

NIAGARA FALLS

Business Case and Land Capacity for
a Downtown Post-Secondary Campus

September 30th, 2013



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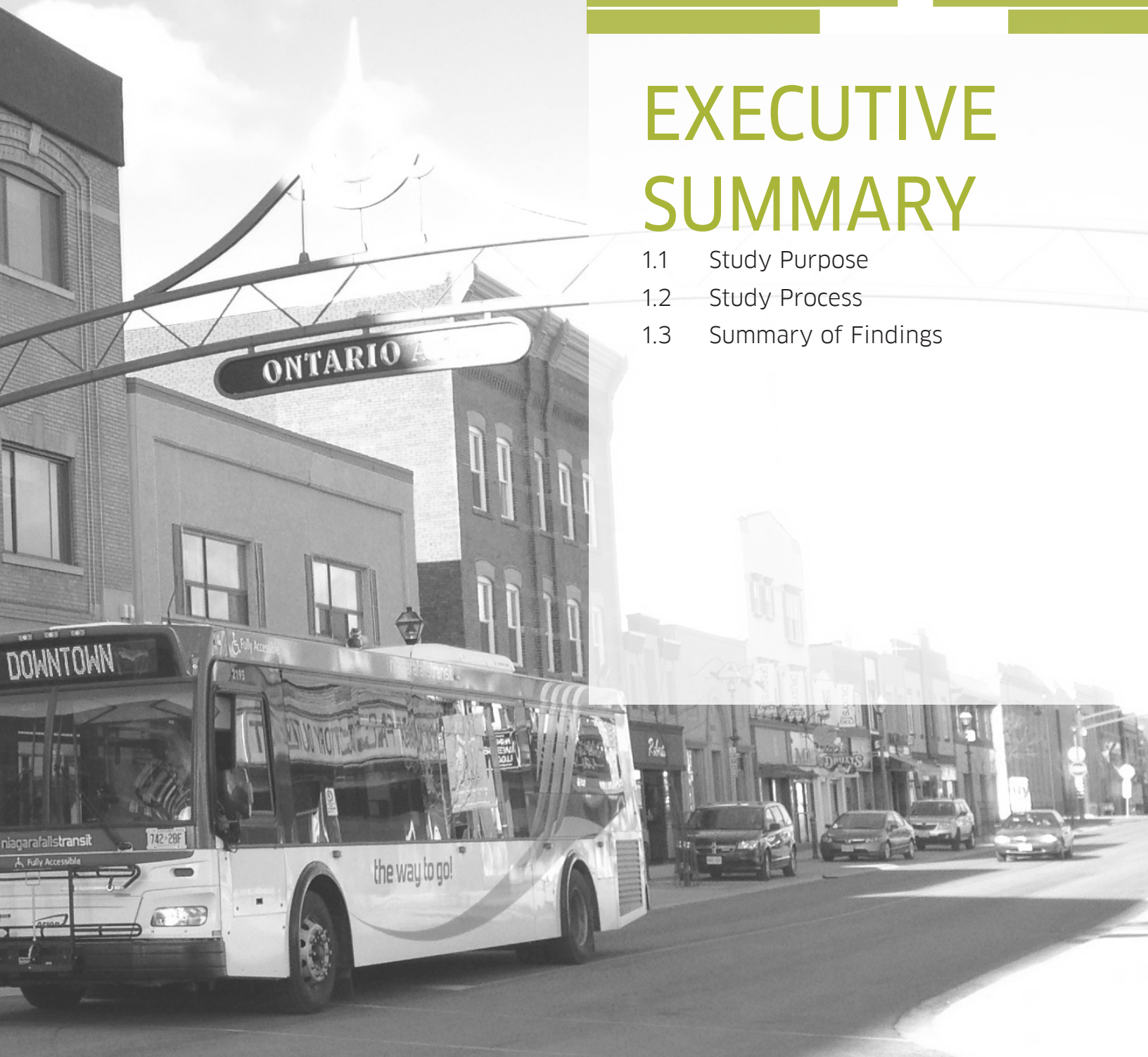
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EXECUTIVE SUMMARY

- 1.1 Study Purpose
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1.0 // EXECUTIVE SUMMARY

1.1 Study Purpose

The City of Niagara Falls is seeking to attract a post-secondary institution into its Downtown to support a series of economic and community development objectives. This Study has been undertaken to evaluate the potential for a Downtown campus and to analyze anticipated outcomes. As part of this analysis, the estimated Return on Investment (ROI) for a post-secondary institution was quantified at a local, municipal, and provincial level. Further, the physical ability of Downtown Niagara Falls to accommodate a post-secondary campus was tested through a Land Capacity Analysis that compared projected space demands with land availability. The outcomes of this Study may be used by the City of Niagara Falls to inform future conversations with the Province and post-secondary institutions.

1.2 Study Process

The Study, completed by DIALOG under contract to the City of Niagara Falls, was completed over a three month period in spring, 2013. The project was delineated into a three phase process, including:

Analysis – Through primary and secondary research, existing conditions in Downtown Niagara Falls were analyzed to assess needs and opportunities.

Concept Development – Estimated programmatic floor space requirements for a post-secondary institution were compared with land availability in Downtown Niagara Falls to assess the physical capacity to accommodate a campus. The outcomes of this analysis were used as inputs into a design workshop held in Niagara Falls to generate a series of concepts for the hypothetical location of a campus.

Economic Impact Assessment – Using the outcomes of the first two phases, the economic impact of a post-secondary campus in Downtown Niagara Falls was estimated at a municipal and provincial level.

1.3 Summary of Findings

Addressing Provincial Needs

Locating a post-secondary campus in Downtown Niagara Falls will address a number of current needs of the Province of Ontario. The Niagara Region is underserved by post-secondary education enrollment spots in comparison to other major population centres in southern Ontario. This undersupply negatively impacts youth retention in Niagara Falls, as those pursuing post-secondary education relocate to attend institutions elsewhere in Ontario. Correspondingly, Niagara

Falls forgoes many of the economic opportunities associated with post-secondary institutions that benefit nearby cities such as London and Waterloo. A local post-secondary institution will encourage the incubation of emerging sectors in Niagara Falls, and will help diversify the local economy away from its current reliance on tourism. Although an important local job creator, the strength of Niagara Falls' tourism sector is threatened by external factors, including the potential construction of a new casino facility in the Greater Toronto Area.

Addressing Municipal Needs

From a municipal perspective, the location of a campus in Niagara Falls will help address a number of underlying local economic and community development issues. Specifically, Niagara Falls' post-secondary education levels are well below the provincial average, household incomes are comparatively low, the economy is undiversified and highly oriented around tourism, and the municipality relies more heavily on its commercial tax base than all other Ontario communities. The construction and operation of a post-secondary institution will directly provide high quality employment within Niagara Falls. In addition, the presence of a local post-secondary institution would help improve Niagara Falls' youth retention rates. Based on Niagara Falls' current demographic profile, the city has a deficit of 1,950 young adults in comparison to the age cohort structure that would normally be expected. In addition to direct benefits, post-secondary institutions have important economic spin-off benefits, particularly when programs are aligned with local emerging sectors. Incubating new businesses would help Niagara Falls diversify its economy into new sectors, and limit potential risks incurred from future fluctuations in the tourism market.

Addressing Downtown Needs

Locating a campus in Downtown Niagara Falls will address several issues currently impacting the area. New spending generated by students, visitors, and staff will support new and existing businesses. An estimated 8,800 square meters of retail space could be absorbed by this new spending alone, an important contribution to a Downtown suffering from a 43% vacancy rate. In addition, a campus would help draw new residential growth into the Downtown, halting the ongoing population decline. Currently, the income of residents in the Downtown is 32% lower than the city-wide average. It is expected that higher paying post-secondary jobs, and an influx of new residents, would provide greater balance to Downtown demographics. A larger critical mass of adjacent residents and workers will also lead to increased foot traffic, activating currently underutilized streets and public spaces. Finally, an influx of investment into the Downtown could lead to adaptive reuse strategies for a number of important, at risk, heritage buildings.

Achieving a High Return on Investment (ROI)

A post-secondary institution located in Downtown Niagara Falls' is anticipated to deliver a high ROI due to a lower required upfront investment, and the potential for strong returns. A new campus will require comparatively low upfront financial investment as a result of the following characteristics:

- Reduced land acquisition costs due to the provision of 14 acres of Downtown City-owned lands, and relatively low land values of privately held land;
- Recent infrastructure investments that enable intensification to occur in the Downtown;
- The availability of a large inventory of occupiable

built space within the Downtown, available at low rental rates.

- Expressed interest from the private sector to develop portions of the required facilities, such as student residences.

Further to the general economic benefits for the Province realized through the increased earning potential of a more highly educated workforce, an investment in a post-secondary institution in Niagara Falls has unique opportunities to generate economic returns by attracting international students. As recognized by the Province's Open Ontario initiative, international students are a major boost to the economy through increased direct spending, and the propensity to seek employment in Canada after graduation. As such, Open Ontario targets strategies to increase international student volumes in the province by 50%. A post-secondary institution in Niagara Falls would be well positioned to help achieve this increase due to its unparalleled international brand recognition, and access to 1.2 million US residents residing within a 45 minute drive.

Downtown Land Capacity Analysis

A spatial analysis was undertaken to test the capacity of Downtown Niagara Falls to accommodate a hypothetical student campus. For testing purposes, a full time equivalent student population of 5,000 was assumed, approximately equivalent to the current undergraduate and graduate student population in Brantford, Ontario. At a maximum, a campus of this magnitude would require an estimated net assignable area of 55,200 m², with a total built gross area of 85,000 m². The required institutional space could be accommodated within the Downtown on City-owned lands if built at an average Floor Space Index of 2.8 (Floor Space divided by Land Area). Four potential campus locations in the

Downtown are presented in the Study, each comprising varying amounts of City-owned land, private land, and repurposed built space. The potential campus locations are oriented around key existing assets, including the Train Station, Queen Street, Olympic Legacy Trail, and the Niagara River.

Economic Impact Analysis

The economic impact of a proposed post-secondary institution in Downtown Niagara Falls has been analyzed through the lens of an input-output model. In total, the net combined impact of direct expenditures of a post-secondary campus in Niagara Falls for 2,500 students is estimated at \$148.1 million, a figure which would increase to \$296.2 million for 5,000 students. 48% of this figure is associated with the initial construction and would be a onetime expenditure, while the remaining 52% is associated with operating costs and would reoccur annually. After applying economic multipliers to account for direct, indirect, and induced impacts, the total gross impact is estimated to range from \$555.0 million to \$277.5 million at the provincial level. Approximately 75% of this economic benefit would be retained locally in Niagara Falls, while the remainder would dissipate across Ontario. Between \$130.6 million and \$261.2 million in employment income is anticipated, and between 2,666 and 5,333 in newly generated employment years. A total of between \$65.6 and \$131.3 million in tax revenues is expected, of which the Province would receive 36%, and the City of Niagara Falls would receive 11%.

The annual investment costs required to operate a post-secondary institute in Niagara Falls would have a number of beneficial financial and economic returns for the Province. The following figures are exclusive of the overall economic benefits to Ontario of the increased earning potential of post-secondary graduates, and

exclusive of the \$50 million investment into Downtown Niagara Falls committed by private sector developers.

For every \$1 invested by the Province in post-secondary operations:

- \$0.64 would be directly returned to the Province in the form of newly generated tax revenues;
- \$3.67 in new employment income would be generated in Ontario, 79% of which would remain in Niagara Falls; and
- \$7.76 in gross economic impact would be generated in Ontario, 71% of which would remain in Niagara Falls.

In addition, one employment year would be generated in Ontario for every \$11,230 invested by the province annually.

Concluding Comments

Downtown Niagara Falls would be an excellent location for provincial investment in a new post-secondary campus. From the standpoint of maximizing ROI, available land and infrastructure would minimize start-up costs, while geographic location, transportation connections, and the international awareness of the Niagara Falls brand would ensure that the new campus is well-positioned to attract domestic and international students.

A post-secondary institution in Downtown Niagara Falls would generate a variety of synergies resulting in positive outcomes for the Province, the City, and Downtown. It would provide strong economic returns to the Province; it would assist a region that is largely underserved by post-secondary enrolment spaces; it would diversify a local economy that is dependent on tourism and gaming; and, it would act as a catalyst for positive change in Downtown Niagara Falls.





2

ADDRESSING PROVINCIAL NEEDS

- 2.1 Defining Return on Investment (ROI)
- 2.2 Maximize Population Served
- 2.3 Population Coverage & Regional Connectivity
- 2.4 Minimize Investment Cost
- 2.5 Maximize Revenues

2.0 // ADDRESSING PROVINCIAL NEEDS

Ontario's Provincial government has identified a need for new post-secondary spaces through its 2011 Throne Speech.¹ Furthermore, the Province has also established an objective of supporting, developing, and diversifying the economic base of communities in Ontario through youth education and training, increased youth employment, and the growth of innovative industry sectors.²

The growth of post-secondary spaces can be accommodated by expanding existing institutions or by developing new locations (as either a new institution or a satellite campus for an existing institution). The latter option has the advantage of diversifying the geographic placement of post-secondary spaces, and fulfilling a need in underserved catchment areas. Furthermore, to the extent that post-secondary institutions are local economic catalysts, the latter option has the added potential of supporting, balancing, and diversifying Ontario's economic base.

Through this Study we will seek to further understand Niagara Falls' need for post-secondary spaces and the potential effects to the local and regional economy. In so doing, we will quantify the relative cost and return on investment (ROI) to the public sector of such an initiative.

1 Moving Ontario Forward: A Plan for Jobs and the Economy, 2011 Ontario Legislature Throne Speech. November 22, 2011. Office of the Premier.

2 The Way Forward, 2013 Ontario Legislature Throne Speech. February 19th, 2013. Office of the Premier.

2.1 Defining Return on Investment (ROI)

For the purposes of this study ROI has been defined as the cost-benefit correlation, to the public sector, of a specific initiative and / or investment. A positive ROI is driven by maximizing benefits and revenues while minimizing investment costs.

Important, for this exercise, is having a strong understanding of the cost of this undertaking, and the areas where cost-saving measures can result in a higher ROI. As an example, investment costs in Niagara Falls on a per student basis should be low compared to other Ontario locations due to the presence of centrally-located and free municipal land, low land prices and floor space rental costs, existing infrastructure, and a significant inventory of existing built space that can be repurposed for post-secondary institution uses.

Similarly important, for this exercise, is having a broad understanding of what constitutes a benefit. Some benefits are direct and easily quantifiable (e.g. a decrease in the vacancy rate), while others are indirect, or “softer” and more qualitative (e.g. improving the image of Downtown). Extensively, it is important to understand the multiple areas where benefits may be realized in order to more fully understand the potential, and to better direct the investment. Examples of some of the direct and indirect potential benefits we have sought to understand, include, without limitation:

- Tax revenues for the province in the form of income taxes, corporate taxes, and sales taxes;
- Growth opportunities through the incubation of small businesses, and diversification away from a high dependence on the commerce sector;
- Attraction of international students – both in the Buffalo region, and from countries abroad – and the corresponding economic impact;
- Stimulating private sector reinvestment into Downtown Niagara Falls, reducing the vacancy of underutilized properties, and stabilizing the local economy.
- Opportunities to take advantage of Downtown Niagara Falls' transportation hub - VIA, GO Transit, WEGO visitor transportation system, Niagara Falls Transit, and motorcoaches.

2.2 Maximize Population Served by New Institution: Niagara Region is Currently Underserved

To assess how well Niagara Falls is currently served by post-secondary institutions, the number of enrollment spaces in nearby regions are aggregated and compared with total population figures.³ Expressed as the total post-secondary enrollment spots per 1,000 residents, the calculated metric allows for a relative comparison of education coverage.

With 431,000 residents, Niagara Region is a major population centre in Ontario. Although the population is divided among several urban core areas, the majority of this population is concentrated in the north-eastern sector of the region. Economically, the Niagara Region acts as a coherent area and exhibits a large degree of interconnectedness. Niagara has two major post-secondary institutions, Brock University and Niagara College. Neither of these institutions have a major presence in the municipality of Niagara Falls itself, however. Combined, these campuses provide 22,500 full time post-secondary spaces within the Niagara Region, equivalent to 52 spaces per 1,000 residents.⁴ Proportionally, this figure is low relative to population centres of a similar size, such as Hamilton (77 per 1,000), Kitchener / Cambridge (99 per 1,000),

and London Region (93 per 1,000). The Guelph region is smaller in total population, but has 105 spaces per 1,000 residents. Brantford and Brant County, combined, have a population less than half that of Niagara Region, and a similar number of enrollment spaces per 1,000 residents (see Figure 2-1).

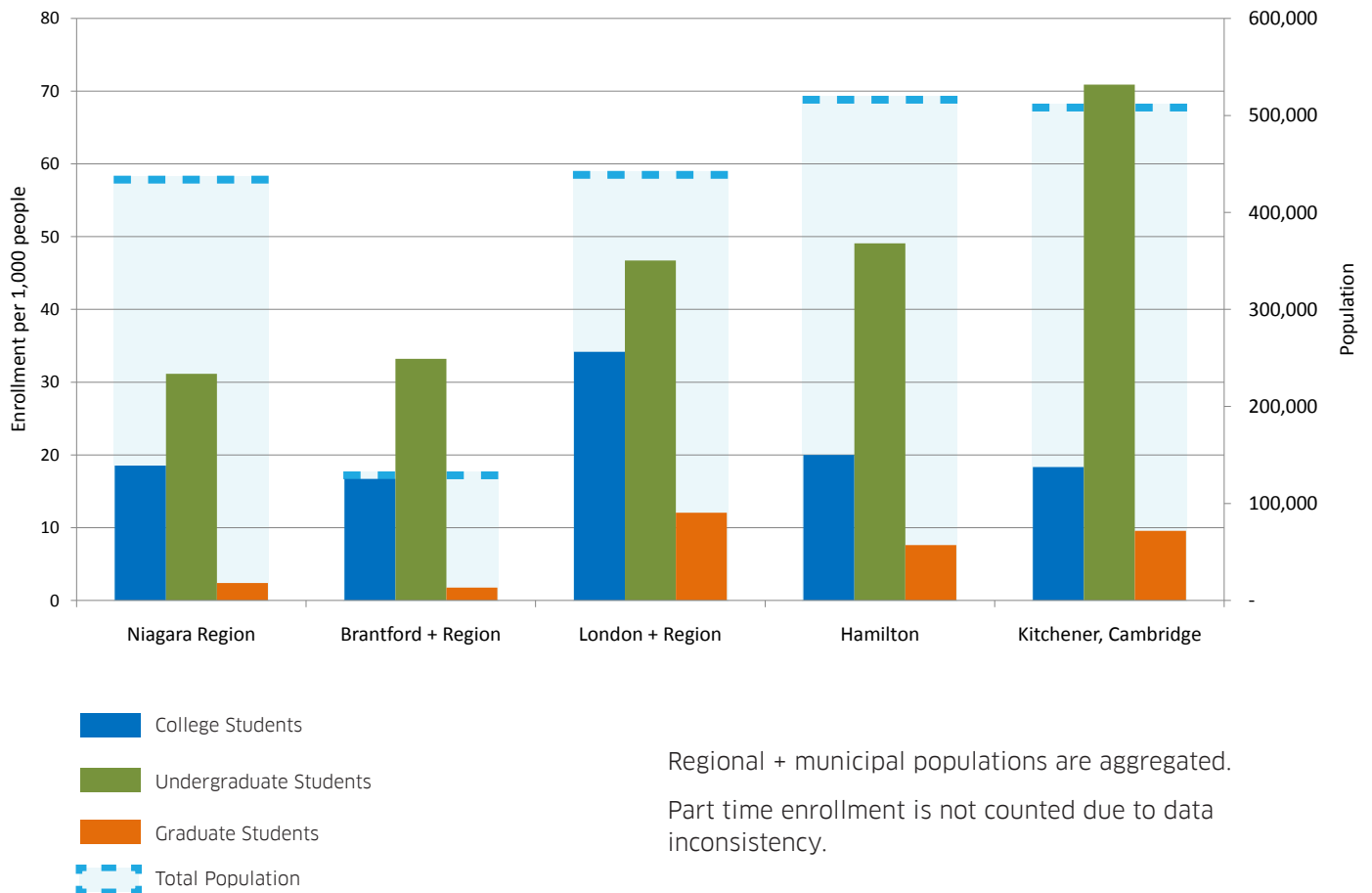
Considering Niagara Region's population, it is currently underserved by post-secondary institutions in comparison with neighbouring regions (see Figure 2-2). Further, the majority of the post-secondary enrollment spaces in Niagara Region are concentrated in St. Catharines rather than in Niagara Falls.

3 Niagara Falls is assessed at the regional level (Niagara Region) to provide a broader perspective, and in recognition of the area's economic interdependency. Analyzed alone, Niagara Falls level of post-secondary coverage is significantly lower as the primary institution (Brock) is located in St. Catherine's.

4 Population Figures are sourced from Statistics Canada 2011 Census, and enrollment spots are derived from publicly available information released by post-secondary institutions.

Despite having a relatively large population, the Niagara region has a low number of post secondary enrollment spots per 1,000 people.

Fig. 2-1: Full Time Post-Secondary Enrollment per 1,000 Residents



A large number of existing post-secondary institutions are clustered near Kitchener-Waterloo, Hamilton, and London. The Niagara Region is comparatively underserved.

Fig. 2-2: Total Full Time Enrollment Spots per 1,000 Residents



Transportation Links:

- Proximity to QEW and I-90 in New York State
- GO / VIA Train
- GO Bus
- Intermunicipal Bus Service
- U.S. High Speed Rail Service
- Hamilton Airport proximity (45 minutes)
- Buffalo Airport proximity (25 minutes)

Car Costs:

- 41% of students in Canada have cars
- Ownership costs per year are significant (i.e. \$7,725 to drive a Civic LX 12,000 km)
- GO Train Station adjacent to proposed campus
- For \$15, students can go from downtown Niagara Falls to downtown Toronto in 2 hours

2.3 Population Coverage & Regional Connectivity

Niagara Falls is strategically located and highly connected, allowing a campus in Downtown to achieve;

- a. Post-secondary coverage to a broad area with a significant population.

420,000 Canadians, and 1.17 million Americans, live within a 45 minute drive time of Downtown Niagara Falls. Niagara Falls is already served by VIA Rail and summer GO Service (future year-round service) (see Figure 2-3).

- b. Draw on potential US students, and minimize the outflow of Canadian students to the US.

A 2011 Deloitte study estimated that 600 Canadians per year are attending American post-secondary institutions near the Niagara Falls border, at a net loss to the Ontario economy of \$25.2 million per annum.⁵ In addition, every gained international student contributes significantly to the provincial economy. The strategic location of Niagara Falls will strengthen provincial student retention, and increase international student attraction.

- c. Reduce the financial burden of transportation costs on students.

59% of Canadian students do not own a car, and for those that do, the annual financial burden can be close to the actual cost of tuition itself.⁶ As a result, access to a regional excellent transit system is beneficial not only in extending the draw of a post-secondary institution, but also for reducing financial burdens on students. With nearly all of Downtown Niagara Falls accessible within a 10 minute walk from the train station, a future campus would have a high degree of connectivity with other cities in the greater region (see Figure 2-4).

- d. Increase partnership opportunities with institutions elsewhere in Ontario.

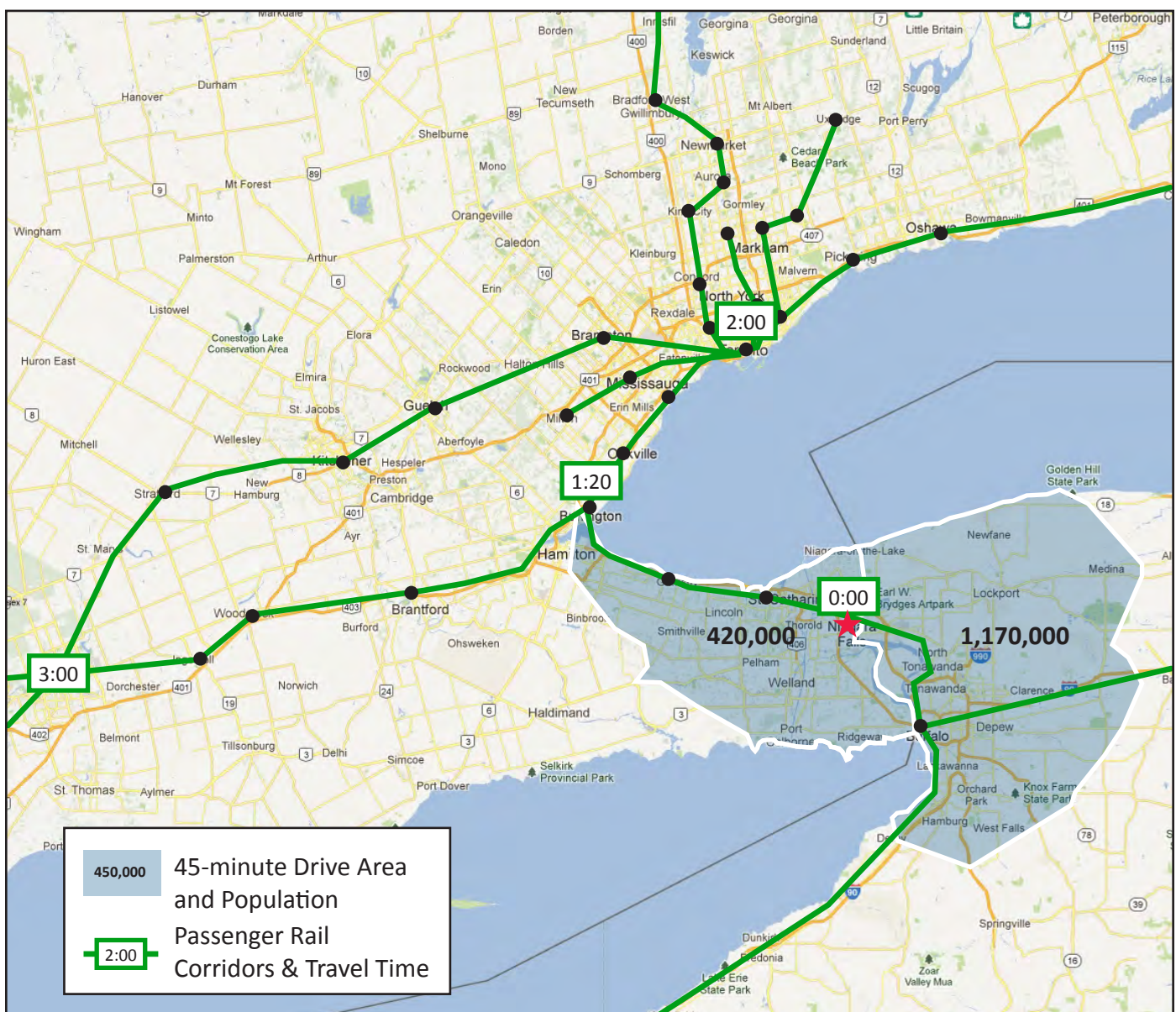
By GO Train, travel time to Toronto's Union Station is only two hours, and many other destinations can be reached in less time. In addition, 14 GO buses per day depart from Niagara Falls. This transit connectivity will allow students access to external learning opportunities, and increase the potential for partnerships with other post-secondary institutions.

⁵ Niagara Border Study: 10 Years After 9/11 Binational Economic & Tourism Alliance, Deloitte. June 2011

⁶ Students as Consumers - A Syndicated Study Student Wallet Module, Student Awards Inc. February 2010

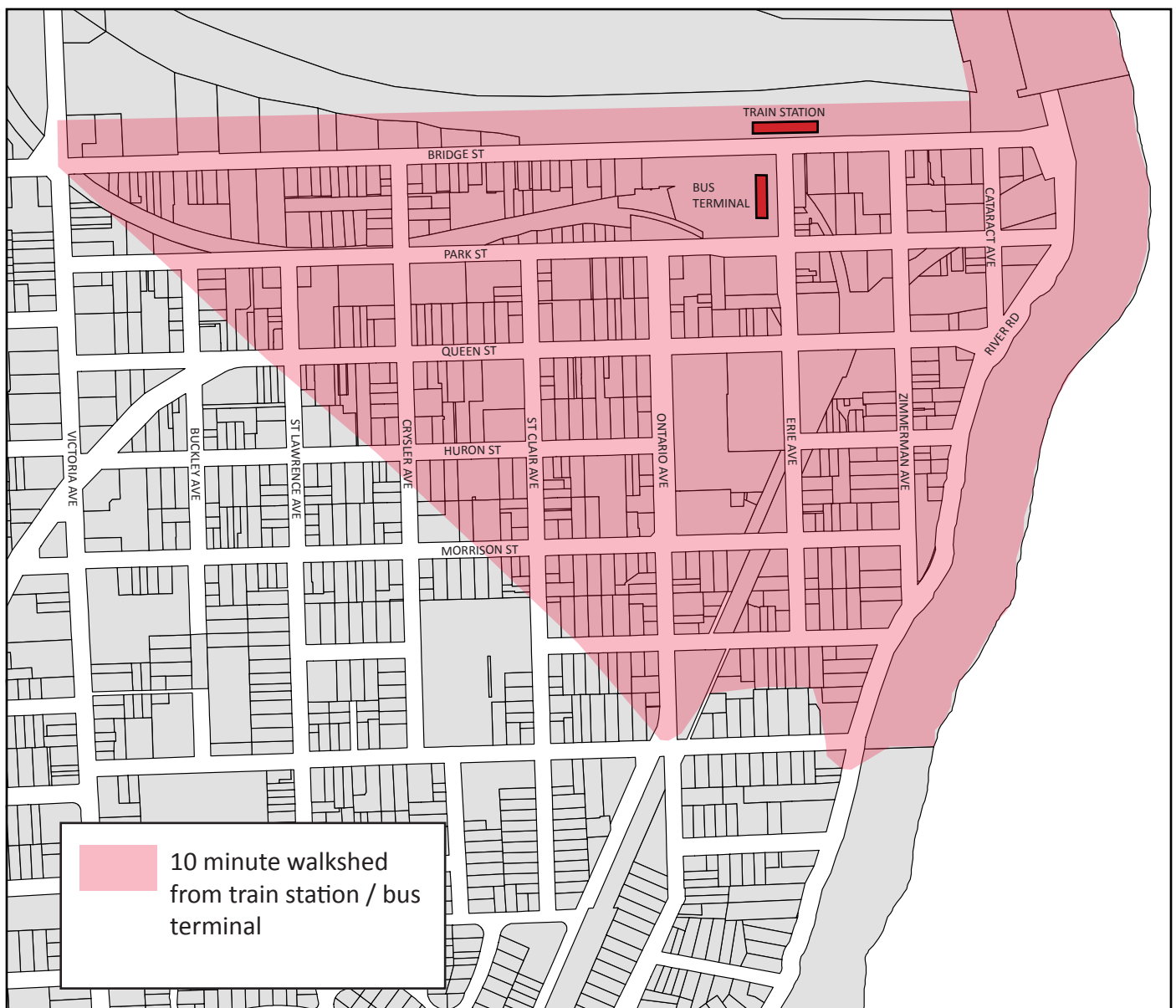
Downtown Niagara Falls is strategically located and highly connected - 1.59 million residents live within a 45 minute drive time of Downtown Niagara Falls, and more are within reach of bus and rail.

Fig. 2-3: Future VIA & GO Train Networks + 45 min. Drive Time Population



Most of Downtown Niagara Falls is within a ten minute walk of the train station and bus terminal.

Fig. 2-4: 10 Minute (800m) Walking Distance from Train Station / Bus Station



2.4 Minimize Investment Cost

To minimize the investment required per enrollment spot, a post-secondary institution can achieve campus development savings in land costs and infrastructure costs.

Land costs can be reduced by making use of City-owned properties which will be offered to an incoming post-secondary institution without charge. In total, the City owns over 14 acres of land within close proximity to Downtown's core (see Figure 2-5).⁷ Additional land, as required, can be purchased or expropriated at market rates which are well below average for mid-sized Ontario city downtowns (see Figure 2-6).

In addition to saved land costs, recent and ongoing upgrades to Downtown's infrastructure network (net investment of over \$13 million) will reduce future needs.⁸ The existing infrastructure, in addition to budgeted upgrades along Bridge Street in 2014, will help support increased population capacity with minimal cost. Niagara Falls is also in the unique position of being a majority owner in Niagara Falls Broadband Network which is currently in the process of bringing fibre optics and free wifi into Downtown. The existence of this infrastructure will help a post-secondary institution reduce the cost burden of bringing in fibre optic cables, an essential component in modern education institutions.

By repurposing existing vacant properties (see Figure 2-7), the total amount of built space required to accommodate a post-secondary institution could be further reduced, lowering the magnitude of the required upfront investment. Currently, 43% of ground floor space within Downtown is vacant, and approximately 50% of above grade space is available.⁹ This high vacancy could accommodate non-core post-secondary institution uses, such as offices and student residences. Existing facilities, such as the historic Seneca Theatre (330 seats), could be used as a lecture hall with minimal investment. Rented ground floor space can be secured for approximately \$6 to \$9 per square foot per month (plus maintenance). In addition to reducing investment costs, more affordable residential rentals (\$0.75 to \$1 per square foot per month¹⁰) and home purchase prices would reduce living costs for students and faculty.

9 Commercial real estate data provided through interview with local leasing broker active in Downtown Niagara Falls

10 Data provided by Canada Mortgage and Housing Corporation

7 Information provided by City of Niagara Falls

8 Information provided by City of Niagara Falls

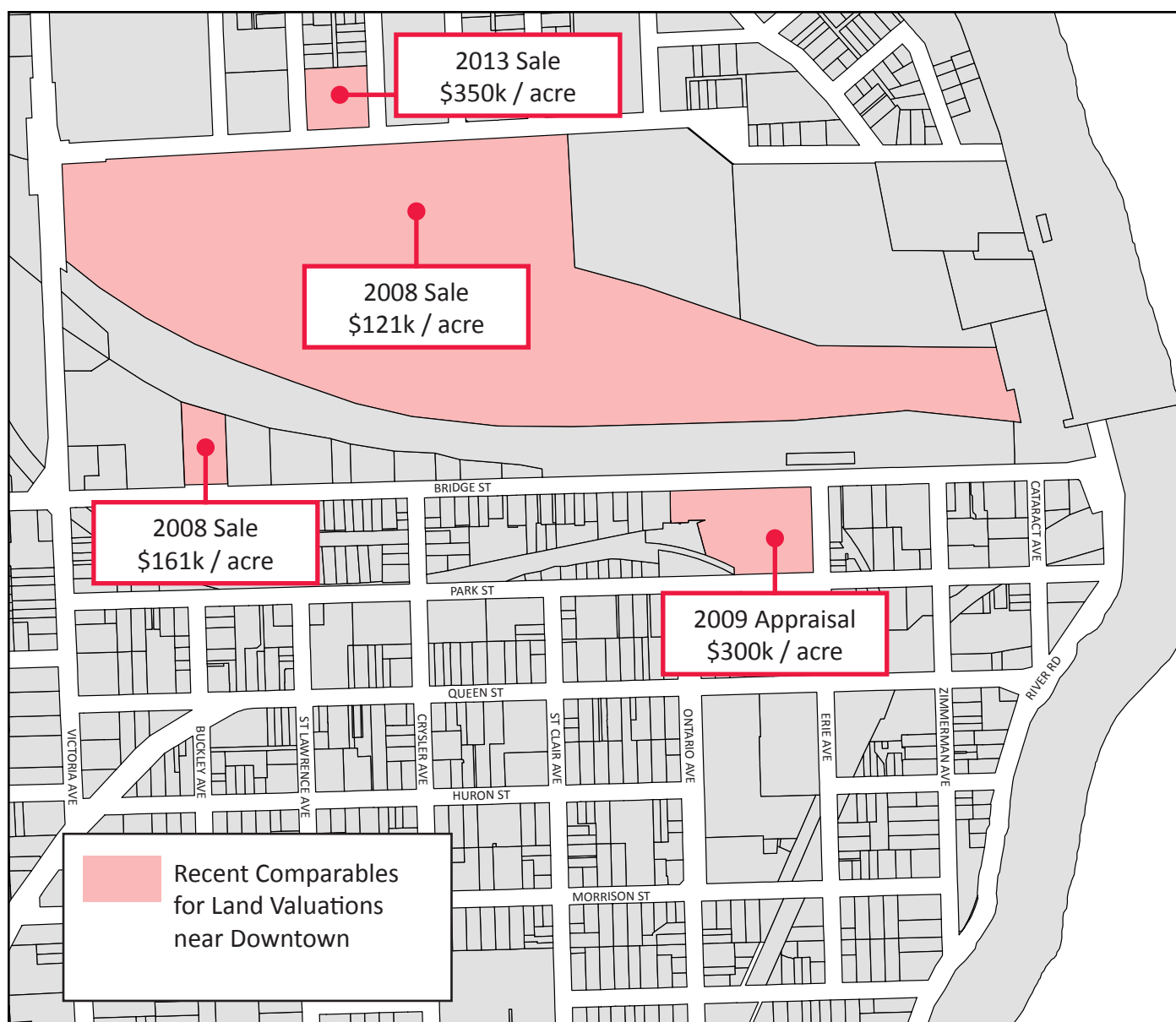
The City of Niagara Falls owns over 14 acres of land in and near Downtown, available to an incoming post-secondary institution at no charge.

Fig. 2-5: City-Owned Lands Within Downtown



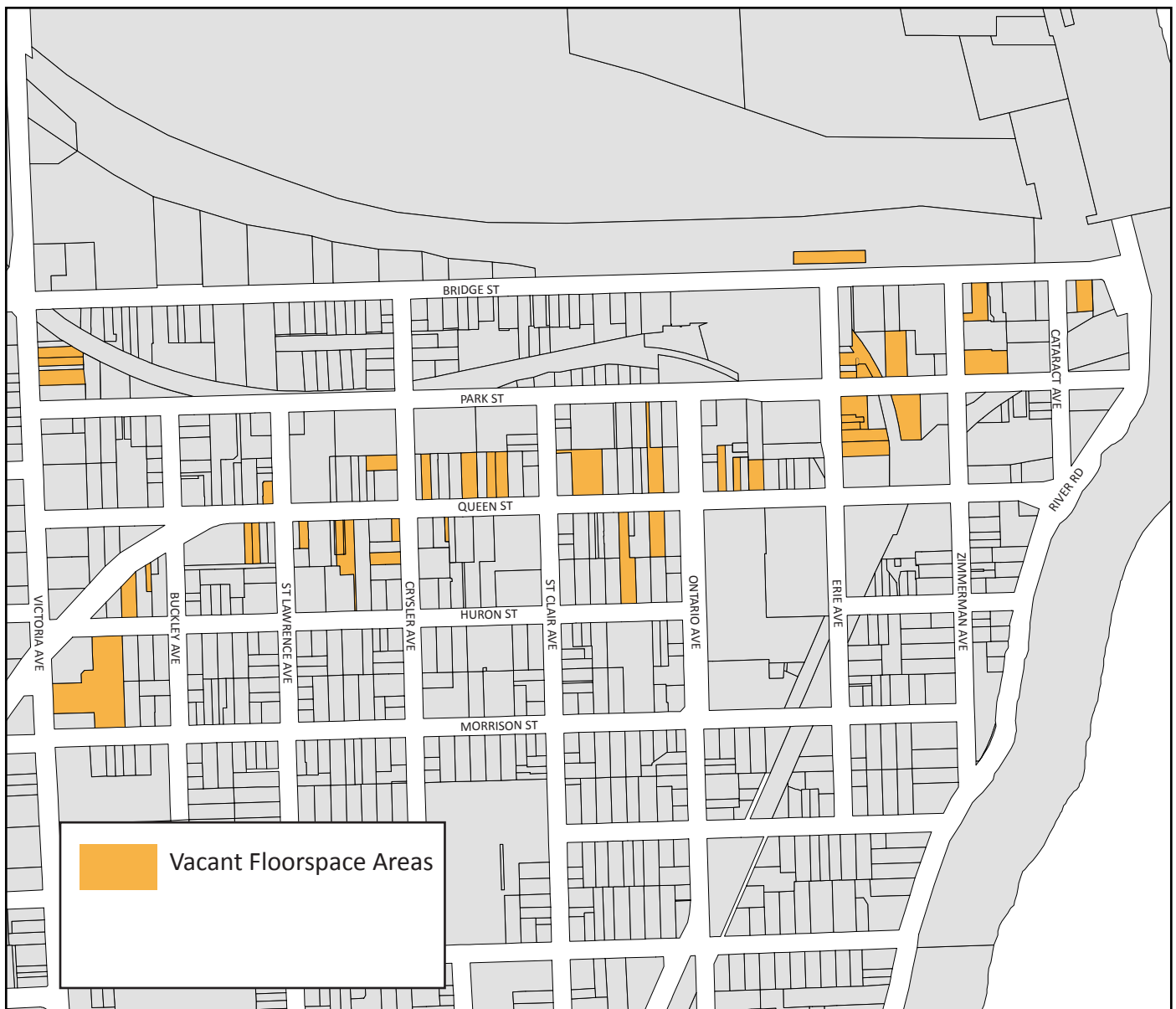
Additional land is available Downtown at market rates which are well below average for mid-sized Ontario city downtowns.

Fig. 2-6: Land Transaction Prices Near Downtown



43% of ground floor space within Downtown is vacant, and approximately 50% of above grade space is available.

Fig. 2-7: 2013 Vacant Ground Floor Space in Downtown



2.5 Maximize Revenues

On a population-weighted basis, British Columbia attracts 61% more international students than Ontario.¹¹ International students are a major source of revenue for Ontario universities, and an important contributor to the economy. On average, international students spend \$34,000 annually (including tuition), and contribute \$21,200 to the GDP.¹² In addition, for every 3 international students, it is estimated that 1 Canadian job is created.

In 2010, as part of the Open Ontario plan, the Province announced an objective of increasing international enrolment in Ontario colleges and universities by 50 per cent. The rationale for this initiative was that it would provide cultural, intellectual, and economic benefits, all contributing to strengthening Ontario's position in a global market economy.¹³

Niagara Falls has an unparalleled brand - it is consistently ranked as one of the top 3 internationally recognizable Canadian attractions in surveys by the Canadian Tourism Commission, outranking other major cities.¹⁴ In addition, 1.17 million US residents live within a 45 minute drive of Niagara Falls. By virtue of its strong brand, and its location near the Canada / US border, a post-secondary institution in Downtown Niagara Falls would be uniquely positioned to recruit and attract international students to Ontario.

14 Canadian Tourism Commission, Global Tourism Watch Annual Reports (various countries)

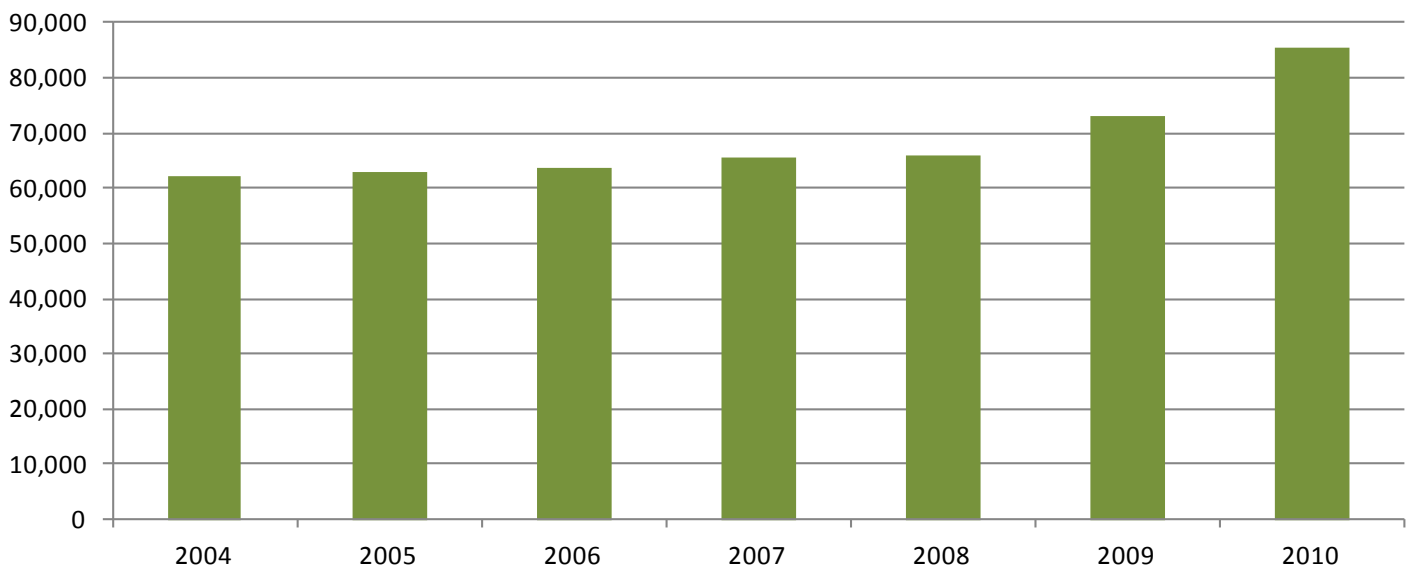
11 Economic Impact of International Education in Canada, Roslyn Kunin & Associates, Inc. (RKA, Inc.). Prepared for Foreign Affairs and International Trade Canada. July, 2009

12 Economic Impact of International Education in Canada, Roslyn Kunin & Associates, Inc. (RKA, Inc.). Prepared for Foreign Affairs and International Trade Canada. July, 2009

13 Open Ontario, Ontario's Plan for Jobs and Growth. Queen's Printer for Ontario, 2010

On average, international students spend \$34,000 annually, contributing \$21,200 to GDP. For every 3 international students, 1 job is created.

Fig. 2-8: Growth of International Student Enrollment in Ontario

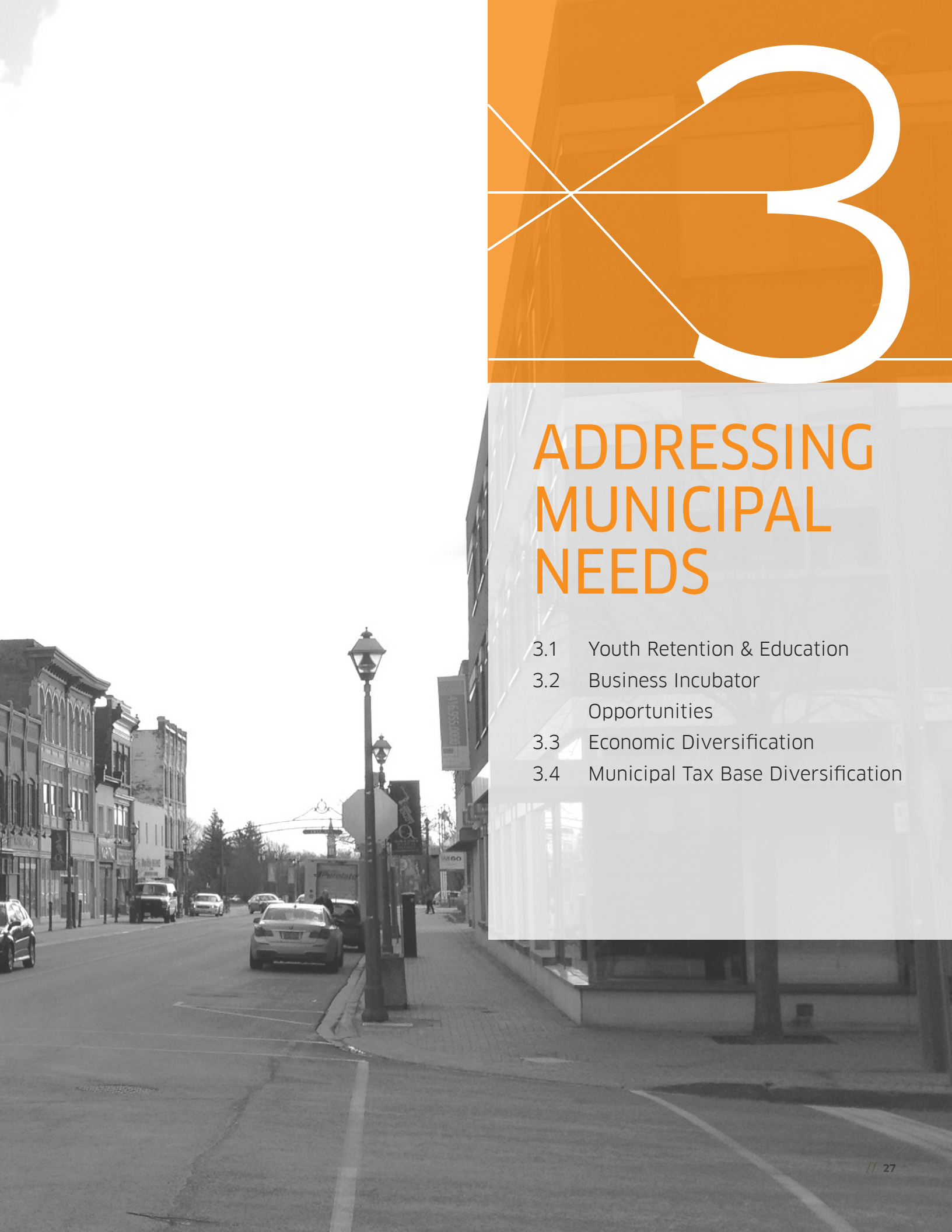






ADDRESSING MUNICIPAL NEEDS

- 3.1 Youth Retention & Education
- 3.2 Business Incubator Opportunities
- 3.3 Economic Diversification
- 3.4 Municipal Tax Base Diversification



3.0 // ADDRESSING MUNICIPAL NEEDS

Niagara Falls has historically served an important economic role within Ontario, both in terms of manufacturing and tourism. As the manufacturing base declined, tourism has increasingly grown to become a dominant driver of the Niagara Falls economy. Currently, 9 of the top 10 employers in Niagara Falls are related to the tourism sector, and collectively employ over 12,000 workers.¹

Despite this strength, Niagara Falls has yet to meet its full economic potential, and continues to suffer from an unemployment rate above the provincial average. New sectors, such as agricultural spin-off industries, health care related sectors, green energy, digital media, and advanced manufacturing are beginning to emerge. However, the growth of these sectors is limited by a lack of educated young adults entering the local job market.² Due to the minimal number of post-secondary enrollment spots available, Niagara Falls experiences an outmigration of young adults who leave for education reasons, and who often stay to work outside the city.³ Based on experiences in nearby Ontario cities, such as Waterloo and London, a post-secondary campus in Niagara Falls could provide a boost to incubating these emerging sectors, stem the outflow of youth, and enable the city to achieve a greater level of economic

diversification.

Achieving greater economic diversification would have a number of important potential benefits for Niagara Falls, including:

- a. Enabling Niagara Falls employment structure to more closely resemble provincial averages;
- b. Increasing the resiliency of Niagara Falls' economy to withstand negative impacts on the tourism market, such as the construction of a competing resort-casino in the GTA;
- c. Cultivating the development of businesses in Downtown's core, an area which has largely been unaffected by Niagara's tourism industry;
- d. Diversifying Niagara Falls' municipal revenue structure away from its current dependence on tourism-related commercial properties;
- e. Attracting higher paying jobs into Niagara Falls to balance out the municipality's comparatively low average household income;
- f. Balancing the seasonality of the tourism-based economy with an activity that thrives during the tourism off-season.; and
- g. Better aligning Niagara Falls' economy to benefit from Ontario's growing and creative cultural sectors.

1 Information provided by City of Niagara Falls

2 Interviews with Niagara Falls Small Business Enterprise Centre

3 See data presented within Municipal Needs Assessment: Youth Retention & Education

3.1 Youth Retention & Education

Less than 20% of Niagara Falls residents aged 25 to 34 have a post-secondary certificate, diploma, or degree. In comparison, the Ontario average is 33%, and many mid-sized cities are above 25% (see Figure 3-1).⁴ Due to a lack of enrollment spaces, to receive post-secondary education most young adults must travel outside of Niagara Falls, and in many cases, out of the Niagara Region altogether.

A demographic cohort analysis shows that, approximately, a net 1,950 residents aged 20 to 39 have migrated out of Niagara Falls (see Figure 3-2)⁵, suggesting that youth that move away for education reasons are staying to work in their host cities after graduation. In addition, Niagara Falls is forgoing the business incubation opportunities generated by the presence of young talented graduates, as seen in cities such as London, Waterloo, and Kitchener.

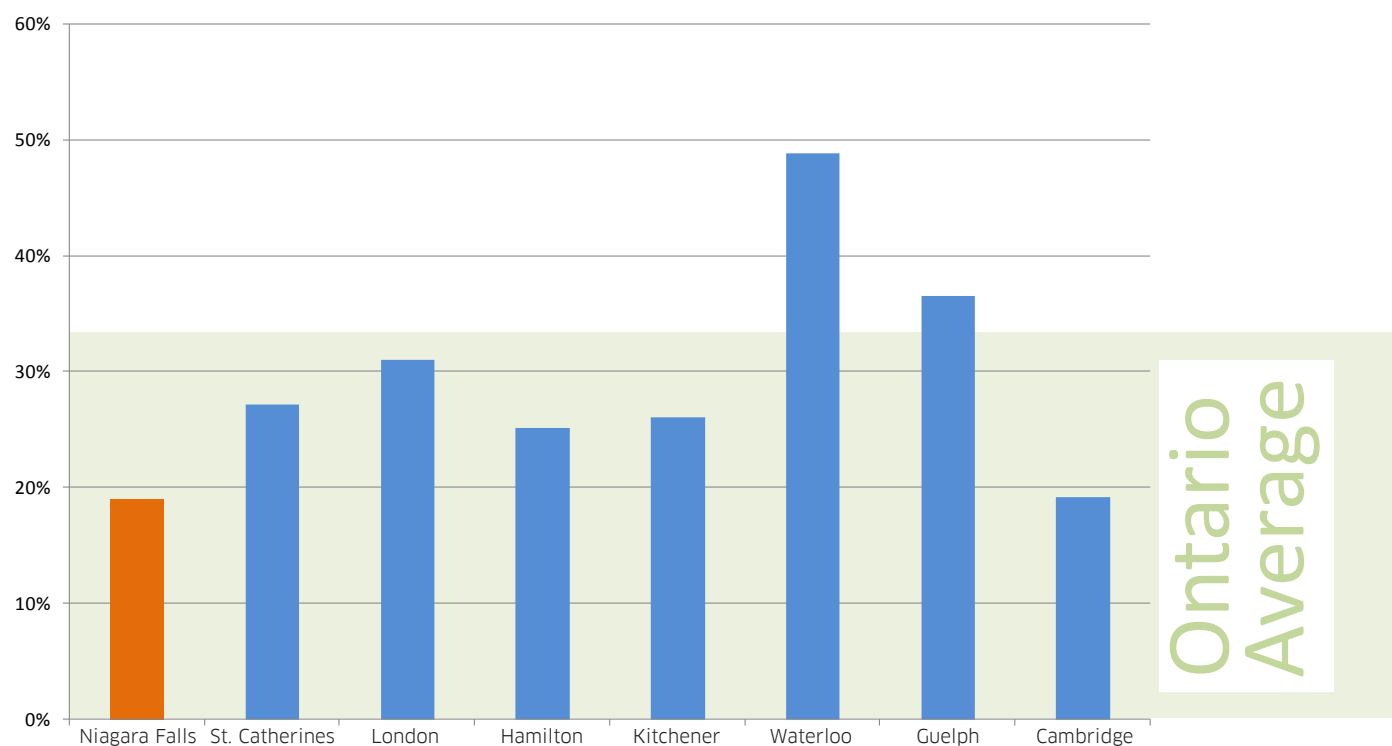
Currently, 95% of the local economy is driven by small and medium sized businesses. A post-secondary institution would help create an environment for homegrown business to establish and flourish through the provision of talented labour, and access to innovation and creative research.

4 Statistics Canada, 2006 Census of Canada

5 Estimated by comparing Niagara Falls demographic age cohorts with provincial averages, based on Statistic Canada data, 2011 Census of Canada

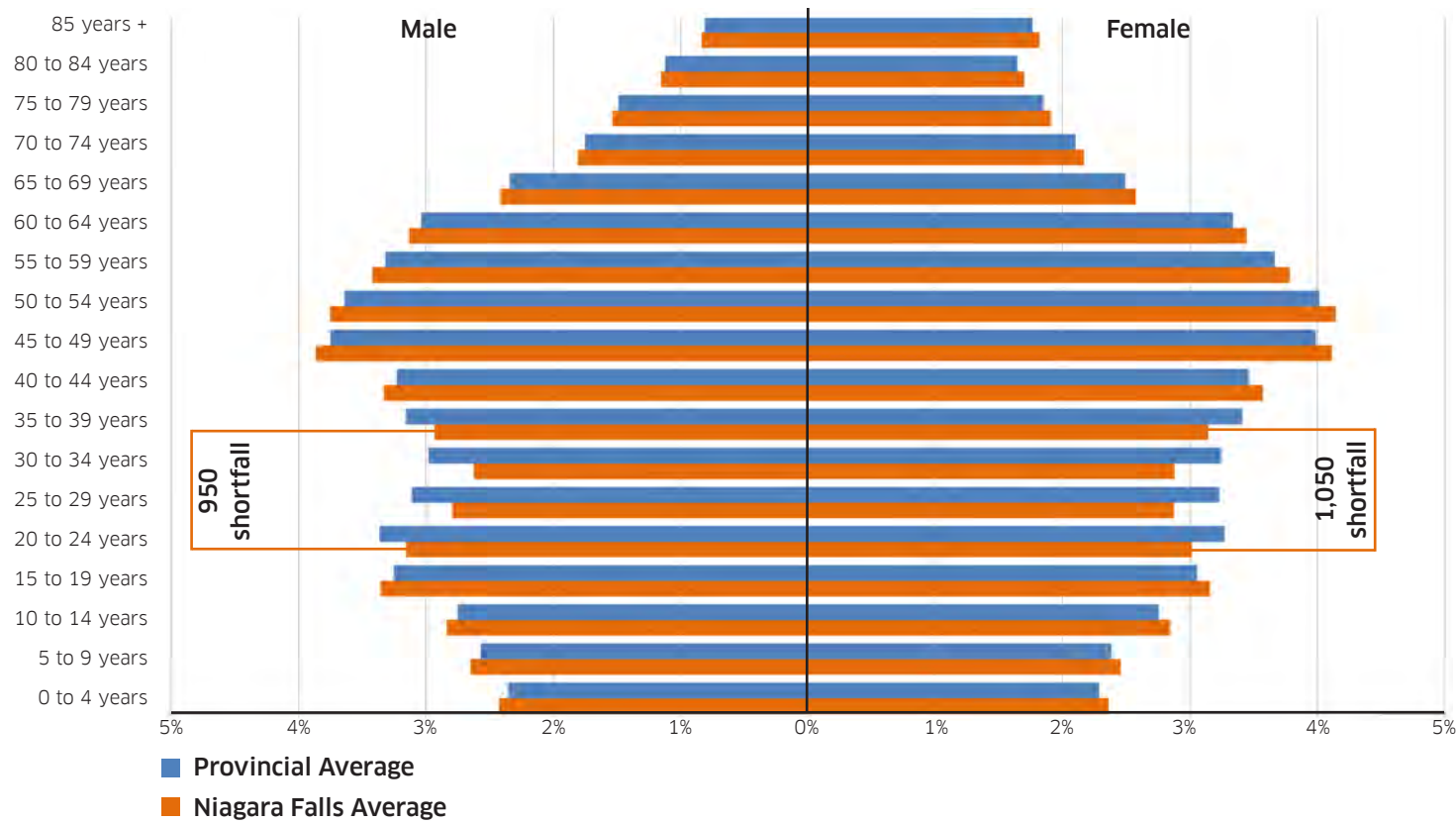
A lack of post-secondary enrollment spots contributes to a comparatively low percentage of the Niagara Falls population obtaining a university certificate, diploma, or degree.

Fig. 3-1: % of Population Aged 25 to 34 with Post-Secondary Certificate, Diploma, or Degree (2006 data)



The 2011 Census shows approximately 1,950 less people aged 20 to 39 are living in Niagara Falls than expected (when compared with province-wide demographics)

Fig. 3-2: Niagara Falls Population Cohorts vs. Ontario Average



3.2 Business Incubator Opportunities

One of the primary objectives of securing a post-secondary campus in Downtown Niagara Falls is the development of new business opportunities, as well as creating the conditions to stimulate the growth of existing firms. To assess this potential, historic job growth was analyzed alongside interviews with local economic development specialists.

When job growth rates are compared between 1996 and 2012, it is evident that the Niagara Region has seen significant growth in the agricultural sector compared to the province as a whole (see Figure 3-3).⁶ In particular, the value-added component of the agricultural sector has led to new opportunities and is considered a best practice for economic growth. This sector has been boosted by the local presence of specialized post-secondary education, such as Niagara College's Winery and Viticulture Technician program. This program works synergistically with the surrounding vineyards and wineries, building a clear link between post-secondary education, business incubation, and employment growth. With the development of a Downtown Niagara Falls post-secondary campus, this business incubation cycle could be extended to other emerging growth sectors.

6 Statistics Canada, Labour Force Survey, 1996-2012

Emerging Growth Sectors ⁷

The following emerging growth sectors have been identified through interviews as partnership opportunities for a post-secondary institution in Niagara Falls.

Advanced Manufacturing: Recent investments in new manufacturing facilities, such as Cytec, and Provincial Design and Fabricating, are examples of growing opportunities in the advanced manufacturing sector. These firms require staff trained in mechanical and industrial engineering, as well as skilled machinist operators.

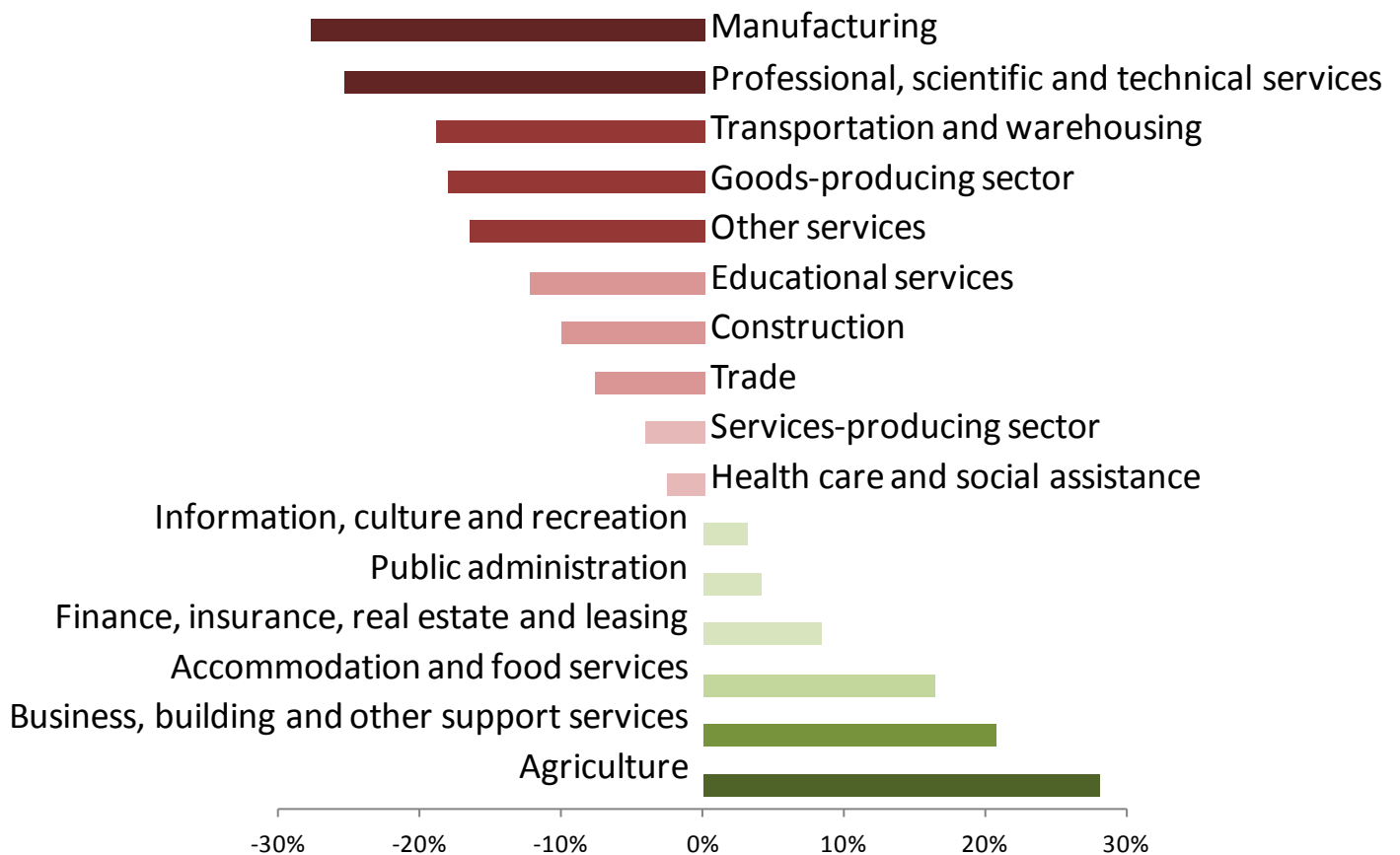
Health Care: Niagara Falls has been identified as the site for development of a billion dollar Niagara South Hospital, and is planning a substantial medical business park adjacent to the site. In addition, a growing influx of aging residents is leading to increasing demand for health care related services and professions. Training in nursing, medical schools, and social services are needed to support this sector.

Agriculture: As shown by the growth of the winery sector, the benefits of linking agriculture, value-added industries, and tourism can be significant. New investments in the agricultural sector are allowing a greater variety of food types to flourish within the surrounding region. Improved training in horticulture, combined with education streams supportive of local food production and consumption, will help enhance this emerging sector.

7 Interviews with Niagara Falls Small Business Enterprise Centre and The Niagara Falls Business Development Division

The Niagara Region has been outpacing the province in agriculture; business, building, and other support services; accommodation and food services; and finance, insurance, real estate and leasing.

Fig. 3-3: Niagara Regional Competitive Advantage: Ontario 1996 – 2012
Relative Job Growth / Niagara 1996 – 2012 Relative Job Growth



Hospitality: Providing an increased offering of activities for visitors, such as developing a renowned local restaurant, café, and wine bar culture, could help cushion Niagara Falls' tourism volume from seasonal and annual fluctuations. In addition, it may enable more tourism dollars to flow into the historic Downtown. Local training in hospitality services, cultural programming, and culinary arts could help Niagara Falls achieve broader diversity in the hospitality sector.

Digital Media: Niagara Falls has seen a number of emerging digital media companies take root within the city, such as Rev Publishing, Brink Studios, and Meridian Reservations Systems. These creative class companies draw on talented young workers within Niagara Falls, and could emerge as an important element of the city's new economy. Talented staff trained in graphics, media, computer programming, and website / app development are needed for these firms to thrive.

Green Energy: Many forward-thinking companies in Niagara are now focusing on opportunities within the green energy sector. Niagara's manufacturing base has been applying its depth of knowledge in heavy metal fabrication to new opportunities to manufacture wind energy components. The Niagara Industrial Association, a consortium of local manufacturers, is leading a drive to diversify its operations and make inroads into not only wind energy, but solar, and other green energy component manufacturing, while small entrepreneurial companies are exploring niche markets in the same sectors.

Niagara Falls already possesses many of the basic elements recognized as essential grounding blocks of successful business incubation environments, including;

- A municipally owned fiber optics internet company, providing high speed internet connectivity;
- Low living costs for employees, coupled with a high concentration of nearby lifestyle amenities attractive to creative sector workers;
- A low cost of doing business due to minimal real estate purchase prices and rents;
- Geographic proximity to key Canadian and US markets, the presence of the US / Canada border, and access to major regional transportation networks; and
- A strong international brand awareness of Niagara Falls.

Through these factors, it is anticipated that a Downtown post-secondary campus would provide considerable support to emerging growth sectors in Niagara Falls by attracting talented young adults, and strengthening youth retention rates.

3.3 Economic Diversification

Approximately one in four jobs in Niagara Falls are estimated to be generated by direct tourism spending and indirect spin-off impacts (see Figure 3-4).⁸ Tourism has helped transition Niagara Falls away from a manufacturing economy, but also has left the city dependent on visitor volume fluctuations (see Figure 3-5). CAD-USD currency fluctuations, global recessions, and the development of competing attractions (e.g. a GTA Casino), are all risk factors that Niagara Falls tourism economy has to contend with. As the past decade has shown, the tourism sector is a highly variable industry that is dependent on factors external to Niagara Falls. As discussed in *Municipal Needs: Business Incubator Opportunities*, the addition of a post-secondary institution in Niagara Falls could help stimulate the growth of emerging sectors, and subsequently increase economic diversification.

As well, seasonal variations in Niagara Falls tourism sector mean significant revenue declines in winter months. Inconsistent sales volumes are a major operational barrier for retailers and restaurants. Retail spending generated by students, faculty, and visitors to post-secondary institutions is generally an inverse profile of the tourism industry – low summer spending, but high spending in fall, winter, and spring. By combining the spending generated by post-secondary institutions with tourism spending, a far greater diversity of retail related businesses could become viable within the city. In addition, these seasonal fluctuations would provide numerous summer employment opportunities to post-secondary students in Niagara Falls.

8 'Economic Impact Analysis of Tourism Development in the Niagara Region - 1996, 1997 and Proposed 2002' and 'Niagara Investment Opportunities' (Commissioned by the Niagara Economic and Tourism Corporation)

1 in 4 jobs in Niagara Falls are estimated to be generated by direct tourism spending, and indirect spin-off impacts - leaving the city dependent on a seasonally impacted industry.

Fig. 3-4: Employment Structure of Niagara Falls vs. Ontario Average ¹

¹ Statistics Canada, 2006 Census of Canada

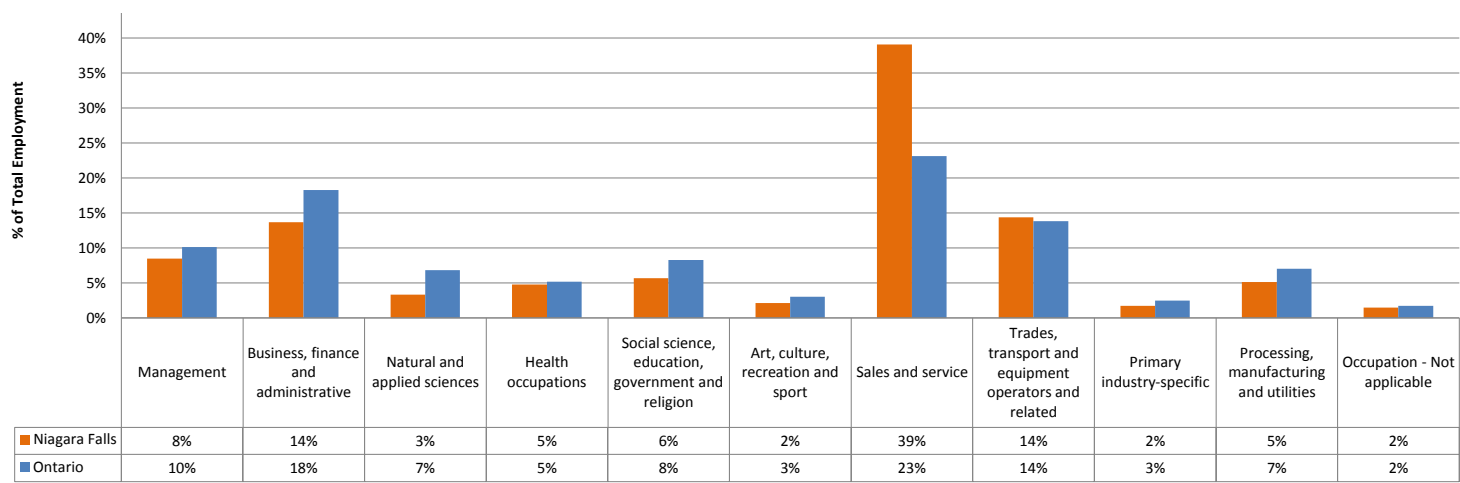
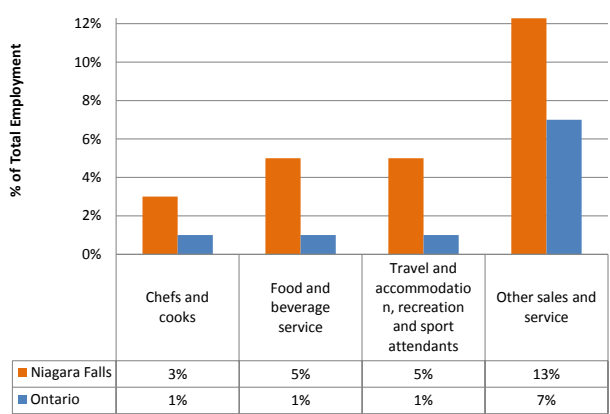


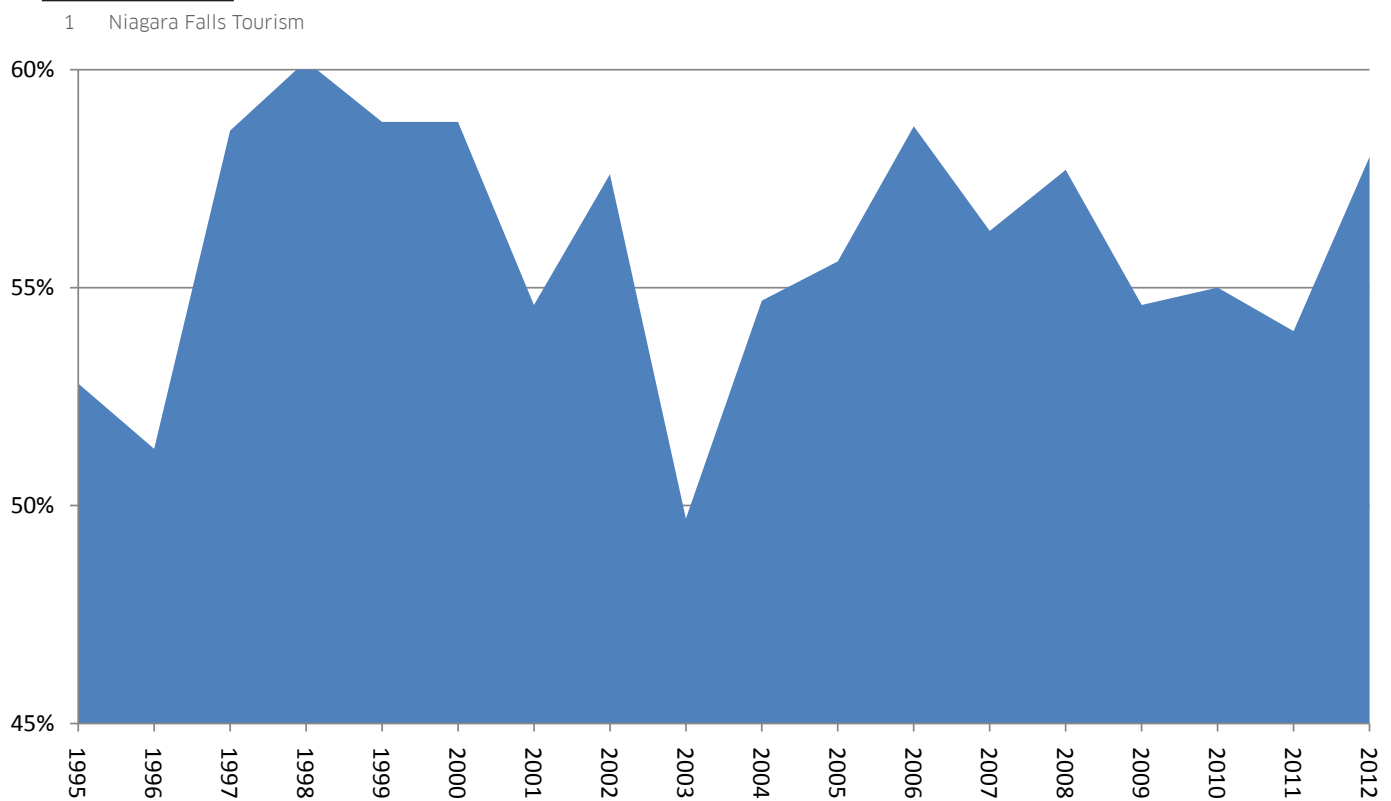
Fig. 3-5: Sales and Service Employment ¹

¹ Statistics Canada 2006, Census of Canada



The tourism sector is a highly variable industry and dependent on factors external to Niagara Falls. Diversifying the economy will help cushion Niagara Falls from future shocks on the tourism industry.

Fig. 3-6: Niagara Falls Hotel Occupancy Rates, 1995 - 2012 ¹



3.4 Municipal Tax Base Diversification

Out of the 86 municipalities surveyed by BMA Management Consulting for the 2012 Municipal Study, Niagara Falls has the highest percentage of its tax base originating from commercial properties (see Figure 3-8).⁹ This is a result of the large tourism-oriented commercial base in relation to the city's population, an asset which has helped stabilize the municipality's finances as the local industrial base declined. This large commercial tax base helps reduce the overall tax burden on households, keeping the municipality financially competitive, and reduces the cost of living for residents. Currently, the average municipal burden (property taxes + water / sewer costs) of households in Niagara Falls is \$3,726 per year, 11% lower than Ontario municipal average. Despite this low figure in absolute terms, the average household municipal burden equates to 5.2% of total household income (see Figure 3-7). Accordingly, BMA has classified Niagara Falls as having a "high municipal burden".¹⁰

Potential risk factors to the tourism industry, such as the construction of a competing casino in the GTA, could necessitate increased residential property taxes. Many properties in the downtown have been reassessed at lower values, reducing property tax revenues and negatively impacting the Downtown BIA's budget. Given the existing high financial burden already faced by Niagara Falls households, diversifying the local tax base is a key objective of attracting a Downtown post-secondary campus.

A Downtown post-secondary campus could reduce municipal revenue risk by increasing the assessed value of nearby properties, inducing new development, and diversifying the overall economy towards a more balanced structure.

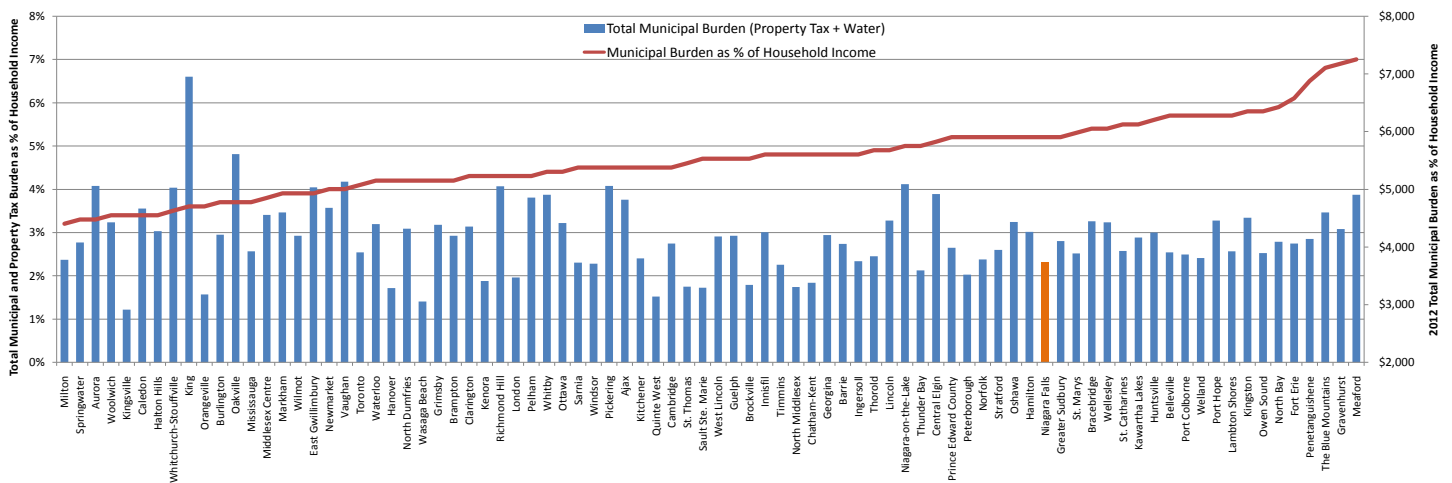
9 BMA Management Consulting Inc., Municipal Study – 2012

10 BMA Management Consulting Inc., Municipal Study – 2012

SECTION 3 ADDRESSING MUNICIPAL NEEDS

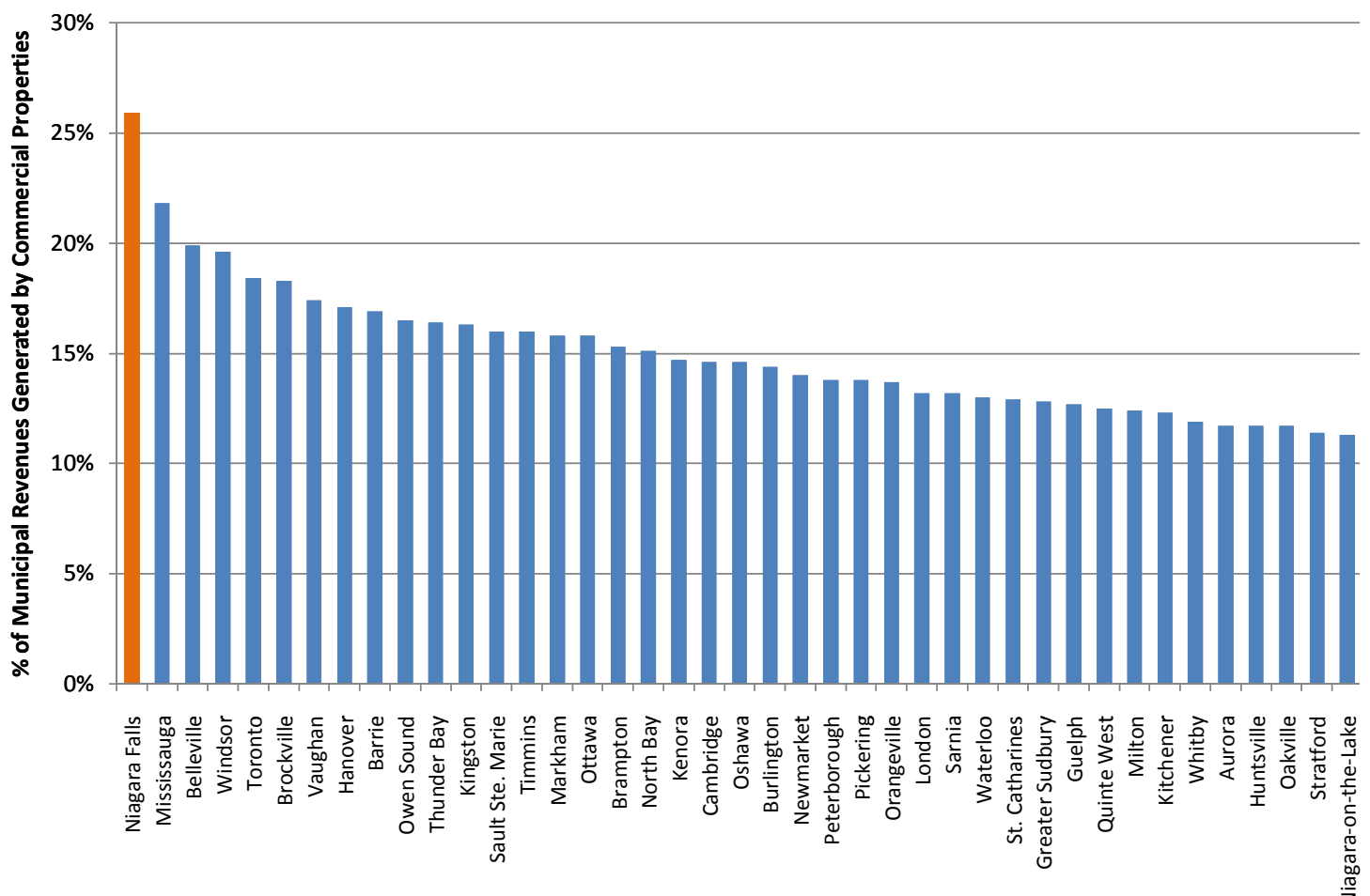
Niagara Falls' lower average household income means that residents face a proportionately higher burden. Any decline in commercial property taxes could represent a significant additional burden for the residents of Niagara Falls.

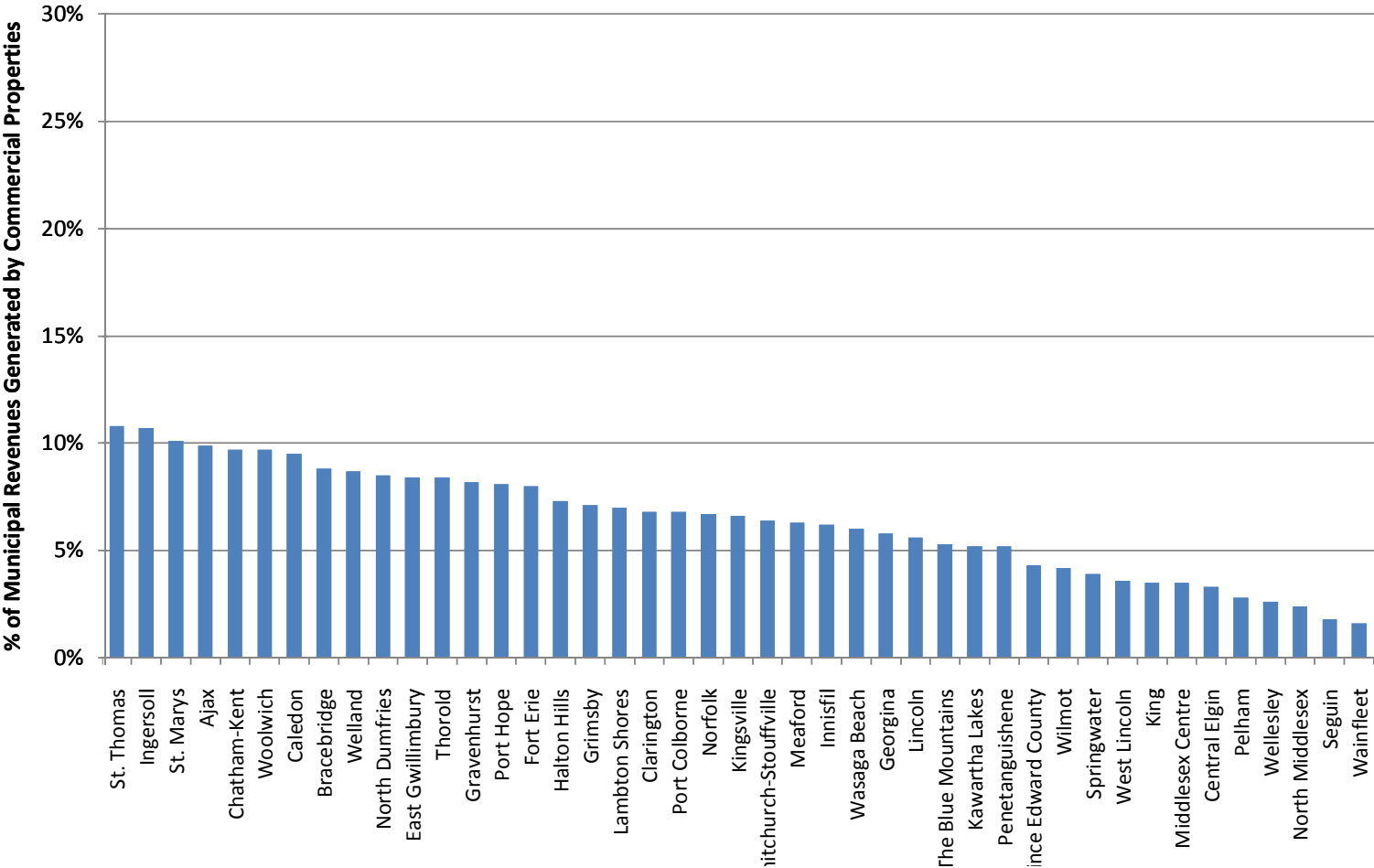
Fig. 3-7: Municipal Burden as a Percentage of Household Income



Out of the 86 municipalities surveyed by BMA for the 2012 Municipal Study, Niagara Falls has the highest percentage of its tax base originating from commercial properties.

Fig. 3-8: Percentage of Municipal Tax Base from Commercial Properties







An aerial photograph of a downtown area, showing a mix of commercial buildings, parking lots, and streets. The image is partially obscured by a large white number '4' on a magenta background in the top right corner.

4

ADDRESSING DOWNTOWN NEEDS

- 4.1 Business Retention, Growth, and Diversification
- 4.2 Reducing Property Vacancy Rates
- 4.3 Balanced Demographics
- 4.4 Strategies to Repurpose Heritage Assets
- 4.5 Activating Streets & Public Spaces

4.0 // ADDRESSING DOWNTOWN NEEDS

Downtown Niagara Falls is characterized by a fine grain block layout, a rich stock of heritage buildings, and well-designed streetscapes and public realm. While Downtown has the urban structure of a vibrant city core, it lacks an economic engine. The current office worker and residential population located within the Downtown is insufficient in volume to activate the 850 meter long main street (Queen Street). Ground floor units are 43% vacant, and above grade units are estimated to be 50% vacant.¹ Despite some recent developments, the overall population in Downtown is declining. Per capita income is 18% below the Niagara Falls average, and 44% below the provincial average.² Although Niagara Falls sees 12 million tourists a year, only a small portion of these spend money within Downtown's core.³ Despite these issues, Downtown Niagara Falls remains safe, foot traffic has increased, and some residents and businesses have begun to relocate to the area.⁴

From the perspective of siting a post-secondary campus, Downtown's underlying economic issues represent a significant opportunity. Empty buildings, free land, cheap rental rates, and existing infrastructure, could allow a post-secondary institution to create an authentic campus environment. Repurposed heritage buildings and quality streets add to the character and prestige of universities, creating unique places and great learning environments.

For Downtown, an appropriately scaled post-secondary institution could be a major economic catalyst capable of revitalizing the area. Increased population density, and existing and affordable built retail space, likely may mean an influx of restaurants, bars, cafes, and stores to serve student and faculty needs. In addition to a diversification of the businesses within Downtown, a campus could help draw young professionals to the area and provide balance to the current demographics which are skewed from the city-average.⁵ Finally, a Downtown campus and vibrant street environment could help Downtown Niagara Falls to become recognized as an important tourist attraction, multiplying the economic impact by drawing increased visitor spending dollars.

5 Environics Research Group, 2012 Estimates & Forecasts

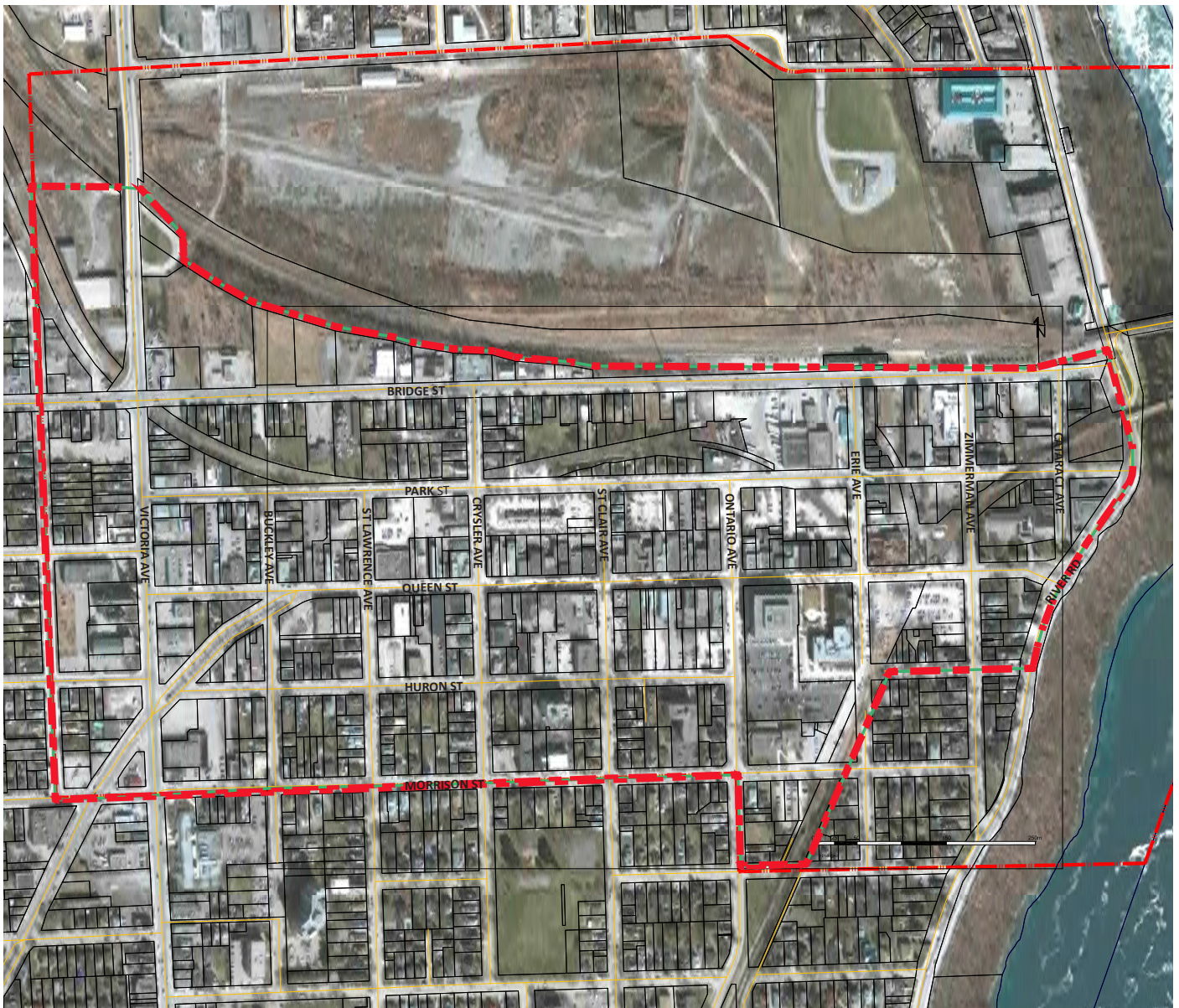
1 Commercial real estate data provided through interview with local leasing broker active in Downtown Niagara Falls

2 Environics Research Group, 2012 Estimates & Forecasts

3 Niagara Falls Business Development Division

4 Interview with local leasing broker active in Downtown Niagara Falls

Fig. 4-1: Boundary Map of Downtown Niagara Falls (CIP Area)



4.1 Business Retention, Growth, and Economic Diversification

1,200 employees work within Downtown Niagara Falls, including a number of major employers such as Hatch Engineering (230 staff).⁶ Most private companies are small in scale, with an emphasis on professional services, financial services, community services, and retail. The retail profile of Downtown can be best described as being oriented towards serving local residents and workers. This characteristic is illustrated by the fairly low representation of clothing stores, a business type that generally requires a regional draw to thrive.⁷

In recent years, new investment has occurred in Downtown, in part due to a municipal grants program that has triggered a return of \$8.3 for every \$1 of grant money since 2007. Despite this investment, there is a need to ground Downtown with a more robust local economy, a larger critical mass of employees, and a greater diversity of both office sector and retail related businesses. The presence of a post-secondary campus, affordable real estate, and existing infrastructure in-place, could greatly support this objective by:

- Increasing local retail spending;

- Incubating new businesses that are created as spin-offs from the post-secondary institution;
- Supporting the growth of existing businesses through a supply of talented labour;
- Creating an environment that attracts existing residents and businesses from across Niagara Falls to Downtown; and
- Stimulating new investment into Downtown.

Investment opportunities that can be leveraged from the presence of a Downtown campus have already been recognized by the private sector. If a downtown campus is to become a reality, private sector investment is necessary.

⁶ Information provided by City of Niagara Falls

⁷ Retail inventory undertaken by Joseph Urban Consultants and Altus Clayton Division of Altus Group Limited for the Market Overview and Economic Analysis of the Strategic Implementation Plan (SIP)

Downtown Niagara Falls needs to attract and retain more high value-added jobs to thrive, creating a virtuous cycle that supports a higher level of retail service and amenity provision through increased consumer density.

Fig. 4-2: Hatch Engineering, Downtown Niagara Falls



4.2 Reducing Property Vacancy Rates

The development of a post-secondary campus within Downtown is anticipated to reduce the vacancy rates of built properties, as well as stimulating the redevelopment of underutilized land parcels. Based on the assumptions of a 5,000 person campus, it is estimated that 8,900 square meters of retail space could be directly supported by student and staff spending (see Figure 4-3)⁸. Currently, Niagara Falls has a vacancy rate of 43% in the Downtown. With the addition of a post-secondary campus, it is anticipated that new absorption would reduce this vacancy rate to 32% (see Figure 4-4).^{9, 10}

This absorption in space may indirectly generate additional sources of retail spending as new stores and restaurants draw increased volumes of tourists and residents into Downtown.

In addition to retail absorption, growing demand for other real estate uses could also have an impact on vacancy rates in Downtown. The incubation of new and existing businesses that spin-off from the post-secondary institution would require new space to operate, a portion of which will be located in Downtown. Based on the direct employment forecasts generated in the Economic Input-Output Model for spin-off industries (see 6.8), between 140 and 730 new jobs may be created. At an

average of 25 square meters¹¹ per employee, between 6,500 and 17,000 square meters of new office space would be required.

Demand for residential units within Downtown's core will also increase through the development of a post-secondary campus. If 50% of students are accommodated in on-campus or near-campus housing, there will be demand for approximately 2,500 bed-units for a 5,000 student campus. Although student residences likely will account for a portion of this demand, a minimum of 500 three-bedroom residential units would be required to meet demand.¹² A number of these units could be accommodated in the second and third floors of the heritage buildings on Queen Street which are approximately 50% vacant.¹³

11 Office space per employee typically ranges from 20 to 30 square meters per employee

12 Assumption: 15% of students will live in residences, as per estimates used in "Post Secondary Institutions on Brantford & Brant County, Economic Impact Study, Adventus Research Inc."

13 Commercial real estate data provided through interview with local leasing broker active in Downtown Niagara Falls

8 Assumptions: 5,000 students, 200 faculty, and 250 support staff. Full occupancy in Fall / Spring semesters, 40% occupancy in summer. On-site students spend \$2,500 per semester, commuters spend \$1,750. Staff spend \$2,300 per semester (expenditures made during work, or on commute home only). Retail space productivity assumed at \$3,000 per square meter per year. Assumptions Source: International Council of Shopping Centers Office Worker Spending, Student Wallet - Studentawards Inc. (Student Spending Survey), Simon Fraser University Retail Demand Model (Justin Barer, GP Rollo & Associates)

9 Current vacancy rate information provided by City of Niagara Falls

10 Retail impact analysis conducted by DIALOG

A 5,000 student campus would generate approximately \$11 million worth of spending per semester (2020 figures), absorbing up to 8,900 m² of retail space in Downtown.

Fig. 4-3: Estimated Retail Absorption by Category (2020)

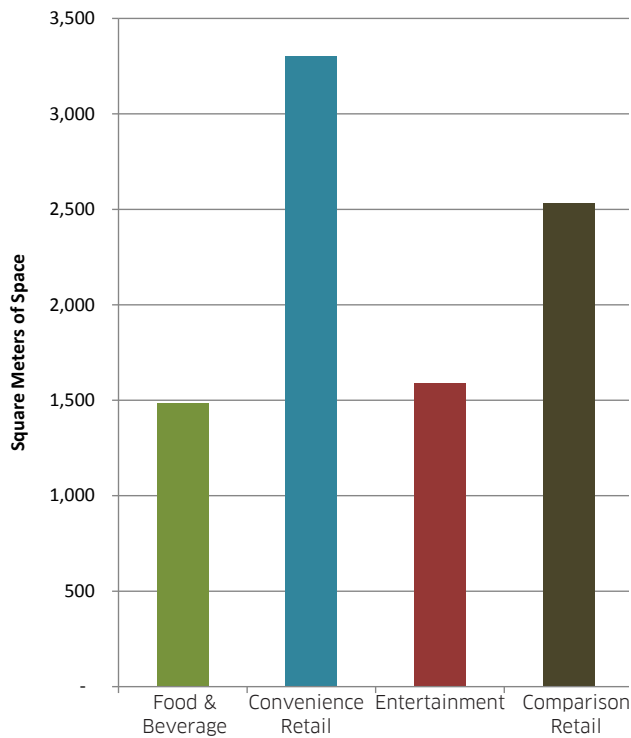
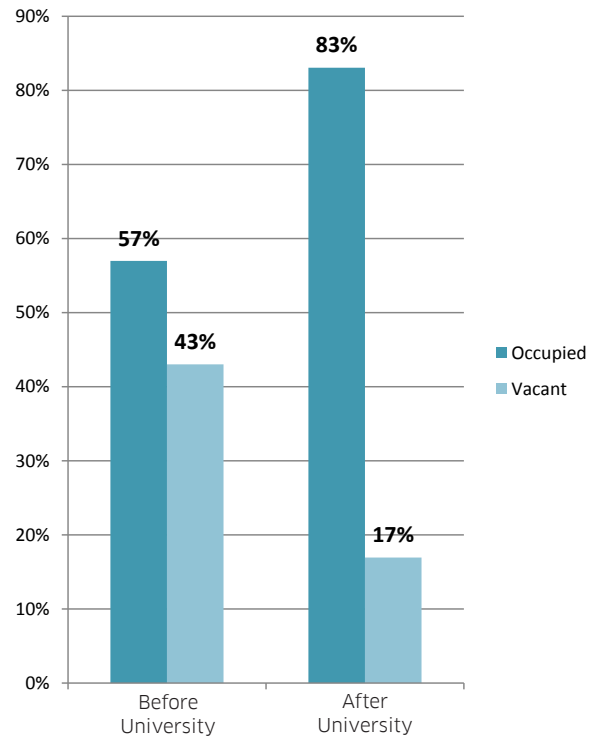


Fig. 4-4: Impact of Post-Secondary Institution on Vacant Downtown Commercial Properties



Food Services (eating out), convenience (groceries), entertainment (cinema, alcoholic beverages etc), and comparison retail (fashion, electronics etc).

4.3 Balanced Demographics

Approximately 1,250 residents currently live within a 400 metre walking distance of Queen Street and St. Clair Avenue. When comparing Downtown to municipal and provincial averages, there are significant differences in demographic profiles. Notably, only 9% of residents within this 400 metre radius have a bachelor degree or higher. In addition, per capita incomes are \$20,000 per annum, well below both Niagara Falls and provincial averages (see Figure 4-5). Further, current population projections created by Environics Research Group predict a decline in Downtown's population over the next five years, despite a growing city population overall.¹⁴

While recent residential developments in the Downtown suggests the population may be stabilizing, there is a clear need to direct more growth to core areas in order to support its long-term health and sustainability. As illustrated by the revitalization impact of Wilfred Laurier Brantford, a Downtown post-secondary campus attracts not only students and faculty, but also residents that are drawn to the vibrant and dynamic environment. With the addition of a post-secondary campus, it is expected that future demographics within Downtown will more closely resemble city-wide averages.

14 Environics Research Group, 2012 Estimates & Forecasts

Population projections predict a decline in Downtown's population over the next five years, despite a growing city population overall.

Fig. 4-5: Demographic Comparison: Downtown, Niagara Falls, Ontario

2012 Demographic Snapshot	400 m radius of Queen Street & St. Clair Ave		Niagara Falls (CY), ON		Ontario	
		%		%		%
Total Population						
2007 estimated	1,314		83,434		12,792,932	
2012 estimated	1,247		84,403		13,527,757	
2017 projected	1,190		87,808		14,403,035	
% Pop. Change (2007-2012)	-5.1%		1.2%		5.7%	
% Pop. Change (2012-2017)	-4.6%		4.0%		6.5%	
2012 Total Census Families	306	%base	23,426	%base	3,637,482	%base
Total Couples	218	71%	18682	80%	3063537	84%
Without children at home	81	27%	8,227	35%	1,201,183	33%
With children at home	137	45%	10,455	45%	1,862,354	51%
Lone-parent families	88	29%	4,744	20%	573,945	16%
2012 Educational Attainment (15 years+)	1,102	%base	69,967	%base	11,116,799	%base
Less than a bachelor degree	1,000	91%	60,798	87%	8,360,417	75%
Bachelor degree & higher	103	9%	9,169	13%	2,756,382	25%
2012 Households	676	%base	34,029	%base	5,175,079	%base
Persons per household	1.90		2.43		2.58	
Average household income	37,931		69,436		91,811	

4.4 Strategies to Repurpose Heritage Assets

At many of North America's most prestigious universities, heritage buildings and student campuses are closely intertwined. Heritage buildings go beyond simply adding to campus aesthetics; they symbolize a sense of legacy, resilience, and multi-generational learning. From a branding perspective, emphasizing these aspects could provide a major advantage in terms of establishing credibility and reputation when compared to a new-build greenfield campus.

The repurposing of heritage properties for academic uses also has the potential to provide great value to the City of Niagara Falls, from the standpoint of preserving the heritage stock in the Downtown, and maintaining links to the Downtown's rich history. Vacant buildings can fall into disrepair, and their very existence can be threatened - a prime example being the former Rosberg's Department Store in Downtown Niagara Falls, lost to fire. Post-secondary institutions tend to be stable and responsible stewards of heritage assets, and repurposing vacant or underutilized heritage properties for post-secondary related uses would stabilize and protect Downtown's heritage assets.

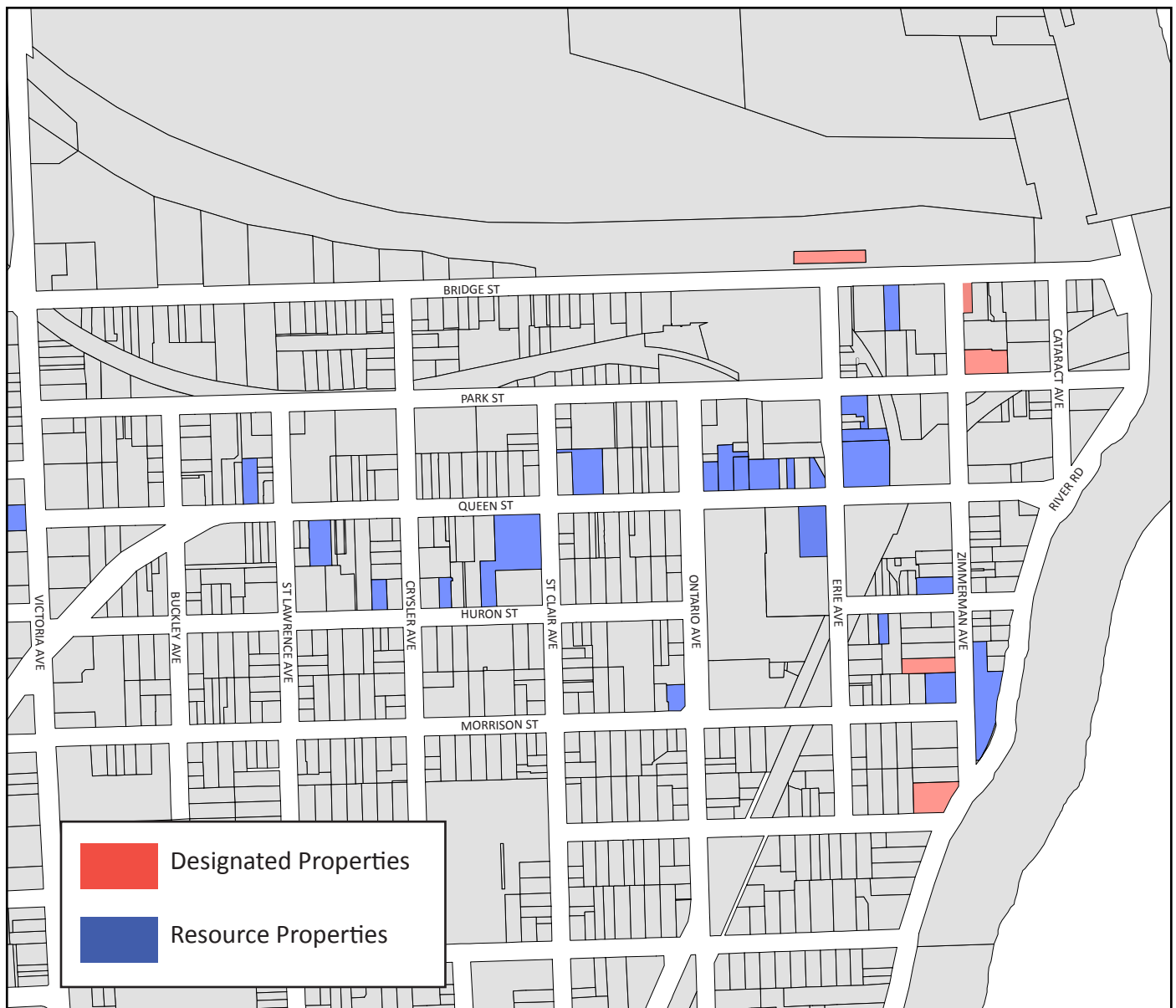
If utilized strategically, Niagara Falls' rich offering of heritage assets provides an unique opportunity to create a traditional campus environment in a short time period. Specifically, key heritage assets with significant repurposing potential include the Seneca Queen Theater (4624 Queen Street) and the Q Club at (4437-4455 Queen Street - former Buttery Theater). Although some heritage buildings may not be appropriate for primary institutional functions, most existing assets could be repurposed as residences and for office uses.

Niagara Falls already has a number of Community Improvement Programs in place, or available to implement, that could assist with repurposing heritage assets, such as facade improvement programs and tax incremented financing.



Downtown Niagara Falls' rich offering of heritage assets provides an unique opportunity to establish a traditional campus character in a short time period.

Fig. 4-6: Heritage Properties in Downtown Niagara Falls



4.5 Activating Underutilized Streets / Public Spaces

Great public spaces and streetscapes are essential elements of both successful Downtowns, and vibrant post-secondary campus environments. Recent streetscape investments into Niagara Falls' Queen Street, and the addition of new public spaces, have created an attractive pedestrian realm enjoyed by existing residents and workers. However, the critical mass of population needed to generate a public realm that is consistently active through all hours of the day is still lacking. With the addition of a post-secondary campus, the accompanying population influx would help activate these existing public spaces within Downtown Niagara Falls. Public realm vibrancy leads to more 'eyes on the street', a key element needed to create welcoming, safe, and walkable campus and downtown environments.

Interviews with real estate professionals indicate that historically, the main barriers to revitalization have been negative perceptions of the downtown and inconsistent street activity. However, foot traffic has improved on Queen Street and in public spaces over the last 3-4 years, a change which is having a direct impact on the general desirability of the area to live and work. Adding a post-secondary institution will significantly increase this effect, and magnify trends towards revitalization.



SECTION 4

ADDRESSING DOWNTOWN NEEDS

Niagara Falls has invested in the quality of the public realm along Queen Street, and a Downtown post-secondary institution could provide the critical mass of population and users to activate it.

Fig. 4-7: Queen Street, Downtown Niagara Falls





5

CAMPUS CONCEPTS

- 5.1 Campus Space Requirements
- 5.2 Capacity Analysis
- 5.3 Demonstration Concepts

5.0 // CAMPUS CONCEPTS

Four concepts for a post-secondary campus in Downtown Niagara Falls are presented herein. Each concept has its own specific attributes, demonstrating the viability of different configurations of land assemblage and phasing with respect to delivering a post-secondary campus in the Downtown, and each concept would be likely to address the provincial, municipal, and Downtown needs - and facilitate the positive outcomes - discussed in the previous chapters.

The development of concept options for a Downtown post-secondary campus consisted of the following steps:

- Calculating the estimated space requirements (in terms of gross floor area) of a Downtown post-secondary campus;
- Identifying and testing the capacity of City-owned developable parcels in the Downtown, with respect to accommodating identified space requirements; and
- An internal workshop at which a series of options were developed and considered.

5.1 Space Requirements

For the purposes of testing the land capacity in Downtown Niagara Falls to accommodate a post-secondary institution, the maximum total institutional gross floor area required has been estimated. To be conservative, a high end space requirement is used in this analysis. For this maximum gross floor area figure, the following assumptions were used:

- A student population of 5,000 FFTE (Financial Full-Time Equivalent) students;
- 17 square metres (approximately 180 square feet) of gross space, based on averages for Ontario universities ¹; and
- Floor space efficiency of 65%.

Based on these inputs, a 5,000 FFTE student campus - fully built out, would generate the following space requirements:

Fig. 5-1: Space Requirements - 5,000 FFTE Student Campus	
Net Assignable Area	55,200 m ²
Floor Space Efficiency	65%
Non Assignable Area	29,800 m ²
Gross Area	85,000 m ²

The estimated space requirements have been validated against the Council of Ontario Universities space guidelines (Building Blocks, 2007-08), a set of formulas for calculating generated space entitlements with respect to an institution's academic, administrative, research, office, library, common use, assembly, and amenity facilities.

The estimated space requirements for the 5,000 FFTE student campus do not include student residences or parking. It is assumed that these needs can be accommodated, in the short term, by existing parking capacity Downtown; by the likely evolution of a market for student rentals in the residential neighbourhoods adjacent Downtown; and, by the repurposing of available vacant space in the Downtown for campus-related residential uses. Any longer term consideration of the number of student beds and parking stalls that might be required by a post-secondary campus in Downtown Niagara Falls would be contingent on the programmatic direction of the institution, and the makeup of the student body.

For the financial analysis presented in Section 6., it is assumed that a post-secondary institution will be built with greater efficiency than the conservative figures used in the land capacity analysis. Being located in the Downtown means that existing buildings can be reused (such as the Seneca Theatre), and that existing outdoor public space and amenities can reduce the required amount of indoor common areas. As such, current average Ontario college space per FFTE are applied - 11 square meters, or approximately 120 square feet. A 2,500 FFTE student campus would require 27,500 m² gross floor area, while a 5,000 FFTE would require 55,000 m².

¹ When Efficiency Becomes a Liability: Capital Funding Priorities in the Ontario College System, ECS, February 2007, Page 4-5

5.2 Capacity Analysis

Methodology

So as not to overstate the development capacity of Downtown, the capacity analysis was, by design, a conservative exercise in that it only considered City-owned properties. The full development opportunity in Downtown Niagara Falls includes surplus parcels held by other levels of government, as well as privately held properties that are currently for sale, or known to be available. The concepts that follow in this section propose a variety of property assemblages, including City-owned and available private properties.

The capacity analysis considered whether City-owned properties Downtown offer sufficient development potential – in terms of gross floor area yield – to accommodate the space requirements of a 5,000 FTE student campus. The analysis began by looking at all City-owned lands Downtown (see Figure 5-3), and then filtered those properties to exclude those deemed to be unlikely candidates for redevelopment for post-secondary uses:

- Parcels that were too small to produce appropriate floor plate sizes for academic uses;
- Parcels with existing buildings that might complicate, or limit the potential for redevelopment;
- Parcels with odd shapes, or that could not be accessed easily; and
- Parcels that were too far removed from the centre of Downtown, and that would not have contributed to creating the desired critical mass of activity.

The remaining properties that were included in the capacity analysis were larger, contiguous blocks, located near the centre of Downtown, primarily consisting of surface parking. The City-owned properties included in the capacity analysis can be seen in Figure 5-4.

Findings

The capacity analysis of these parcels demonstrated that, at 3 or 4 times FSI (the ratio of a building's total floor area to the area of the property on which it is constructed), there exists enough potential – on City-owned land alone – to accommodate the space requirements of a 5,000 FFTE student campus in Downtown Niagara Falls.

Fig. 5-2: Development Capacity of City-Owned Lands Downtown	
Total Area of Included Properties	29,908 m ²
@ 2 FSI	59,817 m ²
@ 3 FSI	89,725 m ²
@ 4 FSI	119,633 m ²

The upper limit of 4 FSI was based on a coverage assumption of 66.6%, as this would imply a maximum height of six stories, a scale of development that would be in keeping with the upper limit currently defined by the Hatch building, while also not overwhelming the heritage streetscapes.

The full development potential of available lands Downtown, including privately held parcels that are available for assemblage and properties currently owned by other public bodies, is even greater. Downtown Niagara Falls offers a unique opportunity in that ample and affordable development capacity exists, sufficient to accommodate a 5,000 FFTE student population post-secondary institution, in the context of a functioning downtown with intact main street frontages.

Fig. 5-3: All City-Owned Properties in Downtown Niagara Falls



There exists enough potential – on City-owned land alone – to accommodate the space requirements of a 5,000 FFTE student campus in Downtown Niagara Falls.

Fig. 5-4: City-Owned Properties Included in the Capacity Analysis



5.3 Demonstration Concepts

The space requirements analysis and capacity analysis informed an internal workshop where a series of demonstration concepts were developed. The demonstration concepts follow on pages 66 - 73. Four concepts are presented, each demonstrating distinct, viable approaches to delivering a post-secondary campus in Downtown Niagara Falls. The four concepts differ in terms of the location of the concentration of post-secondary activity in Downtown, illustrating the variety of ways in which a campus might be assembled in Downtown Niagara Falls, and the range of positive outcomes that could be achieved through different land assemblages for post-secondary uses.

The demonstration concepts are not intended to depict the architecture or design of buildings, and shaded areas on the concept maps do not indicate contiguous building footprints, or the wholesale redevelopment of build-out of parcels and blocks. The concepts are illustrative, indicating where campus-related adaptive reuse and new build might be focused in a variety of scenarios. These concepts are meant to demonstrate that there are many different ways in which synergies can be achieved through establishing a post-secondary campus in Downtown Niagara Falls, and that space is not a constraint to achieving scenarios that are a 'win-win' for a post-secondary campus and for Downtown Niagara Falls.

The following illustrated legend explain how to read the demonstration concepts:



New Development

Indicates assemblages of properties that currently have no buildings on them, or that are occupied by structures that do not contribute to the character of Downtown. Post-secondary facilities in these areas would likely be in the form of new build.

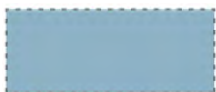
Example: Sheridan College Campus, Mississauga City Centre - new build facilities, constructed on a greenfield site near Square One and Mississauga City Hall.



Re-purpose Existing Buildings for Post-Secondary or Incubator Use

Indicates blocks that contain buildings and frontages likely to be retained for post-secondary, incubator, or commercial uses. The introduction of new and enhanced uses in these areas would be through repurposing and reuse, with sensitive additions.

Example: University of Waterloo School of Architecture - former Riverside Silk Mills were repurposed as studios, auditorium, library, café, and space for community functions.



Potential for Building Additions and Property Enhancements

Indicates significant public / civic facilities Downtown that might be enhanced as part of a larger strategy to revitalize Downtown through introduction of a post-secondary campus.

Example: The underused old City Court House building.





**Improved
Pedestrian Realm /
Retail Frontage**

Indicates streets where the pedestrian realm can be improved through the introduction of post-secondary uses, or through the enhancement of retail and amenities supported by campus-related demand.

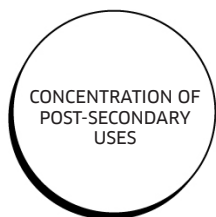
Example: Walkable campus or retail streets with active, well-maintained building frontages, high quality street furniture and paving materials, and healthy street trees.



**Public Open Space
and Pedestrian
Paths**

Indicates opportunities to expand and link to the pedestrian / cycling trail system serving Downtown.

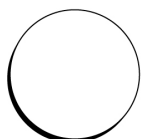
Example: The concepts consider ways to link a campus to the Olympic Legacy Trail, as well as ways to draw the Trail into the heart of Downtown, and to connect the trail system to the river's edge.



**Concentration of
Post-secondary
Uses**

Indicates the point at which post-secondary uses are most concentrated, resulting in a hub of commercial and campus-related activity, and the sense of being at the heart of campus.

Example: Harvard Square - the heart of Harvard University, and the commercial centre for students and visitors.



Nodal Points

Indicates the future development of secondary hubs of activity (including a future 'pole' of activity at the west end of Queen Street), or the opportunity to define gateways that provides a sense of arrival to the city, the Downtown, or the campus.

Example: St. Patrick's Church in Niagara Falls, a prominent visual landmark at the terminus of Queen St.



Demonstration Concept 1: AT THE GO STATION

The first concept concentrates campus development at a node immediately south of the historic railway station, utilizing the bus depot as the core campus development site. The development potential of the depot site is maximized by assembling an available Niagara Region property that unlocks a larger contiguous block.

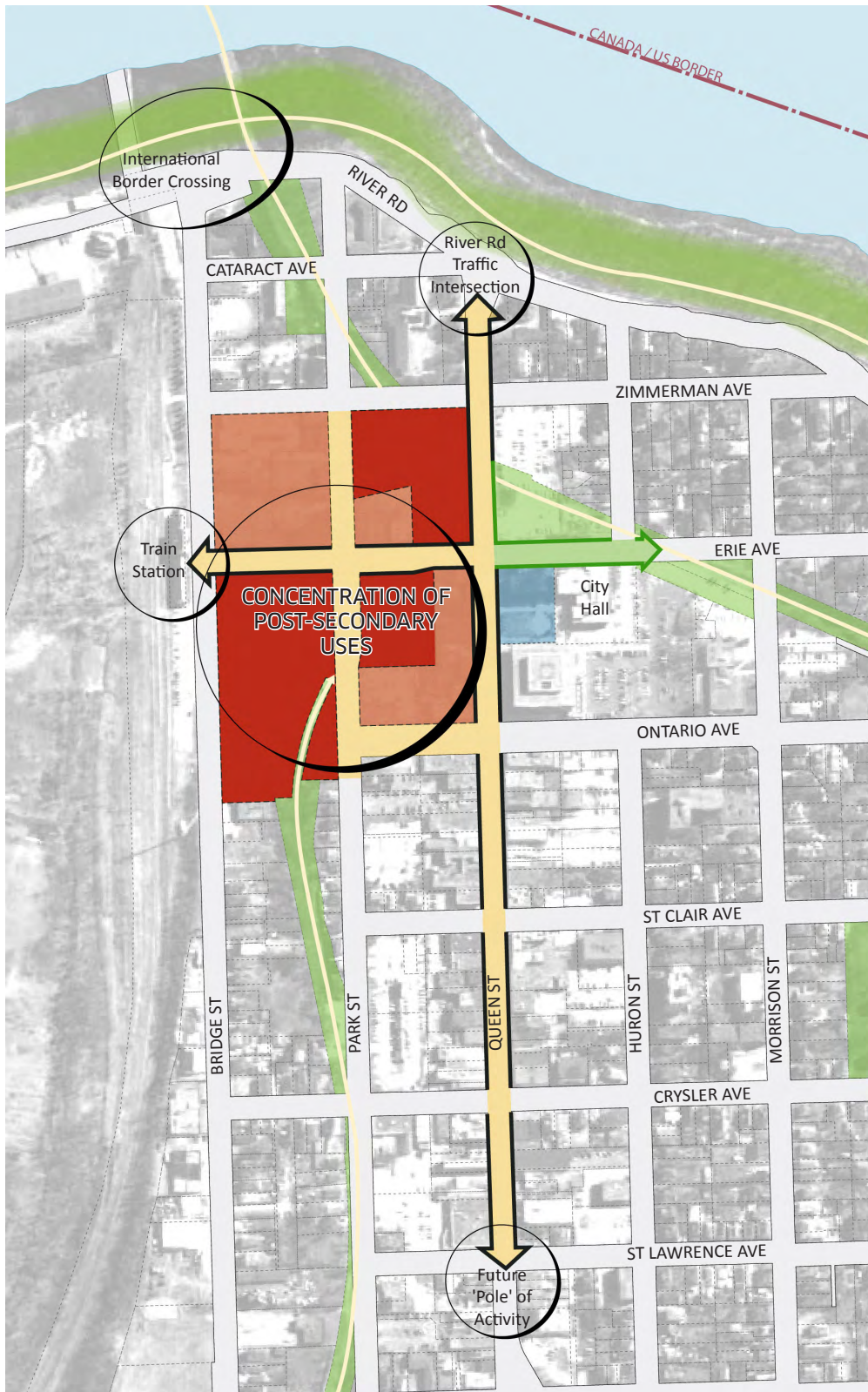
Primary Parcels:

- Bus terminal and depot.
- City-owned surface parking lots south of Park Street, between Erie Avenue and Ontario Avenue.
- Former Rosberg's Department Store site (northeast corner of Erie Avenue and Queen Street), and the adjacent CPR site.

Key Concept Elements:

- Bringing Erie Avenue back to life as the core connector between GO / VIA, Queen Street, and the Olympic Legacy Trail leading to the Clifton Hill tourist district.
- In addition to new build, employing adaptive reuse to activate vacant buildings, and to improve facades of traditional retail streetscapes and heritage structures along Erie Avenue, and the first blocks of Queen Street west of Erie Avenue.
- Utilizing Queen Street as the amenity base for the campus, ensuring that retail and food services are provided from building frontages, drawing activity to Queen Street and not competing with it.

- Establishing a crossroads between two axes - an arrivals corridor on Erie Avenue, and a retail / amenity spine along Queen Street - that encourages visitors to interact with Queen Street on the way through Downtown, into Niagara Falls.
- Where possible, repurposing and adapting existing buildings and frontages along Queen Street for post-secondary related uses.
- Concentrating campus development in the early phases to create a critical mass of activity, a sense that 'something is happening', in the first block south of the railway station.
 - Phase 1 - establish an education district / village.
 - Phase 2 - create a 'pole' of activity at the west end of Queen Street, to draw people along that axis.
 - Phase 3 - potential to attract higher density residential development to the Downtown, leveraging the activity generated by the academic campus to grow the permanent population Downtown and build a local market to support improved services and amenities.



Demonstration Concept 2: AT THE CROSSROADS

The second concept shifts the concentration of post-secondary related activity a block further south, to the intersection of the two primary axes along Erie Avenue and Queen Street, taking full advantage of the opportunity for the presence of a Downtown campus to reinvigorate Queen Street. The bus depot is maintained as a multi-modal transportation hub, integrated with trails and bicycle infrastructure, enhancing access to campus and the Downtown.

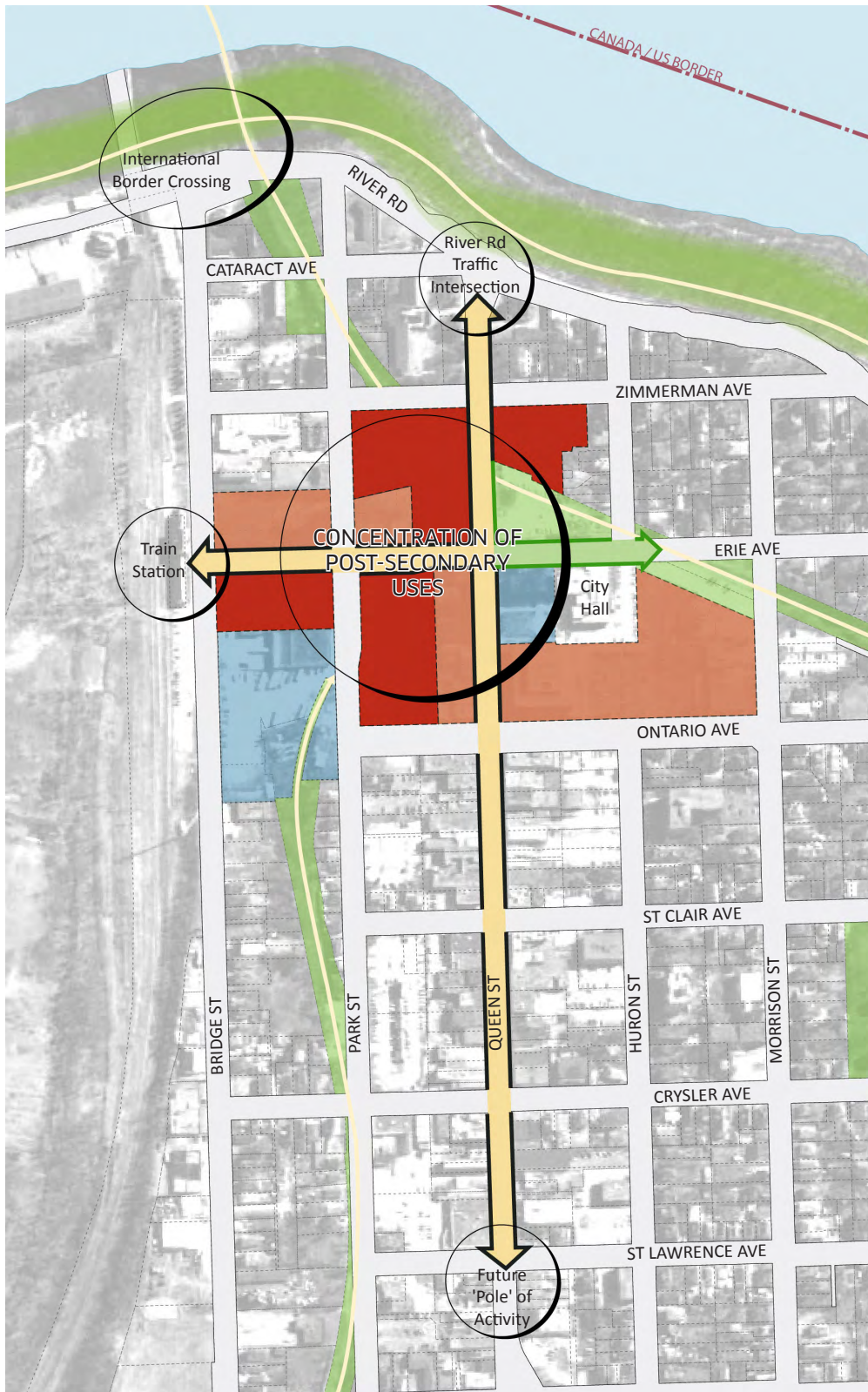
Primary Parcels:

- City-owned surface parking lots south of Park Street, between Erie Avenue and Ontario Avenue.
- A near-contiguous block consisting of the former Rosberg's Department Store site (northeast corner of Erie Avenue and Queen Street), the adjacent CPR site, and the City-owned surface parking lots south of Park Street and west of Zimmerman Avenue.
- City-owned surface parking lots south of Queen Street, west of Zimmerman Avenue.

Key Concept Elements:

- Pulling the centre of activity one block further south from the railway station, to the intersection of Erie Avenue and Queen Street.
- Positioning the campus to serve as a dual gateway – to Niagara Falls, from the railway station; and, to Queen Street, from River Road.
- The location of the campus, directly at the intersection of Erie Avenue and Queen Street, provides a reason for passers-by to stop and engage.
- Pulling the Olympic Legacy Trail into Downtown, through to the transportation hub, and out to the waterfront / river.

- Maintaining the bus terminal / depot as part of the Downtown movement network, improving its frontages, and upgrading it as a multi-modal hub / bike hub.
- Employing adaptive reuse to activate vacant buildings, and to improve facades of traditional retail streetscapes and heritage structures along Erie Avenue, and the first blocks of Queen Street west of Erie Avenue.
- Potentially utilizing 20,000 sq. ft. of available space in the Hatch building, that might be suitable to serve certain campus functions, and that would provide an additional post-secondary campus presence on Queen Street.
- Concentrating campus development in the early phases to create the gateway conditions, and the critical mass of activity at the crossroads.
 - Phase 1 – establish an education district / village at Erie Avenue and Queen Street.
 - Phase 2 – create a 'pole' of activity at the west end of Queen Street, to draw people along that axis.
 - Phase 3 – potential to attract higher density residential development to the Downtown, leveraging the activity generated by the academic campus to grow the permanent population Downtown and build a local market to support improved services and amenities.
 - Motel properties, and other underused or vacant sites, offer further opportunities to draw activity eastward, toward the river, over time.



- New Development / Land Transfer
- Re-purpose Existing Buildings for Post-Secondary or Incubator Use
- Potential for Building Additions and Property Enhancements

- Improved Pedestrian Realm / Retail Frontage
 - Public Open Space and Pedestrian Paths
- 0 25 50 100 150 250m



Nodal Points

Demonstration Concept 3: A CAMPUS CORRIDOR

The third concept draws the post-secondary activity along a corridor, rather than focusing it at a node. The concept entails the evolution of two parallel corridors Downtown – an academic corridor (along Park Street), and a retail corridor (along Queen Street). This approach takes advantage of the concentration of available City-owned properties along Park Street.

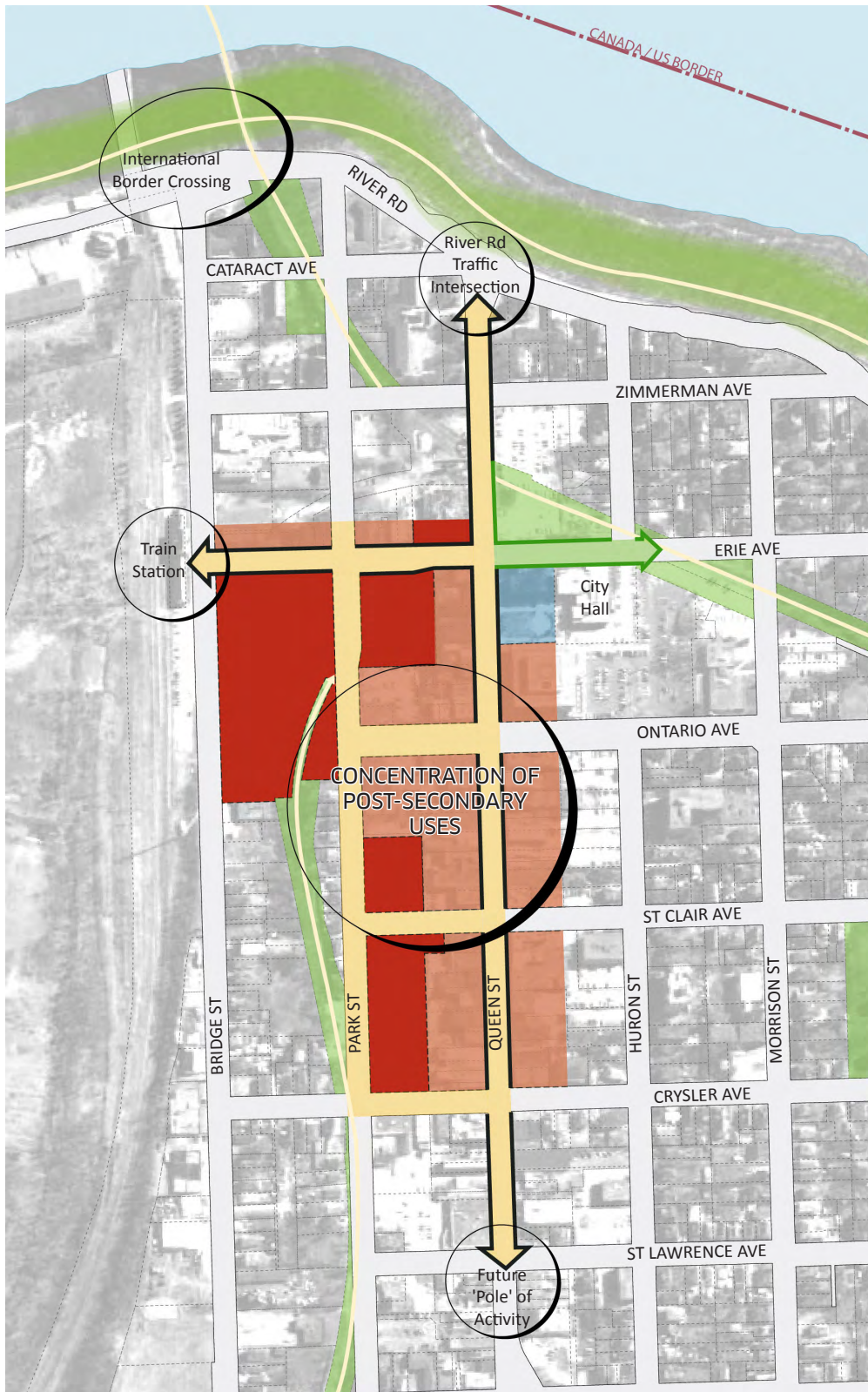
Primary Parcels:

- Bus terminal and depot.
- City-owned surface parking lots south of Park Street, between Erie Avenue and Ontario Avenue.
- City-owned surface parking lots south of Park Street, West of Ontario Avenue.
- City-owned surface parking lots south of Park Street, between St. Clair Avenue and Chrysler Avenue.

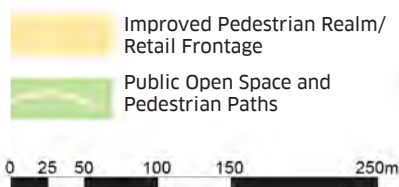
While the two City-owned surface parking lots toward the west end of Park Street are scheduled for near-term refurbishing, as part of the City's parking strategy, in the long term they offer potential sites for academic facilities or incubators.

Key Concept Elements:

- A series of campus buildings along a campus street.
- Engaging Queen Street with post-secondary uses in repurposed buildings.
- A greater focus on adaptive reuse and repurposing existing structures.
- Concentrating campus development in the early phases at the northwest and southwest corners of Erie Avenue and Park Street, to define a gateway to the campus street.
 - Phase 1 – establish the gateway to a Park Street campus corridor.
 - Phase 2 – engage in the adaptive reuse of buildings along Queen Street; improve frontages along the connecting blocks between Park Street and Queen Street.
 - Phase 3 – draw campus activity further west along Park Street, extending the campus corridor.



- New Development / Land Transfer
- Re-purpose Existing Buildings for Post-Secondary or Incubator Use
- Potential for Building Additions and Property Enhancements



Nodal Points

Demonstration Concept 4: ON THE WATERSIDE

The fourth concept shifts the campus node east of the CPR right of way, toward River Road and the waterfront. This prominent location takes advantage of views over the river and to the Falls, while directly engaging River Road to draw traffic into Downtown.

Primary Parcels:

- A consolidated block between the CPR right of way, River Road, and Queen Street. This block currently consists of a mix of City-owned and privately owned properties.

Key Concept Elements:

- Potentially pedestrianising Cataract Avenue between Park Street and Bridge Street, to create a contiguous campus block.
- Shifting the centre of campus activity east, to directly engage River Road, drawing traffic into Downtown.
- Engaging the former Olympic Legacy Trail in the heart of campus.
- Potentially utilizing the elevated approach to the rail bridge for recreational uses, or to build atop to maximize views and sightlines.
- Developing a new gateway into Downtown from River Road, along Park Street.
- Establishing prominent and iconic location for the new institution, overlooking the river.
- Concentrating campus development in a single contiguous block near the river:
 - Phase 1: Assemble and develop the block west of River Road and east of the CPR right of way.
 - Phase 2: engage in the adaptive reuse of buildings west of the CPR right of way, and along Park Street from the tracks to Erie Avenue.



- New Development / Land Transfer
- Re-purpose Existing Buildings for Post-Secondary or Incubator Use
- Potential for Building Additions and Property Enhancements

- Improved Pedestrian Realm/ Retail Frontage
 - Public Open Space and Pedestrian Paths
- 0 25 50 100 150 250m



Nodal Points



6

ECONOMIC IMPACT

- 6.1 Economic Analysis Approach
- 6.2 Economic Impact of Construction
- 6.3 Economic Impact of Operations
- 6.4 Economic Impact of Spending
- 6.5 Economic Spin-Off
- 6.6 Economic Impact Summary
- 6.7 Return on Investment

6.0 // ECONOMIC IMPACT

6.1 Economic Analysis Approach

The economic impact of a proposed post-secondary institution in Downtown Niagara Falls has been analyzed through the lens of an input-output model. An input-output model illustrates the economic relationships between suppliers and producers in an economy. Input-output models are commonly used by governments to analyze the impact of investment decisions, and have been applied on multiple assessments of post-secondary institutions in Ontario over the past decade.

The model tracks the flow of invested capital and estimates the multiplying impact of each dollar as it flows through the economy. The flow of these invested dollars are depicted on the following page in “The Difference a Post-Secondary Institution Makes” graphic. In the first round of economic activity, the post-secondary institution attracts direct revenues from the provincial and federal governments, as well as tuition, research grants, and other smaller sources of funds. The majority of these funds are spent directly within the local economy, either by purchasing goods and services, paying salaries and wages, or through construction projects. The post-secondary institution also leverages additional direct expenditures in the form of spending by students, faculty, and visitors. These expenditures primarily flow into the local Niagara Falls economy, with some leakage to other regions of Ontario and areas further afield. The economic impact of this spending is labeled as “direct impacts”, and helps stimulate a second round of spending known as “indirect impacts”, and a final third round of “induced impacts”. As an example, the presence of a post-secondary institution draws a visitor to Downtown Niagara Falls who purchases lunch from a local restaurant on Queen Street (direct impact). The restaurant owner subsequently buys food supplies

(indirect impact) and pays wages to the server, who then uses this money to pay rent (induced impact). The cycle of economic impact will repeat indefinitely, but input-output models typically only follow the path of dollars for three rounds of economic spending.

An input-output model relies on “multipliers” to estimate the corresponding economic impacts of initial expenditures. The multipliers used in this report are derived from a series of similar economic studies produced for the Council of Ontario Universities, and existing / proposed post-secondary institutions in Stratford, Barrie, Waterloo, and Brantford. In addition, a key variable in the input-output model are the campus size assumptions. For illustration purposes, a range of campus sizes were tested from 2,500 FFTE (Financial Full Time Equivalent) to 5,000 FFTE. For comparison purposes, a 5,000 FFTE campus is approximately equivalent to the graduate and undergraduate student population in Brantford. The magnitude of construction costs and annual operating expenditures are dependent on the assumed campus gross floor area (GFA) and enrollment.

The outputs of the model are presented with the following key variables:

Initial Expenditures: Net combined spending input into economy.

Direct Value Added: The direct impact of initial expenditures, calculated through the application of economic multipliers.

Indirect / Induced Value Added: The secondary and tertiary impact of initial expenditures, calculated through the application of economic multipliers.

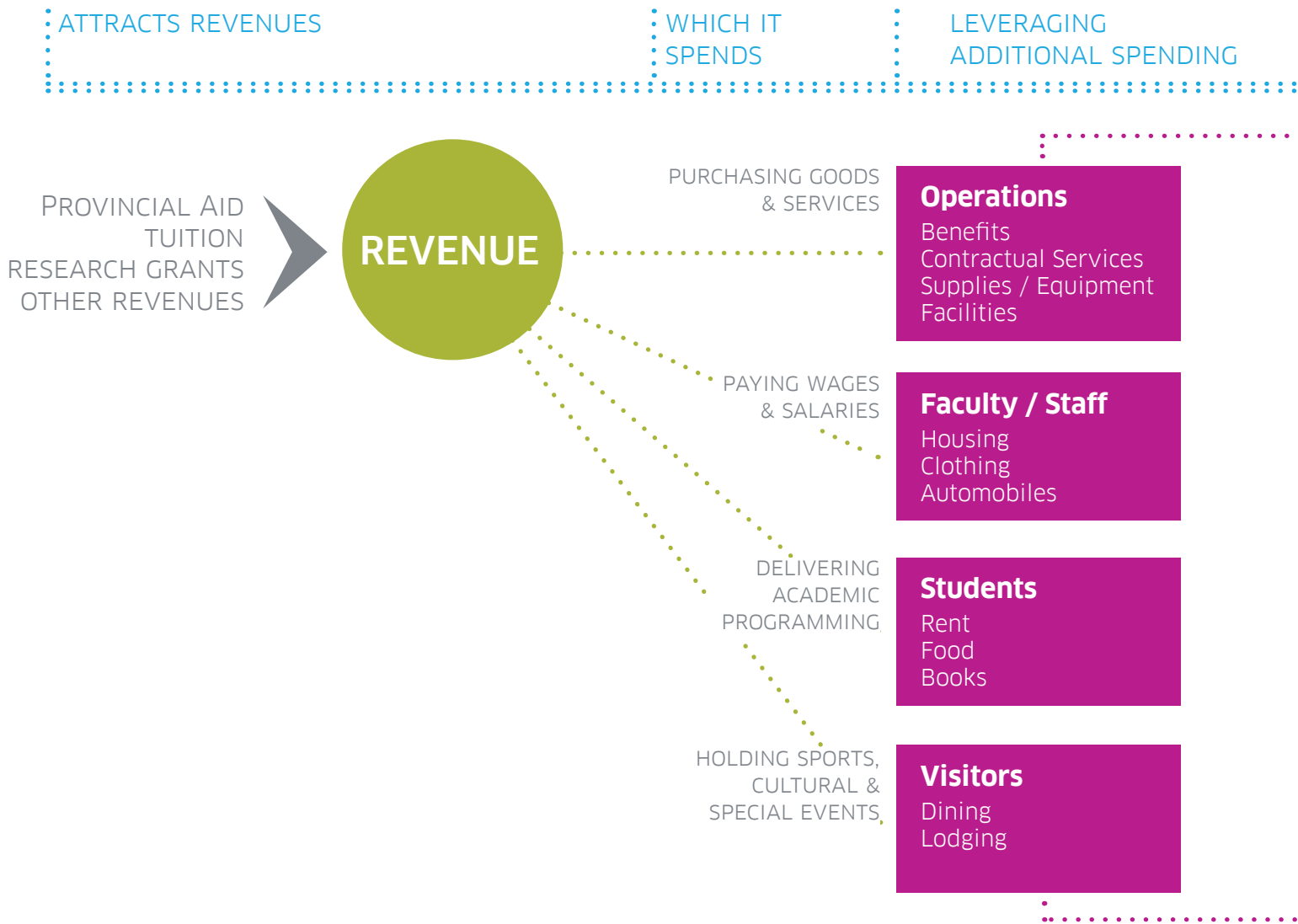
Gross Economic Impact: The total value of all economic and business activity resulting from a post-secondary campus. Gross economic impact is recognized as the most comprehensive of measures of economic activity as it considers all business transactions associated with initial expenditures.

Employment Income: The net increase in wages and salaries resulting from direct and indirect / induced value added outcomes.

Employment Years: The net increase in employment (measured in 'employment years') resulting from direct and indirect / induced value added outcomes.

Taxes: The net increase in federal, provincial, and local (municipal) taxes resulting from the increase in gross economic output.

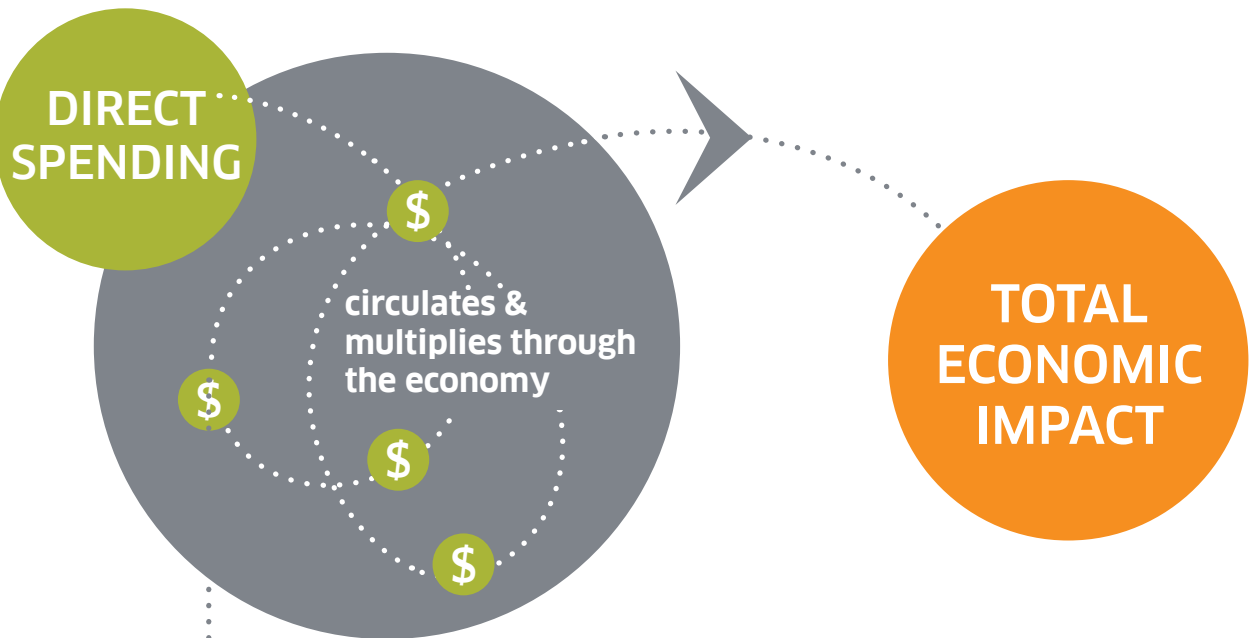
THE DIFFERENCE A POST-SECONDARY INSTITUTION MAKES TO THE ECONOMY



THE CYCLE OF ECONOMIC IMPACT

The basis for a post-secondary institution's economic power is the revenues that flow into the institution. A post-secondary institution allocates these dollars to operations, paying wages and salaries to employees, building academic programming to draw students, and providing sports and cultural events to attract visitors. Faculty and staff, students and visitors then pump new dollars into the local economy, magnifying the impact of initial expenditures.

AND SENDING DOLLARS INTO THE LOCAL ECONOMY
TO STIMULATE ECONOMIC ACTIVITY



THE PATH OF
THE DOLLAR

Direct Impacts

The post-secondary institution and its employees, students and visitors spend dollars directly on goods and services.

contracts with
utility to provide heat
and electricity

employee purchases
clothing

visitor
buys lunch

Indirect Impacts

Direct expenditures maintain and create business and employment for related businesses which sell the goods and provide the services used by the post-secondary institution community.

utility buys materials

clothing store purchases
inventory

restaurant owner
buys food

Induced Impacts

The employees of those businesses supporting the post-secondary institution spend their wages within the local economy to create even more economic activity and employment.

utility worker pays
for leisure activities

clothing store employee
buys monthly groceries

restaurant server
pays rent

6.2 Economic Impact of Construction

The construction cost of the proposed Downtown campus is estimated by applying an average construction cost per square meter to the total gross floor area required for institutional uses. In total, the net construction cost of a 2,500 student campus is estimated at \$71.5 million, while a 5,000 student campus would cost approximately \$143.0 million. This net cost is exclusive of land costs and debt servicing, as only expenditures with direct economic impacts are accounted for in input-output economic models. However, land costs are expected to be minimal as the City of Niagara Falls will make their existing 14 acres of Downtown land holdings available.

As specified in Section 5.1 Space Requirements, it is anticipated that the initial capital cost of the campus can be reduced by adapting existing buildings within the Downtown, such as the Seneca Theatre. Further, a prominent developer has expressed interest in delivering student residences and other facilities through a P3 model. As such, a more efficient floor area per student ratio is applied (11 m²) to calculate construction costs, a figure which is in line with similar recent post-secondary proposals in Ontario.

Construction costs are a major economic value in post-secondary input-output models, and can be responsible for significant short term job creation and spin-off impacts. The impact of major post-secondary construction projects was evidenced by the recent development of Queen's University's Athletics and Recreation Centre which had a measurable impact on Kingston's economy and overall real estate market. However, these impacts are temporary and after several rounds of spending, the benefits dissipate. Despite the temporary nature of a construction driven economic

boost, there is a strong argument to be made at a provincial / federal level for strategically injecting capital into weak but revitalizing economies at opportune moments. Comparatively, the ROI from construction investments into an economy like Niagara Falls likely will be considerably higher than if similar investments are made into strong economic regions of Ontario.

Fig. 6-1: Construction Budget

Construction Budget	FFTE 2,500	FFTE 5,000
Institutional Size (m ²)	27,500	55,000
Construction Cost per m ²	\$2,600	\$2,600
Total Budget	\$71,500,000	\$143,000,000
Construction cost per square meter for institutional buildings: \$2,600. Based on October 2010 construction cost estimate for comparable post-secondary institution in Ontario.		

Fig. 6-2: Economic Impact of Construction

Economic Impact of Campus Construction	FFTE Enrollment = 2500				FFTE Enrollment = 5000			
	Ontario		Niagara Falls		Ontario		Niagara Falls	
	Value	Multiplier	Value	Multiplier	Value	Multiplier	Value	Multiplier
Summary								
Initial Expenditure	\$71,500,000		\$71,500,000		\$143,000,000		\$143,000,000	
Gross Economic Output	\$121,550,000	1.70	\$98,908,333	1.38	\$243,100,000	1.70	\$197,816,667	1.38
Temporary Increase in Employment Income	\$56,757,732	0.79	\$33,907,216	0.47	\$113,515,464	0.79	\$67,814,433	0.47
Value Added	\$52,433,333	0.73	\$41,708,333	0.58	\$104,866,667	0.73	\$83,416,667	0.58
Direct	\$28,600,000	0.40	\$21,450,000	0.30	\$57,200,000	0.40	\$42,900,000	0.30
Indirect / Induced	\$23,833,333	0.33	\$20,258,333	0.28	\$47,666,667	0.33	\$40,516,667	0.28
Employment Income	\$56,757,732	0.79	\$33,907,216	0.47	\$113,515,464	0.79	\$67,814,433	0.47
Direct	\$25,983,247	0.36	\$15,571,521	0.22	\$51,966,495	0.36	\$31,143,041	0.22
Indirect / Induced	\$30,774,485	0.43	\$18,335,696	0.26	\$61,548,969	0.43	\$36,671,392	0.26
Employment Years	877		524		1,754		1,049	
Direct	402		240		803		481	
Indirect / Induced	475		284		951		568	
Taxes	\$28,286,727	0.40	\$16,861,469	0.24	\$56,573,454	0.40	\$33,722,938	0.24
Federal	\$14,742,268	0.21	\$8,753,222	0.12	\$29,484,536	0.21	\$17,506,443	0.12
Provincial	\$10,780,284	0.15	\$6,449,742	0.09	\$21,560,567	0.15	\$12,899,485	0.09
Local	\$2,764,175	0.04	\$1,658,505	0.02	\$5,528,351	0.04	\$3,317,010	0.02
Economic impact multipliers derived from "Council of Ontario Universities: The Economic Impact of Ontario's Universities (2001)", and "Laurentian University, Determining the Economic Impact of an Expanded Barrie Campus, 2011"								

6.3 Economic Impact of Operations

The operating cost of a post-secondary satellite campus is estimated at \$12,000 per annum per student. As some administrative costs are retained at the post-secondary institution's main campus, this figure is lower than the overall average for Ontario, and comparable to assumptions used in recent economic impact reports (Laurentian Barrie, 2011).

These operational costs are translated into direct expenditures by the post-secondary institution on goods, services, wages, salaries, and other operational costs. The ripple effect of these dollars is expected to multiply through the economy, creating an overall gross economic output 1.5 times initial expenditures.

Fig. 6-3: Operations Budget

Operations Budget	FFTE 2,500	FFTE 5,000
Operating Cost per Student ¹	\$12,000	\$12,000
Provincial Contribution per Student	\$8,040	\$8,040
Total Provincial Cost (annual)	20,099,513	40,199,027
Total Operating Budget (annual)	\$30,000,000	\$60,000,000
¹ Based on assumptions from "Laurentian University, Determining the Economic Impact of an Expanded Barrie Campus, 2011"		
² Estimates from University of Alberta Statistics Centre, 2009		

Fig. 6-4: Economic Impact of Operations

Economic Impact of Campus Operations (annual)	FFTE Enrollment = 2,500				FFTE Enrollment = 5,000			
	Ontario		Niagara Falls		Ontario		Niagara Falls	
	Value	Multiplier	Value	Multiplier	Value	Multiplier	Value	Multiplier
Summary								
Initial Expenditure	\$30,000,000		\$30,000,000		\$60,000,000		\$60,000,000	
Gross Economic Output	\$56,000,000	1.87	\$45,000,000	1.50	\$112,000,000	1.87	\$90,000,000	1.50
Increase in Employment Income	\$33,416,537	1.11	\$26,606,864	0.89	\$66,833,073	1.11	\$53,213,729	0.89
Value Added	\$45,000,000	1.50	\$43,000,000	1.43	\$90,000,000	1.50	\$86,000,000	1.43
Direct	\$27,000,000	0.90	\$26,000,000	0.87	\$54,000,000	0.90	\$52,000,000	0.87
Indirect / Induced	\$18,000,000	0.60	\$17,000,000	0.57	\$36,000,000	0.60	\$34,000,000	0.57
Employment Income	\$33,416,537	1.11	\$26,606,864	0.89	\$66,833,073	1.11	\$53,213,729	0.89
Direct	\$18,369,735	0.61	\$14,625,585	0.49	\$36,739,470	0.61	\$29,251,170	0.49
Indirect / Induced	\$15,046,802	0.50	\$11,981,279	0.40	\$30,093,604	0.50	\$23,962,559	0.40
Employment Years	743		591		1,485		1,183	
Direct	408		325		816		650	
Indirect / Induced	334		266		669		533	
Taxes	\$16,684,867	0.56	\$13,291,732	0.44	\$33,369,735	0.56	\$26,583,463	0.44
Federal	\$8,681,747	0.29	\$6,903,276	0.23	\$17,363,495	0.29	\$13,806,552	0.23
Provincial	\$6,341,654	0.21	\$5,054,602	0.17	\$12,683,307	0.21	\$10,109,204	0.17
Local	\$1,661,466	0.06	\$1,333,853	0.04	\$3,322,933	0.06	\$2,667,707	0.04
Economic impact multipliers derived from "Council of Ontario Universities: The Economic Impact of Ontario's Universities (2001)", and "Economic Analysis & Impact of Laurier Brantford, Nipissing-Brantford and Mohawk College in Brantford On the City of Brantford, Brant County & Other Local Regions, Adventus Research Inc., 2012"								

6.4 Economic Impact of Spending

Indirect Impact of Student Spending

Spending by students on retail, transportation, and accommodation can have a positive impact on the local economy. Students that live close to the campus will have the greatest economic impact as the least amount of spending will leak to surrounding regions. On average, the daily spending impact is anticipated to vary from \$12 to \$40 per capita, depending on the living arrangements of students. Spending is expected to be 2.5 times higher in fall and spring semesters in comparison with summer months due to increased enrollment during this period. In total, a 2,500 person campus is anticipated to have \$17 million in gross student spending per year, while a 5,000 person campus would have \$34 million in gross spending per year.

Indirect Impact of Visitors

In addition to direct spending by students, it is anticipated that a post-secondary institution would attract an increased volume of visitors to Downtown Niagara Falls. For each student, it is assumed that 7 visitor days will be generated per year with an average per daily spend of \$85.

In total, visitors are expected to add between \$1.5 million and \$2.9 million per year into the local economy, depending on the size of the post-secondary institution.

Fig. 6-5: Annual Indirect Impact of Students

Annual Indirect Impact of Students		FFTE Option 1 2,500	FFTE Option 2 5,000
Annual FFTE Students	Breakdown¹		
Local Students	15%	375	750
Commuter Students	35%	875	1,750
Students in Residence	15%	375	750
Students in Private Rentals	35%	875	1,750
Daily Spend on Retail, Transportation, Accommodation	Per Capita¹	Combined Spend	
Local Students	\$22	\$8,250	\$16,500
Commuter Students	\$12	\$10,500	\$21,000
Students in Residence	\$20	\$7,500	\$15,000
Students in Private Rentals	\$40	\$35,000	\$70,000
Estimated Enrolled Days per Year²	280		
Total Annual FFTE Student Spending		\$ 17,165,313	\$ 34,330,625
Local Students		\$ 2,312,063	\$ 4,624,125
Commuter Students		\$ 2,942,625	\$ 5,885,250
Students in Residence		\$ 2,101,875	\$ 4,203,750
Students in Private Rentals		\$ 9,808,750	\$ 19,617,500
¹ Figures derived from survey of Brantford Students, and Statistics Canada data, used in "Post Secondary Institutions on Brantford & Brant County, Economic Impact Study, Adventus Research Inc."			
² Based on 8 month semester, minus 1 week for Reading Week, 2 weeks for Christmas, plus 40% of students assumed to take summer classes.			

Fig. 6-6: Annual Indirect Impact of Visitors

Annual Indirect Impact of Visitors		FFTE Option 1 2,500	FFTE Option 2 5,000
Ratio of Annual Visitors per Student ¹	7		
Average Annual Visitors		17,125	34,250
Per Capita Spend per Visit ²	\$85		
Annual Direct Expenditures		\$1,455,625	\$2,911,250
¹ Based on figures used in the University of Waterloo Regional Economic Benefits Study, 2001, PriceWaterhouseCoopers.			
² Average spend per visitor (day-vistor and overnight visitor combined) figures are average of "University of Waterloo Regional Economic Benefits Study, 2001, PriceWaterhouseCoopers" and "The Difference a University Makes, an Impact Analysis of the University of Buffalo, 2007".			

Economic Impact of Student & Visitor Spending

Combined together, between \$18.6 million and \$37.2 million in direct spending is anticipated to be generated by students and visitors. The gross economic output of this spending is expected to multiply the impact of the initial expenditures by a factor of 1.17 within the City of Niagara Falls, and by a factor of 1.78 at a provincial level.

A 5,000 person campus is expected to generate \$16.2 million in taxes annually, 50% of which would flow to the federal government, 32% to the provincial government, and 17% to the municipality.

Fig. 6-7: Economic Impact of Student & Visitor Spending

Economic Impact of Student & Visitor Spending	FFTE Enrollment = 2,500				FFTE Enrollment = 5,000			
	Ontario		Niagara Falls		Ontario		Niagara Falls	
	Value	Multiplier	Value	Multiplier	Value	Multiplier	Value	Multiplier
Initial Expenditure (Students)	\$17,165,313		\$14,590,516		\$34,330,625		\$29,181,031	
Initial Expenditure (Visitors)	\$1,455,625		\$1,237,281		\$2,911,250		\$2,474,563	
Summary								
Total Initial Expenditures	\$18,620,938		\$15,827,797		\$37,241,875		\$31,655,594	
Gross Economic Output	\$33,162,474	1.78	\$18,564,048	1.17	\$66,324,949	1.78	\$37,128,096	1.17
Increase in Employment Income	\$14,890,266	0.80	\$9,692,634	0.61	\$29,780,531	0.80	\$19,385,268	0.61
Value Added	\$23,560,176	1.27	\$14,014,694	0.89	\$36,520,348	0.98	\$20,946,473	0.66
Direct	\$10,247,025	0.55	\$8,690,785	0.55	\$20,452,505	0.55	\$12,997,192	0.41
Indirect / Induced	\$13,313,152	0.71	\$5,323,910	0.34	\$16,067,843	0.43	\$7,949,281	0.25
Employment Income	\$14,890,266	0.80	\$9,692,634	0.61	\$29,780,531	0.80	\$19,385,268	0.61
Direct	\$7,360,232	0.40	\$6,256,236	0.40	\$14,720,465	0.40	\$12,512,472	0.40
Indirect / Induced	\$7,530,033	0.40	\$3,436,398	0.22	\$15,060,066	0.40	\$6,872,795	0.22
Employment Years	479		328		958		657	
Direct	249		212		498		423	
Indirect / Induced	230		117		460		234	
Taxes	\$8,091,090	0.43	\$4,956,907	0.31	\$16,182,180	0.43	\$9,913,813	0.31
Federal	\$4,065,328	0.22	\$2,559,248	0.16	\$8,130,655	0.22	\$5,118,495	0.16
Provincial	\$2,614,053	0.14	\$1,629,601	0.10	\$5,228,106	0.14	\$3,259,202	0.10
Local	\$1,411,710	0.08	\$768,058	0.05	\$2,823,419	0.08	\$1,536,116	0.05
Note: 15% outflow of spending assumed. Comparison: University of Buffalo spending outflowing from region estimated at 92-95% (2007 Economic Impact Analysis)								
Multipliers derived from PriceWaterhouseCoopers "University of Waterloo, Regional Economic Benefits Study, 2001"								

6.4 Economic Spin-Off

Post-secondary institutions have positive impacts on the economy by educating and training future workers, increasing their economic productivity in comparison to unskilled labour. At the local level, the increase in skilled young workers often results in direct economic benefits by supporting the growth of existing businesses, and helping to spur the development of new companies. Studies on the impacts of post-secondary institutions have found that their presence has a measurable influence on the location decisions of new firms, but that this spillover effect is locally bounded.

Economic spin-off impacts can vary widely, depending on the location, function, and specialization of post-secondary institutions. Recognizing this variation, a low and high end scenario is presented for a new post-secondary institution in Niagara Falls. It is anticipated that the actual spin-off impact would fall between the two scenarios, and an average of these numbers is carried forwards for economic impact summary purposes.

In isolation, a post-secondary institution is insufficient to fully realize potential spin-off benefits. In addition to a pool of talented labour, other supporting factors, such as regional transportation networks, access to markets, relative cost advantages, and attractive lifestyle and cultural amenities, can help spur the development of industry-specific clusters. As highlighted in the Needs Assessment, Downtown Niagara Falls characteristics and locational advantage should position a post-secondary institution to have strong positive economic spin-off benefits.

Fig. 6-8: Economic Impact of Spin-Off Employment

Economic Impact of Spin-Off Employment	FFTE Enrollment = 2,500				FFTE Enrollment = 5,000			
	Ontario		Niagara Falls		Ontario		Niagara Falls	
	Low	High	Low	High	Low	High	Low	High
Summary								
Initial Expenditure	\$15,652,437	\$40,282,609	\$15,652,437	\$40,282,609	\$31,304,873	\$80,565,217	\$31,304,873	\$80,565,217
Gross Economic Output	\$37,377,508	\$96,193,556	\$26,270,929	\$67,610,020	\$74,755,017	\$192,387,111	\$52,541,858	\$135,220,040
Increase in Employment Income	\$11,039,347	\$40,038,858	\$15,557,724	\$28,410,509	\$22,078,694	\$80,077,716	\$31,115,447	\$56,821,019
Value Added	\$21,096,472	\$54,293,202	\$15,909,965	\$40,945,376	\$42,192,943	\$108,586,405	\$31,819,931	\$81,890,753
Direct	\$10,137,395	\$26,089,274	\$10,137,395	\$26,089,274	\$20,274,790	\$52,178,548	\$20,274,790	\$52,178,548
Indirect / Induced	\$10,959,077	\$28,203,928	\$5,772,571	\$14,856,102	\$21,918,154	\$56,407,857	\$11,545,141	\$29,712,205
Employment Income	\$11,039,347	\$40,038,858	\$15,557,724	\$28,410,509	\$22,078,694	\$80,077,716	\$31,115,447	\$56,821,019
Direct	\$6,362,769	\$16,375,019	\$6,362,769	\$16,375,019	\$12,725,539	\$32,750,038	\$12,725,539	\$32,750,038
Indirect / Induced	\$4,676,578	\$23,663,839	\$9,194,954	\$12,035,490	\$9,353,155	\$47,327,678	\$18,389,908	\$24,070,980
Employment Years	245	890	346	631	491	1,780	692	1,263
Direct	141	364	141	364	283	728	283	728
Indirect / Induced	104	526	204	267	208	1,052	409	535
Taxes	\$7,042,934	\$18,125,469	\$5,182,090	\$13,336,460	\$14,085,868	\$36,250,938	\$10,364,180	\$26,672,920
Federal	\$3,940,241	\$10,140,477	\$3,080,011	\$7,926,617	\$7,880,481	\$20,280,953	\$6,160,021	\$15,853,233
Provincial	\$2,225,655	\$5,727,875	\$1,631,144	\$4,197,859	\$4,451,310	\$11,455,749	\$3,262,288	\$8,395,718
Local	\$877,038	\$2,257,118	\$470,935	\$1,211,984	\$1,754,077	\$4,514,235	\$941,871	\$2,423,968
PriceWaterhouseCoopers reports on the economic impact of universities were used to estimate spin-off impacts. The high scenario is derived from a PWC study of the University of Waterloo, an institution nationally recognized for its ability to generate spin-off companies. The low scenario is derived from PWC impact study of the University of Manitoba.								

6.6 Economic Impact Summary

In total, the net combined impact of direct expenditures of a post-secondary campus in Niagara Falls for 2,500 students is estimated at \$148.1 million, a figure which would increase to \$296.2 million for 5,000 students. 48% of this figure is associated with the initial construction and would be a onetime expenditure, while the remaining 52% is associated with operating costs and would reoccur annually. After applying economic multipliers to account for direct, indirect, and induced impacts, the total gross impact is estimated to range from \$555.0 million to \$277.5 million at the provincial level. Approximately 75% of this economic benefit would be retained locally in Niagara Falls, while the remainder would dissipate across Ontario. Between \$130.6 million and \$261.2 million in employment income is anticipated, and between 2,666 and 5,333 in newly generated employment years. A total of between \$65.6 and \$131.3 million in tax revenues is expected, of which the Province would receive 36%, and the City of Niagara Falls would receive 11%.

6.7 Return on Investment

The annual investment costs required to operate a post-secondary institute in Niagara Falls would have a number of beneficial financial and economic returns for the Province. The following figures are exclusive of the overall economic benefits to Ontario of the increased earning potential of post-secondary graduates, and exclusive of the \$50 million investment into Downtown Niagara Falls committed by private sector developers.

For every \$1 invested by the Province in post-secondary operations:

- \$0.64 would be directly returned to the Province in the form of newly generated tax revenues;
- \$3.67 in new employment income would be generated in Ontario, 79% of which would remain in Niagara Falls; and
- \$7.76 in gross economic impact would be generated in Ontario, 71% of which would remain in Niagara Falls.

In addition, one employment year would be generated in Ontario for every \$11,230 invested by the province annually.

Fig. 6-9: Economic Impact Summary

Economic Impact Summary	FFTE = 2,500		FFTE = 5,000	
	Ontario	Niagara Falls	Ontario	Niagara Falls
	Value	Value	Value	Value
Initial Expenditures Attributable to University	\$148,088,460	\$145,295,320	\$296,176,920	\$290,590,639
University Direct Inputs: Operations	\$30,000,000	\$30,000,000	\$60,000,000	\$60,000,000
University Direct Inputs: Construction	\$71,500,000	\$71,500,000	\$143,000,000	\$143,000,000
Initial Student / Visitor Expenditures	\$18,620,938	\$15,827,797	\$37,241,875	\$31,655,594
Initial Spin-Off Businesses Expenditures ¹	\$27,967,523	\$27,967,523	\$55,935,045	\$55,935,045
Total Initial Expenditures	\$148,088,460	\$145,295,320	\$296,176,920	\$290,590,639
Total Gross Impact	\$277,498,006	\$209,412,856	\$554,996,013	\$418,825,711
Multiplier	1.87	1.44	1.87	1.44
Total Value Added	\$158,688,347	\$127,150,699	\$306,776,689	\$247,218,482
Direct	\$83,960,359	\$74,254,119	\$167,879,174	\$144,123,861
Indirect / Induced	\$74,727,988	\$52,896,579	\$138,897,515	\$103,094,621
Employment Income	\$130,603,637	\$92,190,831	\$261,207,274	\$184,381,662
Direct	\$63,082,109	\$47,822,236	\$126,164,218	\$95,644,472
Indirect / Induced	\$67,521,528	\$44,368,595	\$135,043,056	\$88,737,190
Employment Years	2,666	1,933	5,333	3,865
Direct	1,311	1,030	2,623	2,060
Indirect / Induced	1,355	903	2,710	1,806
Taxes	\$65,646,886	\$44,369,382	\$131,293,772	\$88,738,764
Federal	\$34,529,702	\$23,719,059	\$69,059,403	\$47,438,118
Provincial	\$23,712,755	\$16,048,447	\$47,425,510	\$32,096,894
Local	\$7,404,429	\$4,601,876	\$14,808,858	\$9,203,753
¹ Based on average of Low and High scenarios.				
Economic Impact Summary based on 1 year of stabilized operations (full enrollment), and total initial construction value. Figures are in current dollars.				

