunities for services business, this is an unfortunate omission.

There were limited industrial lands listed at the beginning of 2017 – only two vacant employment lands properties. One was a 12.41-acre greenfield property on Berryman Avenue that, with the assistance of the St. Catharines Economic Development team, was certified under the Ontario Ministry of Economic Development and Growth’s Certified Site Program that designates larger industrial sites meeting basic criteria making them suited to immediate development. The Certified Site designation is very helpful in drawing attention to the property. The other property was 4.5 acre site.

Information on future employment land infill or adaptive reuse opportunities proved difficult to identify in the search. Among those that were, it was not always possible to confirm their status. Though typically not market-ready, these properties may be of interest to prospects with a longer-term horizon. Profiles should be available. Several multi-residential projects in various phases of development have been identified that will have significant impact for the City.

The Niagara Region Site Finder database is excellent and is best positioned to be the prime source for St. Catharines property information. The St. Catharines Economic Development team must ensure the Site Finder has up-to-date information on all St. Catharines properties. In addition, the Economic Development team should have profiles and contact information for major redevelopment projects.

Having readily-available summary information on comparative industrial and commercial sale prices and lease rates is also desirable. Niagara Region arranged to contract for the preparation of such a report in 2016. The

report shows that St. Catharines has the lowest commercial office and industrial lease rates in the Greater Golden Horseshoe (GGH), except as compared to Kitchener's lower suburban office rates. Sales prices for industrial properties in St. Catharines were lower than all comparable jurisdictions except for GTA East and Oshawa (Exhibits 12 and 13).

Exhibit 12			
Selected Greater Golden Horseshoe Commercial Office Real Estate Leasing Rates			
Prices per Square Foot - 2016 ¹			
Municipality/Area	Net	TMI²	Total
GTA Central	\$23.04	\$22.56	\$45.60
Financial Core	\$30.59	\$27.27	\$57.86
Downtown	\$29.26	\$25.98	\$55.24
Midtown	\$21.31	\$20.94	\$42.25
GTA North	\$16.47	\$12.98	\$29.45
GTA East	\$12.86	\$14.56	\$27.42
GTA West	\$16.45	\$13.51	\$29.96
Kitchener	\$12.33	\$9.33	\$21.66
St. Catharines – Downtown ³	\$10.50	\$9.00	\$19.50
St. Catharines – Suburban ³	\$14.00	\$9.00	\$23.00
¹ Source: Niagara Region Industrial Market Summary with High Level Commercial Retail & Office Overview, 2016 Edition, Colliers International			
² TMI = Taxes, Maintenance & Insurance			
³ Average			

Exhibit 13				
Selected Greater Golden Horseshoe Industrial Real Estate Leasing Rates and Sale Prices				
Prices per Square Foot - 2016¹				
Municipality/Area	Lease Rates			Sale
	Net	TMI²	Total	Asking Price
GTA Central	\$6.48	\$4.43	\$10.91	\$177.88
GTA North	\$6.89	\$3.85	\$10.74	\$192.67
GTA East	\$5.55	\$3.48	\$9.03	\$54.06
GTA West	\$6.75	\$3.76	\$10.51	\$165.47
Oshawa	\$4.75	\$3.07	\$7.82	\$48.25
Burlington	\$6.50	\$4.95	\$11.45	\$136.09
Kitchener	\$5.24	\$2.77	\$8.01	N/A
St. Catharines ³	\$5.14	\$2.83	\$7.97	\$101.00
¹ Source: Avison Young GTA Report 2016				
² TMI = Taxes, Maintenance & Insurance				
³ Niagara Region Industrial Market Summary with High Level Commercial Retail & Office Overview, 2016 Edition, Colliers International				

Further quarterly reports of this type should be arranged by Niagara Region Economic Development for its use and use by economic development partners. Hamilton may also be interested as that city is also not included in GTA reports by major realty groups such as CBRE and Colliers.

Competitiveness of St. Catharines Industrial and Commercial Property Taxes: St. Catharines promotes its property taxes as being low and competitive with similar-sized municipalities. The City's marketing collateral presents comparisons with Hamilton, Burlington, Brampton, Oakville and Guelph, which show the City to have the lowest property taxes per square foot for commercial office, standard industrial and large industrial.

A comparison with a wider group of municipalities in the Greater Golden Horseshoe shows that this is more generally the case, even if not in each and every situation. Some other Niagara municipalities have lower rates in a few categories, for example, Welland is the case in point shown in Exhibit 14.

Exhibit 14			
Commercial Office and Industrial Property Tax Comparisons for Selected Greater Golden Horseshoe Municipalities			
\$ Per Square Foot - 2016			
Municipality	Commercial Office	Standard Industrial	Large Industrial
St. Catharines	\$2.41	\$1.86	\$1.08
Hamilton	\$2.58	\$2.64	\$1.17
Burlington	\$3.54	\$2.39	\$1.71
Oakville	\$4.05	\$2.93	\$2.52
Mississauga	\$3.60	\$2.24	\$2.11
Brampton	\$3.11	\$2.57	\$1.31
Vaughan	\$3.38	\$1.68	\$1.52
Markham	\$3.11	\$2.36	\$1.38
Whitby	\$4.39	\$2.61	\$1.60
Oshawa	\$2.85	\$2.08	\$1.73
Kitchener	\$2.42	\$1.45	\$0.61
Guelph	\$3.38	\$2.11	\$1.27
Welland	\$1.75	\$1.62	\$0.55
Source: BMA Management Consulting, "Municipal Study," 2016.			

Competitiveness of St. Catharines Industrial and Commercial Development Charges: St. Catharines does not have Development Charges. Only Niagara Region Development Charges apply. This means the stated Development Charges in St. Catharines are lower than other Greater Golden Horseshoe jurisdictions. While the absence of municipal development charges can be a financial advantage for developers, there are funding implications related to municipal infrastructure. . Municipalities with development charges in place often impose development charge exemptions are part of their incentive offers for developments in priority areas within the municipality. .

St. Catharines Incentives: The City of St. Catharines' Community Improvement Plan (2015 CIP) provides incentive programs designed to stimulate new investment in community renewal. The 2015 CIP comprises four programs:

- Tax Increment Finance (TIF) Program for soil remediation and/or redevelopment projects;
- Brownfield Tax Assistance (BTA) Program for remediation of contaminated soils;
- Façade Improvement (FIP) Program for building façade and store front enhancements mainly within the downtown core; and
- Residential/Office Conversion (ROC) Program for conversion of small, unused vacant space for new residential dwelling units or leasable office space mainly within the downtown core.

To cap the City's level of financial exposure, the CIP applications are being invited annually. This is an important improvement over the initial arrangement where it was managed on a less predictable cash flow basis.

Going-forward, the City's Economic Development and Planning and Building groups need to monitor the competitiveness of the CIP vis a vis the offerings in comparative municipality in the Greater Golden Horseshoe (GGH), and undertake a reassessment if the current offering appears to be uncompetitive. An evaluation of incentives should also be a part of the development of the renewed Downtown Master Plan (as recommended

in Section D.1). Feedback provided through the Strategy's online survey indicated quite widespread support for effective incentives that would attract expansions and new investment.

Northern-tier Niagara municipalities such as St. Catharines are not eligible for the incentives provided through the Niagara Gateway Economic Zone and Centre Community Improvement Plan (Gateway CIP). The Gateway CIP offers programs that provide financial incentives to property owners who promote private sector investment, development, re-development and construction activity on employment lands in Fort Erie, Niagara Falls, Port Colborne, Thorold and Welland. The Gateway CIP programs are delivered through a partnership between the Region and the participating municipalities. The Gateway CIP is said to have played a role in the attraction of the General Electric (GE) Brilliant project and Northern Gold Foods.

The Niagara Region will undertake a comprehensive development incentive review in 2017 in order to evaluate the effectiveness and promotion of the development incentive suite against competitor communities, potentially leading to more strategically focused marketing and promotional programs in partnership with area municipalities.¹⁷ The City of St. Catharines should take the opportunity to identify changes to the Regional program that will advance its goals – immediately and in the near term – and be an advocate and active participant in the review. A specific amendment would be have to Region extend its CIP approval area to the entire municipality, to align with the municipality's 2015 CIP. Currently, certain projects that receive municipality funding are not eligible for Regional funding as a result of not being within a Regional priority area.

3. Economic Development and Investment Readiness

Leads about prospective investors are valueless unless they are acted upon in a professional and timely way by providing complete information. Lack of a prompt and full response to leads will damage the community's and the organization's reputation. Therefore, it is absolutely essential, prior to undertaking any proactive initiatives, to work with existing companies or to identify and target new prospects, that resources are focused on ensuring that the response systems are in place and staff are clear on procedures. This is a consideration especially in the case of direct investment enquiries and opportunities presented by Niagara Region Economic Development.

The competitive environment for new investments demands that the St. Catharines Economic Development team be fully investment ready. Key aspects of such readiness are:

- Comprehensive, detailed, up-to-date data (especially the 2016 Census data being released throughout 2017) that will respond fully and immediately to prospective investors' requirements to enable informed decisions, including:
 - Socio, economic, and demographic information;
 - Detailed value propositions for the most promising sub-sectors and niches;
 - Full profiles of available sites, industrial and commercial buildings, and development situations;
 - Detailed workforce availability;
 - Full outline of post-secondary educational and training programs, capabilities and graduates;
 - Potential for impactful and cost-effective research, development and commercialization operations, especially in partnerships with universities and colleges;
 - Applicable local, Regional, Ontario and Federal tax rates and incentives; and

¹⁷ Niagara Region, Memo to Niagara Regional Council, Niagara Economic Development Update with Niagara Economic Development Business Plan 2017, March 2, 2017.

- Information on utilities and transportation infrastructure.
- Having a qualified group of knowledgeable senior people from business, academia and government that can be drawn upon to provide professional and personal insights on doing business in Canada, Ontario and St. Catharines to prospects independent of economic development staff, demonstrating an “Open for Business” culture required for successful investment wins.

Concierge Service: The St. Catharines Economic Development team must be staffed to have the capacity to work in a “hands-on” manner with local firms considering expansion and with prospective investors to facilitate the entire process and ensure that they benefit from thorough, attentive and expedient service related to all their needs through to a decision to invest.

An “Expeditor”: Consultations with the business community in St. Catharines that were a part of the Strategy noted the many layers of government and government organizations that may be involved in a new investment or expansion. Requirements are not always clear up-front and time frames are too often uncertain. Companies that are pursuing job-producing investments and expansions need an “expeditor” or “champion” – a designated St. Catharines Economic Development team member – to work with them throughout to facilitate and expedite the process. The “expeditor” must be knowledgeable, experienced, and fully acquainted with requirements. Having prior relationships with the decision makers in the entities responsible for the approvals is also important.

The facilitation of any approval process benefits greatly from arranging initial roundtable meetings with prospective investors that involve all those who will be involved in the process. Such sessions serve, on one hand, to acquaint officials with the project and its timeliness, and, on the other, to expose the proponent to requirements that will need to be met and the likely time frames for decisions.

Helpfully, Niagara Region Economic Development, in its 2017 Business Plan, references the Regional Council’s strategic priority to develop a policy to proactively expedite significant development projects.

A Development Approval Flow Chart: A further important tool that enhances transparency and conveys a business-like approach to prospects seeking to expand or invest is the development of a Development Approval Flow Chart that outlines in accessible language the procedures, processes and people involved in development approvals at both the City and Regional levels with indicative timelines for decisions that will be honoured. The creation of such a Development Approval Flow Chart requires close collaboration with the City and Regional planning officials. It is also desirable that the flow chart and the process associated with it include all provincial requirements and other entities that can be involved (e.g. the Niagara Peninsula Conservation Authority and the Niagara Escarpment Commission). The Flow Chart should be posted online as evidence of St. Catharines’ interest in attracting new investment and expansions. PBS is in the midst of the creation of the development approvals flow chart for all types of planning applications, along with an updated Site Plan Manual. The department is also proceeding toward a goal of launching an online AMANDA Portal that is accessible to the public. This initiative is aimed at improving transparency and providing effect project status updates.

Niagara Region Foreign Trade Zone (FTZ) Point: The Niagara Foreign Trade Zone (FTZ) Point was designated by the Canadian government in April 2016 to promote Niagara as a hub for international trade and a location for foreign and domestic investment. The FTZ Point serves as a one-stop shop for businesses to access information on Canada’s FTZ tax and tariff export-related programs that can make it easier for business looking to expand or export. These programs include, for example, the Duty Deferral Program, the Drawback Program, the Customs Bonded Warehouse Program, the Export Distribution Centre Program, and the Exporters of Processing Services

Program. The essence of the Canadian FTZ model is to offer a package of measures that are equivalent to US Free Trade Zones that can be offered in the Niagara Region. Advantage will accrue where the St. Catharines Economic Development team can demonstrate how the provisions can be beneficially applied to specific business situations that take advantage of St. Catharines' location close to the border. A task force of Federal, Ontario and municipal representatives is to meet regularly with regional industry exporters. The Federal government's FTZ marketing program financially supports regional organizations with matching funds to promote FTZ benefits linked to the FTZ Point.

St. Catharines, as the Region's business hub, needs to position itself to be a leader in taking full advantage of the designation. The duty and tax relief that the FTZ programs offer is geographically flexible – that is, it can be applied anywhere – meaning that businesses can apply it to existing locations or choose the location that best fits their needs. The FTZ Point will be an additional selling point for St. Catharines and the Niagara Region as locations for US and Asian firms to take advantage of the European access afforded by the Canada-European Union Comprehensive Trade and Economic Agreement (CETA).

Key Partnerships and Relationships: Economic development, it is often emphasized, is a “team sport” where success depends the involvement of many people and organizations – not on individual entities. Many considerations go into companies' decisions to expand or make new investments; seldom is a single factor dominant. It is rare that a single economic development organization can claim the entire credit for job-producing decisions by the private sector. Attracting investment demands cohesive effort and the orchestration of community resources.

Well-coordinated economic development efforts impress business. Officials working transparently together to facilitate processes convey a positive message. Communities where the private sector, professional services providers, leaders of post-secondary institutions and economic developers are relating the same story makes an especially strong impact on prospects.

Private Sector and Stakeholder Consultative and Advisory Arrangements: Existing day-by-day dialogue and consultations on specific issues between the City and stakeholders appear to function satisfactorily. However, interaction with business and stakeholders could be taken to a higher level through a structured process or forum. The objective would be to ensure an exchange of perspectives and information among key players that builds community consensus in economic development priorities, a common agenda, and shared messages about the community's strengths. Ideally, the approach chosen will promote un-political dialogue among all the participants and not been seen as an advocacy opportunity for stakeholders vis a vis City policies.

The principal options centre around:

- An Economic Development Advisory Council, an independent and representative group of economic development stakeholders that would meeting with and advise selected elected officials and City staff to provide advice against an agenda largely set by the City;
- An annual stakeholder summit (or conceivably more frequent sessions) with a group of economic development stakeholders, possibly centred in part on discussion of the Economic Development business plan for the year ahead; or
- One or more meetings a year with an independently-organized but representative group of City leaders.

The stakeholders would include a cross-section of business, agriculture, educational and research institutions, workforce organizations, business groups, the health care sector and creative industries. Keeping the group to a

manageable size and rotating membership would promote effectiveness. It was pointed out in the consultations on the Strategy's development that the same representatives seem to be involved time after time. Participants felt that the circle needs to be widened.

Post-Secondary Educational Institutions: Universities and colleges are vital economic development partners as sources of talent, lifelong learning, research and development, advice, testing, prototyping and other needed services. The sectors and disciplines in which a community excels frequently align with the excellence and leading-edge research facilities possessed by its institutions of higher learning. Many government programs seek to bring business and academia together into mutually productive relationships. Ultimately, the linkages are most often forged at the local level through effective structures, regular contact, and personal relationships.

Prospective investors may also make their first connection with a community like St. Catharines because of a relationship developed initially with a university or college – hiring their co-op students, recruiting their graduates, or partnering on research projects. In such cases, the Economic Development team can play a role in encouraging the company to establish a presence, helped by providing the fuller story, making additional connections, and addressing all the requirements that can lead to a positive decision by the company.

St. Catharines Business Community and Professional Services Providers: Systematic interaction between economic development teams and their local business community is a fundamental and necessary ingredient in building a foundation for a community's success. There are many dimensions:

- The success of local firms is the most telling testimonial to a community. The testimonials and comments of private-sector leaders have great credibility.
- The business community can be harnessed to be highly effective ambassadors for the community with colleagues in their networks.
- Prospective investors will ask to meet with local business leaders to obtain their first-hand perspectives and views, and, if not introduced, will seek them out through other channels.
- Prospective investors turn to professional services providers – financial, real estate, lawyers, accountants and others – for assistance. The economic development team can complement and add to what they can provide.
- Local businesses can suggest – and introduce – supply chain partners whose presence locally may be merited.
- Economic developers are the community's "ears to the ground," listening for and acting on concerns, issues and needs that may represent opportunities or risks.

Regular interaction and dialogue with businesses by the economic development team serve to ensure that the wider community interested in economic development have shared views about the community's assets, opportunities and challenges. In turn, this leads to common messaging to others about the advantages of St. Catharines as a Niagara Region location.

GLOBAL
INVESTMENT ATTRACTION
GROUP

	Actions:			
	1. Ensure the Niagara Region Economic Development Site Finder includes full information on all Industrial and Commercial properties available for lease or sale in St. Catharines	B	On-Going	SCEDT & NRED
	2. Develop summary profiles of the notable emerging projects that are expected to deliver industrial and commercial sites and buildings	B	On-Going	SCEDT & SCPB
	3. Encourage Niagara Region Economic Development to contract for quarterly reports providing comparable industrial and commercial sale prices and lease rates for the Greater Golden Horseshoe	B	2017	SCEDT, TN & NRED
	4. Monitor the effectiveness of City incentives, reassess those that fall out of line, and advocate for St. Catharines interests in the Niagara Region incentive review	A	On-Going	SCEDT, SCPB & NRED
	5. Monitor and compare industrial and commercial property taxes in St. Catharines and Regional development charges relative to other Great Golden Horseshoe locations	B	On-Going	SCEDT & SCPB
Funding:				
<ul style="list-style-type: none"> Provincial and Federal Opportunities 				
Performance Metrics:				
<ul style="list-style-type: none"> Internal assessments of projects where St. Catharines was considered but not chosen should be undertaken, including whether more attractive incentives offered by other jurisdictions were consequential, either in terms of value or how they were granted 				

Strategy Section	Goals, Objectives & Actions (Continued)	Priority ¹	Timing	Lead & Partners ²
D.3	<p>OBJECTIVE: Facilitate the development application review processes for applicants for expansions and new investment in St. Catharines</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Take needed steps to make St. Catharines Economic Development investment ready, especially with respect to a Customer Relationship Management (CRM) system and having up-to-date data, including from the 2016 Census 2. Create a concierge service that will include a new “Expeditor” position on the Economic Development team to assist proponents of expansions and new investments through all aspects of the approval processes 3. Create a Development Approval Flow Chart to be available to prospective investors and to be prominently posted on the website 4. Identify and promote situations where the application of Niagara Free Trade Zone (FTZ) programs will position St. Catharines as an optimal location for FTZ authorized activities for new and existing businesses 	A	2017	SCEDT
		A	2017 & On-Going	SCEDT, SCPB, NRPDS & NEC
		B	2017	SCEDT, SCPB, NRPDS & NEC
		B	2017 & On-Going	SCEDT & NRED
<p>Funding:</p> <ul style="list-style-type: none"> • Budget allocation for CRM system should include staff training • Provision may be needed for part-time contract staff or consulting services to assist with analyzing and updating databases, especially 2016 Census information 				
<p>Performance Metrics:</p> <ul style="list-style-type: none"> • Annual review of state of investment readiness, including evaluation of effectiveness of responses to investment enquiries and leads (timeliness and completeness), based on follow-through with leads and prospects • Annual review of frequency with which the concierge service provided by the “Expeditor” was called upon and its impact in terms of outcomes, based on debriefs of clients 				

Strategy Section	Goals, Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
D.4	OBJECTIVE: Establish a new forum or mechanism that will facilitate structured on-going dialogue with the St. Catharines private sector, stakeholders and institutions of higher learning to advance common agendas and speak with a common voice Actions: <div><div>1. Evaluate and implement new mechanisms to promote structured on-going dialogue with the St. Catharines business and community leadership, stakeholders and post-secondary institutions</div><div>2. Encourage and support interaction and information sharing among community leaders, particularly through the new mechanism, to promote enhanced collaboration based on greater awareness of respective capacities, interests and assets</div></div>	<div>B</div> <div>B</div>	<div>2017-2018 & On-Going</div> <div>On-Going</div>	<div>SCEDT, Brock, NCC, McM, IN, GNCC, NIA, NWPDP & NHS</div> <div>SCEDT, Brock, NCC, McM, IN, GNCC, NIA, NWPDP & NHS</div>
Funding: <ul style="list-style-type: none">• The St. Catharines Economic Development Team will face an additional administrative burden with member selection and liaison; meeting organization; and surveys and feedback mechanisms• Some room rental and incidental hospitality costs may be involved				
Performance Metrics: <ul style="list-style-type: none">• Members should be surveyed for input and feedback prior to and after meetings• Evaluation surveys should be undertaken annually• Assessments of participants leaving the group should be solicited				
NOTES AND ABBREVIATIONS <div><div>¹ Priorities: A = Highest Priority & Very Time-Sensitive; B = Important & Time-Sensitive; and C = Desirable & Less Time-Sensitive</div><div>² Abbreviations<div><div><div>Brock = Brock University</div><div>IN = Innovate Niagara</div><div>GNCC = Greater Niagara Chamber of Commerce</div><div>McM = McMaster University (including Niagara Medical Campus)</div><div>MEDC = Ontario Ministry of Economic Development & Growth</div><div>MTCS = Ontario Ministry of Tourism, Culture & Sport</div><div>NCC = Niagara College Canada</div><div>NEC = Niagara Escarpment Commission</div><div>NHS = Niagara Health System</div><div>NIA = Niagara Industrial Association</div></div><div><div>NRED = Niagara Region Economic Development</div><div>NRPDS = Niagara Region Planning & Development Services</div><div>NWPB = Niagara Workforce Planning Board</div><div>OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs</div><div>OTMP = Ontario Tourism Marketing Partnership Corporation</div><div>SCEDT = St. Catharines Economic Development & Tourism</div><div>SCPP = St. Catharines Planning & Buildings</div><div>TN = TeamNiagara</div><div>TPN = Tourism Partnership Niagara (RTO2)</div><div>VRIC = Vineland Research & Innovation Centre</div></div></div></div></div>				

E. Key Economic Development Program Thrusts

1. Business Retention and Expansion

The retention and expansion of existing businesses and agricultural enterprises are core economic development objectives. Accepted wisdom is that as many as 70% to 80% of new jobs may be generated through expansions within the local business base. As with any company's sales efforts, it is generally easier and less expensive to keep existing clients, as compared to the ever-important task of identifying and attracting new ones.

Nearly 4,000 Enterprise Locations in St. Catharines: Excluding the indeterminate category (involving firms with no employees or only contracted workers), St. Catharines had 3,951 enterprise locations in 2016 (Exhibit 15). As is the case throughout Ontario, the smaller-sized St. Catharines enterprises were in the overwhelming majority. By numbers of employees, 47.5% had four or fewer workers (micro-enterprises), while 50.5% locations had 5 to 99 employees (small enterprises) – for a total of 98% of all enterprises. Medium sized enterprise locations having 100 to 499 jobs each represented a further 1.7%, with large enterprise locations with 500 employees and more accounting for the remainder – only 9 out of 3,951 locations.

In St. Catharines small enterprise locations (5-99 employees) comprise a larger share of the total than is the case provincially.

Exhibit 15			
Number of St. Catharines Enterprise Locations By Employee Size - 2016			
Enterprise Size by Employees	Number of Enterprises 2016	Share of Total Enterprises	Ontario Share of Total Enterprises
1-4 (Micro-Enterprises)	1,876	47.5%	57.8%
5-99 (Small Enterprises)	1,997	50.5%	40.1%
100-499 (Medium Enterprises)	69	1.7%	1.8%
500+ (Large Enterprises)	9	0.2%	0.3%
Total	3,951	100.0%	100.0%
Source: EMSI Q3 2016			
Note: Does not include indeterminate enterprises (i.e. firms with no employees or only contracted workers)			

Feedback from Local Businesses: The St. Catharines Economic Development team, often in the company of the Mayor, undertake business retention and expansion calls on a regular basis, capitalizing on the range of intelligence and information available them and on their knowledge of apparent opportunities or risks facing local companies. These calls contribute valuable information and perspectives, and invariably lead to specific supportive follow-through. Current BR&E calls also provide candid front-line assessments of the strengths and weaknesses of the area that can inform and sharpen the City's business attraction messaging. Such meetings can also identify local company managers that are willing to provide testimonials and to meet with prospective new investors.

The addition of regular well-structured BR&E programs undertaken in parallel or as a complement to regular targeted calls would add important value and ensure wider reach. Systematic BR&E calls and surveys which include a set of common topics and issues on the plans, views and preoccupations of local businesses and agricultural enterprises allow the information to be aggregated and summarized in a report. Such a report alerts

the City's leadership, the St. Catharines Economic Development team and Niagara Region counterparts to areas of opportunity, concern and need, and provides informative indications of local businesses current and future hiring plans, workforce requirements, and intentions with respect to expansion or retrenchment.

The Ontario Ministry of Economic Development and Growth, which has a local St. Catharines office, also has a mandate for corporate calls. An effort should be made to collaborate where possible to eliminate duplication and to ensure comprehensive follow through and coordinated assistance.

This would also be a further on-going contribution to the purposeful dialogue needed between those in the City dealing with economic development and the wider business and stakeholder community.

Competition from US Jurisdictions: US state and municipal economic development organizations are aggressively courting firms in Ontario to invest in their jurisdictions, offering enticing tax and financial incentives. While most St. Catharines firms interviewed appear to be ensconced locally or unwilling to uproot their operations, the competition underlines the importance of St. Catharines business retention and expansion activities that ensure companies know they are valued and welcome locally. If the US lowers corporate tax rates and if explicit or implicit protectionism becomes a factor, pressures on St. Catharines firms to have a US presence may grow.

Niagara Region Employment Inventory: In 2016, Niagara Region commenced what is expected to be an annual employment inventory based on data about each business location collected directly from the companies. The survey, undertaken by students, will provide baseline data to analyze historical trends and forecast employment and economic growth. An automotive directory identifying firms that are part of the automotive supply chain has been developed based on the 2016 survey. The survey questionnaire also asks, "What can Niagara do to support your business?" to provide local governments with a better measure of needs and preoccupations.

Growing Local Businesses: A front-line economic development role is to support and mount initiatives that provide information, intelligence and connections that will help local businesses sustain their competitiveness and expand their markets. Exporting, accessing government funding, procurement, research partnerships with universities and colleges and workforce training are possible areas. BR&E calling programs and regular consultation with stakeholders are excellent sources as to the areas in which local business has the greatest need and interest.

Information about St. Catharines Procurement: Local St. Catharines firms, especially Small and medium-sized enterprises (SMEs), are interested to have a full and fair opportunity to benefit from municipal government procurement opportunities in St. Catharines and at the Regional level as well, especially when US governments appear focused on "Buy America." SMEs, who have limited staff and whose owners and management are inevitably stretched, frequently can lack an understanding of procedures or can find it difficult to navigate government organizations and to get insightful information. The St. Catharines Economic Development team can work with City and Regional procurement counterparts to facilitate access to information on their procurement plans, possibly through seminars. In addition, working with their procurement counterparts, a proactive point of contact in purchasing could be designated to respond to enquiries and his or her availability widely advertised locally. The initiative could be combined with a webinar or seminar on the procurement process and might include a means for firms to provide feedback. These initiatives would be open to all interested firms, not just those in St. Catharines and the Region. None of this precludes mutually-beneficial cross-border initiatives to open municipal procurement.

E. KEY ECONOMIC DEVELOPMENT PROGRAM THRUSTS**E.1 BUSINESS RETENTION AND EXPANSION**

Strategy Section	Goals, Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
E.1	<p>GOAL: Encourage the retention and expansion of existing St. Catharines businesses and agricultural enterprises</p> <p>OBJECTIVE: Reach out, engage, support, understand and report upon the preoccupations and intentions of existing St. Catharines businesses and agricultural enterprises</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Undertake regular systematic business and retention programs that provide summary reports in the aggregate on the intentions and preoccupations of local businesses 2. Offer, support, and promote programs that will assist local businesses to sustain their competitiveness and expand and diversify their markets 3. Arrange initiatives that will ensure local businesses are informed about City – and, ideally, Regional – procurement opportunities 	<p>A</p> <p>B</p> <p>B</p>	<p>On-Going</p> <p>On-Going</p> <p>On-Going</p>	<p>SCEDT, MEDG & OMAFRA</p> <p>SCEDT, SCEC, NRED, GNCC, NIA, NCC, Brock, McM & NWPB</p> <p>SCDET, SCEC, GNCC, NIA, NRED & Purchasing</p>

Funding:

- OMAFRA offers a BR&E program that can be utilized or other proprietary systems can be purchased
- Some of the programs to assist local businesses will be provided by SCEDT or SCEC, often on a cost recovery basis
- SCEDT and SCEC will also be ensuring local businesses are aware of programs mounted by other partners organizations

Performance Metrics:

- The basic metrics are numbers of BR&E calls and meetings; businesses retained; expansion projects; value of investment retained or invested in new projects; and jobs retained and created (in situations where SCEDT has influenced outcomes)

NOTES AND ABBREVIATIONS

¹ **Priorities:** A = Highest Priority & Very Time-Sensitive; B = Important & Time-Sensitive; and C = Desirable & Less Time-Sensitive

² **Abbreviations**

Brock = Brock University

IN = Innovate Niagara

GNCC = Greater Niagara Chamber of Commerce

McM = McMaster University (including Niagara Medical Campus)

MEDC = Ontario Ministry of Economic Development & Growth

MTCS = Ontario Ministry of Tourism, Culture & Sport

NCC = Niagara College Canada

NEC = Niagara Escarpment Commission

NHS = Niagara Health System

NIA = Niagara Industrial Association

NRED = Niagara Region Economic Development

NRPDS = Niagara Region Planning & Development Services

NWPB = Niagara Workforce Planning Board

OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs

OTMP = Ontario Tourism Marketing Partnership Corporation

SCEDT = St. Catharines Economic Development & Tourism

SCPP = St. Catharines Planning & Buildings

TN = TeamNiagara

TPN = Tourism Partnership Niagara (RTO2)

VRIC = Vineland Research & Innovation Centre

2. Innovation and Entrepreneurship

New business creation and entrepreneurship have become ever more crucial to healthy, vibrant economies. An appetite for innovation and calculated entrepreneurial risk on the part of established companies is also essential if they are to grow, earn acceptable returns and survive in businesses that are subject to such rapid change and disruption. Throughout the consultations on the Strategy, the importance of positioning St. Catharines as a leader for innovation and entrepreneurship was frequently mentioned as being especially important.

The most widespread and accepted definition of innovation is that “an innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations.”¹⁸ Innovation therefore needs to be understood as being more than just a new or significantly improved good or service. It extends to process, marketing and organizational innovation too.

Canada’s Advisory Council on Economic Growth, in a February 2017 report, “Unlocking Innovation to Drive Scale and Growth,” identifies five critical elements in the innovation ecosystem that it believes need to be present to enable companies to grow into industry leaders. These are:

- Access to talent, especially experienced business talent;
- Access to risk capital, and to the value-added support that world-class venture investors can bring;
- Connectivity, with customers, partners, start-ups, investors, universities and colleges;
- Customers, both commercial and government; and
- Enabling public sector programs.

The Council expresses concern that the Canadian environment in many of these areas is subscale and fragmented.¹⁹

A substantial and growing focus on innovation and entrepreneurship in St. Catharines is evident, along with the creation of structures and linkages that support and nurture creative talent and business formation and the scaling of promising new ventures. An inventory of the principal incubators and shared spaces in St Catharines and nearby in Niagara Region is provided in the box profiling “Key Participants in the Innovation and Entrepreneurial Ecosystem in St. Catharines and Niagara Region” which follows. Dynamic ecosystems in which these initiatives will thrive also involve place making that will attract and retain new ventures, entrepreneurs and talent.

Analysis indicates that new and young companies drive job creation. These are not confined to high technology but cut across all sectors. The companies that achieve high growth are found principally among young companies that have been in existence for less than five years. And, although younger people are definitely part of the entrepreneurship scene, the peak ages for successful entrepreneurship have been shown to be people in their late 30s and early 40s.

¹⁸ Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd edition (OECD, 2005)

¹⁹ Advisory Council on Economic Growth, “Unlocking Innovation to Drive Scale and Growth,” February 6, 2017.

Scaling Early-Stage Firms: A major challenge for many of these firms is managing rapid growth while sustaining the founders' ownership as they expand from a few employees to beyond 20 or 30 and through to 50 and 100. Critically needed management competencies related to scaling are sales, marketing, organizational design and product management – difficult skillsets to find. The development of programs that address the needs of companies seeking to scale rapidly is a particular focus for the Ontario government which is involving the Regional Innovation Centres (RICs) such as Innovate Niagara. It could be an area in which promising local pilots or initiatives may be rewarded, possibly involving the Goodman Business School at Brock and others.

Internationalization: Internationalization is important for most early-stage companies right from the outset. Reciprocal arrangements providing soft landing spaces are now common among incubators, accelerators and co-working locations. These partnerships provide a physical presence in other markets, while also potentially attracting early-stage foreign ventures to St. Catharines, some of whom may decide to put down roots to pursue the Ontario, Canadian or North American market. Innovate Niagara, as a member of the Canadian Digital Media Network (CDMN), offers access to the CDMN's international soft landing program. Innovate Niagara is exploring reciprocal soft landing relationships with Buffalo and Windsor incubators.

Start-Up Immigrant Visas: Canadian and Ontario government start-up immigrant visa initiatives to facilitate the attraction of early-stage ventures and of entrepreneurs with validated proposals have not yet found substantial traction. Adjustments to the programs can be expected to provide a more viable path for innovative foreigners to establish their businesses in Canada and Ontario. Progress and opportunities should be monitored.

Entrepreneurs in countries such as Britain, Brazil, China and India may see Canada as an attractive base from which to tackle North America. St. Catharines' proximity to the US, resources in Buffalo, and the facilitative aspects of the Niagara Free Trade Zone are pluses that may differentiate the City. Some of the diaspora who have already put down roots in St. Catharines may have the connections and ability to help foster interest by entrepreneurs from their home country and then be part of the mentoring structure to welcome them.

Collaboration: Hamilton-Niagara and Niagara-Buffalo linkages are already growing. St. Catharines players should also be open to a wider arch of well-focused and mutually beneficial collaborations with other selected innovation centres and clusters in the GTA and the Greater Golden Horseshoe and across the US border in the states of New York, Pennsylvania and Ohio.

Celebrate and Broadcast Success: St. Catharines needs to celebrate the successes among its emerging firms and ensure their stories are known, as a means to widen understanding of the challenges, winning formulas, and fruits of success, and to encourage others to aspire to be entrepreneurial innovators. Pitch Sessions, such as Ignite Niagara!, are part of this. At the same time, a culture must be built that accepts -- even honours -- failures as a necessary ingredient and source of learnings that will enable success in the future.

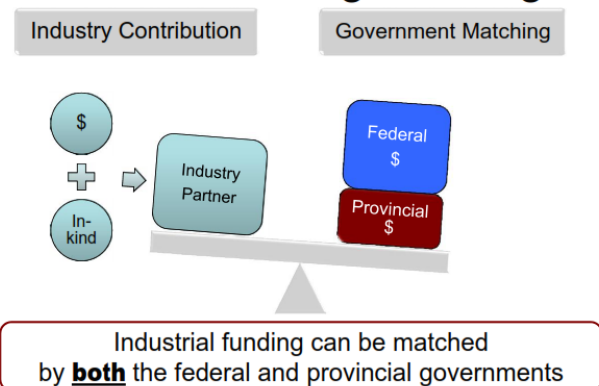
Involve Established St. Catharines Firms: Though expanding, there appear to be still greater opportunities to encourage closer linkages between established St. Catharines firms and the growing research resources available in post-secondary institutions. The availability of highly relevant facilities at Niagara College and Brock University have grown significantly. Capabilities at McMaster and Mohawk in Hamilton are in many respects complementary. Examples of private sector partnerships are growing but still short of an optimal level, giving the competitiveness and innovation challenges that all firms face today. Consultations associated with the Strategy's development indicated that the community is proud of its post-secondary educational institutions which are seen as economic development assets. However, interviews with firms tend to indicate limited actual knowledge of the facilities at Brock and Niagara College, often simply because owners of SMEs have limited time available for anything but today's immediate imperatives.

The wide range of exceptional facilities and centres at the Niagara College and Brock University are listed in the box on “Key Participants in the Innovation and Entrepreneurial Ecosystem in St. Catharines and Niagara Region” which follows. These valuable assets need to be better known.

Profitable R&D Partnerships Between Businesses and Universities and Colleges: Collaboration between companies and institutions of higher learning, such as Brock and Niagara College, are encouraged and supported by Federal and Ontario funding mechanisms. Canada leads all G-7 countries in the level of Federal and provincial funding for research and development in post-secondary education as a share of GDP. This makes St. Catharines’ proximity to universities and colleges additionally attractive. Canadian government granting agencies, such as the Natural Sciences and Engineering Research Council (NSERC), favour projects where private sector or other non-governmental partners are involved and are making cash and in-kind contributions to the projects undertaken by university and college researchers. These contributions from business lever additional government funding. The company also gains by developing intimate and privileged relationships with the best and brightest researchers in universities and colleges. In 2015-16, NSERC partnered with 3,600 Canadian companies who contributed more than \$200 million on joint research projects with universities and colleges that resulted in innovative new products and services.²⁰

The National Research Council’s Industrial Research Assistance Program (IRAP) and Ontario’s OCE Inc focus on directly assisting business to forge research and development links with academia.

Effective Funding Leverage



Source: Association of University Research Parks (AURP) - Canada

Research Cost Comparison

	USA	Canada
PhD Student Costs	\$ 50K – 100K/year	\$ 20K – 25K/year
Professor Salaries	75 % University 25 % Research	100 % University
University Overhead	80 – 100 %	30 – 50 %

University research is considerably **more affordable in Canada**

R&D Tax Incentives: Highly favourable statutory tax credits are the principal means to provide incentives to companies to undertake R&D in Canada and in Ontario. In Ontario, R&D tax incentives can reduce the after-tax cost of every \$100 spent on R&D to about \$61, or \$37 for small businesses, when combined with federal R&D tax incentives.²¹

Initiatives to acquaint St. Catharines businesses with opportunities and connect them with expert resources and funding will serve to heighten the focus on research and development, an essential aspect of sustained competitiveness.

²⁰ NSERC Departmental Performance Report 2015-2016 (http://nserc.ca/NSERC-CRSNG/Reports-Rapports/DPR-RMR/2015-2016/index_eng.asp#rh). Accessed on February 15, 2017.

²¹ Government of Ontario website (<https://www.investinontario.com/why-ontario#innovation>). Accessed on February 17, 2017.

Federal and Ontario Investments in Innovation: Innovation and business formation and growth are major priorities for the Ontario and Federal governments which are making significant investments both as catalysts and partners. Both governments acknowledge that delivery must involve dynamic local on-the-ground entities. Both place a priority on backing collaborative and inclusive community-based efforts, involvement and leadership from the private sector, and on the local community making its own financial commitment. The Federal and Ontario governments will demand high performance standards marked by agile, expert and metrics-driven approaches. This invites the best collective efforts that St. Catharines and other Niagara Region counterparts can muster. The Federal and Ontario government also favour agile partners who are refining and adapting their programs and approaches based on careful monitoring of measurable outcomes. St. Catharines has a leadership role to play in continual efforts to maximize the levels of Federal and Ontario government support and to ensure the City and Niagara Region are early participants in new initiatives.

The Federal government's 2017 budget outlined a national Innovation Agenda that targeted major investments toward:

- "Superclusters," providing \$950 million over five years for "a small number" of clusters in "highly innovative" industries to be selected in a competitive process;²² and
- A Venture Capital Initiative, offering \$400 million over three years to lever private sector, late-stage venture capital to make available a total venture capital pool of \$1.5 billion to scaling companies.²³

The budget also includes a grand total of \$1.4 billion over the next three years in new equity, working capital and project financing for cleantech companies to be offered through the Business Development Bank of Canada (BDC) and Export Development Canada (EDC).²⁴ In addition, \$400 million over five years was allocated to recapitalize the SD Tech Fund™, a flagship Sustainable Technology Development Technology Canada (SDTC) program for the development and pre-commercial demonstration of clean technologies, such as those that address climate change, air quality, clean water and clean soil.²⁵

The budget's innovation funding seeks through several different initiatives to encourage work-integrated learning placements and STEM²⁶ and digital studies, while also influencing greater participation in entrepreneurial ventures and technology- and innovation-oriented pursuits by women and aboriginal peoples.²⁷ These may further propel St. Catharines and Niagara programs in these areas.

Also included in the 2017 Federal Budget are the Smart Cities Challenge Fund and the Canadian Cultural Spaces Fund. As these seem to be potentially best suited to the Downtown, they are addressed in D.1.

The St. Catharines Economic Development team, working with its innovation entities and post-secondary institutions needs to identify whether there are promising new Federal and Ontario innovation proposals that align with local plans and ambitions. Collaborative effort will be required locally to develop winning strategies. The Federal government processes to award funding will be extremely competitive. Compelling proposals will

²² Finance Canada, Budget Plan 2017, "Building a Strong Middle Class," March 22, 2017, Chapter 1, Pages 79 and 80.

²³ Finance Canada, Budget Plan 2017, "Building a Strong Middle Class," March 22, 2017, Chapter 1, Page 83.

²⁴ Finance Canada, Budget Plan 2017, "Building a Strong Middle Class," March 22, 2017, Chapter 1, Page 97.

²⁵ Finance Canada, Budget Plan 2017, "Building a Strong Middle Class," March 22, 2017, Chapter 1, Page 98.

²⁶ STEM = Science, Technology, Engineering and Mathematics

²⁷ Finance Canada, Budget Plan 2017, "Building a Strong Middle Class," March 22, 2017, Chapter 1, Pages 74-74 and 84-85.

be required. Alliances with other jurisdictions outside Niagara Region will likely be a prerequisite in several of these initiatives.

City of St. Catharines Procurement from Innovative Local Companies: How can the City of St. Catharines show tangible support for innovative local companies – possibly in partnership and parallel with the Niagara Region and area municipalities? A number of Canadian governments have created new procurement processes designed to lead to offer themselves as the first or at least an early public sector client for innovative companies. This is a direct and explicit way to signal support for innovation.

Typically, an open process is established and advertised, inviting proposals for emerging technologies or approaches that are at or near market-readiness and have the potential to address areas of need by offering new or more advanced solutions. The process recognizes that the emerging technologies and approaches may need to be further tweaked or adapted, so there will usually need to be initial collaboration between the company and the government to align or refine the product or service in light of the buyer's needs.

At the national level, a new Federal procurement initiative, Innovative Solutions Canada, was announced in the 2017 Federal budget, with \$50 million committed starting April 1, 2017. Under the program, a portion of funding from federal departments and agencies – possibly growing to as much as \$300 million²⁸ – will be allocated towards early-stage research and development, late-stage prototypes and other goods and services from Canadian entrepreneurs and innovators. In return, the Federal government will have access to the latest, most innovative products and services. The budget indicates that the program will be designed to be scalable, so that other Canadian jurisdictions can take part in the future, if they so wish.

The new Innovative Solutions Canada initiative is seemingly in addition to the Build in Canada Innovation Program (BCIP) created in 2010 and made permanent after a two-year trial. BCIP recognizes that companies often have difficulty moving their innovative goods and services from the final stages of research and development into the market. The BCIP helps bridge this pre-commercial gap by buying pre-qualified late-stage research and development innovations for federal departments to test. After testing, the BCIP provides feedback to suppliers on the performance of their products or services. BCIP annually spends up to half-a-million dollars on non-military and a million dollars for military innovations.

For its part, the Ontario government introduced the Small Business Innovation Challenge (SBIC) in 2017. The \$28.8-million SBIC program, delivered by Ontario Centres of Excellence (OCE), is directed to high-potential, technology-driven start-ups and SMEs able to offer solutions to public sector business challenges. Hopefully, this will provide a platform to springboard their technology innovations from the conceptual stage to globally competitive products and services. The first two areas of interest identified were “digital identity” from the Ministry of Government and Consumer Services (MGCS), and “vehicle occupancy detection” from the Ministry of Transportation (MTO).

A municipal example is provided by the City of Guelph which launched a pilot initiative in 2016, the Civic Accelerator, a call for proposals from “solution partners” to address specific complex municipal problems (e.g. enabling citizens to detect water leaks and reduce use; maximizing the value of downtown parking space; and how to facilitate public feedback on planning decisions). The Guelph Civic Accelerator involves partnerships with the local University, the Chamber of Commerce, the Regional Innovation Centre and Canada's Open Data Exchange.

²⁸ Silcoff, Sean, Globe and Mail, “Navdeep Bains: The man leading Canada's big bet on innovation,” March 23, 2017.

A new St. Catharines procurement initiative might focus on the innovative solutions the City could benefit from to tackle access to Downtown parking; provide smart, electronic signage; utilize open data; and locate free Wi-Fi hotspots.

Key Participants in the Innovation & Entrepreneurial Ecosystem in St. Catharines and Niagara Region

St. Catharines has become Niagara Region's principal centre for innovation and entrepreneurship organizations and activities, a status the City will work consciously to sustain and grow. The main locations – Downtown and at Brock and Niagara College – are interacting, collaborating and come together jointly for programs, including, for example, a business pitch competition, Ignite Niagara!

Recent investments in new facilities, especially at Niagara College, are focused on research and development relevant to manufacturing. The Vineland Research and Innovation Centre (VRIC) is also a resource not just for growers and greenhouse operators but for automation production systems greenhouse structures that present opportunities for more diversified manufacturing and new investment. Funding also supports the agri-food sector for research labs, training facilities for student entrepreneurs and incubation space for agri-food businesses.

The St. Catharines Enterprise Centre (SCEC): The St. Catharines Enterprise Centre (SCEC) is one of 57 Ontario Small Business Enterprise Centres (SBECS) that are part of the Ontario Network of Entrepreneurs (ONE). The SCEC has a satellite office in Welland. Though there is another small business centre in Niagara Falls, the SCEC makes it known that its mandate is to serve clients throughout Niagara Region.

Funding for the SCEC is provided by the City of St. Catharines and, at the provincial level, by the Ontario Ministry of Economic Development and Growth (MEDG) and the Ministry of Research, Innovation and Science (MRIS). SCEC focuses on entities that have been in business for five years or less. The SCEC offers no cost, one-on-one professional advice, low cost workshops and other specialized services. Its objective is to support the launch and growth of these local businesses within the mainstream economy, by providing advice, education and tools to help clients be successful and create wealth through job creation and retention. SCEC sees opportunities to work with former residents choosing to return to Niagara. Experienced semi-retired business people are welcomed as mentors. For youth, SCEC supports Summer Company and Starter Company, Ontario government funded entrepreneurship programs for youth aged 15 – 29. It has also been associated with Futurpreneur Canada (formerly Canada Youth Business Foundation) as source of funding for early-stage businesses.

In 2016, the SCEC fielded over 3,100 inquiries in person, by phone and by email. The SCEC provided in excess of 400 consulting hours and 550 hours of training. Over 100 seminars drew more than 600 attendees. More than 100 business start-ups were supported, creating 100 full- and part-time jobs. The SCEC assisted clients in accessing \$350,000 in grants and loans.

Innovate Niagara: Innovate Niagara, which started as nGen in 2008, is the Regional Innovation Centre (RIC) for the Niagara Region, one of 18 designed and supported by the Ontario Ministry of Research, Innovation and Science (MRIS). The RICs are part of the Ontario Network of Entrepreneurs (ONE), a mechanism to coordinate support and assistance to Ontario firms. In addition to the primary support from the Ontario government, the facility was the recipient of a \$3 million grant from the FedDev Ontario Community Adjustment Fund.

Innovate Niagara's incubation facilities are in Downtown St. Catharines where it positions itself as the connector for innovators with the people and programs that will bring their innovations to market, supported by a suite of in-house programs, resource partners, and a network of mentors. Innovate Niagara focuses both on services for start-ups

(innovative and scalable models under 5 years old) and established high potential, high growth projects over 5 years old and half-a-million dollars in revenue.

The Generator at one: The Generator at one is a component of Innovate Niagara which opened its doors in 2010 to be the catalyst for interactive digital media growth in Niagara by bringing together companies, researchers and students in one space and adopting a model that has produced results in areas such as Silicon Valley for video games, video production, augmented reality, gamification, motion capture, 3D scanning/printing, app development, 3D animation, or visual effects (VFX). It is one of 26 members of the Canadian Digital Media Network.

The production studio includes blue and green screens, Red One cameras, a DMX lighting grid, and a VICON Motion Capture system. A 2k screening and presentation theatre features a Crestron AV control system and a high fidelity THX, Dolby and DTS surround sound audio system with 3D ready capabilities. The T160 Cameras in the motion capture studio allow for four times the resolution of any other motion capture camera available. The VICON MX System allows for greater precision and performance.

Including the Generator at one component, Innovate Niagara reports incubating 42 companies, helping 706 clients from June 2011 to December 2016, providing over 10,000 consulting hours, creating 280 new jobs, and securing more than \$31.1 million in funding. Just over half of the clients are in digital media and ICT, 11% in advanced materials and manufacturing, 9% in life sciences and advanced health, and 8% in education.

ihub: The Educational Research and Innovation HUB (ihub) operates in partnership with the District School Board of Niagara (DSBN), Brock University and Niagara College, and in collaboration with Innovate Niagara. Occupying 2,100 square feet in the DSNB Academy in St. Catharines, ihub is the first educational technology incubator in North America to be located inside a K–12 school facility. ihub provides a bridge between educational technology innovation and the K-12 public education classroom by facilitating collaboration amongst educators, students, parents, researchers, industry leaders, and companies associated with ihub.

Brock University LINC: Brock University is substantially increasing its innovation and commercialization space by developing the Schmon Tower Innovation Atrium, which will provide 30,000 square-feet for the new Brock LINC. The Canadian Government has committed \$8.47 million and Brock University is investing an additional \$10.62 million in the project.²⁹ In 2013, the 5,000 square foot Goodman School of Business BioLinc business incubation facility was launched in the Cairns Family Health and Bioscience Research Complex to bring together University expertise and community resources, including from Innovate Niagara, to support entrepreneurs looking to turn their ideas into products and services for the marketplace. Activities at BioLinc include a pitch competition, workshops, training events, seminars and networking opportunities for entrepreneurs. BioLinc also delivers the Kick-Starting Entrepreneurship Program, which targets entrepreneurially-oriented Niagara youth (ages 18 to 29) provides up to 35 Niagara youth with two intensive training weekends, monthly seminars and events, plus mentorship and advisory services. Once the Brock LINC is completed, BioLinc staff will be co-located with labs remaining in the previous space.

ncTakeOff: Supported by Ontario Centres of Excellence (OCE), ncTakeOff is Niagara College's entrepreneurship hub, located in the Walker Advanced Manufacturing Centre in Welland, that hosts entrepreneurial development programs and connects students to on- and off-campus resources including mentors, funding sources and opportunities, subject experts and events. Access is provided to student Makerspaces at the Welland and Niagara-on-the-Lake campuses. In 2015-2016, 39 student companies were created in food and beverage, digital media and web design, advanced manufacturing, agriculture and social enterprises. In addition, 590 students participated in 24 ncTakeOff seminars and engaged with 43 mentors involving 20 community partners.

²⁹ Government of Canada News Release, "Canada and Ontario invest in infrastructure at Brock University and Niagara College," November 3, 2016 (<http://news.gc.ca/web/article-en.do?nid=1147179>). Accessed on February 7, 2017.

Shared and Co-Working Spaces: FueledMinds is coworking space for designers, developers, creative professionals, entrepreneurs and start-ups in Downtown St. Catharines adjacent to Innovate Niagara, the Generator at one and SCEC.

The purchase of the former Niagara Regional Police headquarters building in Downtown St. Catharines in early 2017 by a local tech company holds promise of a Tech HUB. The purchaser announced the six storey, 40,000 square foot building will house not only his company but space for tech companies.

Venture Niagara: Venture Niagara, part of the Community Futures Development Corporation and FedDev Ontario, assists entrepreneurs across Niagara Region with loans and investment needed to start or grow their business. The borrowers include wineries, craft breweries, value-added tourism, environmental services and manufacturers.

Niagara Angel Network (NAN): The Niagara Angel Network, with just over 50 members, has made cumulative investments of over \$10.5 million in 19 companies since its formation in 2010. The largest number (12) have been in the information and communication technology sector, with four in clean tech, two in health sciences and another in biosciences. NAN's investing activity is not confined to Niagara-based companies. The group has had its first exit and engaged in its first deal lead in a bi-national start-up located in Niagara. NAN is part of the Network of Angel Organizations-Ontario and has worked with FedDev Ontario which financially supports angel groups and firms in which they invest. NAN hosted the 2015 National Angel Summit in Niagara-on-the-Lake.³⁰

Centres of Research and Excellence at Brock University and Niagara College

Brock University

Brock University has a commitment to trans-disciplinary research that sets it apart from others.

The scope of the Cairns Family Health and Bioscience Research Complex was outlined in Section C.1. Among a number of related Brock centres are ones focused on Electrophysiological Research, Health and Well-Being, Applied Disability Studies, Biotechnology, Bone and Muscle Health, Healthy Development through Sport and Physical Activity, Sport Capacity, and Lifespan Development Research.

Advanced Bio-manufacturing Centre (ABC): The overall ABC mission is the pursuit of new methods for the manufacture of medically important compounds, chemical building blocks, and new materials. In the future, petrochemicals for manufacturing may be less available. New ways to provide these building blocks will have to be discovered. The answers will come from the fusion of biology and chemistry that historically have existed as "two solitudes."

Brock Institute for Scientific Computation (BISC) promotes multi-disciplinary and collaborative research that uses high-performance computers to generate and analyze scientific data. Computing is a central aspect of almost all kinds of research while complexity is rapidly increasing. BISC members come from a wide-range of disciplines within Brock's faculties of mathematics and science and applied health sciences.

Cool Climate Oenology and Viticulture Institute (CCOVI) was developed in partnership with the Grape Growers of Ontario and the Wine Council of Ontario. Established in 1996, CCOVI is a successful, internationally recognized institute for the grape and wine industry. As the institute has grown, research and services have expanded beyond the science of oenology and viticulture to look at all areas of the grape and wine value chain such as wine business, policy research and agri-tourism. CCOVI has also developed a focus on the growing cider business.

³⁰ Niagara Angel Group, 2014-2016 Annual Report (<http://niagaraangelnetwork.com/wp-content/uploads/2016/11/2016-Final-NAN-Annual-Report.pdf>). Accessed on February 16, 2017.

Environmental Sustainability Research Centre (ESRC) pursues innovative transdisciplinary research about the environment, sustainability, and social-ecological resilience by bringing together Brock faculty from the natural sciences, social sciences, and humanities to research how to move forward when the earth's natural, social, and economic resources are threatened. Areas of focus include water resources; climate change, adaptation and transformation; meanings and measurements of sustainability; science and public policy; and social justice, development and health. The Centre embraces Brock's privileged location in a UNESCO Biosphere Reserve.

Accounting: The Goodman Business School is known for its strength in accounting. A reflection of this is the presence at Brock of the Chartered Professional Accountants of Ontario Research Excellence Centre, the CPA Brock Accounting Research and Education Centre, and the CPA/Goodman Institute for International Issues in Accounting.

Niagara College

In 2015-2016, 200 companies accessed services provided by Niagara College Research and Innovation. Research and Innovation was involved in 222 research projects and technical services, 24 programs of applied research and 1,800 applied research student experiences.

Walker Advanced Manufacturing Centre: The 15,000 square foot Walker Advanced Manufacturing Centre hosts applied research projects, utilizing specialized labs with 3D printers, scanners, and other equipment. The Centre adjoins the Rankin Technology Centre, the 120,000 square foot site of the College's technology programs which has a welding lab, drafting room, materials lab and a big bay. The Centre houses ncTakeOff, the College's entrepreneurship hub, and the College's digital media and web solutions group.

Southern Ontario Network for Advanced Manufacturing and Innovation (SONAMI): Niagara College, supported by a \$7.3 million contribution from FedDev Ontario, is also establishing the Southern Ontario Network for Advanced Manufacturing and Innovation (SONAMI) in partnership with Mohawk College, Sheridan College and McMaster University. SONAMI will offer a single-window to support manufacturers' research and development needs, encouraging them to adopt and integrate disruptive technologies into their operations.³¹

Agriculture & Environment Innovation Centre: The Agriculture & Environment Innovation Centre offers private and public sector partners faculty and student expertise in precision agriculture, computer programming, GIS, sustainable food production, horticulture and greenhouse operations, aquaponics, renewable energies, environmental management. The Centre's infrastructure includes 20,000 square foot greenhouse and environmental labs, on-campus wetlands and lagoons.

Augmented Reality Research Centre (ARRC): ARRC, established in 2007 at Niagara College supported by an Ontario Centres of Excellence (OCE) grant, has focused on agricultural remote sensing and visualization with the PrAgMatic project to help farmers increase crop yields while reducing dependence on fertilizers and water, therefore reducing environmental impact. The Pragmatic system currently encompasses a host of technologies, including GIS/GPS, databases, 2D and 3D visualization, digital soil mapping (DSM), image classification, sensor networks, LIDAR, and other remote sensing technologies. An example of advanced research is the work on remote-controlled rovers and drones and wireless micrometeorological/weather stations that is being led by the College's NSERC Industrial Research Chair in Precision Agriculture, Mike Duncan, to provide analytics that monitor heat and humidity of crops and that identify oncoming weather threats.

Canadian Food and Wine Institute Innovation Centre (CFWIIIC): The Centre links industry with faculty experts and students from programs such as brew master; brewery operations management; culinary innovation and food technology (co-op); culinary management (co-op), winery and viticulture technician; and wine business management

³¹ Government of Canada, Media Release, "FedDev Ontario Invests in Manufacturing Innovation in the Golden Horseshoe," December 19, 2016 (<http://news.gc.ca/web/article-en.do?mthd=index&ctr.page=10&nid=1171469>). Accessed on February 8, 2017.

programs, to bring competitive advantages to partner firms. In addition to microbiology, sensory and consumer testing, shelf-life and packaging, and chemistry labs, the Centre accesses 40 acres with vineyards, a hopyard, culinary gardens, and the College greenhouse. The Centre also has the advantage of interacting with the teaching winery, teaching brewery, and commercial kitchen, to provide hands-on, farm-to-table experience. CFWIIC has worked with a host of wineries, craft breweries and speciality food and beverage firms and was provided in 2016 with Federal funding of \$1.75 million over five years to create a Technology Access Centre to be part of tech-access.ca network of Colleges and Institutes Canada.

Vineland Research and Innovation Centre: Vineland Research and Innovation Centre (VRIC), a world-class research centre dedicated to horticultural science and innovation and located in neighbouring Lincoln, is a major resource centre for the greenhouse sector in Canada. A new \$10 million 40,000 square foot pre-commercial greenhouse complex assists the industry and suppliers in developing new technologies to increase competitiveness such as robotics, automation, and lighting, irrigation and climatic control systems. Vineland's assets include approximately 90 hectares of experimental tender fruit and other orchards, vineyards, rotation crop areas, ornamental plantings and breeding, greenhouses, a mushroom production unit and ethnic vegetables – dimensions that are of potential interest to specialty food manufacturers, along with its consumer insights. VRIC works collaborates with industry assisting with commercialization, technology scouting and technology transfer activities. Though it has close partnerships with Federal and Ontario researchers and the University of Guelph, Vineland is an independent, not-for-profit organization, funded under the Federal and Ontario Growing Forward 2 program.

E. KEY ECONOMIC DEVELOPMENT PROGRAM THRUSTS

E.2 INNOVATION AND ENTREPRENEURSHIP

Strategy Section	Goals, Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
E.2	<p>GOAL: Create an innovative and entrepreneurial ecosystem</p> <p>OBJECTIVE: Play a leadership role in the creation of a collaborative, constantly-evolving ecosystem that encourages and supports entrepreneurship and innovation</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Leverage the City's funding, coordinating and governance roles to ensure the growth and evolution of a responsive, connected leading-edge innovation ecosystem 2. Review and develop strategies, together with local partners, related to the innovation funding and programs announced in the 2017 Federal and Ontario budgets 3. Encourage initiatives to involve established firms in research and innovation and in taking calculated entrepreneurial risks 4. Monitor and ensure that St. Catharines will be a participant in Federal and Ontario start-up visa programs 	<p>A</p> <p>B</p> <p>B</p> <p>C</p>	<p>On-Going</p> <p>2017 & On-Going</p> <p>On-Going</p> <p>On-Going</p>	<p>SCEDT, SCEC, IN, Brock, NCC, McM & NRED</p> <p>SCEDT, SCEC, IN, Brock, NCC & NRED</p> <p>SCEDT, Brock, NCC, NRED, NIA & GNCC</p> <p>SCEDT, NRED & IN</p>

Strategy Section	Goals, Objectives & Actions (Continued)	Priority ¹	Timing	Lead & Partners ²
E.2	5. Develop a municipal procurement initiative to make the City a first or early public sector client for emerging technologies	B	2017-2018	SCEDT & Purchasing
Funding: <ul style="list-style-type: none"> The City of St. Catharines is a core funder for the St. Catharines Enterprise Centre (SCEC) and Innovate Niagara Federal and Provincial funding for initiatives that will contribute to a dynamic St. Catharines innovation ecosystem 				
Performance Metrics: <ul style="list-style-type: none"> Performance Metrics will generally be developed and data gathered by the organizations that the City is funding As a funder and Board member, the City should monitor these metrics closely – especially the outcomes rather than just activities – and ensuring that they drive the organizations strategies and operations 				
NOTES AND ABBREVIATIONS ¹ Priorities: A = Highest Priority & Very Time-Sensitive; B = Important & Time-Sensitive; and C = Desirable & Less Time-Sensitive ² Abbreviations <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Brock = Brock University IN = Innovate Niagara GNCC = Greater Niagara Chamber of Commerce McM = McMaster University (including Niagara Medical Campus) MEDC = Ontario Ministry of Economic Development & Growth MTCS = Ontario Ministry of Tourism, Culture & Sport NCC = Niagara College Canada NEC = Niagara Escarpment Commission NHS = Niagara Health System NIA = Niagara Industrial Association </div> <div style="width: 45%;"> NRED = Niagara Region Economic Development NRPDS = Niagara Region Planning & Development Services NWPB = Niagara Workforce Planning Board OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs OTMP = Ontario Tourism Marketing Partnership Corporation SCEDT = St. Catharines Economic Development & Tourism SCPP = St. Catharines Planning & Buildings TN = TeamNiagara TPN = Tourism Partnership Niagara (RTO2) VRIC = Vineland Research & Innovation Centre </div> </div>				

3. Attracting New Investment

Direct investment attraction is exceptionally competitive. Throughout the world, there are literally tens of thousands of economic development organizations actively seeking to attract new investment to their jurisdictions. Understandably, in order to hope to be successful, investment attraction initiatives must be exceedingly well researched and highly targeted on companies in sub-sectors, niches and specialized areas for which economic development organizations have developed compelling value propositions that readily differentiate their region from most others. International firms and their site selection professionals will move quickly to a short list of three to five locations.

The Strategy assesses and comments on sector priorities in Section F, Sectors of Focus, emphasizing the importance of choice, concentration of resources, and realism.

A Regional Approach: In two-tier municipalities like Niagara Region, the approach invariably is to have the Regional level take the lead role for external investment attraction.

The reasons for adopting a regional approach are well accepted. First, prospective investors that are considering expansion or a new location look at wider economic regions and take initial decisions based on what the region as a whole offers. Subsequently, they will evaluate sites, local taxes and incentives and the more precise fit of a community with their requirements, but this generally comes only after selecting or radically narrowing down the regions to consider. Second, external investment attraction – especially foreign direct investment (FDI) – requires extensive analysis of priorities, the development of robust value propositions, and the identification of companies and countries to target. Together with travel, this is an inherently more expensive aspect of economic development. It makes abundant sense to share costs on a regional basis to get a foot-in-the-door, create an impactful presence at suitable events, respond comprehensively in the first instance to enquiries, and to invite and host prospects and influencers. An important driver for collaborative regional effort has also been the ability to access matching funding, because the Federal and provincial governments proactively favour cooperative approaches in their funding decisions. Regional collaboration among economic development groups was widely endorsed in the consultations associated with the development of the Strategy, with several people welcoming the evidence of collaboration in attracting the GE Brilliant project.

Niagara Region Economic Development's proactive program to attract new inward investments (foreign and domestic) is being pursued under the four-year targeted marketing plan (2015-2018), with a new Regional Economic Development Growth Strategy to be developed in 2017. Niagara Region Economic Development has also committed to developing a more robust and formalized site selection protocol with its partners in 2017. Effective regional investment attraction efforts require trust, transparency, agreed flows of information, and well-defined relationships. The St. Catharines team is well-placed to play a leadership role defining this. A detailed 2017 trade and investment work plan is set out in the Niagara Economic Development Business Plan 2017.

The Team Niagara approach has also been formalized through the Niagara Development Corridor Partnership Inc. (NDCPi) which is an incorporated partnership among the economic development officers of St. Catharines, Welland, Fort Erie, Niagara Falls, and Port Colborne working with Niagara Region Economic Development to support business attraction, retention and expansion. The partnership has a website (<http://niagaradevelopmentcorridor.com/>).

Collaborations Beyond Niagara Region: Benefits of collaboration – often labelled “co-opetition” – extend beyond just Niagara Region. A current example is the Hamilton-Niagara Partnership which was established in 2015 to market the broader area to prospects and influencers attending the PanAm Games which featured competitive events in both Hamilton and St. Catharines. Global Affairs Canada's Invest Canada Community Initiatives (ICCI) has been a source of matching funding. Marketing activities are focused on emerging economies in South America, such as Brazil, Columbia and Costa Rica.

Another instance is the participation of the Mayor of St. Catharines in the Ontario Mayors' Auto Caucus, bringing together southern Ontario Mayors to support and further encourage automotive investment in their communities.

Cross-Border linkages also have potential merit. One under development is the Binational Research & Innovation Corridor (BRIC) to aggregate biotechnology and life sciences research in the Hamilton-Buffalo Niagara region (see Section F.2). Previous trans-border linkages have also been promoted but have tended to wither in the absence of sustained effort and compelling mutual interests and benefits.

Pan Regional Co-opetition: The intensity of the international competitive dynamic for investment attraction is also the reality behind the wide adoption of regional investment attraction models in Ontario that aggregate the efforts of like-minded competing jurisdictions to jointly target and pursue prospective international investors.

In the past, the Niagara Economic Development Corporation and subsequently Niagara Region Economic Development participated in Ontario pan-regional groups including the Ontario Food Cluster (OFC), the Ontario Technology Corridor (OTC), the Ontario Automotive Communities Alliance (OACA), and the Ontario CleanTech Alliance (OCTA). St. Catharines was the lead for Niagara Region in OTC because of presence in St. Catharines of Silicon Knights and nGen. In 2013, after reorganization, all pan-regional memberships were discontinued. For 2017, Niagara Region Economic Development has rejoined OFC and the relatively new Ontario Manufacturing Communities Alliance (OMCA), the successor to OACA and OCTA. OFC and OMCA have matching funding from ICCI. OFC plans for 2017 include participation and lead generation at the Anuga Food Fair in Cologne and the Private Label Trade Show in Chicago, while OMCA events include Hannover Messe and Fabtech in Chicago. Niagara Region Economic Development dropped previous memberships with foreign Chambers of Commerce but maintains memberships in the Automotive Parts Manufacturers' Association (APMA) and the Society of Industrial and Office Realtors (SIOR). The membership costs are paid by Niagara Region Economic Development but interested Niagara municipalities can participate.

St. Catharines' Role in Investment Attraction: The St. Catharines Economic Development team needs to ensure that St. Catharines' assets, interests, differentiators and sites are reflected in the broader Regional investment attraction efforts, that St. Catharines attributes as a place to invest are apparent as part of the Region's pitch, and that value-added opportunities to support the Region and to pursue priority St. Catharines interests are taken up. The City Economic Development team will also work with Regional colleagues and the prospects to demonstrate how St. Catharines meets specific investor requirements and host prequalified prospects. It also needs to be borne in mind that the contacts, intelligence and leads that the St. Catharines team obtains from its BR&E and innovation involvement contribute important information that supports investment attraction efforts.

To support its involvement in investment attraction (as noted elsewhere in more detail), the St. Catharines Economic Development team requires a Customer Relationship Management (CRM) system, up-to-date and comprehensive economic, demographic and labour force data bases, information on sites and buildings, value propositions for priority sub-sectors, tax rates and incentives, and information on utilities and transportation infrastructure. For its part, Niagara Region Economic Development is according priority in 2017 to implementing an integrated CRM system. Common systems would be desirable.

E. KEY ECONOMIC DEVELOPMENT PROGRAM THRUSTS				
E.3 ATTRACTING NEW INVESTMENT				
Strategy Section	Goals, Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
E.3	GOAL: Attract new investment to St. Catharines OBJECTIVE: Work within the TeamNiagara context to target and pursue new investment prospects Actions: <ol style="list-style-type: none"> 1. Identify, develop and keep current compelling value propositions for high priority sub-sectors and niches 	A	On-Going	SCEDT

Strategy Section	Goals, Objectives & Actions (Continued)	Priority ¹	Timing	Lead & Partners ²
E.3	2. Contribute St. Catharines perspectives and intelligence and ensure that St. Catharines assets, interests, priorities, differentiating factors, and sites and buildings are reflected in TeamNiagara investment attraction efforts	B	On-Going	SCEDT, NRED & TN
	3. Participate in Regional investment attraction initiatives and leads facilitated by the Region where there is value added	A	On-Going	SCEDT & NRED
	4. Host and demonstrate to investment prospects how St. Catharines meets their requirements, led by the Economic Development team's "Expeditor"	A	On-Going	SCEDT
Funding: <ul style="list-style-type: none"> The TeamNiagara model has welcomed involvement of municipalities in external investment attraction efforts The budget is driven by the extent of the agreed overall TeamNiagara annual plan which anticipates an increasing level of activity Provision will be needed for part-time contract staff or consulting services to prepare sub-sector value propositions (one to two per year at about \$25,000 each) 				
Performance Metrics: <ul style="list-style-type: none"> Number of sub-sector value propositions developed (and later updated), and evaluations of how they are proactively used, including regular re-evaluation of the traction that they generate Performance Metrics should concentrate on outcomes (the number of new investments and the jobs and amounts and how they continue to grow), supplemented by measures of activities likely to lead to the outcomes (investment-related events; contacts established by category; and categorization of leads in terms of demonstrated degree of interest) (in situations where SCEDT has influenced outcomes) 				
NOTES AND ABBREVIATIONS ¹ Priorities: A = Highest Priority & Very Time-Sensitive; B = Important & Time-Sensitive; and C = Desirable & Less Time-Sensitive ² Abbreviations <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Brock = Brock University</p> <p>IN = Innovate Niagara</p> <p>GNCC = Greater Niagara Chamber of Commerce</p> <p>McM = McMaster University (including Niagara Medical Campus)</p> <p>MEDC = Ontario Ministry of Economic Development & Growth</p> <p>MTCS = Ontario Ministry of Tourism, Culture & Sport</p> <p>NCC = Niagara College Canada</p> <p>NEC = Niagara Escarpment Commission</p> <p>NHS = Niagara Health System</p> <p>NIA = Niagara Industrial Association</p> </div> <div style="width: 45%;"> <p>NRED = Niagara Region Economic Development</p> <p>NRPDS = Niagara Region Planning & Development Services</p> <p>NWPB = Niagara Workforce Planning Board</p> <p>OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs</p> <p>OTMP = Ontario Tourism Marketing Partnership Corporation</p> <p>SCEDT = St. Catharines Economic Development & Tourism</p> <p>SCPP = St. Catharines Planning & Buildings</p> <p>TN = TeamNiagara</p> <p>TPN = Tourism Partnership Niagara (RTO2)</p> <p>VRIC = Vineland Research & Innovation Centre</p> </div> </div>				

4. Talent and Workforce

The Prized Resource: Human Capital: Highly qualified personnel are the assets that global firms frequently seek above all and want to access for expansions and new investments in developed countries such as Canada, the US, and western Europe. Over half of the corporate real estate executives polled by the CBRE Institute in March 2016 rated talent availability as the leading consideration in company moves and expansions.

Rapid technological shifts, adaption to which have been a factor in the displacement of workers and the slow growth in real incomes for many, are among the dislocations inviting a response. So too, youth unemployment has been troubling.

The World Economic Forum's (WEF's) 2016 Human Capital Report underlines the important role of talent and adaptation to technology shifts: "A nation's human capital endowment – the knowledge and skills embodied in individuals that enable them to create economic value – can be a more important determinant of its long-term economic success than virtually any other resource. This resource must be invested in and leveraged efficiently in order for it to generate returns – for the individuals involved as well as an economy as a whole." With an eye to the future, the report points out, "as today's economies become ever more knowledge-based, technology-driven and globalized, and because we simply don't know what the jobs of tomorrow will look like, there is a growing recognition that we have to prepare the next generation with the capacity for lifelong learning. The idea of a one-time education providing people with a lifelong skillset is a thing of the past."³²

Canada's Advantage: Canada is favoured by a number of comparative international metrics that seek to judge the quality of talent. The WEF's 2016 Human Capital Report ranks Canada ninth overall globally in its index that focuses on national learning and employment outcomes and demographics. Canada stood number one in North America, well ahead of the United States which is twenty-fourth. Canada, with Ontario in the lead among provinces, also has the highest level of post-secondary educational attainment in the world.

Higher Education: When it comes to talent, the challenge in a competitive global economy is to be responsive to market dynamics and to have workforce training that supports adjustments to change through on-going training and reskilling. The presence of Brock University and the Niagara College – along with McMaster's satellite Medical Campus – are sources of desirable talent; providers of training and reskilling; and partners for research, innovation, testing, and prototype development. Both Brock and Niagara College are growing and evolving. Both are committed to partnerships with business and to aligning their course offerings to market requirements. Conscious efforts are required to keep these post-secondary players at the centre of the community efforts to develop the workforce of the future and create the ecosystems that will retain and attract the "best and the brightest." In the consultations, the presence of the post-secondary educational institutions was seen as a top ranking competitive strength. At the same time, it was evident, especially in company interviews, that additional dialogue and efforts are needed so that business will become better attuned to co-op, training, research and other partnership opportunities, and so that the University and College benefit from feedback and are responsive to the talent requirements of business.

The presence of McMaster University and Mohawk College in neighbouring Hamilton is a plus. Partnerships with McMaster and Niagara Region are growing, in recognition of complementarities and the benefits of collaboration. So too, among Niagara College, Mohawk and others. McMaster has a highly regarded Faculty of

³² World Economic Forum, "The Human Capital Report 2016," June 28, 2016 (<https://www.weforum.org/reports/the-human-capital-report-2016>). Accessed on February 11, 2017.

Engineering which graduates about 1,000 students a year, providing the Niagara Region a proximate source of this valued talent. The presence of McMaster's Medical Campus at Brock is fostering a growing relationship in health sciences, an established area of excellence and innovation for McMaster. The Southern Ontario Network for Advanced Manufacturing and Innovation (SONAMI) involves Niagara College, Sheridan College, Mohawk College and McMaster.

In addition to Niagara College, Mohawk, McMaster and Brock, there are seven more universities and another five colleges that are within an hour-and-a-half's drive of St. Catharines.³³ Information on the talent that is being produced by this extensive range of post-secondary institutions needs to be a prominent component of the talent database available to be used by St. Catharines in the attraction of additional investment. So too, attracting and retaining graduating students – especially those who have some roots or prior affiliation with St. Catharines – needs attention. For its part, Mohawk College is a source of trained trades people and apprentices in fields additional to those available at Niagara College, for example architectural technology; chemical engineering technology; energy systems engineering technology; heating, refrigeration and air conditioning techniques; manufacturing engineering technician; stationary engineering; and insurance.

St. Catharines and Niagara Region have a strong self-interest in supporting efforts designed to encourage more students – especially women and aboriginals – to pursue studies in science, technology, engineering and mathematics – the so-called STEM disciplines – even if the Ontario and Federal governments hold the prime lead. Federal and Ontario government innovation initiatives offer funding support. These areas are in high demand by businesses seeking to be at the leading-edge of innovation and growth. In the online survey and the consultations associated with the Strategy's development, respondents saw workforce availability as an area of challenge. St. Catharines manufacturers, especially SMEs, indicated in interviews that they face challenges in finding and retaining high quality manufacturing workers. For some, answers lie in better public transit, such as the creation of inter-municipal services among St. Catharines, Niagara Falls and Welland that is being pursued jointly with Niagara Region.

Educational Levels: The proportion of the total population in St. Catharines that has attained a post-secondary education is lower than the provincial average – 59.8% compared to 64.6% provincially. The St. Catharines level is however fractionally higher than in the Region where the rate is 58.8%. The rate of apprenticeship and college completion among the residents of St. Catharines (35.7%) is higher than provincially (31.4%), while 20.7% of people living in St. Catharines had a university qualification at the bachelor level or higher compared to 28.7% in Ontario.

³³ Universities: Wilfrid Laurier, Waterloo, Guelph, Toronto, Ryerson, York, and OCAD; Colleges: Conestoga, Sheridan, George Brown, Seneca and Humber.

Exhibit 16				
Highest Level of Educational Attainment in St. Catharines				
Age 25 - 65 Years in 2016				
Education Level	Total	St. Catharines %	Niagara Region %	Ontario %
Total Population Aged 25 to 65	69,699			
No certificate, diploma or degree	7,792	11.2%	11.4%	11.1%
High school diploma or equivalent	20,220	29.0%	29.8%	24.3%
Postsecondary certificate, diploma or degree	41,694	59.8%	58.8%	64.6%
Apprenticeship or trades certificate or diploma	6,607	9.5%	10.0%	7.6%
College, CEGEP or other non-university certificate or diploma	18,282	26.2%	27.7%	23.8%
University certificate or diploma below bachelor level	2,377	3.4%	3.1%	4.4%
University certificate, diploma or degree at bachelor level or above	14,428	20.7%	18.0%	28.7%
Bachelor's degree	8,580	12.3%	11.1%	17.7%
University certificate or diploma above bachelor level	5,848	8.4%	6.9%	11.1%
Source: Manifold Data Mining Inc.				

Workforce Availability and Demand: The Niagara Region needs to build and keep current a more robust database of workforce availability and demand, ideally leading to information-rich online data and job matching tools. Such data is more and more critical at a time when workplace changes occur rapidly – at exponential rather than just linear rates. The best available assessments of the emerging requirements of employers need to be known to governments, educational institutions, organizations planning and providing training, members of the workforce, and students making career choices. The rate of change in the workplace demands a shift to lifelong learning. Given the importance of talent skilled in leading-edge disciplines, business looking to expand and investment will be attracted to jurisdictions that are aggressively pursuing workforce strategies and initiatives that distinguish them from other competitive locations.

The Niagara Workforce Planning Board (NWPB) plays a central role in innovative labour market solutions by bringing people together. NWPB provides authoritative research to identify employment trends, target workforce opportunities and develop projects, often collaboratively. The St. Catharines Economic Development team and its counterparts in the Region stand to gain from ensuring that the NWPB's access to data is fully exploited and well-structured collaborative projects track and provide information on workforce demand, supply and training and educational offerings.

Important new Canadian workforce data from the 2016 Census will be released in late November 2017 covering labour, journey to work, language of work, and mobility and migration. The St. Catharines Economic Development team, working with partners such as the NWPB and Niagara Region Economic Development, should plan to undertake a thorough analysis of this comprehensive data which becomes available only every five years. The data should, for example, help identify occupations where a significant number of St. Catharines residents are commuting to work elsewhere – a pool of talent that will be interest to companies looking to establish a new facility or expand an existing one.

Retaining and Attracting Talent: Future economic growth in St. Catharines will depend to a large extent on the retention and attraction of highly qualified people to the City and to Niagara Region as a whole. Availability of the right skills is consistently a front-of-mind consideration for businesses that are expanding or contemplating new investment.

St. Catharines should target the attraction of job-creating entrepreneurs, creative professionals and lone eagles who can make personal lifestyle choices to base their businesses on the perimeter of major metropolitan areas, provided they can access affordable and reliable high-speed broadband.

With the high-cost of housing in Toronto and the GTA more generally, St. Catharines is a potentially attractive urban option with its relatively lower prices and better availability for single-family and other more spacious residential accommodation. The pressures of escalating Toronto housing prices are already having an evident impact as Hamilton, for example, has become a notable destination for young technology and creative workers who are attracted to a somewhat more affordable area. The availability of rental accommodation where newcomers can live initially is also an important consideration. Social media and media coverage of people who celebrate their decisions to move are among the favoured tactics that are adopted by communities to generate interest.

Immigrant attraction is also an important component, especially as the rate of growth of Canadian-born entrants to the workforce slows. The numbers of immigrants coming to Niagara Region have reportedly been in decline. About one-third of Immigrants land initially in the Toronto area, drawn at least in part by ethnic community support there. Well-targeted initiatives can introduce them to job opportunities which will lead to them moving to a more affordable – but not too distant – community. So too, efforts to attract immigrants can draw on the connections of the diaspora already living in St. Catharines.

Niagara Region, as part of its Global Attractiveness Initiative that will be more fully launched in 2017, has a project aimed at net new population growth of at least 10,000. Collaboration with this initiative should be a central aspect of St. Catharines own efforts.

In the consultations on the Strategy, local talent shortages were mentioned, for example, experienced marketing and accounting people, though there are generally more job seekers than openings. A key objective, it was felt, should be to attract younger workers with skills that can fill the gaps left by the growing number of retirees. When it comes to talent attraction, several of stakeholders indicated that the most productive approach would be to focus on people who are in their thirties or early forties and now have families, rather than focusing primarily on retention of youth. The availability of employment opportunities for spouses was flagged as an important issue in people's decisions. Improved municipal transit – as envisaged, for example, through the Inter-Municipal Transit model for which approval is pending – is essential to get the workforce and students to places of study and work, according the feedback offered during the stakeholder engagements.

The objective of attracting talent to fill St. Catharines jobs also aligns with the City's efforts to profile and market the area to visitors. This invites close consultations on marketing and targeting among those involved on branding, marketing, website, social media and signature events.

“Silver” Generation as a Niagara Region Asset: Notable is the steady climb, in line with national and Ontario trends, in participation and employment rates among people 65 years and over since 2001 in the St. Catharines-Niagara CMA. As noted in Exhibit 7, the Niagara CMA has a high proportion of its population over 65 years than the average in Ontario. The rates that were just under 5% in 2001 have risen to 14% and 13.6% respectively in 2016 in Niagara. Some of the continued involvement of the 65 and over workforce may be out of necessity, though, just as likely, the increased involvement of the “silver generation” may be a desire to remain engaged and therefore may represent an important asset that St. Catharines can harness.³⁴

³⁴ Statistics Canada, CANSIM 282-0129 and 282-0002 (<http://www5.statcan.gc.ca/cansim/a26>). Accessed on February 12, 2017.

Unemployment, Full-Time versus Part-Time, Participation and Employment Rates: Though unemployment rates in the St. Catharines-Niagara CMA have taken time to recover from the 10.4% rate registered in 2009 in the wake of the global financial crisis, the annual rate for 2016 for the CMA (7.1%) returned to a level more in line with pre-recession levels prior to 2009. Generally, from 2001 to 2016, the St. Catharines-Niagara unemployment rate tended to be only moderately higher than the Ontario rate.

The proportion of full-time jobs (as opposed to part-time employment) in the St. Catharines-Niagara CMA has definitely been at a lower level following the recession. Where full-time jobs outnumbered part-time by 3.5 to 3.8 times prior to 2008-2009, the ratio declined to 3.1 to 3.2 from 2010 to 2015 before climbing to about 3.5 in 2016.

Participation and employment rates in the St. Catharines-Niagara CMA have returned to pre-recession levels. The decline of these, subsequent to the recession, has been a concern in some regions. The highest participation and employment rates in the St. Catharines-Niagara CMA continue to be found in the 25 to 54 age bracket. This age range also has a slightly lower unemployment rate.

Youth Unemployment: Youth unemployment (ages 15 to 24 years) has reached worrisome levels in Canada since the global financial crisis. Nationally, it spiked at 15.4% in 2009, declining on an annual basis to 13.1% in 2016. Ontario's youth unemployment rate also peaked in 2009 but at the higher rate of 17.6%, moving downward to 14.0% in 2016. The St. Catharines-Niagara CMA experienced annual rate above 18% in 2010 (18.4%) and 2012 (18.1%) but following measured declines from 2013 to 2015, dropped considerably to reach only 8.5% in 2016.³⁵

The Ontario government's two-year Youth Job Connection program launched in October 2015 and additional local support programs appear to have been contributing factors to the reduction in youth unemployment rates. It will be important to monitor trends and to sustain effective, properly funded and targeted programs to ensure that youth unemployment rates remain moderate. Niagara Region's Global Attractiveness Initiative will include a Joint Strategy on Youth Retention with Post-Secondary Institutions.

Physician Recruitment: The availability of family doctors is a critical consideration in the attraction of people, businesses and investment to a community. Niagara Region spearheads efforts, working in collaboration and coordination with the municipalities, as well as the McMaster Medical Campus and Family Clinic. Over the last five years, the attraction rate of family physicians has tended to offset the doctors retiring and leaving practices, though a deficit endures for all municipalities. In 2016, there were four new practicing physicians in St. Catharines, with an additional one pending. Eight tours were given to prospective physicians and on-going support was accorded the McMaster Niagara Campus first year residents tour.

St. Catharines is the only municipality to have a dedicated staff member. This person is contracted part-time and has a small annual budget of \$25,000 available to assist with up to \$5,000 in re-location costs per candidate. Both the current St. Catharines Council-approved program and the Regional program are up for review in 2017. The most efficient and appropriate option is to end the St. Catharines program and have the Region handle recruitment under the same model that has been in place for the other municipalities, particularly as it will facilitate coordination with broader talent recruitment initiatives being led by the Region.

³⁵ Statistics Canada, CANSIM 282-0002 (<http://www5.statcan.gc.ca/cansim/a26>). Accessed on February 12, 2017.

E. KEY ECONOMIC DEVELOPMENT PROGRAM THRUSTS**E.4 TALENT AND WORKFORCE**

Strategy Section	Goals, Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
E.4	<p>GOAL: Align workforce availability and employer requirements</p> <p>OBJECTIVE: Develop, encourage and support initiatives that will attract, retain and adapt a talent pool that will align with evolving requirements of existing and new businesses</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Engage, in collaboration with others, in the identification and analysis of comprehensive up-to-date data on the talent pools that new and existing businesses can access (including post-secondary graduates and commuter flows by sector and occupation) 2. Collaborate in the Niagara Workforce Planning Board's research, activities and initiatives, including those that will facilitate response to change, new opportunities and workplace dislocations 3. Participate actively in initiatives to attract and retain talent and entrepreneurially-oriented individuals, including immigrants 4. Support initiatives that will better align workforce skills with evolving employer requirements 5. Arrange for St. Catharines to transition to the same Niagara Region physician recruitment model that is in place for other municipalities 	<p>A</p> <p>A</p> <p>C</p> <p>B</p> <p>C</p>	<p>2017-2018</p> <p>On-Going</p> <p>On-Going</p> <p>On-Going</p> <p>2017</p>	<p>SCEDT, NWPB, Brock, NCC, McM & NRED</p> <p>SCEDT, NWPB & NRED</p> <p>SCEDT & Niagara Region</p> <p>SCEDT, NWPB & NRED</p> <p>SCEDT & Niagara Region</p>
<p>Funding:</p> <ul style="list-style-type: none"> • Provision may be needed for part-time contract staff or consulting services to assist with analyzing and updating databases, especially the important 2016 Census information on labour, commuting to work and mobility to be released in November 2017 • Involvement in joint studies with the NWPB will involve financial contributions to the shared costs of these studies • The outcome that is envisaged for the physician recruitment program will save about \$50,000 per year 				
<p>Performance Metrics:</p> <ul style="list-style-type: none"> • The key product sought in terms of talent and workforce is compelling, detailed data that identifies attractive and accessible talent pools that align with the interests of new investors or local business seeking to expand • Initiatives to attract talent, entrepreneurs, creative professionals and immigrants should devise metrics that set goals and measure the response 				

NOTES AND ABBREVIATIONS

¹ **Priorities:** **A** = Highest Priority & Very Time-Sensitive; **B** = Important & Time-Sensitive; and **C** = Desirable & Less Time-Sensitive

² **Abbreviations**

Brock = Brock University

IN = Innovate Niagara

GNCC = Greater Niagara Chamber of Commerce

McM = McMaster University (including Niagara Medical Campus)

MEDC = Ontario Ministry of Economic Development & Growth

MTCS = Ontario Ministry of Tourism, Culture & Sport

NCC = Niagara College Canada

NEC = Niagara Escarpment Commission

NHS = Niagara Health System

NIA = Niagara Industrial Association

NRED = Niagara Region Economic Development

NRPDS = Niagara Region Planning & Development Services

NWPB = Niagara Workforce Planning Board

OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs

OTMP = Ontario Tourism Marketing Partnership Corporation

SCEDT = St. Catharines Economic Development & Tourism

SCPP = St. Catharines Planning & Buildings

TN = TeamNiagara

TPN = Tourism Partnership Niagara (RTO2)

VRIC = Vineland Research & Innovation Centre

5. Marketing

The marketing of St. Catharines must consider the range of economic development programs and priority geographic targets, though there is a considerable degree of overlap in both cases.

Marketing supports the City's economic development goals to:

- Attract, retain and expanding businesses;
- Promote a vibrant innovation ecosystem;
- Attract highly qualified and skilled talent, immigrants, entrepreneurs, creative professionals and risk-takers; and
- Promote the City as a tourism destination, including by attracting major international and national events.

The geographic focus is weighted heavily to Toronto. Residents of the Greater Toronto Area (GTA), including those with ties to St. Catharines, are the prime audience, not least for the City's and Niagara Region's goals of attracting talent, immigrants and experiential travel. Businesses in the GTA may also be increasingly receptive to expansion and relocation to lower-cost, less congested areas that also offer an attractive lifestyle. The task of conveying a refreshed and current profile of a progressive and exciting St. Catharines – including the Downtown – is an example where the interests of various components of the economic development programs converge and will benefit from the development and dissemination of common messaging.

The prime international target areas are the immediately neighbouring regions in the US – Buffalo and western New York State, Pittsburgh and northern Pennsylvania, and Cleveland and northeast Ohio. Europe is a priority among offshore regions. Latin America has recently received attention as consequence of initiatives at the time of the PanAm Games.

Further investigation could be launched regarding Asian connections, particularly international students at Brock University and Niagara College and the Greater Niagara Chamber of Commerce partnership with the Niagara Chinese Business Council.

In the light of the transformative place-making investments that have occurred, an underlying objective for St. Catharines' marketing efforts is to present a compelling image of a renewed urban hub that is the vibrant, progressive and competitive anchor for Niagara, a region offering a multitude of enticing diversions and lifestyle

choices. During the consultations, members of the City's business community pointed to the change which has been occurring in St. Catharines, in areas such as the Downtown and in health care, and the resulting need to contradict out-dated perceptions and to acquaint people with the emerging "new" community.

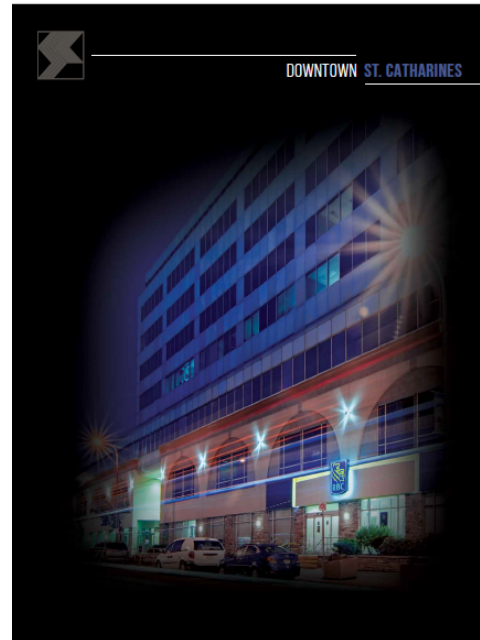
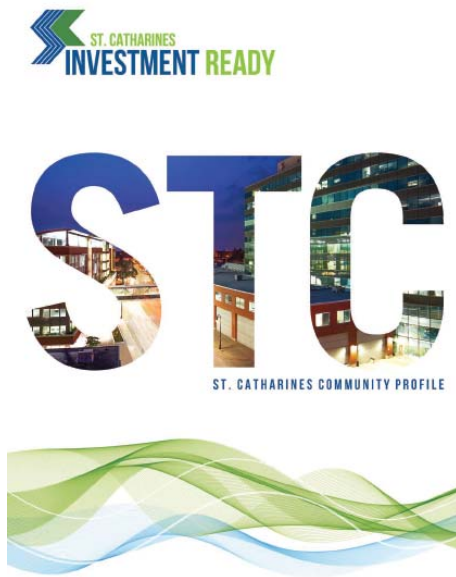
Branding and Marketing Review: A comprehensive review of the St. Catharines economic development branding, marketing collateral, website and social media tools would be timely in 2018. A key objective is coherence. The assessment will need to ensure a degree of congruity with tourism, Regional and broader City messaging. In addition, it should take in to account both business and talent attraction goals and highlight organizations and businesses that reflect St. Catharines' character and success. Effective and authentic marketing will also encourage civic pride and be an impetus to greater unity among the community voices that influence the City's image externally.

The St. Catharines Economic Development team has recently overseen the production of appealing marketing collateral and created the investinSTC website. A view expressed by a number of people in the outreach to the community as part of the Strategy development was that St. Catharines Economic Development needs to make a clear choice about its identity and brand and "stick to it." The sense was that there has been a lack of consistency over time and that as a result no enduring brand, image or basic messaging being consistently conveyed – or retained.

Economic Development Websites: The St. Catharines Economic Development team launched the new investinSTC website (www.investinSTC.ca) in 2015. The website is supported by a partnership with the Downtown Business Improvement Association (BIA).



The website messaging is complemented by two brochures – one a Community Profile and the other focusing on Downtown St. Catharines. The Community Profile carries the City's Investment Ready messaging that highlights investment opportunities; major recent community investments; core business strengths; favourable location and market access; the competitive business environment; experienced workforce; educational assets; arts, culture, festival, wine and culinary scene; Downtown redevelopment; and the promise to expand GO transit service to Toronto.



The investinSTC website has several videos with focused messaging that highlight leading St. Catharines companies and the City's prime attributes.

The investinSTC website is separate from the Economic Development portion of the City of St. Catharines website which presents information in a more classic manner. There do not appear to be invitations or links in each case to visit the other website. There are also inconsistencies in the information that is available. Rationalization is required to focus resources and messaging and sustain credibility.

Leading economic development groups generally have principal websites that are kept distinct from municipal sites so that that sites are less constrained by the rules and protocols that governments find necessary to adopt to meet the range of potential concerns that accompany other municipal responsibilities. In line with this commonly employed approach, the investinSTC website should be the one on which to focus.

The revised and consolidated investinSTC website should include the following features:

- Ability to download information;
- Ability to obtain translations of material;
- A specific tab for site selection professionals giving access to detailed download data;
- Integration with social media tools and e-marketing initiatives;
- Strong value propositions, supported with factual information;
- Maps;
- Source of searchable real estate;
- A fact sheet;
- In-depth information on post-secondary institutions, including numbers of graduates, co-op programs, research centres and facilities;
- A Business Directory, with separate material providing profiles of foreign-affiliated companies and the largest private-sector employers;
- Property tax rates, development charges, and local incentives;

- Functioning links to websites of key partners; and
- Contact information for the Economic Development team.

The current investinSTC website has video content which should be kept current and built upon.

Testimonials to the City’s Success – Shared Messaging: Word of mouth, especially testimonials from the business, post-secondary and institutional leadership, is the most credible and therefore persuasive messaging for any location. The community’s leaders have privileged insights because of their positions and connections. Their observations and insights benefit from being from an independent and authentic source.

Communities that develop a shared understanding of their strengths and a vision of where they are headed impress visitors – not least journalists and prospective investors – critical players in building a community’s reputation. And the visitor is not left to weigh and assess varying perspectives; the messaging comes through loudly, clearly and consistently.

Shared messaging – getting everyone “singing for the same song sheet” – comes about through regular dialogue with the business community and stakeholders. Elsewhere (Section D.3), the recommendation is made that structures be established to ensure regular on-going dialogue with a cross-section of businesses and stakeholders. The shared messaging that emerges needs to feature prominently in the content of the economic development websites and social media campaigns.

Niagara Development Corridor Partnership Website: As part of the collaborative economic development efforts, St. Catharines Economic Development is part of the Niagara Development Corridor Partnership website, along with Welland, Fort Erie, Niagara Falls, Port Colborne and Niagara Region. The website concentrates on half-a-dozen high-level messages. What seems to be missing, however, are links to the websites of the participating organizations and actionable contact information.

Tourism Website: A completely redesigned St. Catharines tourism website was launched in 2017. A single agency will manage this dedicated website, ensuring a high degree of coherency, and effective integration of new tools including the social media capability that is crucial to campaigns such as the Ale Trail and Downtown events. A state-of-the-art approach can capitalize on St. Catharines’ interactive digital media capabilities.

An annual City Guide is the principal compendium of St. Catharines tourism information, also available on line as a flipbook. Eighty community partners support the City Guide. In 2016, 90,000 copies were distributed – 70% in Ontario and 30% in the northeastern US, supported by 75 community partners.

Like the investinSTC website, the tourism website should have prominent links from the City’s website. The City website’s tab, “Play In” features many recreational pursuits, such as trails, that will be of interest to tourists as well as locals and that are likely featured in tourism offerings too.

A modest degree of coordination between the economic development and tourism websites about branding and basic look and feel is desirable. The image of the City that each presents should be helpful to the pursuit of the other’s and should contribute to an overall City image. Some of the tourists visiting St. Catharines may be individuals who are actively looking or are receptive to a new community to which they might move, so the City needs a degree of consistency to be sure to put its best foot forward.

Value Propositions: St. Catharines requires value propositions and related marketing collateral for the priority sectors and sub-sectors to secure serious interest and consideration by prospective investors. A high-level

overview of St. Catharines strengths is required that positions the City in the Canadian, Ontario and Niagara context. Relevant factual information lends credibility.

St. Catharines requires robust in-depth value propositions focused on the sub-sectors and niches where it can differentiate its offering and make a compelling fact-based case for investment. The value proposition responds to the invitation, “Tell me more,” and needs to explain the distinct benefits that a St. Catharines location can promise to deliver. The value propositions that are developed will frequently need to be tailored to specific situations and prospects. They must also be kept up-to-date.

The need to be able to differentiate St. Catharines and make a world-class case means the number of sub-sectors or niches selected for the development of in-depth value propositions will be very limited. A rigorous process is needed to narrow down and select the sub-sectors and niches. For each, target firms need to be identified, along with the strategies to reach them. The sectors of focus are outlined and addressed in Section F.

Marketing Automation: The use of marketing automation in business-to-business situations is growing and offers economic development organizations the potential to better qualify prospects on which to focus. Data analytics bring a level of sophistication that enables CRM, email, social media and web-based marketing initiatives to identify and appropriately nurture the more receptive and sales-ready prospects. These software platforms capitalize on assets such as interactive website material, value propositions, downloadable white papers and special reports or other marketing collateral as a means to entice interest, gain feedback and qualify and narrow the prospect pool. Marketing automation can be utilized to supplement and, in some cases, replace contracted lead generation in pre-mission and trade show contact and follow up. These platforms offer a non-obtrusive process of maintaining contact and building relationships for ongoing investment attraction. Performance metrics can be established to measure the effectiveness of programs, materials and campaigns.

Media and Site Selector Visits: Economic development organizations like St. Catharines regularly target US-based site selection firms and invite them to be part of VIP visits the Region. The objective is to be sure that St. Catharines is front-of-mind with these firms that advise companies evaluating new locations. In tourism, there are parallel efforts to bringing in influencers.

The cost of such initiatives is lower and impact much higher if such efforts are undertaken collaboratively on a Niagara Region-wide basis. Niagara Region Economic Development, in its 2017 Business Plan, indicates that a program will be developed to better cultivate, engage with, and learn from site selectors. Similarly, there are opportunities to host visiting media groups. Some of these opportunities arise directly, others through partners such as the Federal and Ontario governments.

E.5 MARKETING

GLOBAL
INVESTMENT ATTRACTION
GROUP

NOTES AND ABBREVIATIONS

¹ **Priorities:** **A** = Highest Priority & Very Time-Sensitive; **B** = Important & Time-Sensitive; and **C** = Desirable & Less Time-Sensitive

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F. Sectors of Focus

1. Introduction: Cross-cutting Technologies and Forces of Change

Cross-Cutting Technologies

Emerging New Paradigms for Economic Development: The pace of technological change continues to accelerate. What once might have linear rates of change have shifted to be exponential. All manner of businesses are being upended or radically changed by digital- and technology-based disruptions – some seemingly to occur in a matter of months. In the face of such change, governments have recognized that giving a very high policy priority to innovation is an imperative.

Convergence: The convergence of digitally-based technologies serves to blur traditional product sector boundaries, as technologies cut across and influence many products and services. The analytical, sensing, simulation, wireless and communications technologies that are coming together carry various labels: the Internet of Things (IoT), Big Data, the Cloud, 3D printing and 3D visualization, Augmented and Virtual Reality, robotics, imaging, GPS, cyber security, and Machine Learning and Artificial Intelligence (AI), among others. These are also interacting with and helping unlock gains in materials science, nanotechnology and biotechnology, especially gene sequencing. Major thematic public policy initiatives – such as sustainability policies, especially those related to climate change – also impact commercial innovation across multiple sectors.

These shifts argue for modified approaches to establishing traditional sector-centred priorities for economic development strategies. Previously, strategies identified priority sectors on which to focus efforts. Each was presented as being distinct, though definitional issues were increasingly evident. The difficulties of packaging priorities into neat sector packages continue to grow and will become more so over the duration of the St. Catharines Economic Development Strategy.

Skills or Occupations? An additional reason to step back from priorities centred solely on traditional sectors is that local and global businesses are now looking for the types of skill sets that prospective employees possess more than they are for people who distinguish themselves by their sector experience and qualifications.

Fourth Industrial Revolution: The convergence and interaction of technologies is evident in what many believe is the emerging fourth industrial revolution.³⁶ Germany launched its fourth industrial revolution initiative, Industrie 4.0, in 2013. The Advanced Manufacturing Partnership that kicked off in the United States in 2011 has been creating new manufacturing innovation institutes to focus on accelerating the adoption on emerging technologies such as 3D printing, digital manufacturing and design, semiconductors and photonics. The prestigious World Economic Forum (WEF), held annually in Davos, Switzerland, endorsed the fourth industrial revolution as its 2016 theme. The WEF sees this next evolution occurring at an exponential rather than linear pace and being centred on what it calls cyber-physical systems that move beyond earlier computerization and digitization to innovation based on powerful combinations of advanced technologies.

The Pervasive Influence and Importance of Digital Technology and Skills: Given the power and persuasive nature of these forces, the general availability of digitally-based skills should be a central theme in a forward-

³⁶ According to this analysis, the first industrial revolution was mechanical power from steam (end of the 18th Century); the second the assembly line and mass production (start of the 20th Century); and the third electronics, computers and automated production (1950s on).

looking economic development strategy. The national digital talent strategy released in March 2016, “Digital Talent: Road to 2020 and Beyond,” indicates that 55% of Canada’s 877,470 information and communications technology (ICT) workers were employed in 2015 in sectors outside of ICT, making them “the foundation of economic growth in today’s hyper-connected landscape.”³⁷ By 2019, the in-demand roles in the digital economy will be information systems analysts and consultants, computer network operators and web technicians, computer programmers and interactive media developers, software engineers, graphic designers and illustrators, computer and information systems managers, and database analysts and data administrators.

St. Catharines Capabilities: St. Catharines has a pool of talent with skills aligned with digitally-oriented workplaces into which firms locating in the City can tap. In 2016, this included computer design and services (475 jobs); advertising and public relations (313); motion picture and video (179); design services (127); and software publishers (119), which in the aggregate grew by over 45% from 2011 to 2016. St. Catharines needs to present and promote its advanced digital capabilities and digitally-enabled talent and emphasize their application across multiple sectors.

Digital media, as a blend of technologies, has applicability across many sectors and numerous applications. So too, digital media requires teams of professionals with diverse skills – technical, artistic, analytical and production coordination – to create the best user experience. Sectors which digital media products serve include entertainment, gaming, eCommerce, health, education, advertising and marketing, publishing, television, and the environment.

Interactive Digital Media has been a key area of focus for St. Catharines. The Generator at one, inheriting the work of nGen, has been the centre of innovative activity and company creation and growth. Ontario’s Interactive Digital Media Tax Credit is an important incentive.

Post-Secondary Focus on Digital Technology: Niagara Region’s post-secondary educational institutions have focused on providing world-class digital technology programs to create a pool of talented, well-trained graduates, eager to become leaders in this field. The post-secondary institutions with a presence in the Region or located nearby are also well placed – not only to be a source of highly qualified talent but also to facilitate workforce adaptation, as technology advances and workplace demands change. Relevant facilities of note are the Brock Institute for Scientific Computation (BISC), the Digital Media and Web Solutions team at Niagara College Research and Innovation, and the College Library’s exploratory digital lab (“The Exploratory”). The Centre for Digital Humanities is home to Brock’s Interactive Arts and Science (IASC) program. The GAME program, the latter a partnership between Brock and the Department of Computer Science and Niagara College, allows students to earn in the space of four years one of two Bachelor’s degrees coupled with an advanced diploma in game development.

Exhibit 17			
Niagara College Enrolment in Selected Courses – 2013-2014			
Course	Enrolment	Course	Enrolment
Computer Engineering Technician	21	Game Development	107
Computer Programmer & Analyst	123	Graphic Design	150
Computer Systems Technician	47	Media Arts	34
Source: Head Count by College and Program, Government of Ontario			

³⁷ Information and Communications Technology Council (ICTC), “Digital Talent: Road to 2020 and Beyond,” March 2016 (http://www.ictc-ctic.ca/wp-content/uploads/2016/03/ICTC_DigitalTalent2020_ENGLISH_FINAL_March2016.pdf). Accessed on February 17, 2017.

The Creative Component

The strategic vision and goals for the City of St. Catharines have supported the creative sector as being a central ingredient for the City's development and evolution. This too is a cross-cutting consideration, covering segments such as communications, design, software and hardware, data sciences, entertainment and fine arts. The Council's Strategic Plan speaks out about inspiring the community through culture by celebrating local talent and encouraging growth in arts and culture, to help to attract new investment and retain young professionals.

The presence of Brock University's Marilyn I. Walker School of Fine and Performing Arts, Rodman Hall, the FirstOntario Performing Arts Centre and the Niagara Artists Centre are helping make the Downtown a centre for creativity and culture. Also contributing are the Culture Plan, Creative Cluster Master Plan, and encouragement of crowdfunding for cultural activities and events. Employment in the St. Catharines arts, entertainment and recreation sector, which stood at just over 1,200 in 2016, grew by 11% from 2011 to 2016.

From an economic development perspective, a vibrant creative scene is also a major attractor of tourism – both on its own and how it enriches the local scene. The creative component also reflects itself in fields such as artisanal and specialty foods and beverages, horticulture and floriculture, architecture and design, software, interactive digital media, gaming and web design.

Close collaboration with the City's culture coordinator and the Arts and Culture Committee will be central to ensuring that the creative component is included and integrated as an appropriate part of economic development initiatives. To access information on best municipal level practices in integrating and growing the creative industry component, membership may be merited in the Creative City Network of Canada. In the US, the Pittsburgh Technology Council's Creative Industries Network is viewed as having a state-of-the-art program. The Network's creative economy city partners include Detroit, San Jose, Brooklyn, Los Angeles, San Francisco and Santa Fe.

Impactful Government Policy Thrusts

Major public policy initiatives increasingly cut across multiple sectors and influence a broader swath of situations. In addition to innovation and to major infrastructure investments, new policies to address climate change are the most prominent and likely to be the most consequential in the near-term.

The Ontario's Climate Change Action Plan 2016-2020 creates important opportunities for the private sector and for communities. The Plan calls for retrofitting of buildings, energy audits resale of homes, net-zero building standards, provision of vehicle fueling stations and corridors, community emission reductions, methane-fuel electricity generation, and support for research and innovation. As the major business opportunities tend to rest in the services area, this Strategy addresses the economic development consequences of the Ontario Climate Change Action Plan for St. Catharines in the section on the professional, engineering, scientific and technical services sector (Section F.2).

Choosing Sectors of Focus for the St. Catharines Economic Development Strategy

The cross-cutting influences that have been noted – digitally-based technologies, ensuring a creative component, and consequential government policy initiatives – make it more difficult to categorize the Strategy's

priorities into traditional, neat sector packages. Nevertheless, St. Catharines must still judiciously focus its efforts.

Acknowledging the changes underway and the breadth of the impact, the first priority segment for the Strategy must be innovation-driven digitally-based technologies, as already described.

Additional Sectors of Focus: St. Catharines should give priority to a limited number of sectors where it has demonstrable advantages and can truly differentiate its offering in an exceptionally competitive world. Highly-focused, well-researched and sustained proactive initiatives are required to target and reach prospects and generate the impact needed to win new investment. In-depth value propositions are required. Substantial staff resources will be required in each case.

Remaining Investment Ready and Able to Respond: Choosing sectors of focus does not mean that others are unimportant and should be neglected. The St. Catharines Economic Development team will continue to field and identify an extremely varied range of leads and must be ready to respond quickly and adequately. Wide opportunity exists to retain, expand and attract investment.

Need for Flexibility: In addition, given the accelerating speed of change in business and the economy, economic development strategies and plans should acknowledge the need to build in more flexibility, undertake more frequent reviews, and tighten planning horizons. The future will be faster-moving, less predictable, and more turbulent. The world will be a different place in five years. Adaptability is very important. In order to react to the new opportunities, St. Catharines will need to be able to “pivot” when needed (to use the language of today’s emerging companies). The adage that the only constant is change will be truer than ever.

Exhibit 18			
St. Catharines: Technologies and Sectors of Focus – 2017 - 2022			
SECTOR/TECHNOLOGY	RETAIN Existing Firms	NURTURE Existing Capabilities	ATTRACT Additional Investment
Digitally-Based Technologies	✓	✓	✓
Creative	✓	✓	✓
Professional, Engineering, Scientific, Business Support & Technical Services			
• Professional, Engineering, Scientific & Technical Services	✓	✓	✓
• Business Support Services	✓		
Tourism	✓	✓	✓
Agriculture, Food and Beverages			
• Agriculture	✓		
• Food and Beverages	✓	✓	✓
Health Care		✓	✓
Manufacturing			
• Automotive/Mobility	✓	✓	
• Supply Chain Opportunities	✓	✓	
• Greenhouse-Related Systems		✓	✓

The online survey undertaken in association with the development of the Strategy asked respondents to identify the top five sectors most important to the future growth of St. Catharines. The top choices of those responding were:

1. Health Care Services (66);
2. Arts, Entertainment and Recreation (63);
3. Professional, Scientific and Technical Services (56);
4. Manufacturing (54);
5. Information Technology (51);
6. Educational Services (49);
7. Tourism (44);
8. Biosciences (43);
9. Digital Media (40);
10. Distribution and Logistics (33); and
11. Environmental, Waste Management and Remediation (30).

F. SECTORS OF FOCUS

F.1 INTRODUCTION: CROSS-CUTTING TECHNOLOGIES AND FORCES OF CHANGE

Strategy Section	Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
F.1	<p>OBJECTIVES: Focus on the converging digitally-based and related technologies that are influencing nearly all sectors; encourage their evolution, application and adoption; and promote St. Catharines' talent pool, research assets and innovation culture</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Assemble, keep current and present detailed information on the digitally-enabled talent pool that can be accessed by businesses based in St. Catharines 2. Publicize digitally-based capacity, creativity, excellence, innovation and research in St. Catharines 3. Support initiatives to connect existing businesses across all sectors with relevant cross-cutting technologies and the creative sector 	<p>A</p> <p>A</p> <p>B</p>	<p>On-Going</p> <p>On-Going</p> <p>On-Going</p>	<p>SCEDT, Brock, NCC, McM, NRED & NWPB</p> <p>SCEDT, Brock, NCC, McM, NRED & NWPB</p> <p>SCEDT, Brock, NCC & NRED</p>
<p>Funding:</p> <ul style="list-style-type: none"> Provision may be needed for part-time contract staff or consulting services to assist with analyzing and updating databases on St. Catharines' and Niagara Region's digitally-skilled talent pool, including post-secondary co-ops and graduates 				

Performance Metrics:

- The key measure is the extent to which St. Catharines can demonstrate digitally-based capacity and availability of talent and attract related investments

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2. Professional, Engineering, Scientific, Business Support and Technical Services

The shift in the economy from manufacturing to services puts the spotlight on St. Catharines as a potential location for specialized services businesses and operations. St. Catharines has a long-standing concentration of business support centres offering specialized outsourced services to other larger companies. The City has the potential in the future to attract higher skilled engineering, finance, technical, professional and scientific services jobs.

A consideration that makes St. Catharines an attractive location is that the area is serviced by major fibre-optic trunks that cross the border in the Niagara area. Access to high-speed broadband is also a consideration for other service-oriented operations dependent on computer systems.

Business Support Services: St. Catharines has been the location of choice for companies offering business support services for many years, including home-grown operations such as Canadian Tire Acceptance and NuComm. In 2006, nearly 3,500 people were employed in St. Catharines in the business services support sub-sector, almost 60% of the total in the Niagara CMA. During this time, the Ontario government and municipal economic developers targeted investment attraction activities toward the business support services sector, often referred to as the “call centre” space. Business support operations cover a number of specialized services offered on behalf of large companies involving inbound calls, technical support, credit and collections, ordering and logistics. St. Catharines centres have not general been involved in outbound calls or telemarketing. Many post-secondary students and recent graduates in business, accounting and liberal arts have gained early working experience with these companies.

The employment in St. Catharines in the business support services sector declined markedly to just over 1,300 in 2011. Apart from the 2008 economic downturn, influences were the introduction in 2006 by the Canadian Government of “Do Not Call” legislation and the upward movement of the Canadian dollar to parity with its US counterpart. Employment levels have slipped slightly since 2011 to around 1,200 in 2016. St. Catharines is home to successful companies in this sector including CTFS (formerly Canadian Tire Acceptance), SITEL and newly located Ting Mobile. Centres represent uniquely targeted services which rely heavily on the ability to recruit talent in St. Catharines. These organizations have moved up the value chain and provide training and

opportunities for advancement. Ting Mobile indicated that it had chosen St. Catharines over communities such as Buffalo, Welland, Hamilton, Barrie and Guelph.

The principal St. Catharines business support services providers are historically important sources of employment. The sector is competitive and cost-sensitive. As such, the St. Catharines Economic Development team should ensure it sustains a close relationship with the local operations to support their presence and facilitate expansion opportunities, especially where higher level skills are involved.

Professional, Engineering, Scientific and Technical Services: Relative to the provincial Local Quotient (LQ) averages for these types of services businesses, St. Catharines currently has a lower concentration of jobs than might be expected in the professional, scientific and technical services category (Exhibit 19). It seems likely that the slightly higher than average LQs in the areas of legal, accounting, payroll and tax services and advertising and public relations reflect the City's role as a business services centre for the Region.

Exhibit 19							
Job Growth and Location Quotients - Professional, Scientific and Technical Services Sub-sectors							
NAICS Code	Description	2011 Jobs	2016 Jobs	2011-2016 Change	2011-2016 % Change	2011-2016 Ontario % Change	2016 Location Quotient
5411	Legal services	419	527	108	25.8%	4.1%	1.15
5412	Accounting, tax preparation, bookkeeping and payroll services	605	633	28	4.6%	-1.4%	1.07
5413	Architectural, engineering and related services	665	783	118	17.7%	8.5%	0.84
5414	Specialized design services	102	127	25	24.5%	-4.5%	0.65
5415	Computer systems design and related services	322	475	153	47.5%	19.8%	0.46
5416	Management, scientific and technical consulting services	429	421	-8	-1.9%	9.7%	0.66
5417	Scientific research and development services	52	59	7	13.5%	14.7%	0.28
5418	Advertising, public relations, and related services	220	313	93	42.3%	24.6%	1.11
5419	Other professional, scientific and technical services	182	233	51	28.0%	5.5%	0.62

Source: EMSI Q1 2016

Though the LQs are currently below provincial averages, St. Catharines should set its sights on attracting operations of firms in the engineering, construction, finance, technical, professional and scientific services sector. The targets should be in segments where the jobs demand highly educated and skilled staff – especially, for example, consulting engineering, construction, architecture, design, financial services, communications technology, software, and human resources, payroll and accounting. Many operations are staffed with professionals who do not need to have frequent face-to-face personal interaction with clients and who welcome the opportunity to work in more affordable locations that offer lifestyle advantages. Regional and satellite operations for GTA-based companies represent the best prospects initially

Engineering and Construction Services: Canada's consulting engineering sector, with gross revenues of upwards of \$31.0 billion, is very internationally-oriented, ranking as the second-largest exporter of engineering services in the world. Major sectors are petroleum and petrochemicals (19.9% of total operating revenue); commercial, public and institutional building engineering (13.2%); mining and metallurgical (10.9%), transportation (9.7%); residential building engineering (6.3%); power generation and distribution (6.1%); project management (6.1%); municipal utilities (4.5%); construction services (3.5%); and environmental (2.6%). There has been significant growth in public-private projects (P3s) where Canada has become the North American leader. In addition to

Canadian-based firms such as SNC Lavalin, WSP and Golder, Canada is the location of national or North American headquarters for many functional units of global firms.

Financial Services: Financial services involves highly skilled professionals. The Toronto region is the second largest financial centre in North America, ranking in the top ten globally. The cluster, whose growth has outpaced New York and Chicago, incorporates banks, insurance companies, pension funds, investment dealers, stock brokers and the Toronto Stock Exchange, North America's third largest equity exchange.

The trend among financial institutions has been to decentralize some defined functions in the interest of greater economies. Central downtown financial districts involve high rents and compensation levels. The judgment that the financial institutions must make is how critical it is to have various functional groups co-located at headquarters. In making that call, a key consideration is how much and how intensely the group interacts personally on demand with customers, with head office management and/or with other head office business units. In some cases, the relationships may be close and regular, but not so frequent and time critical that staff cannot be based at a nearby location that allows them to attend meetings in person on fairly short notice. Oakville/Burlington, Markham and Mississauga are among the prominent current options. The advent of GO commuter train and bus service will increase the attractiveness of a St. Catharines location. When the interaction with the financial institution's senior headquarters staff and operational units can largely be managed via email, conference calls and scheduled visits, sites can be more remote (even overseas), with the dominant consideration becoming the lowest cost.

Ontario Government's Climate Change Action Plan: The Ontario government's recent comprehensive Climate Change Action Plan 2016 – 2020 addresses its ambitious plans to reduce greenhouse gases in order to fight climate change.

The Plan creates new opportunities, many for service or service-driven businesses. A number of initiatives play to St. Catharines and Niagara Region interests, capacities and strengths. These possibilities will also be pursued aggressively by other Ontario municipalities and companies however which will marshal community resources to make their case both at the political level and to companies and investors.

Some of the principal opportunities from the Climate Change Action Plan include:

- **New Net Zero Carbon Emission Buildings and Homes:** St. Catharines should set out to be the base of operations for the contractors, designers, engineers and technicians that will build the new net zero carbon emission buildings and homes that the updated Building Code will mandate by no later than 2030. The government will also be retrofitting social housing apartments, providing funding for educational institutions to improve the energy efficiency of their buildings, and supporting research and pilot programs for innovation, including design and engineering of tall wood-frame buildings. The government also says it will focus on helping the agri-food sector adopt low-carbon technologies, for example for greenhouses and grain dryers. Niagara College already offers construction engineering technology and renovation techniques programs to train those who will build, maintain and repair buildings.
- **Pre-Sale Energy Audits for Resale Homes:** By 2019, free energy audits will be required before a home can be listed for sale. Before the program launches, the province will be supporting development of energy audit training programs. Niagara College is well placed to offer training in addition to training for home inspections.

- Low-Carbon Clean Technology Accelerators and Clusters:** The Climate Change Action Plan indicates that the Ontario government will develop low-carbon clean technology accelerators and clusters, support proof-of-concept projects, and help emerging low-carbon companies increase scale. Funding in addition to the \$55 million in the 2016 Budget is signalled. Competition for available funding will be keen, but this should be an area for St. Catharines and Niagara Region to explore, including related to biogas, greenhouses, wineries and the agriculture sector.
- Methane Demonstration Projects:** Plans by the Ontario government to fund commercial-scale demonstration projects that use methane from agricultural materials or food waste should be monitored. With the greenhouse and wine industries that surround it, St. Catharines involvement should be explored. Building on previous projects, St. Catharines has companies such as PlanET Biogas Solutions, the experience of Walker Industries, and the interest of General Motors on which to call. The wastewater treatment plant in Port Dalhousie has been mentioned as possibly the best place to construct a pilot plant to upgrade the biogas to biomethane of natural gas quality into the Enbridge natural gas grid, supported by a Niagara Region project to fuel Regional vehicles.³⁸ There may be a critical mass of projects which can benefit St. Catharines companies, post-secondary educational institutions, the innovation centres and municipalities, provided a degree of leadership emerges and meets a response.
- A Network of Low Emission Fueling Stations:** Working with the Ontario Trucking Association and suppliers, the province will build a network of natural gas or low- or zero-carbon fueling stations. Funding of \$75 to \$100 million is indicated over five years. Niagara Region's location astride the Queen Elizabeth Way (QEW) positions it optimally for such facilities. Nearby Interstate Highway 90 in New York is a designated LNG corridor, offering connections to US LNG routes.³⁹ Given Niagara Region's automotive sector credentials, the potential may also arise to attract companies that can undertake conversions, provide technologically-advanced devices to reduce emissions, and offer vehicle servicing.
- A Global Centre for Low-Carbon Mobility:** A Global Centre for Low-Carbon Mobility will be set up at an Ontario post-secondary institution to advise the government, to direct funding to R&D and low-carbon manufacturing, and to focus on industry R&D needed for electric automated vehicles. Government funding of \$100 to \$140 million over five years is proposed. Many jurisdictions will aspire to be the location for such a centre, but Niagara Region's post-secondary institutions, with community and industry support, may see an opportunity to be part of such a Global Centre. Niagara College, supported with funding from Ontario's Apprenticeship Enhancement Fund, has a Green Tech Automotive Lab housing electric charging stations, alternative fuel technology, green technology simulators, and electric and hybrid vehicles.
- Green Bank:** Central to the Action Plan is a Green Bank to deploy and finance readily available low-carbon energy technologies. The Green Bank will help source the most cost-effective low carbon technologies to reduce emissions in homes and businesses. US models in Vermont and New York are cited as best practices.

³⁸ St. Catharines Standard, "Niagara Region looking into fueling up with what we flush," July 22, 2014

(<http://www.stcatharinesstandard.ca/2014/07/22/region-has-excess-gas>). Accessed on February 14, 2017.

³⁹ Federal Highway Administration, "National Electric Vehicle Charging and Hydrogen, Propane, and Natural Gas Fueling Corridors," January 13, 2017 (https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/resources/section_1413_report/fhwahep170.pdf). Accessed on February 14, 2017.

- **Greenhouse Gas Pollution Reduction Challenge Fund:** The Action Plan indicates that the government will fund a Greenhouse Gas Pollution Reduction Challenge fund or program at a level of \$250 to \$300 million over five years to offer matching funding for emissions reduction programs proposed by municipalities that have community energy plans. St. Catharines' and the Region's environmental plans and economic development objectives may intersect in a program of this type.

There will be intensive province-wide competition among many jurisdictions in the province for the various projects and for the private-sector investments that respond to the opportunities created by the government's Action Plan. Brock University, St. Catharines Transit and Horizon Utilities are part of the Pan-Ontario Electric Bus Demonstration Trial which has attracted \$10 million in Ontario government funding over four years. A well-coordinated community-wide effort to assess the opportunities, develop compelling plans and proposals, and advocate on behalf of St. Catharines and the Niagara Region will be essential to success.

Attracting Professional, Engineering and Technical Firms: Close analysis is needed as to the professional service sub-sectors where St. Catharines can advance its strongest case. Attracting people with the appropriate qualifications is the driver for engineering, information technology, architectural, accounting, human resource, and financial and insurance firms. Detailed data on the residency and place of work for these (and other) occupations has been provided by Census data. As noted earlier (Section E.4), the valuable new 2016 Census data on labour, commuting, mobility and migration will be released in late November 2017. This should provide data by occupations on local residents and where they currently work. Where there are notable groups that commute elsewhere to work, it represents talent pools that will be of interest to firms looking for a new location. It will also be important to highlight the advantages that existing firms attribute to St. Catharines. Service sector firms will be prime candidates for Class A commercial office space Downtown, as well as in other prospective commercial office areas, such as near the train station. The availability of suitable space needs to be showcased. St. Catharines' competitiveness and whether incentives – say for leasehold improvements – may be required must also be assessed.

F. SECTORS OF FOCUS				
F.2 PROFESSIONAL, ENGINEERING, SCIENTIFIC, BUSINESS SUPPORT & TECHNICAL SERVICES				
Strategy Section	Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
F.2	<p>OBJECTIVE: Promote St. Catharines as a location for professional, engineering, scientific, business support and technical services</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Undertake business retention and expansion calls on local business support services companies, such as CTFS, SITEL and Ting 2. Identify and develop value propositions for St. Catharines as a location for selected high priority professional and technical services sub-sectors 	<p>A</p> <p>B</p>	<p>On-Going</p> <p>2018-& 2019</p>	<p>SCEDT & MEDG</p> <p>SCEDT</p>

Strategy Section	Objectives & Actions (Continued)	Priority ¹	Timing	Lead & Partners ²
F.2	3. Monitor and promote the availability of suitable commercial office space, especially Downtown	B	On-Going	SCEDT
	4. Participate in the evaluation and pursuit of relevant opportunities related to the Ontario Climate Change Action Plan for the City of St. Catharines, post-secondary educational institutions and businesses	B	2017 & On-Going	SCEDT, Brock, NCC, IN & NRED
Funding: <ul style="list-style-type: none"> Provision will be needed for part-time contract staff or consulting services to prepare sub-sector value propositions (about \$25,000 each) 				
Performance Metrics: <ul style="list-style-type: none"> Performance Metrics should concentrate on outcomes (the number of businesses retained; expansion projects; new investments and the jobs and amounts involved), supplemented by measures of the activities likely to lead to the outcomes (BR&E calls and meetings; investment-related events; contacts established by category; and categorization of leads in terms of demonstrated degree of interest) (in situations where SCEDT has influenced outcomes) 				
NOTES AND ABBREVIATIONS ¹ Priorities: A = Highest Priority & Very Time-Sensitive; B = Important & Time-Sensitive; and C = Desirable & Less Time-Sensitive ² Abbreviations Brock = Brock University IN = Innovate Niagara GNCC = Greater Niagara Chamber of Commerce McM = McMaster University (including Niagara Medical Campus) MEDC = Ontario Ministry of Economic Development & Growth MTCS = Ontario Ministry of Tourism, Culture & Sport NCC = Niagara College Canada NEC = Niagara Escarpment Commission NHS = Niagara Health System NIA = Niagara Industrial Association NRED = Niagara Region Economic Development NRPDS = Niagara Region Planning & Development Services NWPB = Niagara Workforce Planning Board OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs OTMP = Ontario Tourism Marketing Partnership Corporation SCEDT = St. Catharines Economic Development & Tourism SCPP = St. Catharines Planning & Buildings TN = TeamNiagara TPN = Tourism Partnership Niagara (RTO2) VRIC = Vineland Research & Innovation Centre				

3. Tourism

Travel is one of the largest and fastest growing economic sectors in the world, and, despite continued global uncertainties, increases in global travel revenue have actually exceeded GDP growth in recent years. The future outlook is for above average growth. As such, it invites attention on St. Catharines' part.

Tourism is a major component of the City's economic development mandate. The tourism industry is experiential and often largely depends on social interaction which involves the wider community. As well, tourism, culture, sport, historic sites, and culinary and beverage offerings combine powerfully. Diverse businesses – many small sized – benefit and spending spills over into segments that do not specifically target

tourists. In Ontario, 13% of all businesses are involved in tourism, and over 90% of these are small businesses with fewer than 20 employees.⁴⁰

The City of St. Catharines has a Tourism Strategy covering 2009 to 2019. Beginning in 2018, a multi-year renewal of the Strategy should be undertaken with extensive community stakeholder input and thorough re-examination of the program, including successes and opportunities. The strategy development should adopt an integrated approach by addressing not only the marketing to target and attract tourists to St. Catharines' offerings, but the development of product and capacity, the attraction of new investment, and how to ensure a world-class visitor experience. Branding should be revisited, taking into consideration other St. Catharines brands related to investment, talent and immigration attraction.

Trends in Tourism to Canada: Canada's travel and tourism sector struggled to find growth between 2002 and 2012 for a variety of reasons including air access, traveller documentation issues and thickening of the border with our largest market, the US, due to the imposition of new US passport requirements. Tourism has been growing strongly recently as the recovery has taken hold and Americans have become more aware of the extra value they can obtain because of the low Canadian dollar. US travel was also boosted by a three-year \$30 million Federal Government marketing reinvestment – "Connecting America" – to help re-establish Canada as a prime destination for the US leisure market. In 2016, travel to Canada rebounded to almost regain the peak 2002 levels close to the 20 million visitor level.⁴¹ Year-over-year growth from the US was just under 10%, while South Korea grew by nearly 30%, and China (now Canada's largest Asian tourism source) increased by close to 24%. Tourism from China benefits from the granting of Approved Destination Status (ADS) for Canada by the Chinese Government in 2010 and the subsequent increase in Canadian visa application centres in China. The Federal government has designed 2018 as a year to be dedicated to Canada-China tourism.⁴² The most promising segments for expansion continue to be the growing middle classes in emerging economies, such as China, that have begun to go global in their travels, and millennials between the ages of 18 and 34. Research shows millennials stay longer, travel further afield and spend more. Millennials travel in smaller groups, and are pervasive users of social media.⁴³ Travel in Canada by Canadians has also been spurred by the higher US dollar.

Tourism and Niagara Region: According to Ontario Ministry of Tourism, Culture and Sport data, the Niagara area (as defined by Regional Tourism Organization 2) drew 12.7 million visitors in 2014 whose aggregate spending was nearly \$2 billion (see Exhibit 21). Niagara has high name recognition, with 43% of Americans indicating in a recent survey that they were aware of the brand name Niagara, Canada.⁴⁴ A major challenge for the Niagara tourism sector is to increase the proportion of travellers who stay overnight in the Region. In 2014, nearly 8 million of the 12.7 million Niagara area visits were same-day trips – 63% of the total. Same-day trips out-ranked overnight visits whether the traveller's origin was overseas, the US or Ontario.

⁴⁰ Ontario Ministry of Tourism, Culture and Sport, "Growing Tourism Together: A Strategic Framework for Tourism in Ontario," 2016 (http://www.mtc.gov.on.ca/en/tourism/strategic_framework.shtml). Accessed on April 10, 2017.

⁴¹ Destination Canada website, "Canadian Tourism Arrivals Hit 14 Year High," (<https://www.destinationcanada.com/en/news/tourism-arrivals-hit-14-year-high>). Accessed on February 22, 2017.

⁴² Finance Canada, "Budget 2017: Building a Strong Middle Class," March 22, 2017.

⁴³ Destination Canada, "Seizing the Winning Conditions for Canada: 2016-2020 Corporate Plan Summary," (https://www.destinationcanada.com/sites/default/files/2016-11/Corporate_2016-2020CorporatePlanSummary_EN.pdf). Accessed on February 22, 2017.

⁴⁴ Tourism Partnership of Niagara, "2015-2016 Business and Marketing Plan: Moving Forward Together," (https://www.niagarasrto.com/sites/default/files/pages/tpn_2015-2016_business_and_marketing_plan.pdf). Accessed on February 18, 2017.

Attracting Tourism to St. Catharines: While St. Catharines can succeed in attracting some visitors drawn by Niagara Falls to stop by, the City has been focused on growing its own authentic identity and attractions. A central part of the tourism vision is that the City should define itself as “a sophisticated regional centre with unique cultural and heritage attractions . . . an integral part of the broader destination of Niagara with year round attractions and tourist interest, strong leadership, and a viable and sustainable tourism industry.” The tourism program will be focused in 2017 on realizing the gains afforded by the new website and stepped up social media activity.

The City’s place-making initiatives Downtown, in Port Dalhousie and elsewhere are important dimensions of these ambitions. Increasingly, a critical mass of arts, culture and heritage destinations, wineries, craft breweries, culinary offerings, parks and trails are emerging that make St. Catharines a destination in itself. Downtown festivals, such as In the Soil Arts Festival, the Niagara Folk Arts Festival, the Norm Foster Theatre Festival, are important draws. With the Downtown wayfinding signage project complete, other areas can be targeted, , there may be opportunities to draw travelers to other areas, for example the St. Catharines greenhouses and fruit growers are selling directly to the public. Segments of the tourism sector are also able to be a leader in the adoption of social media and programs for wireless mobile devices to attract visitors and increase the relevance of their offering.

Information on the main activities that visitors to Niagara participated in encourages the view that there are significant numbers whose interests extend beyond seeing the Falls. The foot count at St. Catharines largest single tourism attraction – the Welland Canal Centre – registered 86,000 visitors in 2016, up 17% over the previous year, after a 10% increase over 2014. Historic sights, outdoor and sports activities, cultural performances, museums and art galleries and National and Provincial parks all ranked in the top 10 activities in which visitors to Niagara Region participated in 2014 (see Exhibit 20).

Exhibit 20	
Tourism Visitors to Niagara – Regional Tourism Organization (RTO) 2	
Top 10 Activities in which Visitors Participated – Person Visits - 2014	
1. Visit Family or Relatives	2,654,000
2. Sightseeing	2,468,200
3. Historic Sights	1,742,600
4. Casinos	1,599,700
5. Shopping	1,582,300
6. Restaurant or Bar	1,463,800
7. Any Outdoor/Sports Activity	1,432,600
8. Cultural Performances	1,357,600
9. Museums/Art Galleries	986,900
10. National/Provincial Nature Parks	949,300
Source: Ontario Ministry of Tourism, Culture & Sport, based on Statistics Canada microdata	

Sales Missions and Visitor Servicing: St. Catharines Tourism has productively increased its participation in Provincially- and Regionally-led sales missions to selected priority markets such as Boston, New York City, Upstate New York, Pennsylvania, Ohio and Chicago. Five missions in 2016 generated 150 qualified travel trade leads. This is in addition to over 400 leads from targeted appointments at travel tradeshow.

St. Catharines Tourism has also fulfilled more than 6,000 enquiries, 70% emanating from Ontario with the remaining 30% split between the US/International and Canada other than Ontario. The level of visitor enquiries invites closer study of whether a seasonal visitor service kiosk can be justified.

Sport Tourism: Sport tourism initiatives have successfully attracted major tournaments that provide the basis for stepped up focus on the segment, including minor sport tournaments as well. St. Catharines has been host to North America's best rowers at the annual Royal Canadian Henley Regatta since 1903. The site drew the 2015 Pan American Games rowing events. The availability of the Meridian Centre is an important asset for larger international, national and provincial events. The Scotties Tournament of Hearts was held in 2017, the bid for which the City contributed to financially. A major success has been Niagara Region's selection as the host for the 2021 Canada Summer Games, with the Games headquarters to be in the Performing Arts Centre and the opening and closing ceremonies and basketball slated for the Meridian Centre. The Summer Games are projected to attract 30,000 visitors, 5,000 athletes, and 400 media. Following on the 2016 International Ice Hockey Federation's Under-18 World's Women's Championship, St. Catharines will host the FIBA International Basketball Federation America's Under-18 Men's Championship in 2018. City investment in facilities and in complementary marketing initiatives will bring additional benefit to the City. A games-related economic development and tourism action plan will short- and longer-term returns. Sports tourism tournaments and competitions can be strategic important in increasing off-season room bookings and bringing expenditures into the community. Securing tournaments and events often requires the availability of bid funding to provide rebates and contributions that are standard practice.

Black History, Harriet Tubman and the Underground Railway: St. Catharines has powerful historical connections with the Underground Railway, having been a terminus and the home in the 1850s of Harriet Tubman, a celebrated "conductor" who assisted slaves to reach freedom. The British Methodists Episcopal Church, Salem Chapel, was a major centre for abolitionist and civil rights activity. It remains an iconic site. Though there are historical plaques and the St. Catharines Library has historical materials and has mounted displays, this important epoch, which is of great interest, could be more fully profiled in ways that would make it better known and more accessible to the visiting public.

Ensuring a High Quality Visitor Experience: The quality of the visitor experience through hospitality training and management and workforce development are also important to the further growth of tourism. St. Catharines Tourism can support industry programs that seek to develop service standards that assure world-class experiences for visitors. Niagara College is especially well placed to play a role. Tourism is the largest employer of youth in Ontario, with over a third of employees aged 15 to 24 years.⁴⁵

The Tourism Partnership of Niagara (TPN): The key relationship for St. Catharines is with the Tourism Partnership of Niagara (TPN), one of thirteen Regional Tourism Organizations (RTOs) in Ontario funded by the Ontario Ministry of Tourism, Culture and Sport (MTCS). TPN ranks second to the Toronto RTO in its share of the visitor spending in Ontario by travel regions.⁴⁶ The City of St. Catharines Department of Economic Development and Tourism is a sub-regional partner, along with four other counterparts representing Niagara municipalities. The TPN vision is that Niagara become "the number one international tourism destination in North America by creating a Niagara discovery experience that is so naturally awe-inspiring, so vibrant, and so much fun that visitors can't wait to be a part of it."

⁴⁵ Tourism Partnership of Niagara, "2015-2016 Business and Marketing Plan: Moving Forward Together," (https://www.niagarasrto.com/sites/default/files/pages/tpn_2015-2016_business_and_marketing_plan.pdf). Accessed on February 18, 2017.

⁴⁶ Tourism Partnership of Niagara, "2015-2016 Business and Marketing Plan: Moving Forward Together," (https://www.niagarasrto.com/sites/default/files/pages/tpn_2015-2016_business_and_marketing_plan.pdf). Accessed on February 18, 2017.

The TPN relationship with the sub-regions such as St. Catharines is that TPN presents experiences and offers that link to the sub-regions to close the sale. TPN does not produce its own consumer events, but rather supports sub-regions, through partnership funding programs.⁴⁷

Investment in Tourism-Related Facilities: Opportunities that can attract new investment to tourism and tourism-related facilities and ventures in St. Catharines also should be pursued. A St. Catharines hotel feasibility study was completed in 2016 to develop business cases for Downtown and Port Dalhousie. In its June 2016 Ontario Tourism Action Plan, the Ontario Ministry of Tourism, Culture and Sport (MTCS), which committed to work with economic development partners, indicated that it would use results from an Ontario Attractions Study to strengthen Ontario's value proposition and strategically target new investment in large-scale demand generators, along with further strategic research to attract private sector investment. The Ministry of Tourism, Culture and Sport (MTCS) has an investment and Development Office focused on investment attraction.

Exhibit 21			
Selected Tourism Statistics for Niagara – Regional Tourism Organization (RTO) 2			
2014			
TOTAL PERSON VISITS	12,666,900	TOTAL VISITOR SPENDING	\$1,938,041,000
Length of Stay		Length of Stay	
• Overnight	4,684,400	• Overnight	\$1,344,546,000
• Same Day	7,982,500	• Same Day	593,495,000
Origin of Visitor		Origin of Visitor	
• Ontario	8,544,100	• Ontario	\$1,162,764,000
• Other Canada	192,000	• Other Canada	\$91,612,000
• US	3,021,100	• US	\$507,589,000
• Overseas	908,800	• Overseas	\$176,076,000
Main Purpose of Visit		Main Purpose of Visit	
• Pleasure	7,599,500	• Pleasure	\$1,426,476,000
• Visit Friends/Relatives	3,080,700	• Visit Friends/Relatives	\$254,903,000
• Shopping	265,100	• Shopping	\$53,581,800
• Convention (Personal)	22,200	• Convention (Personal)	\$11,296,000
• Convention (Business)	299,700	• Convention (Business)	\$60,112,000
• Other Business	515,700	• Other Business	\$36,944,000
• Other Personal	884,000	• Other Personal	\$94,728,000
Source: Ontario Ministry of Tourism, Culture & Sport, based on Statistics Canada microdata			

⁴⁷ Tourism Partnership of Niagara, "2015-2016 Business and Marketing Plan: Moving Forward Together," (https://www.niagarasrto.com/sites/default/files/pages/tpn_2015-2016_business_and_marketing_plan.pdf). Accessed on February 18, 2017.

F. SECTORS OF FOCUS

F.3 TOURISM

Strategy Section	Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
F.3	<p>OBJECTIVE: Attract and welcome increased numbers of tourists to St. Catharines</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Participate in selected Provincially- and regionally-led sales missions in priority markets 2. Benefiting from the new website, solidify gains and build on growing Wine Route, Ale Trail, parks and paths, arts and culture, and historic sites initiatives, enabled by the new website and social media capability 3. Increase focus on sports tourism, leveraging successes in attracting signature international and national events 4. Support programs to build capacity in the tourism sector, including Black History 5. Support training for the hospitality workforce and operators in order to enhance the visitor experience 6. Attract investment in hotels and accommodations 7. Develop a new multi-year tourism strategy for St. Catharines based on community and stakeholder input and a thorough re-examination of the program and branding 	<p>A</p> <p>B</p> <p>A</p> <p>B</p> <p>C</p> <p>B</p> <p>B</p>	<p>On-Going</p> <p>On-Going</p> <p>2017 & On-Going</p> <p>2019-2020</p> <p>2018 & On-Going</p> <p>On-Going</p> <p>2018-2019</p>	<p>SCEDT, TPN & OTMP</p> <p>SCEDT & TPN</p> <p>SCEDT & TPN</p> <p>SCEDT</p> <p>SCEDT, TPN & OTMP</p> <p>SCEDT & MTCS</p> <p>SCEDT</p>
<p>Funding:</p> <ul style="list-style-type: none"> • Tourism promotion involves extensive partnering and matching funding, especially with the Ontario government and local travel trade partners, with the objective of leveraging St. Catharines Tourism funding • Increased funding is indicated for sports tourism, including a bid fund • The cost-benefits of a seasonal visitor service kiosk should be studied, possibly involving consulting costs • Community investment to fully portray St. Catharines' historic involvement in the Underground Railway should be evaluated, including the benefits to tourism • Partnerships with Niagara College or others to provide training will enhance the visitor experience and should be explored 				

Performance Metrics:

- Metrics should continue to report on data about the Annual Civic Guide, matched funding applications, numbers of partners, Tourism website hits, social media data, media coverage, etc.)
- Performance metrics should include any local visitor numbers and enquiries that can be reliably generated (e.g. Welland Canal Centre, and fulfillment enquiries), and activities likely to lead to attract visitors (e.g. leads generated on sales missions and travel trade shows)
- Metrics regarding the new website and increased social media activity should be closely monitored

NOTES AND ABBREVIATIONS

¹ **Priorities:** A = Highest Priority & Very Time-Sensitive; B = Important & Time-Sensitive; and C = Desirable & Less Time-Sensitive

² **Abbreviations**

Brock = Brock University

IN = Innovate Niagara

GNCC = Greater Niagara Chamber of Commerce

McM = McMaster University (including Niagara Medical Campus)

MEDC = Ontario Ministry of Economic Development & Growth

MTCS = Ontario Ministry of Tourism, Culture & Sport

NCC = Niagara College Canada

NEC = Niagara Escarpment Commission

NHS = Niagara Health System

NIA = Niagara Industrial Association

NRED = Niagara Region Economic Development

NRPDS = Niagara Region Planning & Development Services

NWPB = Niagara Workforce Planning Board

OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs

OTMP = Ontario Tourism Marketing Partnership Corporation

SCEDT = St. Catharines Economic Development & Tourism

SCPP = St. Catharines Planning & Buildings

TN = TeamNiagara

TPN = Tourism Partnership Niagara (RTO2)

VRIC = Vineland Research & Innovation Centre

4. Agriculture, Food and Beverages

St. Catharines Agricultural Sector

Under St Catharines Official Plan's settlement pattern, 30% of the municipal planning area is designated as Agricultural Area, amounting to 2,725 hectares in total. Based on agriculture soil classifications and the unique local micro-climate generated by the Niagara Escarpment and Lake Ontario, the City's remaining agriculture lands are considered 'world class' for the growing and production of tender fruit and other crops. The Provincial Greenbelt Plan designates these lands as 'Specialty Crop', affording the highest agricultural land classification and most restrictive policy base for land protection in the Province. In order to protect the viability of farms within the agricultural area severances for small residential lots are not supported.

Production on farms in St. Catharines, as measured by gross receipts, is concentrated in:

- greenhouses involved principally in floriculture;
- fruit, especially grapes for wine;
- cash crops, which can include wheat, grains and oilseeds, and field crops; and
- nursery products, sod and maple.

According to the 2011 Census of Agriculture, St. Catharines had 75 farms. Given the limited area devoted to agriculture in City, the small share of the over 2,000 farms in Niagara Region is understandable. The number of farms in the City in 2011 represents a marked decline however (-27%) from the 2006 level (103 farms), which in turn was lower than 2001 (108) and 1996 (119). In percentage terms, the decline in St. Catharines is larger than any other Niagara municipality and over two-and-a-half times as great as the average decline for Niagara Region.

In St. Catharines, the total area being farmed dropped by 31% from 2006 to 2011 to 1,270 hectares, or an average of 17 hectares per farm. The average farm size has been relatively constant in recent years. Another characteristic that is more pronounced in St. Catharines is that most of the land that is farmed is owned (93%) rather than rented, leased or crop shared. By contrast, the Niagara Region average that is owned is only 63%.

While the number of farms and their average size is small, the total gross farm receipts per hectare in 2011 in St. Catharines were the highest in Niagara Region by a significant margin. Indeed, the gross farm receipts in St. Catharines represent 5% of the total in the entire Golden Horseshoe area⁴⁸, a share exceeded in Niagara Region by only Lincoln (11%), Niagara-on-the-Lake (9%) and West Lincoln (8%). The total gross farm receipts for St. Catharines in 2011 were \$82,427,329 – or more than \$1 million per farm on average. The 2011 total gross receipts are up 12% from 2006. Net revenues after expenses in 2011 were \$7.8 million. Using data that categories farms by receipts, 35 of the 75 farms had gross receipts over \$100,000 in 2011, while the gross receipts from 16 were all in excess of \$500,000.⁴⁹

The higher rates of return and the relatively smaller acreages in St. Catharines are undoubtedly due to the number of greenhouses and to other operations that make intense and productive use of the land area.

Greenhouse Production: Though Niagara greenhouse production of vegetables such as peppers and cucumbers has increased recently, floriculture dominates the greenhouse sector in the Region. A very diverse range of crops are grown. The greenhouse floriculture industry grew rapidly from the early 1980s to the early 2000s, to the point where the Ontario ranks as the third largest producer after California and Florida. The Niagara industry was challenged through the mid-2000s, first, as the Canadian dollar rose to near parity with its US counterpart and the Canada-US border thickened post 9/11, and, then, by the sharp economic downturn in 2008-2009. Exports to the US eastern seaboard peaked in 2002 and declined substantially.⁵⁰ In the wake of the global economic downturn, the industry endured a period of intense competition and narrowed margins, but the surviving operations have generally recovered to pre-recession levels. The industry is sensitive to energy costs which now face upward pressures as a part of climate change policies. Energy efficiencies and alternative fuel sources will be closely examined by greenhouse operators.

The greenhouse floriculture market has shifted as big-box chains have become the dominant retailers, with purchases concentrated on key holiday sales periods. Some smaller retail-oriented growers have been successful, operating during the seasonally strong sales periods. Marketing is a major challenge, one that could be helped by involvement with initiatives – such as way-finding signage and seasonal promotions – that are mounted with tourism also in mind. Fruit growers could also benefit.

To be competitive, computerization and automated technologies are found extensively in Niagara greenhouses, including use of computerized climate, watering, fertilizing and environmental controls. Automation including robots has become the standard and is used for seeding and transplanting bedding plants, pot filling, irrigation, and for pesticide applications.

Support for the Sector: Given the importance of the City's primary agricultural sector and the need to be informed about its plans and preoccupations, it is important that its representatives be included in the City's

⁴⁸ The Golden Horseshoe includes Niagara Region, Hamilton, Halton Region, Peel Region, York Region, Durham Region and the City of Toronto.

⁴⁹ Golden Horseshoe Food and Farming Alliance, "A Profile of Agriculture in the Region of Niagara," October 2014.

⁵⁰ Ontario Ministry of Agriculture, Food and Rural Affairs, "The Ontario Greenhouse Floriculture Industry" (<http://www.omafr.gov.on.ca/english/crops/facts/greenflor.htm>). Accessed, March 8, 2017.

proactive consultative arrangements and that the St. Catharines Economic Development team undertake systematic business retention and expansion (BR&E) outreach to the sector. Active consideration should be given to whether the sector's marketing efforts can be aligned with tourism promotion and way-finding initiatives designed to attract people to the City. There are also important opportunities to learn from the City's greenhouse sector about related manufacturing, technology and innovation opportunities which this increasingly digitized sector presents.

Food and Beverages

The food and beverage sector appears to hold considerable further promise for St. Catharines if the right economic development ingredients can come – or be brought -- together. Importantly, its growth and diversification can often be closely allied with tourism and creative sector interests.

Beverages: The beverage sector has shown notable growth in St. Catharines and in Niagara Region, especially wineries and more recently craft breweries, distilleries and now cideries. New ventures and featured sales in restaurants and bars can be a good fit with Downtown development, tourism and talent attraction initiatives.

Wineries: The cultivation of grapes in Niagara, almost all for wine, has increased. Grapes now account for 35% of the total farm value of Ontario commercial fruit crops, with the switch to higher-valued viniferas. Generally, grapes have been one of the strongest growth areas in Ontario agriculture.⁵¹ The increase in the number of wineries in St. Catharines has influenced related grape production.

St. Catharines has five wineries within the City boundaries on the Niagara Wine Route which also includes Downtown. As part of support to raise the profile of the wineries and their products, the St. Catharines Economic Development team should monitor and evaluate opportunities to make the St. Catharines wineries products more prominently available at retail and in restaurants and bars in the Downtown. Cross-promotions between the Downtown BIA and the wineries may benefit both. The authorization of Ontario wine sales in grocery stores has provided, initially at least, only one location in St. Catharines. With the gradual opening of Ontario's rigid wine retailing regime however, there may be hope that advocacy and rule changes may open some specialized channels, such as the St. Catharines Market. The 2008 Downtown Master Plan put forward the concept of a "wine embassy" which house wine industry groups and have a retail wine outlet.

Craft Brewing: St. Catharines is well positioned to capitalize on the rapid growth of craft breweries in Ontario, given the lead role that neighbouring Niagara College and its Teaching Brewery play in training craft beer enthusiasts and entrepreneurs. Niagara College's leadership with its teaching brewery and winery put the Region and St. Catharines at the heart of the development and growth of the craft beer business in Ontario.

There has been an explosion in the number of craft breweries in Ontario in the last decade. According to the Ontario government, there were 140 operating breweries in 2016, half of whom were selling through the LCBO. More than 1,500 people were employed in direct brewery jobs generating nearly \$70 million in sales. The annual revenue increase was nearly 35% in 2015-2016.⁵²

⁵¹ Grape Growers of Ontario, "Ontario's Grape and Wine Industry," (<http://www.grapegrowersofontario.com/ontarios-grape-and-wine-industry>). Accessed on March 5, 2017.

⁵² Government of Ontario, Media Release, "Provincial and Federal Governments Investing Over \$1.6 million in Craft Beer Sector," (<https://news.ontario.ca/omafra/en/2016/06/provincial-and-federal-governments-investing-over-16-million-in-craft-beer-sector.html>). Accessed on February 15, 2017.

St Catharines already has the Merchant Ale House, the Plan B Beer Works, and Lock Street Brewing. However, given the number of tourists and day-trippers that the area attracts, the population of craft breweries in the Niagara Region – about half a dozen other notable ones – seems far from a saturation point. In early 2017, the Niagara Ale Trail, an initiative spearheaded by St. Catharines Tourism, had 13 participating craft breweries.

Micro-Distilleries: Though relatively speaking still in its infancy, the micro-distilling industry is growing with just over 20 having opened their doors in Ontario by the end of 2016. The Niagara Region's sole entrant currently is Dillons Small Batch Distillery in Beamsville, but a new venture, Polonée Distillery, was planning to open in St. Catharines. Regulatory approvals for distilling operations are more challenging than for craft breweries and some concerns have arisen about the Ontario taxation regime. Time to market and increased capital requirements also increase if products involve aging. To aid the industry growth, Niagara College's Canadian Food and Wine Institute Innovation Centre will open a teaching distillery in 2017.

Hard Cider: Nearly 50 hard cideries have been started in Ontario by the end of 2016, some as part of existing wineries in Niagara. As with craft beer, hard cider was authorized for sale in selected grocery stores in 2016. In Ontario, net sales of local craft cider increased 54% in 2015-2016 according to the Liquor Control Board of Ontario (LCBO).⁵³ With the growing attention on cider production, Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI) is offering Canada's first intensive internationally accredited program covering all aspects of cider production during its one-week duration. At Niagara College, the Teaching Winery is also producing cider, winning US and Ontario awards for its Cider 101 in 2016.

Specialty Food Products: St. Catharines presence in the heart of Niagara Region and on the shoulder of the large population-intensive Greater Golden Horseshoe market, makes it a location for specialty and niche suppliers that are responding to market trends favouring natural, organic and nutrient dense foods.

Industry observers see the trend to free-from foods dominating. Demand for local food leads to emphasis on crops that are grown and livestock and poultry that are raised in Canada. The maple leaf logo has been particularly valued by international customers for its implicit guarantee of high standards. Small and independent makers should see strong potential for sales and margin growth in natural and organic snacks, beverages, baked goods and cereals.⁵⁴

In the Niagara Region, Canadian-branded, higher quality, higher value, lower volume, artisan-type food products fit well with retail boutiques at wineries, fruit and vegetable stands, and other locations frequented by tourists. In addition to the broader trends, these suppliers can build on the local availability of fresh fruit and vegetable ingredients and enjoy "100 Mile" status among the population of the Golden Horseshoe which is home to nearly 9 million people.

Bakeries: Bakeries have also shown growth in St. Catharines. Most of the firms are smaller, suggesting that many are specialized operations capitalizing on ethnic and other markets.

Food Processors to Target: St. Catharines has the potential to target:

⁵³ See <https://brocku.ca/brock-news/2017/02/grape-and-wine-education-leader-brings-cider-training-course-to-canada/>. Accessed on February 14, 2017.

⁵⁴ Food in Canada, "2016 Canadian Food Industry Report," 2016

- Start-ups from Toronto food and culinary incubators, such as the City of Toronto's Food Processing Incubator or the privately-run Kitchen24;
- Growing Toronto food processors – especially in specialty and niche areas- facing constraints such as limited ability to physically expand facilities, high costs and traffic congestion; and
- Western New York State, northern Pennsylvania and eastern Ohio food processors that, depending on NAFTA renegotiation, need a Canadian production base to fully exploit the growth opportunities in the Canadian market.

A St. Catharines Food Incubator: A food incubator or accelerator in St. Catharines would assist in meeting these requirements, particularly for entrepreneurs, start-ups and smaller firms. It could draw early-stage ventures from the GTA. More ambitiously, the incubator could be part of a Centre for Excellence in Food and Beverages, drawing on the research, products and testing being developed by Niagara College and Brock University, including at Niagara College's Canadian Food & Wine Institute Innovation Centre (CFWIIC) and Brock's Cool Climate Oenology and Viticulture Institute (CCOVI). Federal and provincial policies align with the development of such a Centre. Premier Wynne as part of her 2013 Agri-Food Challenge is looking to create an additional 120,000 jobs by 2020.

European Investment: Given a location on the US border, St. Catharines can present itself as a particularly attractive fit for European firms to benefit from the Canada-European Union (EU) Comprehensive Economic and Trade Agreement (CETA). Access for processed food was a key priority for the EU in the negotiation of CETA, but European firms will benefit most if they consider a Canadian presence to fully exploit the North American market from a Canadian-base. The extent to which firms can take advantage of Niagara's Free Trade Zone (FTZ) Point may enhance the case for investment.

Availability of Sites and Buildings: In the food and beverage sector, it will be extremely important to have immediately available sites with the amenities demanded by food processing operations, such as adequate water, waste water and sewage; food preparation and kitchen space; chillers and cold storage; facilities that have had Ontario government and Canadian Food Inspection Agency approval or can readily obtain it; and co-packing and logistics and distribution support.

F. SECTORS OF FOCUS

F.4 AGRICULTURE, FOOD AND BEVERAGES

Strategy Section	Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
F.4	<p>OBJECTIVE: Support the retention and growth of St. Catharines' agricultural sector and grow and attract beverage and food processing facilities</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Identify and target opportunities to grow and attract beverage and food processing facilities, including through provision of local food incubator and acceleration space 2. Support retention and growth of agricultural enterprises, notably the greenhouse floriculture sector, vineyards and fruit growers 	<p>A</p> <p>B</p>	<p>2017 & On-Going</p> <p>On-Going</p>	<p>SCEDT, NCC VRIC & Brock</p> <p>SCEDT, VRIC & OMAFRA</p>

Funding:

- The provision of local food incubator and acceleration space requires joint discussion and study with partners, including Niagara College and Brock, possibly leading to initiatives that might invite a financial contribution from the City

Performance Metrics:

- The results of BR&E calls on agricultural enterprises will be reported and data included in regular reporting
- The outcomes and activities for any food incubator and acceleration space are likely to be reported separately, but monitored closely by the St. Catharines Economic Development team
- Otherwise, Performance Metrics should concentrate on outcomes (the number of businesses retained; expansion projects; new investments and the jobs and amounts involved), supplemented by measures of the activities likely to lead to the outcomes (BR&E calls and meetings; investment-related events; contacts established by category; and categorization of leads in terms of demonstrated degree of interest) (in situations where SCEDT has influenced outcomes)

NOTES AND ABBREVIATIONS

¹ **Priorities:** A = Highest Priority & Very Time-Sensitive; B = Important & Time-Sensitive; and C = Desirable & Less Time-Sensitive

² Abbreviations

Brock = Brock University

IN = Innovate Niagara

GNCC = Greater Niagara Chamber of Commerce

McM = McMaster University (including Niagara Medical Campus)

MEDC = Ontario Ministry of Economic Development & Growth

MTCS = Ontario Ministry of Tourism, Culture & Sport

NCC = Niagara College Canada

NEC = Niagara Escarpment Commission

NHS = Niagara Health System

NIA = Niagara Industrial Association

NRED = Niagara Region Economic Development

NRPDs = Niagara Region Planning & Development Services

NWPB = Niagara Workforce Planning Board

OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs

OTMP = Ontario Tourism Marketing Partnership Corporation

SCEDT = St. Catharines Economic Development & Tourism

SCPP = St. Catharines Planning & Buildings

TN = TeamNiagara

TPN = Tourism Partnership Niagara (RTO2)

VRIC = Vineland Research & Innovation Centre

5. Health Care

The renewal and strengthening of the Niagara Health System's presence and assets in St. Catharines have served to attract highly regarded professionals to the area and to provide an encouraging environment for research and collaboration among the post-secondary educational institutions, researchers, innovators and entrepreneurs and the hospitals. The Brock University Cairns Family Health and BioScience Research Complex and the presence there of the BioLinc incubator and McMaster satellite Medical Campus are important drivers. Growing interest and dialogue is evident over the institutional, research, and incubation linkages that can be developed with Hamilton and with Buffalo.

Research areas that are evident include scoliosis, dehydration in elite athletes, and hyperactive children. Residency specialties include family medicine, surgery and obstetrician, anesthetist and emergency. Cancer and kidney care have been areas of investment in the Niagara Health System acute care hospital site. Of note too is the Steve Ludzik Centre for Parkinson's Rehabilitation located at Hotel Dieu Shaver.

Some of the needed elements that can come together to form an interactive and growing health care cluster are present in St. Catharines. A required ingredient is dialogue among the players in the health care and post-secondary institutions to further identify and promote collaborative opportunities, including research, clinical testing, commercialization and supply chain development.

Canada Research Chairs at Brock: Two holders of Canada Research Chairs (Tier 1) at Brock University have generated advanced research that has led to market place interest. Vincenzo De Luca, Canada Research Chair in Plant Biotechnology in the Department of Biological Science, has focused during his more than 25 years in government, industry and academic laboratories on the mechanisms that plants use to manufacture different natural products that are beneficial for human health and nutrition and for combating cancer. The novel chemistries generated may be used to defend plants against different plant pathogens; produce valuable medicines; produce new functional foods; and produce valuable new aromas, flavours and colorants.

Research by Tomas Hudlicky, Canada Research Chair in Biocatalysis in Brock's Department of Chemistry, focuses on new pain and cancer medicines, green chemistry and natural product synthesis. His breakthroughs in green chemistry include more efficient and environmentally conscious ways to create synthetic versions of morphine or Tamiflu-like drugs, earning him the reputation of being one of North America's top organic researchers. Dr. Hudlicky and his associates are also part of a Brock agreement with a Canadian drug development company to test the anti-cancer activity of synthetic variants of the natural product pancratistatin.

Capitalize on St. Catharines' Health Care Assets and Research: With Brock's research strengths and the enhanced and modernized health care-related assets in St. Catharines, the opportunities to start, grow and attract health care companies are apparent. Important first steps are to create networks and promote awareness and collaboration. Given its involvement in commercialization, the linkage with McMaster University is particularly valuable. Brock's plans to expand incubation space also should be a helpful catalyst. Bringing new health care products to market tends to involve longer timelines than in other sectors, in part because of the requirements for tests and clinical trials and government approvals. Patient capital that understands the sector and can wait for results is required.

Canada-US Cross-Border Linkages: St. Catharines is well positioned to present itself as a hub that facilitates access to both Canada and the US, while also offering advantageous European market access thanks to the Canada-EU Comprehensive Economic and Trade Agreement (CETA). In health care, the US and Canadian

markets are distinct in many ways. The US health care system is private sector-driven, as compared to Canada's single payer provincial models. These different structures typically require different marketing and sales approaches. As well, on the regulatory front, product approvals are necessary in each country.

Canada as a Gateway to Europe for US and Asian Firms: A Canadian location can be a gateway to Europe for US and Asian firms. Having Canadian approvals will often facilitate European access, given similarities in the approvals regimes between Canada and Europe. Apart from required approvals and privileged CETA access, the health care systems and markets in Canada and Europe are also more alike, both differing from the private sector-oriented US system. As a result, experience introducing products in Canada can provide valuable learning experiences and precedents when it comes to accessing the European market.

Looked at from the perspective of US health care entrepreneurs and start-ups, a pairing of Buffalo and St. Catharines locations affords access to Canadian approvals and the Canadian market. In the case of Asian and European firms looking to penetrate the Canadian and the US markets, St. Catharines can present itself as the "go to" North American location, drawing on its links to Buffalo, Rochester and northeast Ohio including Cleveland. For early-stage Canadian firms, St. Catharines can be sold as propitious location from which to tackle US approvals while also being based in Canada's largest provincial health care market.

Having a presence in both Canada and the US also affords binational access to investors, mentoring, research partnerships and federal, New York State and Ontario government funding programs. Travel for Canadian and US citizens can be facilitated by NAFTA provisions for professional visas.

Binational Research & Innovation Corridor (BRIC): St. Catharines should position itself to be the location where critical elements can be brought together quickly to support firms, entrepreneurs and start-ups seeking to take advantage of the binational corridor and gateway concept. An example could be the Binational Research & Innovation Corridor (BRIC). While in the early stages of development, the BRIC initiative is a member-based binational consortium which seeks to establish a world-class biotechnology and life sciences innovation marketplace in the 100-kilometre-long cross-border region from Hamilton through Niagara to Buffalo. Taking strategic advantage of the Canada-US border, the BRIC concept aims to scale-up its members' collective research and innovation capacities to compete more effectively in global markets by expanding corridor member contract research opportunities, generating translational research opportunities, and cultivating global opportunities within the Hamilton-Niagara-Buffalo geographic footprint.

Outlook for Health Care Sector: Over the course of five-year Strategy and Action Plan, health care can emerge as a sector of focus for St. Catharines. The initial focus needs to be on initiatives that will bring together the players and start to build a platform and external linkages that will encourage commercialization. Linkages within the Hamilton and Buffalo corridor stand to build critical mass and bring additional resources into play. These steps will be necessary prerequisites to any significant broadly based initiatives to attract outside investment. The St. Catharines Economic Development team can play vital roles in bring people together, identifying supportive external resources and funding, and helping to create an ecosystem.

For earlier stage St. Catharines health care ventures, having strong linkages and partnerships with Hamilton and Buffalo is important in terms of gaining access to knowledgeable capital. Start-ups in health care frequently take many years of trials to get approvals and come to market, making the attraction of capital challenging.

Soft Landing Spaces in St. Catharines: Shared state-of-the-art soft landing space in St. Catharines, ideally with access to appropriate laboratory space, is a fundamental requirement. The new \$19 million Schmon Tower Innovation Atrium that will house the Brock LINC innovation complex, incorporating the existing Goodman

Business School BioLinc incubator, offers one potential location option, while Downtown St Catharines may be another option – or an additional site.

F. SECTORS OF FOCUS				
F.5 HEALTH CARE				
Strategy Section	Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
F.5	OBJECTIVE: Grow an innovative health care sector Actions: <div><div>1.</div><div>Assist in identifying and connecting leading players and assets and nurturing commercial collaboration and growth in the St. Catharines health care sector</div></div> <div><div>2.</div><div>Support Hamilton-Niagara-Buffalo health care corridor initiatives in which St. Catharines can be a participant, especially as a gateway for European, US and Asian ventures</div></div>	<div>B</div> <div>B</div>	<div>2018 & On-Going</div> <div>On-Going</div>	<div>SCEDT, NHS, Brock, NCC, McM & IN</div> <div>SCEDT, Brock & McM</div>
Funding: <ul style="list-style-type: none">Though too early to know, the City may be asked to be among the financial contributors to any health care corridor or incubation or acceleration facility				
Performance Metrics: <ul style="list-style-type: none">Regular qualitative evaluations of the level and evolution of collaboration among representatives of the key stakeholders would be valuable in order to monitor developments and progressPerformance Metrics should concentrate on outcomes (the number of businesses retained; expansion projects; new investments and the jobs and amounts involved), supplemented by measures of the activities likely to lead to the outcomes (BR&E calls and meetings; investment-related events; contacts established by category; and categorization of leads in terms of demonstrated degree of interest) (in situations where SCEDT has influenced outcomes)				
NOTES AND ABBREVIATIONS <div><div><div>¹ Priorities: A = Highest Priority & Very Time-Sensitive; B = Important & Time-Sensitive; and C = Desirable & Less Time-Sensitive</div><div>² Abbreviations<div><div><div>Brock = Brock University</div><div>IN = Innovate Niagara</div><div>GNCC = Greater Niagara Chamber of Commerce</div><div>McM = McMaster University (including Niagara Medical Campus)</div><div>MEDC = Ontario Ministry of Economic Development & Growth</div><div>MTCS = Ontario Ministry of Tourism, Culture & Sport</div><div>NCC = Niagara College Canada</div><div>NEC = Niagara Escarpment Commission</div><div>NHS = Niagara Health System</div><div>NIA = Niagara Industrial Association</div></div><div><div>NRED = Niagara Region Economic Development</div><div>NRPDS = Niagara Region Planning & Development Services</div><div>NWPB = Niagara Workforce Planning Board</div><div>OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs</div><div>OTMP = Ontario Tourism Marketing Partnership Corporation</div><div>SCEDT = St. Catharines Economic Development & Tourism</div><div>SCPP = St. Catharines Planning & Buildings</div><div>TN = TeamNiagara</div><div>TPN = Tourism Partnership Niagara (RTO2)</div><div>VRIC = Vineland Research & Innovation Centre</div></div></div></div></div></div>				

6. Manufacturing

The net loss of jobs in St Catharines manufacturing sector over the ten years from 2006 to 2016 is 37% -- a decline from 9,076 jobs to 5,710. This compares to a drop of 21% for Ontario. In St. Catharines, the sector was hit hard by the 2008 recession, but marginal growth has occurred since 2011. The growth in manufacturing jobs in St. Catharines of 1% between 2011 and 2016 compares to a slight decline of 0.3% throughout Ontario.

Within the manufacturing sector, some segments have fared markedly better than others over the past decade. Manufacturing sub-sectors showing resilience and strength over this period included:

- engines and transmissions;
- architectural and structural metal;
- glass and glass products;
- beverage processing;
- bakeries;
- coating, engraving and cold and hot metal treatment;
- machine shops, turned products, and screws, nuts and bolts;
- fabricated metal products; and
- medical equipment.

Sub-sectors that appear to have struggled but survived despite lower employment levels include:

- wood manufacturing;
- pulp, paper and paperboard;
- printing; and
- metal working machinery.

Many have however faced severe relative declines, among them:

- motor vehicle parts;
- foundries;
- boilers, tanks and shipping containers;
- household and institutional furniture and kitchen cabinets;
- shipbuilding; and
- meat products.

The manufacturing sub-sector that experienced by far the largest absolute decline in jobs was motor vehicle parts where the 2006 employment level of nearly 4,000 jobs in St. Catharines was reduced by over 3,400 jobs to a reported total of about 550 in 2016. As a consequence, data for 2011 shows that St. Catharines had a surplus of about 300 residents employed in vehicle parts production that were commuting to auto parts jobs elsewhere. In the other manufacturing sub-sectors mentioned that experienced severe declines, the job losses were in the range of 160 to 200 jobs each.

St. Catharines had 159 manufacturing enterprise locations in 2016, excluding the indeterminate category (firms with no employees or only contracted workers). The largest concentrations, accounting in total for over 60% of

locations, were fabricated metal manufacturing (35), printing and support activities (16), food (12), machinery (11), furniture and related products (10), and beverage manufacturing (8).

Despite the notable job losses in some manufacturing sub-sectors, the location quotients for several manufacturing sub-sectors remained relatively high. The manufacturing sub-sectors with the highest LQs in 2016 were:

Exhibit 22		
Manufacturing Sub-Sectors with High Location Quotients		
2016		
Manufacturing Sub-Sector (NAICS)	2016 Jobs	2016 Location Quotient
Motor Vehicle Manufacturing (3361)	1,626	10.95
Ship & Boat Building (3366)	128	4.96
Coating, Engraving, Cold & Heat Treating (3328)	161	3.80
Fabric Mills (3132)	43	2.83
Spring & Wire Products (3326)	40	2.45
Pulp, Paper & Paperboard Mills (3221)	212	2.23
Machine Shops, Turned Product & Screws, Nuts & Bolts	301	2.22
Motor Vehicle Parts (3363)	549	2.16
Glass & Glass Products	62	2.07
Metalworking Machinery	166	2.06
Beverages	238	2.01
Source: EMSI Q1 2016		

The shifts that have occurred in the manufacturing sector over the decade appear to favour more specialized and sophisticated manufacturing ventures where there is an opportunity to distinguish products based on a skilled workforce and product quality, innovation, and design.

Automotive/Mobility Sector

Despite the heavy loss of jobs in the vehicle parts sub-sector, employment in the automotive-related manufacturing sector remains the largest single manufacturing segment in St. Catharines. The key companies include General Motors, THK and Venest.

The General Motors undertaking at the time of the 2016 labour agreement to make further investments in its Powertrain Operations plant in St. Catharines was excellent news. An important investment is anticipated to be a renewable biogas cogeneration plant. With GM's commitment, a renewed look at supply-chain linkages should be undertaken to determine if there are associated investment prospects among key suppliers, for example, Linamar.

The near-term prospects for Canada and Ontario to attract new greenfield investment by original equipment manufacturers (OEMs) are uncertain. While reinvestment continues, no new OEM plant has been built since Toyota Motor Manufacturing Canada (TMMC) opened the Woodstock RAV4 plant in 2008. The prospects for any significant new conventional auto parts investment hinge on new OEM greenfield commitments.

Retaining – and ideally strengthening – the presence of the existing companies is an especially critical economic development priority. The Mayor of St. Catharines, supported by the City's Economic Development team, has

participated in the Ontario Auto Mayors initiative which works collaboratively at the provincial and federal levels to promote awareness, advocacy and strategic policy initiatives that will strengthen automotive sector employment, innovation and productivity. This is an important forum where on-going support can be demonstrated and industry trends monitored and addressed.

In terms of prospects for research and development, the question arises whether GM Canada's research and development partnerships with McMaster University are relevant to GM's St. Catharines plant and whether these might be broadened to include Niagara post-secondary institutions. The McMaster Centres are the GMC Centre for Automotive Materials and Corrosion and the GMC Centre for Engineering Design.

The Transformation - Automotive Becomes Mobility: With major technology shifts underway, it is important to consider whether St. Catharines has a potential role in what is now labelled the mobility sector. The landscape is changing dramatically, with new business models and technology challenging established ways and new players asserting themselves and forcing the pace of change. Leading-edge technologies are being applied to a sector that is already at the forefront of advanced manufacturing.

The new mobility label for the industry reflects the fact that many different options and choices are emerging in terms of how people can and will get from one location to another. In play are ride-sharing business models, connected cars, autonomous vehicles, varied powertrain fuel choices, light-weighting of materials, and the 3D printing of vehicles. Public transit options are in the mix. New entrants are vying to be front-line transportation providers, including through new business models. The evolution will see growth in car-sharing, driverless car technologies and likely a joining of the two. In the process, the principal players may be transformed from manufacturers and sellers of vehicles into providers of transportation as a service, seeking to offer end-to-end seamless mobility. How radical and rapid the change will be is uncertain: it may tend to be incremental and evolutionary, or it may end up disrupting a century-old manufacturing business.

The connected car and autonomous vehicles have been a rapidly growing focus and are emblematic of the new directions. These are attracting attention for their future growth prospects. Stratford has taken an initiative – given its city-wide Wi-Fi network – to court the testing of autonomous vehicle testing. Existing suppliers of connected vehicle technologies have come together to demonstrate their capabilities on a Lexus vehicle in a project developed in partnership with the Automotive Parts Manufacturers' Association (APMA). GM Canada has a mandate related to the connected car that has led it to strengthen and expand partnerships with several universities and the Communitech Technology Association in Waterloo Region. In 2016, GM announced the choice of Markham for a new software and engineering centre. If there is a St. Catharines constituency that sees opportunities, the case needs to be developed and made that it has the cluster, technology or geographic advantages that readily put it in a preferential position as an evident candidate related to these activities.

Manufacturing Supply Chain Opportunities

The long and deep tradition of manufacturing in St. Catharines leaves a workforce that, if adaptable and trainable, can be attractive to manufacturing firms focused on growing existing niches and specialties and on offering local solutions.

Supply Chain Opportunities: Though supply chains have atrophied somewhat during the challenging downturn that devastated aspects of manufacturing, there are also adroit, capable and competitive component suppliers in St. Catharines. The Niagara Industrial Association (NIA) is an important partner. A manufacturing asset mapping project which is being pursued by Niagara Region Economic Development will provide an enhanced

information base. The new General Electric (GE) Brilliant project in Welland offers extensive supply chain potential for existing manufacturers and for new investors. The gigantic Solar City project in Buffalo, said to be ready to start production in mid-2017, also held itself open to St. Catharines and Niagara Region suppliers.

Defence and Aerospace Supply Chains: Defence-related supply chains are also possibilities. The well-established aerospace presence in Niagara Region centred in Fort Erie – comprising Fleet Canada, Airbus Helicopters Canada and others – and the proximity of St. Catharines to the aerospace and defence cluster in Oakville, Burlington and Mississauga opens possibilities for St. Catharines manufacturers. The Canadian government defence procurement policies have evolved with a view to leveraging economic benefit from the involvement of more technology-oriented companies and R&D partnerships. Led by Innovation, Science and Economic Development Canada (ISED), the new Industrial and Technology Benefits (ITB) policy was announced in December 2014, replacing the previous Industrial and Regional Benefits (IRB) policy which dated back to 1986. The ITB policy favours advanced technologies and research and development partnerships.

Greenhouse-Related Manufacturing and Systems

Ontario is the dominant location for the Canadian greenhouse industry, with the Niagara Region as the centre of Canada's floriculture greenhouse industry. To remain competitive and sustain quality and production, the industry continues to adopt large-scale leading-edge systems, technologies and designs, presenting investment potential for the development of manufacturing, service and research-based businesses in St. Catharines that will capitalize on the City's manufacturing tradition, its base of metal fabrication and precision machining companies, and its central location.

Both the floral and vegetable segments of the greenhouse industry are facing strong competitive pressures to introduce and apply new technologies and systems that can optimize output, ensure consistent quality, mitigate risk to plants, and mechanize repetitive tasks. Sophisticated computer-controlled, automated environment and irrigation control systems are common. Many systems can be monitored and controlled remotely via the internet. The introduction of LED lighting, which can be controlled by computers, including to respond to external conditions, is growing.

The greenhouse sector offers existing and future St. Catharines manufacturing operations opportunities to cater to the requirements of this significant sector for structures and systems; racking; robotic and software driven handling and packaging systems; computerized sensing, monitoring and lighting; heating and cooling; and water and nutrient supply systems.

The marketplace for St. Catharines-based manufacturers serving the greenhouse sector extends well beyond the Niagara Region. St. Catharines is proximate to the complementary sister greenhouse sector in southwestern Ontario toward and in the Leamington and Essex County area near Windsor. Though dominated by vegetables (rather than flowers) and by owners of Italian (rather than Dutch) descent, many requirements in the Leamington area are similar. Technologies and systems are also applicable to the technologically-advanced marijuana growing industry which anticipates rapid growth, not just in Canada but the US as well.

More than just Canada, the Niagara Region can be a North American hub for manufacturing businesses that cater to the greenhouse industry. There is already significant integration of the growing sector, with Ontario greenhouse growers exporting extensively to the US. So too, many Niagara Region suppliers to the greenhouse industry sell into the US market. Opportunities exist to persuade Dutch and other offshore companies to headquarter their North American presence in St. Catharines. European business people often are inclined to

prefer a location in Canada, other things being equal, because the Canadian business and social environment is somewhat more European than the US.

The Netherlands is a dominant source of materials and technology for greenhouse operators. The extensive involvement in the Niagara Region of people of Dutch heritage makes St. Catharines a comfortable fit culturally for Dutch companies. The European – especially Dutch – scale for greenhouses is greater, with many large greenhouses devoted to the production of a single species. Niagara Region – and Canada more generally – has some large scale single crop operations but mixed production has tended to be more common.

The development and exploitation of new technologies by companies based in St. Catharines can benefit from the neighbouring Vineland Research and Innovation Centre and its expanding programs to research and commercialize new technological solutions for the greenhouse industry. Vineland's close relationship with the University of Guelph can also be capitalized upon, to access its full resources for St. Catharines-based operations.

In addition, Niagara College is focused on precision agriculture and computer-controlled greenhouse and horticulture operations, aquaponics and related fields in its Agriculture and Environment Innovation Centre and Augmented Reality Research Centre. The College has an enrolment of over 160 students in Greenhouse Technician and Horticulture Technician programs.

The challenge for the St. Catharines Economic Development team is to dedicate some resources that can define the City's opportunity and bring together existing resources that will support new investment, including from Europe and southwestern Ontario. The capabilities and activities at the Vineland Research and Innovation Centre and Niagara College are major assets. The Canadian Greenhouse Conference which is held annually in October in Niagara Falls brings together a comprehensive cross-section of the supply base and is therefore an important source of intelligence and contacts.

F. SECTORS OF FOCUS				
F.6 MANUFACTURING				
Strategy Section	Objectives & Actions	Priority ¹	Timing	Lead & Partners ²
F.6	OBJECTIVE: Support retention and growth of the St. Catharines manufacturing sector Actions: <ol style="list-style-type: none"> 1. Support retention and growth of manufacturing companies, including General Motors Powertrain Operations and automotive parts suppliers 2. Target opportunities to grow and attract manufacturing, research-based and service business designing and supplying greenhouse structures, technologies and systems 3. Assist in growing manufacturing supply chain opportunities 	A A B	On-Going 2018 & On-Going On-Going	SCEDT, NIA, NCC & NRED SCEDT, NCC, VRIC, Brock & NIA SCEDT, NCC, NRED & NIA

Funding:

- Provision will be needed for part-time contract staff or consulting services to prepare a value proposition for manufacturing, research-based and service business designing and supplying greenhouse structures, technologies and systems (\$35,000)
- Seminars, workshops and conferences that may be held to introduce manufacturers to supply chain, technology development and defence sector opportunities, may involve a modest call on budgets and staff, though partner organizations may host

Performance Metrics:

- Performance Metrics should concentrate on outcomes (the number of businesses retained; expansion projects; new investments and the jobs and amounts involved), supplemented by measures of the activities likely to lead to the outcomes (BR&E calls and meetings; investment-related events; contacts established by category; and categorization of leads in terms of demonstrated degree of interest) (in situations where SCEDT has influenced outcomes)

NOTES AND ABBREVIATIONS

¹ **Priorities:** **A** = Highest Priority & Very Time-Sensitive; **B** = Important & Time-Sensitive; and **C** = Desirable & Less Time-Sensitive

² **Abbreviations**

Brock = Brock University

IN = Innovate Niagara

GNCC = Greater Niagara Chamber of Commerce

McM = McMaster University (including Niagara Medical Campus)

MEDC = Ontario Ministry of Economic Development & Growth

MTCS = Ontario Ministry of Tourism, Culture & Sport

NCC = Niagara College Canada

NEC = Niagara Escarpment Commission

NHS = Niagara Health System

NIA = Niagara Industrial Association

NRED = Niagara Region Economic Development

NRPDS = Niagara Region Planning & Development Services

NWPB = Niagara Workforce Planning Board

OMAFRA = Ontario Ministry of Agriculture, Food & Rural Affairs

OTMP = Ontario Tourism Marketing Partnership Corporation

SCEDT = St. Catharines Economic Development & Tourism

SCPP = St. Catharines Planning & Buildings

TN = TeamNiagara

TPN = Tourism Partnership Niagara (RTO2)

VRIC = Vineland Research & Innovation Centre

G. Implementation Plan

The St. Catharines Economic Development Strategy and Action Plan outlines a strategic framework to allow the City of St. Catharines to support growth prospects for existing businesses and agricultural enterprises, to identify and pursue investment attraction opportunities, and to grow tourism and the sector's capacity. Implementation of the strategy is phased so that essential prerequisites and ground-work are in place before initiatives that depend on them are undertaken. The prioritization of the actions needed to realize the goals and associated objectives concentrates on the Strategy's first four years – 2017 through 2020.

Being Investment Ready: The principal near-term priorities for the St. Catharines Economic Development team centre are steps to ensure a high level of investment readiness to enhance the City's responsiveness and competitiveness in the eyes of investors considering new projects or expansions. The key investment readiness actions include the establishment of a Customer Relationship Management (CRM) system and the availability of comprehensive in-depth data that is required by investors. The release of 2016 Census data makes this especially timely. As part of efforts to market the City and make data available to prospects and site selectors online, steps must be taken to rationalize existing economic development websites. The St. Catharines Economic Development team should also ensure that all industrial and commercial sites and buildings in the City are listed on the Niagara Region Economic Development Site Finder and that information is available on major pending potential development projects.

The Strategy recommends that a concierge service for proponents of expansions and new investments be approved through a new economic development staff position. This person would function as an "expeditor" or "champion" to work with investors throughout the approval processes, up to the final decision on specific projects. As further evidence of the City's desire to facilitate approval processes and make them more predictable, preparation of a Development Approval Flow Chart is recommended, setting out in accessible language the basic approval steps, the requirements and the time frames that are typically required. This Flow Chart will be provided to prospects and made available prominently on the website.

Continued pursuit of the City's place making initiatives – especially Downtown – remains important to sustaining the momentum that is evident and needs to be capitalized upon. Having realized the originally envisaged anchor investments, a renewed Downtown Master Plan is needed as a successor to the original 2008 Downtown Creative Cluster Master Plan. Through the addition of a new contract staff position in Planning and Buildings, the City should continue to work to be prepared to respond in a timely and assertive manner to development interest.

The Community Improvement Plan incentives are now available on a more predictable basis, though the annual budget is capped. The City needs to be an active proponent of its interests in the incentives review which Niagara Region is undertaking in 2017. The St. Catharines Economic Development and Planning and Building Services departments need to monitor the competitiveness of incentive offerings and reassess the situation if they fall out of line. A full evaluation should be part of the development of a renewed Downtown Master Plan.

During 2017, a close watch will be needed on political and economic developments in the US and the implications for Canada, so that any needed adjustments in the Strategy and Action Plan can be made.

Priority - Home-Grown Growth: Once investment readiness is in hand, the St. Catharines Economic Development team should accord priority to initiatives that will create, retain and grow local business.

To enhance dialogue among the stakeholders with a direct interest in the City's economic development, the Strategy recommends the creation of a structured forum or mechanism to promote focused discussion that will build a common agenda, and shared messaging and goals. The first step – an assessment of optional mechanisms – should be commenced as soon as practical, with a view to introducing the new approach by the end of 2018.

The capacity and resources available to the innovation and entrepreneurial ecosystem in St. Catharines and nearby continues to grow, with new and expanded facilities being launched in 2016, including at Brock University and Niagara College. Further efforts are required to make these valuable centres, facilities and resources widely known and to strengthen the networks and collaborations needed to ensure start-ups and businesses fully exploit their capacities. Leadership is also required to ensure that the local innovation ecosystem, programs and institutional infrastructure adjust by continually evaluating and adopting leading-edge practices, and that opportunities to access new Federal and Ontario funding and programs are seized, including new Federal and Ontario measures. The St. Catharines Economic Development team's leadership and influence on the evolution of the ecosystem can be exercised, among other means, through its board memberships and funding.

Regular outreach through structured business retention and expansion (BR&E) initiatives is envisaged, in addition to the current practice of selected company calls. A series of calls adopting the new format should be commenced in 2018. The feedback from the BR&E exercise will, in turn, inform a subsequent review of the types of programs and support that will be most meaningful and will best serve the needs of the business and agricultural community. All aspects of the BR&E process identify supply chain opportunities and obtain front-line validation of the attributes that differentiate St. Catharines as a location for new investment. The first BR&E program should coincide with the launch of a new mechanism to facilitate high-level dialogue with and among the private sector and stakeholders such as business-oriented organizations and the post-secondary institutions.

Strengthened Initiatives: Place making beyond the Downtown remains important to overall economic growth and the City's attractiveness to talent and risk-taking entrepreneurs. Examination of the wider commercial development possibilities related to the promised GO commuter rail service needs to commence immediately. Niagara Region kicked off consideration of the ambitious Brock District Plan in 2016. Other possible place making possibilities need to be monitored.

Given the importance of talent, a special interest on the part of the St. Catharines Economic Development team will be to encourage programs and initiatives that will serve existing and anticipated workplace needs. The retention and attraction of talent and entrepreneurs is also a key component. The City has important partners with whom to interact and to support. A program led at the Regional level is being put in place to attract and retain talent, including immigrants. The Niagara Workforce Planning Board is well placed to analyze and assess trends and needs and lead in the exploration and articulation of appropriate responses. Of particular importance is early analysis of the November 2017 release of 2016 Census data on labour, commuting patterns, and mobility as this will provide insights on the talent residing in the area that is currently commuting elsewhere.

In 2018, an evaluation and update of St. Catharines economic development branding and its marketing collateral should be undertaken, including its relation to messaging by Tourism, the City and Region. Associated with this should also be a fuller review of how to position the economic development and tourism websites and make greater use of marketing automation.

Among the Sectors of Focus: Among the sectors of focus, the most immediate requirement is to ensure the retention – possibly the growth – of existing larger employers in sectors that have faced challenges in recent years, such as manufacturing, business support services, and the greenhouse sector.

Being investment ready and having selected, well developed, targeted value propositions are forerunners to targeted initiatives to support expansion and new investments. Identified sub-sectors of note are food and beverages, and greenhouse-related manufacturing and systems – in-depth value propositions for each being needed.

In addition, with the shift from manufacturing to services, closer study of the service sector opportunities is required in the medium-term, leading to the development of robust value propositions in the highest priority sub-sectors. Because the Province is moving ahead aggressively on its Climate Change Action Plan, priority might be given to possibilities related to the Plan. Other prospective service sector targets are consulting engineering, construction, architecture and design, financial services, communications technologies, software, and human resources, payroll and accounting.

In health care, groundwork must be laid, first to bring the growing constellation of local players together to develop synergies. Progress stands to be hastened by new initiatives such as the proposed Binational Research and Innovation Corridor (BRIC). The health care sector is a medium-term prospect.

In tourism, the development of a new tourism strategy should commence in 2018. In the meantime, the program will be focused in 2017 on capitalizing on the new website and enhanced capacity for social media, associated with initiatives such as the Ale Trail. Success in attracting major international and national sports events provides the basis for greater focus on sports tourism, including minor sport tournaments.

Retaining Flexibility: As stressed earlier in discussing the sectors of focus, the Strategy and actions require constant and systemic re-evaluation and adjustment, given the increasing rapid pace of technological change and the uncertain and volatile global economy. Flexibility and agility will be crucial, even more so given global challenges and uncertainties about US policy directions.

Economic development realizes its greatest reward when the full range of community resources – public, private, educational, institutional and individual – coalesce around common goals.

H. Resource Implications

The St. Catharines Economic Development team is called upon daily to devote a significant amount of its time internally with Council, committees and city colleagues. In the interests of liberating some of this time and reorienting it toward outwardly focused activities with business, steps should be taken to provide the Economic Development team with more autonomy based on Council-endorsed annual business plans having clear goals, a detailed action plan, and performance metrics against which results can be measured. The Economic Development team would present mid-year updates. The development of a mechanism to promote dialogue among the community economic development stakeholders can also feed into the development of the annual business plan.

The areas which the Strategy identifies that merit greater devotion of time by the Economic Development team are:

- The addition of a more systematic business retention and expansion (BR&E) calling program;
- The development of a high-level structured dialogue involving business and economic development stakeholders;
- Advocacy of St. Catharines interests in the Niagara Region incentives review; and
- Participation with Planning and Building colleagues in the renewal of the Downtown Master Plan and other emerging place making initiatives.

Even with changes that might free up more time, two additional positions are envisaged to adequately meet identified needs.

1. **Economic Development “Facilitator/Expeditor”:** A key recommendation supports the Council-endorsed “Project Facilitator/Expeditor” position responsible for the coordination of escalated project and procedural processes from initial contact through to final decision. This position is to be staffed by a client-focused and development-oriented individual who can be a constructive intermediary and who is knowledgeable and familiar with the development approvals that a prospect will encounter. Because of the frequent direct involvement of the “expeditor” with prospects and their needs, the individual could also be tasked to assist with:
 - Updating the Development Approval Flow Chart;
 - Assisting in the development and maintenance of the comprehensive databases required to respond to specific investment leads and enquiries;
 - Contributing to the core investment attraction messaging that will effectively market St. Catharines strengths and differentiators;
 - Contact with the realtors and developers offering industrial and commercial properties and buildings; and
 - Ensuring that all available industrial and commercial properties are listed on the Niagara Region Economic Development Site Finder.
2. **Project Manager – Place Making:** St. Catharines currently has limited industrial land available and needs to press forward and pursue signature place making initiatives, most immediately the Downtown, Port Dalhousie, the former GM lands on Ontario Street and the Brock District. To ensure momentum is

sustained and accelerated, a one year contract for a project manager is proposed, to be located in Planning and Buildings, though close collaboration with Economic Development is envisaged.

Funding for Research: The release of the results of the 2016 Canadian Census during 2017 and into 2018 represents a timely opportunity to strengthen the databases available to the Economic Development team. More in-depth statistical data is needed to respond fully to the information requirements of prospects and site selectors. As a complement to the existing research-oriented position, budget resources are needed in 2017 and 2018 are required to engage contracted researchers or consultants to marshal this information.

The development of selected compelling, in-depth value propositions also requires concentrated and specialized research and effort which is often entrusted to qualified consultants. One per year is envisaged, calling for an annual budget of \$35,000.

Branding Evaluation and Update: A brand evaluation and update for St. Catharines economic development is proposed. This is typically contracted to specialist firms. Budget resources are likely to be in order of \$60,000.

Tourism Strategy: In 2018 and 2019, steps to develop a new multi-year tourism strategy will be required. Funds should be available to engage a specialist firm to assist in its development.

I. SWOT Analysis

Strengths:

- Location and market access – part of the Greater Golden Horseshoe (GGH); proximity to the Greater Toronto Area (GTA) and rest of southern Ontario; and access to multiple border crossings with direct access to neighbouring states of New York, Pennsylvania and Ohio.
- Centrally located among Niagara's other communities and within the Niagara recreation, wine and tourist areas.
- Direct highway access to the QEW and Highway 406, leading to other Ontario 400 series highways and the US Interstate system.
- Commitment to inaugurate GO Commuter Rail service; initial agreements in place to implement Niagara's Inter-Municipal Transit (IMT) system by St. Catharines, Welland, Niagara Falls and Niagara Region, both of which will benefit the Downtown and the municipality as a whole
- Access to multiple airports, most with international cargo and passenger services, including Buffalo Niagara International (US), Niagara Falls International Airport (US), Niagara District Airport (providing three daily flights to downtown Toronto), Hamilton John C. Monroe International Airport, and Toronto Pearson International Airport.
- Access to waterway transportation routes including the Welland Canal on the City's eastern border, with Hamilton's Great Lakes port nearby.
- Niagara Region – including St. Catharines – is cost competitive relative to most other Canadian and US locations.
- Joint Regional investment attraction effort on the part of economic developers in the Niagara Region, as reflected in the TeamNiagara approach and the Niagara Development Corridor Partnership whom were successful in helping attract General Electric to Welland Ontario.
- The collaborative Hamilton-Niagara Partnership that is jointly marketing the broader southern tier of the greater golden horseshoe with investment attraction as its main focus area.
- Fibre optic connectivity for digital- and communication-dependent companies as St. Catharines is serviced by a major fibre optic hub providing connections to both north-south and east-west trunk lines. Service will be strengthened by Niagara Region's participation in the Western Ontario Wardens' Caucus (WOWC), The SouthWestern Integrated Fibre Technology Network (SWIFT) project that will deliver fibre optic coverage to communities throughout southwestern Ontario.

- St. Catharines is the largest municipality in Niagara Region by population – 133,113 persons in 2016, representing around 30% of the population in the Region.
- Functions as a regional business hub and service centre, accounting for 40% or more jobs in some sectors such as educational services; health care and social assistance; retail trade, finance and insurance; information and cultural industries, professional, scientific and technical services and real estate.
- The Government of Ontario through its “Places to Grow” legislation designated St. Catharines Downtown as an Urban Growth Centre in the Greater Golden Horseshoe – it is the only provincially designated Urban Growth Centre within the Niagara Region.
- The major anchor projects of St. Catharines transformative Downtown Creative Cluster Master Plan have been realized, creating a walkable and livable mixed use Downtown, new investment, business development and a cultural renaissance and renewal since 2008.
- The professional, scientific and technical services sector is an emerging growth sector in St. Catharines and has shown significant job growth between 2011 and 2016, with a 19.2% increase (574 jobs), compared to a 10.2% increase at the provincial level.
- The manufacturing sector has grown – though modestly – since the global recession with value-added advanced manufacturing segments leading the way.
- Professional and diverse arts community, now strengthened with the FirstOntario Performing Arts Centre and its four venues and Brock University’s Marilyn I. Walker School of the Fine and Performing Arts.
- High quality, intensively cultivated agricultural land represents 30% of the City’s land which is known for its micro-climate and biosphere. This presents a strength for the greenhouse floriculture, and tender fruit industry.
- St. Catharines has enough jobs with its resident labour force given the number of jobs being approximately equal to the size of the resident labour force. Given the regional labour force and labour inflows from communities beyond St. Catharines borders, there is more than adequate labour supply to attract new operations.
- St. Catharines and Niagara’s success in attracting signature international and national sports events - including the 2015 Niagara PanAm Games, the 2021 Canada Summer Games, the 2018 FIBA Basketball Tournament.

- St. Catharines' unique cultural, recreational and heritage attractions such as: Grape and Wine Festival, The Henley Regatta, 12 Mile Creek, Short Hills Park, heritage tourism sites, black history, market square, etc.
- New St. Catharines Tourism website launched in 2017 with the integration of new tools including social media capabilities crucial to marketing campaigns such as the Ale Trail, cycling, recreational paths, and Downtown.
- Clear precincts – Port Dalhousie, Old Glenridge, Merriton, Downtown, Montebello, etc.
- Lake Ontario Waterfront Trail including Royal Canadian Henley Regatta, Port Dalhousie Harbour, Lakeside Park and Carousel, Sunset Beach, the Welland Canal, and Happy Rolph's Bird Sanctuary as attractions.
- Post-Secondary Educational Institutions (Brock University, Niagara College and McMaster University – Michael G. DeGroote School of Medicine) given the knowledge, skills and talent they produce.
- Easy access to community and regional quality of life attributes at a lower cost of housing relative to larger urban communities in the GTA such as Toronto.
- High level of entrepreneurship support such as: Venture Niagara, Niagara Angel Network, Niagara College – Walker Advanced Manufacturing and Innovation Centre, Brock University – BioLINC and Brock LINC, St. Catharines Enterprise Centre, Innovate Niagara, and ihub.
- Experienced and seasoned talent that can be accessed for mentorships including retirees that have relocated to St. Catharines from communities outside the region such as Toronto.
- St. Catharines generally has the lowest commercial office and industrial lease rates in the Greater Golden Horseshoe. Sales prices for industrial properties in St. Catharines are also lower than comparable jurisdictions except for GTA East and Oshawa.

Weaknesses:

- Low population growth – population grew by only 1.7% over twenty years from 1996 to 2016. Recent growth of St. Catharines' population by 1.3% between 2011 and 2016 is lower than the population growth rate of Niagara Falls (6.1%), the St. Catharines-Niagara CMA (3.5%), Niagara Region (3.8%) and Ontario (4.6%).
- Compared to Ontario, a lower portion of the population aged 25 to 65 in St. Catharines has attained a post-secondary qualification - about 60% compared to 65%. A higher than provincial

share have college completion or have qualified as an apprentice. The lower proportion applies to attainment of a university degree.

- St. Catharines has a relatively high percentage of seniors compared to Ontario overall - about 22% of the residents are 65+ years of age compared to less than 17% for Ontario, which assuming this trend continues, means that a lower portion of the population will be in the labour force contributing to economic growth and there will be increased health care spending needed for this segment.
- Significantly lower levels of population in 2016 compared to 2011 in some working age cohorts associated with experienced labour such as those 40 to 49 years of age.
- Niagara Region has experienced a multi-year decline from 2005 to 2014 in the number of immigrants selecting Niagara.
- Low job growth - St. Catharines had the lowest percentage job growth of the St. Catharines-Niagara CMA communities between 2011 and 2016, at 3.6% compared to 4.7% to 9.5% job increase for the other communities.
- St. Catharines 2016 job level is lower than its 2006 level – 67,751 compared to 70,919 – but has increased since 2011.
- Though generally cost competitive with other US and Canadian locations, Niagara Region ranks more toward the middle-of-the-pack when other factors are considered such as education, training and research; the business support environment; and labour force and employment.
- Greater consistency in City branding is needed.
- Niagara Region brand awareness is clouded by having twelve separate municipalities with their own branding.
- St. Catharines currently lacks serviced shovel-ready prestige employment lands.
- No significant redevelopment of industrial lands for employment.
- Apparent misalignment of skills with needs of many employers. Lack of data that clearly identifies labour force availability and employer demands.
- Perception of lengthy period for processing development applications and ‘red tape’ as identified as concerns in stakeholder consultations.

- Longstanding lack of public transit among Niagara communities and to and from GTA. However, introduction of the IMT systems and GO Commuter Rail should begin to address this.

Opportunities:

- Tourism is a significant and growing sector given the proximity to the American border and a lower Canadian dollar. St. Catharines is also positioned on Niagara's Wine Route and Ale Trail and offers a critical mass of arts, culture, heritage, parks and trails, and waterfront linkages including access to the Downtown.
- St. Catharines can capitalize on Niagara Region's Foreign Trade Zone (FTZ) designation, which is the first of its kind in Ontario.
- Opportunity for St. Catharines to be a "Supply Chain Hub" given location and proximity to American borders allowing for the efficient movement of goods.
- Using St. Catharines' affordable living costs to attract and retain talent.
- A renewed Downtown Master Plan that will build upon the major anchor projects already in place and the transformation and rejuvenation that is underway, especially through the attraction of private-sector investment.
- Development of mixed-use commercial office space in the vicinity of any future GO train stations, with the inauguration of GO Commuter Rail service.
- Realization of the Brock District Plan concept, which is premised on institutions of higher learning being the major catalysts for economic development.
- The Canada-EU Comprehensive Economic and Trade Agreement (CETA) will favour a Canadian location for North American production in certain specific situations, provided that access to the US market is assured.
- Capitalize on the talents of retired or semi-retired business people to mentor entrepreneurs in start-ups, micro-enterprises and scaling businesses.
- Opportunities for the private sector to leverage and invest in new revitalization in the Downtown, GO Transit node and other adaptive reuse areas.

Threats:

- Perception of St. Catharines as a blue collar unionized manufacturing community.

- Competition from other near-by communities, such as Hamilton, that may be viewed as being more open for business.
- Congestion and uncertainties regarding the driving times required on the QEW to and from Toronto.
- Lack of predictability and wait times at the Canada-US border.
- The rise in protectionist and nationalist tendencies internationally, which threaten cross-border flows of goods and people and may politically influence investment decisions.