

City of Kingston Report to Council Report Number 21-012

То:	Mayor and Members of Council
From:	Lanie Hurdle, Chief Administrative Officer
Resource Staff:	Craig Desjardins, Director, Strategy, Innovation & Partnerships
Date of Meeting:	December 15, 2020
Subject:	Recommended Integrated Economic Development Strategy

Council Strategic Plan Alignment:

Theme: 4. Strengthen economic development opportunities

Goal: 4.1 Support new and existing businesses

Executive Summary:

The purpose of this report is to recommend Council's endorsement of the Integrated Economic Development Strategy as directed at the April 7, 2020 meeting of Council. The Strategy, attached at Exhibit A, includes all baseline data, comparative analysis and record of community input and engagement.

Kingston's new Integrated Economic Development Strategy will lay the foundation for strategies, tactics and targeted activities that will create a sustainable and thriving ecosystem to support business growth, start-ups, investment attraction and new foreign direct investment opportunities in our community.

Since the draft plan was submitted to Council in late October, the project team has analyzed the public survey input to ensure community validation of the recommendations of the strategy and prepared the execution plan by consolidating materials into an external-facing strategy that tells the story of the vision and opportunity for economic growth for the community.

Recommendation:

That Council endorse the Kingston Integrated Economic Development Strategy attached as Exhibit A to Report Number 21-012; and

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That Council direct staff to work through the implementation of City of Kingston led initiatives included in the Kingston Integrated Economic Development Strategy.

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Authorizing Signatures:

ORIGINAL SIGNED BY CHIEF ADMINISTRATIVE OFFICER

Lanie Hurdle, Chief Administrative Officer

Consultation with the following Members of the Corporate Management Team:

Paige Agnew, Commissioner, Community Services	Not required
Peter Huigenbos, Commissioner, Business, Environment & Projects	
Brad Joyce, Commissioner, Corporate Services	Not required
Jim Keech, President & CEO, Utilities Kingston	Not required
Desirée Kennedy, Chief Financial Officer & City Treasurer	Not required
Sheila Kidd, Commissioner, Transportation & Public Works	Not required

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Options/Discussion:

Background

In October 2019, Council approve a contribution of up to \$65,000 from the 2019 operating budget to co-lead, with the Kingston Economic Development Corporation, the development of an integrated economic development strategy.

One of the distinguishing characteristics in the development of Kingston's new Integrated Economic Development Strategy has been the deliberate collaboration, integration and alignment of: City Council's Strategic priorities and City work plans, key community stakeholder's strategies including Queen's University and St. Lawrence College and the mission and vision of Kingston Economic Development Corporation.

One of the strengths of the community often cited in stakeholder consultations was that Kingston is big enough for critical mass and scaling but also small enough to be able to connect easily and directly with key community stakeholders. This attribute has allowed the strategy project team to gain access to key stakeholders across the community and will be a key success factor in the implementation of strategy recommendations.

The onset of COVID-19, shortly after work begun on the integrated strategy, has required that new economic conditions and factors impacting our community, region and country be taken into account and planned for accordingly. The pandemic's impact on the economy will be deep and long-lasting.

While most of the economic and social impact has over the past 9 months caused hardship and disruption, the pandemic may have created a positive outcome. The scope, scale and pace of the pandemic has necessitated that government, the not-for-profit sector, and industry work together to locate and produce necessary supplies, keep industries and businesses afloat, and safeguard the health of the population.

This non-partisan collegiality emerged quickly at the federal, provincial, and local levels, and has been well documented in Kingston as well. Unprecedented organizational collaboration and integration of program delivery to help those in need can be a blueprint for community recovery and growth.

Collaboration with City of Kingston - Team Kingston Approach

As part of the development of the Integrated Economic Development Strategy, senior City staff have worked alongside the Kingston Economic Development team and Stiletto Consultants at each stage of work up to and including public engagement which is now underway. In addition, Utilities Kingston and Tourism Kingston staff have been active participants in strategy development discussions providing data and expert advice on infrastructure capacity, planning and market conditions.

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The Integrated Economic Development Strategy ensures consistent and comprehensive direction from the key stakeholders, particularly the City and Kingston Economic Development, leveraging the resources and knowledge of both entities. The working group organizational structure for each of the priority economic sectors, with representation from key stakeholders, will be instrumental in the efficient and effective implementation of the recommendations of the Strategy.

Stakeholder Consultation

The Kingston community was central in developing this strategy. A total of 53 meetings with 223 participants were held during the strategy's development. The meetings included input from 96 unique community-based participants, with various follow-up meetings to validate direction.

Discussions involved individuals from various industries including manufacturing, real estate, education, employment services, health, tourism, and digital media. The sessions evaluated Kingston economic health pre- and post- COVID-19 and discussed community gaps, opportunities, strengths, and challenges.

A survey was also developed and distributed through the Get Involved Kingston Public Engagement Platform, Appendix G of Exhibit A, with advice from the City's Communications & Customer Experience team, and was distributed through the platform and open for 3 weeks. The survey was promoted through city and partner social media channels, print and online advertisements in the Kingston Whig-Standard, Kingston This Week and Kingstonist (online only). A radio campaign advertising the survey was also run for 5 days.

A total of 375 responses from Kingston residents was received before the deadline.

Existing Policy/By-Law:

City of Kingston Strategic Plan 2019-2022

Kingston Workforce Development & In-Migration Strategy

Notice Provisions:

None

Accessibility Considerations:

None

Financial Considerations:

In 2019, Council endorsed a contribution of \$65,000 to the Kingston Integrated Economic Development Strategy.

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Donna Gillespie, Chief Executive Officer, Kingston Economic Development Corporation 613-329-4671

Other City of Kingston Staff Consulted:

None

Exhibits Attached:

Exhibit A – Kingston Integrated Economic Development Strategic Plan

Exhibit A to Report Number 21-012



INTEGRATED ECONOMIC DEVELOPMENT STRATEGY

Kingston Economic Development and the City of Kingston

November 2020

STILETTO

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Foreword

REPORT SCOPE

This report presents an Integrated Economic Development Strategy for the City of Kingston and Kingston Economic Development (2020-25). It articulates the community-based economic development vision of Kingston Economic Development and the City of Kingston. The goal of this strategy is to leverage Kingston's unique value proposition, competitive advantages, and strategic initiatives to position the city as an ideal location to live, work, and invest. This anchor strategy is intended to unify the positions of community members, stakeholders, businesses, and other strategic audiences.

REPORT METHODOLOGY

As part of the extensive secondary data aggregation, a total of 172 internal reports were reviewed, along with the collection and analysis of more than 6,400 data points. Details pertaining to key market trends, impacted sectors, real estate data, strategy reports, and other substantive information have been considered in the formulation of the report's recommendations.

Conclusions were based on analysis of information at the time of report preparation and are subject to change with market conditions. *The evolving nature of the COVID-19 pandemic made mid- to long-term* forecasting a special challenge. To that end, baseline data (2019) and other available data (January 2020 to current) have been included and sourced to clearly date pre- and post-COVID information.

STAKEHOLDER CONSULTATIONS

The Kingston community was central in developing this strategy. A total of 53 meetings with 223 participants were held during the strategy's development. The meetings included input from 96 unique communitybased participants, with various follow-up meetings to validate direction.

Discussions involved individuals from various industries including manufacturing, real estate, education, employment services, health, tourism, and digital media. The sessions evaluated Kingston economic health pre- and post- COVID-19 and discussed community gaps, opportunities, strengths, and challenges.

A survey was also developed and distributed through the Get Involved Kingston Public Engagement Platform, resulting in 375 responses from Kingston residents.



Kingston's Unique Differentiators

Access

Kingston has access to more than 14.5 million people in the Toronto-Ottawa-Montréal corridor. No other Canadian Census Metropolitan Area (CMA) has such a large population base within a three-hour radius.

Tourism Volumes

Kingston has an exceptionally large domestic tourist market. No other CMA attracts more Canadian tourists than Kingston, relative to population size.

Diverse Student Pool

Kingston has an ability to attract international post-secondary students in high volumes. It has the second largest number of international students among CMAs in Ontario.

Highly Skilled Workforce

Kingston has one of the highest concentrations of PhDs in Canada.



Executive Summary

Kingston Economic Development Corporation and the City of Kingston have a bold vision – to create an Integrated Economic Development Strategy that will engage the Kingston business and residential communities.

By collaborating in new ways, aligning development strategies with post-secondary educational institutions, and bringing together key innovation ecosystem and community leaders, Kingston will accelerate a long-term sustainable growth agenda for all.

With its many business and community assets, Kingston is constantly evolving. Kingston has benefited from its robust private-public economic base, strong educational and research institutions, an advantageous location, and the drive of its residents. These benefits have brought a high quality of life, an educated population, and a stable job market to the city. Kingston has a great foundation.

As Kingston evolves, so does the province, the country, and the globe. Kingston must prepare for advances in technology, innovation, and international trade that were not on the radar ten years ago. And the forces that drive this growth can be often competitive: export vs. local sustainability, entrepreneurs vs. established firms, downtown businesses vs. suburban firms. All stakeholders are crucial to the city's continued growth. Retaining and growing our workforce, helping our local business ecosystems grow in a sustainable fashion, and encouraging investment into the community will prepare Kingston for the future.

This strategy outlines 35 specific recommended initiatives, along with proposed action plans and metrics for success. Executing this strategy requires deliberate cooperation and coordination in economic development strategies and initiatives. By intentionally bringing diverse stakeholders together, complex challenges can be thoroughly discussed, integrating Kingston's economic, environmental, social, and cultural values.

The strategy is directed by two specific actions.

As part of the Integrated Economic Development Strategy, the City of Kingston and Kingston Economic Development are introducing two fundamental shifts for the community: a fully integrated and collaborative community, and, a cluster approach for driving short- and long-term economic growth potential.

The cluster approach will focus multi-agency activities towards a common goal and use resources more effectively. Through this strategy, Kingston will focus on two main sectors – Health and Health Innovation and Sustainable Manufacturing. By positioning



these two clusters, Kingston will retain and grow its existing job base, facilitate ecosystems for companies to connect and collaborate, invest in strategic business infrastructure, support entrepreneurial activities, and encourage large-scale foreign direct investment. Specialized services will also be needed by these clusters in marketing, finance, law, packaging, hospitality, and other areas.

Kingston's economic development brand will be more effectively promoted, nationally and internationally, as a Canadian leader in these two sectors. All residents and businesses will have a role to play in moving towards this prosperous future.

If clustering is addressed successfully, Kingston will benefit in many ways.

Clusters normally include companies in the same industry that share infrastructure, suppliers, and distribution networks. Supply chains are then able to support the cluster more effectively within the geographic zone. Local post-secondary institutions provide the talent and research resources needed for applied research and development. From Silicon Valley (IT) to the Okanagan Valley (wine) and Toronto / Vancouver (film), clusters have brought together creative and innovative companies to make their communities prosper. Launching the Integrated Economic Development Strategy serves as a rallying point for greater collaboration within Kingston and surrounding areas. It will support existing, new, and emerging businesses – and drive Kingston's long-term, sustainable economic prosperity.

> Kingston Economic Development and the City of Kingston have a bold vision – to create an Integrated Economic Development Strategy that will engage the Kingston business and residential community.

> By collaborating in new ways, aligning development strategies with post-secondary educational institutions, and bringing together key innovation ecosystem and community leaders, Kingston will accelerate a long-term, sustainable growth agenda for all.

KINGSTON

Background

Kingston is the heart of the Toronto-Ottawa-Montréal corridor, the only census metropolitan area (CMA) in Canada with access to 40 per cent of the country's population within a three-hour driving radius. Along with these 14.5 million Canadians are hundreds of thousands of United States residents who live just across the border.

By leveraging this remarkable market access, Kingston is poised for substantial economic development success through strategic, intentional, and collaborative initiatives.

During the past year, the City of Kingston has partnered with the Kingston Economic Development Corporation to develop an Integrated Economic Development Strategy, incorporating the municipality's strategic priorities with those of the business community. This long-term Integrated Economic Development Strategy lays the foundation for Kingston to become a leader in the region, province, nation, and world.

Extensive stakeholder consultations took place throughout this engagement, including more than 50 discussions (interviews and focus groups) with more than 200 participants. Numerous online meetings were conducted with leaders at the City of Kingston and Kingston Economic Development throughout the project. And, through the Get Involved Kingston Engagement Platform, 375 local citizens shared opinions via an online survey.

Behind the scenes, more than 6,400 data points were collected and analyzed to confirm Kingston's core community assets, identify trends for workforce and business counts, and forecast potential areas for sector growth. Through this research, two significant priority sectors for Kingston were identified – Health and Health Innovation and Sustainable Manufacturing. These two sectors have the existing industry and workforce strengths, as well as the long-term growth potential, to establish Kingston as a recognized leader nationwide.

Though these two sectors were identified as economic development priorities, there are also other secondary areas of special interest that require nurturing. Opportunities in the Creative Industries show great promise, especially in the emerging subsectors of film, music, and theatre. There also is much untapped potential throughout the Rural Kingston area for thoughtful development, especially in tourism, agriculture, and business infrastructure (including broadband).



Due to their importance to the City of Kingston, economic development opportunities in both Rural Kingston and the Creative Industries have been explored in detail, and are covered in separate documents.

For full discussion on these areas, review the Rural Kingston Economic Development Strategy: Mobilizing Opportunities for The Greater Kingston Region report (October 2020) and the Creative Industries, City of Kingston report (October 2020).

The proposed vision for Kingston is to become an national and international magnet for innovative companies, technologies, and people. This strategy will enable the city and business community to achieve that vision. Despite the COVID-19 pandemic, this ambitious strategy ensures that the community is well positioned for long-term growth.

The Integrated Economic Development Strategy identifies four pillars, 13 themes, and 35 recommended initiatives for short-, medium-, and long-term success. Significant progress is already being made, thanks to collaborations between the City of Kingston, Kingston Economic Development, and postsecondary educational institutions.

Kingston's commitment to diversity, sustainability, cultural heritage, innovation, and collaboration have been woven into the various recommended initiatives and are fundamental drivers for the Integrated Economic Development Strategy. These values came through very strongly in all community discussions, reflecting how Kingston residents want their city to be recognized. The success of this strategy is predicated on its implementation. As this plan has been developed as an integrated strategy between the City of Kingston and Kingston Economic Development Corporation, the plan's implementation requires that both entities work in close collaboration. Three working groups are recommended: two to lead the development of the Health and Health Innovation and Sustainable Manufacturing clusters, and one to support the emerging Creative Industries sector.

These working groups will require support from Kingston-area post-secondary educational institutions, industry associations, Tourism Kingston, not-for-profit organizations, and businesses. They will have the mandate to build and support economic development and will be the means to expedite the development process.





Why an Integrated Economic Development Strategy is Needed

A PRIORITY FOR THE CITY OF KINGSTON

The City of Kingston and its Council have set a vision to make Kingston a smart, livable, and leading city.¹ In Kingston's Strategic Plan 2019-22, five priorities were outlined to achieve this vision. Alignment between the priorities in Council's Strategic Plan and the Integrated Economic Development Strategy is of vital importance. Four of the five priorities in Kingston's Strategic Plan are directly reflected in this Integrated Economic Development Strategy. The fifth priority focuses on walkability, roads, and transportation, and is not addressed in this economic development strategy:

- 1. Demonstrate leadership on climate action: Enhance and expand green spaces; protect wetlands; increase the tree canopy through greening initiatives.
- 2. Increase housing affordability: Pursue development of all types of housing city-wide through intensification and land-use policies; advocate for funding and increased investments in housing development.
- 3. Strengthen economic development opportunities: Support new and existing businesses; explore the feasibility of establishing rural business parks; invest in workforce development and inmigration strategies.

4. Foster healthy citizens and vibrant spaces: Support the potential for Indigenous cultural space; leverage and work with partners to promote food security solutions.²

A PRIORITY FOR KINGSTON ECONOMIC DEVELOPMENT

Kingston Economic Development believes in the power of partnerships to bring about lasting change. They believe that enhancing economic capacity comes through building strong local, regional, and extra-regional partnerships and developing collaborative activities. Kingston Economic Development's work is contingent upon the strength of these partnerships, the effectiveness of relationships with city colleagues, and the support of industry / community leaders.

The 2015-20 Strategic Plan speaks volumes about the demonstrated commitment that Kingston Economic Development places on collaboration, with more than 90 active partnerships listed, from school boards to hospitals, associations to media.³ Closer collaboration will further enhance workforce, housing, industry cluster development, and tourism activities. Expanding Kingston's existing and emerging networks will support the economic development strategy and Kingston's long-term potential.



COLLABORATION BETWEEN THE CITY OF KINGSTON AND KINGSTON ECONOMIC DEVELOPMENT

In the past, separate strategies and initiatives from the City of Kingston and Kingston Economic Development did not fully maximize the combined resources, service delivery to businesses, and knowledge that exists between the two organizations.

Findings from primary research conducted for this strategy reflected a desire from stakeholders for a more collaborative and aligned relationship between the two organizations. Work has already begun to address this finding with the redefining of roles relating to workforce development and business support.

The Kingston Integrated Economic Development Strategy partners the City of Kingston and Kingston Economic Development in both its creation and implementation. The Integrated Economic Development Strategy ensures consistent and comprehensive direction from the two organizations, leveraging the resources and knowledge of both entities.

A comprehensive review of governance structures of comparable and aspirational jurisdictions supports this joint action. Findings from a SWOT analysis created for this report (Appendix D) suggest that notable and aspirational cities use an external agency or corporation such as Kingston Economic Development in a management capacity.

A SHIFT IN COMMUNITY MINDSET

The onset of COVID-19 has provided an interesting side benefit. As is seen throughout the world, such a disruptive event necessitated government, the not-for-profit sector, and industry working together to locate and produce necessary supplies, keep industries and businesses afloat, and safeguard the health of the population. That non-partisan collegiality emerged quickly at the federal, provincial, and local levels, and has affected Kingston as well.

Likewise, a new commitment to work collaboratively for a stronger economic future has been made by the City of Kingston, the Kingston Economic Development Corporation, the not-for-profit sector, postsecondary educational institutions, and the business community. Time, effort, and duplication will be reduced by jointly tackling economic development needs from their differing areas of expertise. This approach also brings new voices to the table, ensuring that strategies are practical, effective, and reflect community needs.

As Responding to COVID 19: Report to Council (April 2020) stated, "Now is the time for collaboration across all aspects of our community, including economic, social, and cultural. Taking a united Team Kingston approach will help to streamline efficiencies and support businesses and community members that need it most."⁴



THE IMPACT OF COVID-19

COVID-19 is a global health crisis with profound social and economic consequences. IBISWorld market research recently reported that approximately 91.2 per cent of industries are expected to be moderately to highly impacted by the outbreak in Canada.⁵

All industries in Kingston will be affected in some way due to COVID-19. Specific initiatives were outlined in the Responding to COVID 19: Report to Council (April 2020). Impact intensity will be variable based on a variety of factors, including trade exposure with affected countries, supply chain exposure, and other business environment risks. A recent report from the World Economic Forum (October 2020) reported that "Automation, in tandem with the Covid-19 recession, is creating a 'double disruption' scenario for workers ... positions in growing demand include those in the green economy, roles at the forefront of data and artificial intelligence, as well as new jobs in engineering, cloud computing, and product development."6

With this level of impact, the Kingston Integrated Economic Development Strategy is imperative to sustaining Kingston's economy, industries, and businesses. The strategy report provides a baseline of Kingston industries and workforce, evidence-based recommendations focused on strategic growth, and communitybased action plans that will collaboratively protect vulnerable industries and leverage COVID-19 opportunities.

WORKFORCE TRENDS

When looking at employment forecasts, a study contracted for the City of Kingston (Watson and Associates, 2019) showed a modest employment growth rate: "Under the Base Case Scenario, the City of Kingston's employment base is forecast to increase from 74,800 jobs in 2016 to 85,700 jobs in 2046. This represents a total employment increase of 10,900, or 0.5 per cent per year (363 jobs / year)."⁷

This very long-term snapshot may continue to be valid, but short- and medium-term changes due to the COVID-19 pandemic also need to be considered. As mentioned, the evolving nature of the COVID-19 pandemic made mid- to long-term forecasting a special challenge. To that end, baseline data (2019) and other available data (January 2020 to current) have been included and sourced to clearly date pre- and post-COVID information.

As of June 23, 2020,⁸ the Financial Accountability Office of Ontario has provided the following workforce impact data (Figures 1 and 2). In May 2020, an 11.2 per cent overall job loss was seen across all sectors.

When looking at local sectors, four were impacted the most: accommodation and food services; public administration; information culture and recreation; and health care and social assistance. In these four sectors alone, there were more than 6,300 job losses in Kingston.



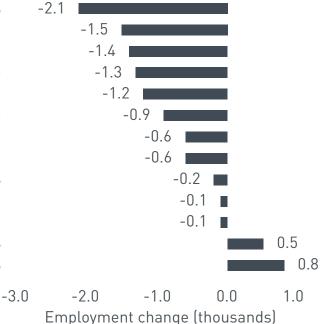
	2018	2019			2020			Feb to May 2020
			Jan	Feb	Mar	Apr	May	
Employment change (thousands)	-0.9	1.1	0.2	0.5	-1.3	-4.5	-4.0	-9.8 (-11.2%)
Unemployment rate (per cent)	5.5	5.3	5.7	5.2	5.7	7.9	10.8	5.6
Participation rate (per cent)	63.7	63.4	62.4	62.5	61.8	59.9	58.8	-3.7

Figure 1: Key labour market indicators, Kingston CMA⁹

Sources: Statistics Canada and FAO

Figure 2: Industry breakdown of job losses during the pandemic, Kingston CMA, February to May 2020*¹⁰

Accommodation and food services Public administration Information, culture, and recreation Health care and social assistance Other services (except public administration) Wholesale and retail trade Transportation and warehousing Construction Educational services Finance, insurance, real estate, rental, and leasing Manufacturing Business, building, and other support services Professional, scientific, and technical services



Note: Not seasonally adjusted Sources: Statistics Canada and FAO

As of September 2020, if we look at overall trends across the province, the job gains are limited: "The impact of the pandemic shutdowns on Ontario's labour market has been dramatic, with a record 1.2 million jobs lost from February to May, while the unemployment rate more than doubled to 13.6 per cent. Job losses were experienced across all age groups, sectors and regions. As the economy reopened through the summer, employment has rebounded strongly, rising by 838,000 over the June to September period, recovering nearly threequarters of the jobs lost during the height of the pandemic. Despite these recent gains, **Ontario employment remains down by 318,500 jobs (or 4.2 per cent) in September compared to the pre-pandemic peak in February.** The strong pace of monthly job gains during the early reopening phase is also expected to moderate, delaying a full employment recovery into 2021."¹¹



Reskilling a percentage of these workers will be necessary if these businesses permanently close or are otherwise affected. Close partnerships with the Government of Ontario and local post-secondary education institutions will be central to this workplace training, especially with funds earmarked in the recently released Ontario budget. Collaboratively, Kingston must be ready to capitalize on "an investment of \$180.5 million CAD over three years, including a skilled trades strategy, an additional \$100 million CAD of dedicated investments through Employment Ontario for skills training, a redesigned Second Career program and \$59.5 million CAD to acquire in-demand skills."12

As discussed in the April 29, 2020 *Response to COVID-19: Outline to Council*, the following workforce recommendations continue to be valid until the Kingston workforce returns to pre-COVID levels, and beyond:

- "Support solutions to get people back into the workforce.
- Facilitate connection between businesses and recruiters – helping move those workers displaced from one sector to another where labour is needed.
- Work with Employment Ontario, St. Lawrence College, and Skills Advance Ontario to support reskilling programs for those impacted needing to re-enter the workforce and connect with business sectors.
- In partnership with St. Lawrence College, develop and implement industry-specific training to support reopening procedures and training for employee and consumers."¹³

ALIGNMENT WITH FEDERAL GOVERNMENT POLICIES AND STRATEGIES

Sector alignment with Canadian federal government policies predominantly revolves around cluster development, export development, and applied, post-secondary research. For example:

- **Green economy:** The federal government has made a commitment to establishing a green economy, especially as part of post-COVID economic recovery. Finance Minister Chrystia Freeland reiterated this stance in August 2020, stating, "I think all Canadians understand that the restart of our economy needs to be green. It also needs to be equitable. It needs to be inclusive. And we need to focus very much on jobs and growth."¹⁴
- **Cleantech:** Various federal departments (16 in number) have banded together through Canada's Clean Growth Hub. The Clean Growth Hub "is a wholeof-government focal point for clean technology focused on supporting companies and projects, coordinating programs, and tracking results."¹⁵
- Canadian Institutes of Health Research (CIHR): Approximately one-quarter of CIHR's \$1 billion CAD budget has been allocated to support research on: "biomedical research, clinical research, research respecting health systems, health services, the health of populations, societal and cultural dimensions of health and environmental influences on health."¹⁶

- Natural Sciences and Engineering Research Council of Canada (NSERC) Alliance Grants: These grants support university researchers collaborating with private-sector, public-sector, or notfor-profit organizations for grants from \$20,000 to \$1 million CAD from one to five years. NSERC projects "should result in both new technical knowledge and societal impact. The research may tackle national priorities or global issues also affecting Canada, or generate societal benefits."¹⁷
- Creative Export Strategy, Canadian Heritage: This strategy is a \$125 million CAD, five-year investment promoting Canada's creative industries. The fourpart strategy encourages the discovery and distribution of creative content abroad, and helps creative businesses and organizations gain the tools they need.¹⁸
- Invest in Canada: This federal program "works directly with global investors to unlock investment opportunities and facilitate expansion in Canada... Facilitating global investment that spurs job growth and makes Canada stronger, Invest in Canada is the foreign investor's primary point of contact."¹⁹

ALIGNMENT WITH PROVINCIAL GOVERNMENT POLICIES AND STRATEGIES

Provincially, there are a number of strategic policy initiatives that would resonate with the two highlighted priority sectors. Sector alignment with provincial policies predominantly revolves around education / training, workforce development, and entrepreneurial supports. The following list provides a selection of new funding initiatives from the provincial budget, *Budget 2020: Ontario's Action Plan: Protect, Support, Recover* (November 5, 2020), most of which are in response to the COVID-19 pandemic:

- "\$3.3 billion CAD in new funding made available, with an additional \$4 billion in 2021–22 and \$2 billion in 2022–23 provided in flexible funding to help the health sector address its changing needs as part of the response to COVID 19 ...
- Investing \$1.75 billion CAD to increase long-term care capacity and access for residents by building 30,000 long-term care beds ...
- Investing \$100 million CAD over two years for the Community Building Fund to support community tourism, cultural and sport organizations that are experiencing significant financial pressures due to the pandemic ...
- Providing one-time emergency funding of \$25 million CAD for Ontario's arts institutions to help cover operating losses incurred as a result of COVID 19 ...
- Offering \$4 billion CAD in one-time assistance to Ontario's 444 municipalities and 110 public transit systems as part of the Safe Restart Agreement (SRA) ...
- Making additional investments of over \$680 million CAD over the next four years in broadband infrastructure ...
- Committing to provide Ontario residents with support of up to 20 per cent for eligible Ontario tourism expenses to encourage them to safely discover Ontario in 2021, the year of the Ontario staycation ...



- Connecting workers in the tourism and hospitality sector and others most affected by the pandemic to training and jobs with an investment of \$180.5 CAD million over three years, including a skilled trades strategy, an additional \$100 million CAD of dedicated investments through Employment Ontario for skills training, a redesigned Second Career program, and \$59.5 million CAD to acquire in demand skills ...
- Providing \$500 million CAD over four years to make government services more reliable, convenient and accessible through the Ontario Onwards Acceleration Fund."²⁰

And, much akin to the federal version, the existing Invest in Ontario initiative centralizes a wide array of programs under one agency to streamline foreign investment: "As Ontario continues to reopen for business, Invest Ontario will initially focus on three strategic sectors where the province has a global competitive advantage – advanced manufacturing, life sciences, and technology – all while moving at the speed of business."²¹ Another program to be aware of is the Ontario Made program. An initiative through Canadian Manufacturers and Exporters, funding for Ontario Made was made possible through the \$50 million CAD Ontario Together Fund launched on April 1, 2020. Manufacturers are encouraged to register their Ontario Made products for inclusion in a searchable database, and receive a special logo for promotional purposes.

Any collaborative alignment with federal or provincial departments or agencies, especially in the area of infrastructure, will ultimately help to quantify the benefits for all parties involved, engage a larger group of community stakeholders, smooth procedural bottlenecks, strengthen risk management, and help to unlock new sources of capital.



KINGSTON

Kingston at a Glance

Indicator	Geography	Data	Date
Population ²²	City of Kingston	123,789	2016
Population, forecast (2046) ²³	City of Kingston	180,300	2019
% of population aged 65 and older ²⁴	Kingston CMA	19.4%	2016
		1 20.4% from	
		2011	
Working age population ²⁵	Kingston CMA	110,000	2019
Total new jobs per year, forecast (2046) ²⁶	City of Kingston	363	2019
Total persons working from home, forecast (2046) ²⁷	City of Kingston	22.0%	2019
Median after-tax household income ²⁸	Kingston CMA	\$62,652 CAD	2015
Unemployment rate ²⁹	Kingston CMA	8.5%	October 2020
% of self-employed ³⁰	TBD	10.0%	2016
Total enrolment, Queen's University ³¹	All campuses	25,560	2019
Total enrolment, St. Lawrence College ³²	All campuses	6,889	2018-19
Number of businesses ³³	TBD	4,500 ↑ 26.0% from 2014	2019
Total GDP ³⁴	Kingston CMA	\$9,027 million CAD	July 2020
GDP per capita ³⁵	Kingston CMA	\$72,922 CAD	July 2020
GDP forecast, 2020 (forecast April 2020) ³⁶	Kingston CMA	\$8,717 million CAD	July 2020
Average commute time	TBD	15 minutes	2018
Total value of building permits ³⁷	Kingston CMA	\$41.3 million CAD	September 2020
Total value of residential building permits ³⁸	Kingston CMA	\$27.5 million CAD	September 2020
Total of value of industrial building permits ³⁹	Kingston CMA	\$10 million CAD	September 2020
Total value of commercial building permits ⁴⁰	Kingston CMA	\$3.3 million CAD	September 2020
Average resale price of homes ⁴¹	Defined by KAREA	\$491,156 CAD	September 2020
Residential rental vacancy rate ⁴²	Kingston CMA	1.9%	October 2019
Commercial vacancy rate ⁴³	City of Kingston	6.5%	2016
Buildings of 10 stories or more	Undefined	36	November 2020



The City of Kingston is located at the northeastern end of Lake Ontario, where the St. Lawrence River and the Cataraqui River meet. Kingston enjoys proximity to the major centres of Toronto, Montréal, and Ottawa, as well as easy access to northern New York state and Syracuse, the largest city in central New York state.

Kingston is a well-known tourism stop with a historic downtown and several major attractions, such as Fort Henry. As well, the Thousand Islands and Prince Edward County (50 kilometres west) are within driving distance.

The city is home to several correctional institutions and Canadian Forces Base (CFB) Kingston, one of the largest military bases in Canada. Large employers, such as INVISTA Canada Co., Novelis Inc., and DuPont Canada Co., have formed Kingston's industrial base, and serve as a foundation for other manufacturing clusters along the Toronto-Ottawa-Montréal corridor. As well, post-secondary institutions, including Queen's University, the Royal Military College of Canada, and St. Lawrence College, provide added economic stability and give the city a richer cultural life than found in many similar-sized cities.⁴⁴

Kingston's highly rated quality of life, excellent health care, reasonable cost of living and reputation as a safe, clean, and walkable city have drawn many young families, retirees, and military veterans to Kingston.

KINGSTON'S VALUE PROPOSITION

Kingston is in the heart of the Toronto-Ottawa-Montréal corridor. More than 14.5 million Canadians – or 40 per cent of the country's population – live within a three-hour drive from the city. In addition, thousands of US residents live just across the border. No other Canadian urban centre can claim the population area claimed by the Kingston CMA.

WHAT DOES A 14.5 MILLION POPULATION CATCHMENT AREA MEAN?

Kingston is out of the commuting area for both Toronto and Montréal. In practical terms, Ottawa is out of commuting area as well, though hundreds of people do commute between Kingston to Ottawa daily.⁴⁵

The Kingston CMA is an ideal location for industries that would benefit from being within a three-hour drive from 14.5 million people. Potential industries include:

- Transportation and warehousing: Kingston is located on Highway 401 – the main transportation link through the Toronto-Ottawa-Montréal corridor.
- **Tourism:** For companies looking to access such a large market, Kingston is well positioned as an easy drive for tourism activities, day tripping, weekends away, and longer vacations.

Communities globally that adopt a cluster strategy also pursue other initiatives to support a multi-faceted approach for economic development. The industries that



can leverage the Kingston market access advantage can serve as short- and mediumterm economic opportunities outside of the cluster development (for Health and Health Innovation and Sustainable Manufacturing).

In addition, considering COVID-19 and the shift to remote working, Kingston is a viable alternative for the relocation of workers from Ottawa, the Greater Toronto Area, and Montréal searching for a better quality of life. Kingston is still a CMA, which allows for many "big city" amenities with the costs, conveniences, and character that a mid-sized municipality provides.

STRENGTHS TO BUILD ON

Kingston has several unique and foundational strengths that can be mobilized to capitalize on rising opportunities.

STRENGTHS

Within the city, Kingston benefits from strong economic leadership and existing cultural attractions. Kingston is intentionally fostering strengths in three priority sectors: food processing, health care, and manufacturing.⁴⁶ Pursuing sectors with a long-term, sustainable focus positions Kingston as a leading jurisdiction among its peers, fostering innovative ideas and attracting invesment. Its strong sustainability focus is also an important asset: Kingston is the first Canadian city to adopt a protocol for sustainable energy procurement.⁴⁷

Kingston is in an ideal position for future growth. High public sector employment (38.5%) combined with a large higher education presence provides Kingston with a strong and stable economic workforce upon which to grow.⁴⁸ Historical sites, festivals, unique architecture, reliable transit systems, and a strong, well-established military presence make Kingston a destination worth visiting.

OPPORTUNITIES

Kingston has an opportunity to leverage its strong start-up reputation to attract investment. Kingston was ranked ninth by StartupBlink (2020) as best start-up community in the world.⁴⁹ It was also ranked the Top Small-Size City in the Americas for foreign investment by the *Financial Times* (2017).⁵⁰ Building on this promotion to drive further growth is a timesensitive opportunity.

In the recommended initiatives, the investment in a research and technology park has also been identified as an opportunity. Leveraging these initiatives will support growing sectors within the Kingston economy and boost long-term GDP. Additionally, Kingston's active participation in regional initiatives and relevant provincial priorities (e.g., repatriation of Canadian companies) presents the city with an opportunity to tap into provincial and regional support to expand economic development efforts.

Kingston's reputation for high quality of life and as a great retirement town presents another key opportunity. The pandemic has intensified the urban exodus for retirees or remote workers coming from the GTA and other large centres.⁵¹ Kingston is in an ideal position to capture some of this market, and the economic benefits that come with it.



COMPARATIVE ANALYSIS WITH PEER CANADIAN CITIES

A detailed analysis was conducted comparing Kingston with peer cities in Canada (note: cities were chosen based on an analysis of social and economic data such as population, income, and heritage focus). The analysis concludes that Kingston has a unique combination of the following elements in comparison with peer cities in Canada:

- Market access (proximity to more than 14.5 million people within a three-hour radius).
- Access to waterfront (for tourists, quality of life for residents).
- Access to harbour (for transport, sport tourism, leisure tourism / cruise ships).
- Proximity to US border (for export, tourism).
- Part of an economic trade corridor.
- Access to a military base.
- GDP growth greater than 10 per cent from 2012-16.
- Average commuting time (15 minutes) is much less than Canadian average (26 minutes).

Kingston has also been recognized nationally and internationally in various ranking studies:

- Ranked #1 in Top Cities in Canada to be a Woman – Canadian Centre for Policy Alternatives, Manitoba Office, 2019.⁵²
- Ranked #1 for Best Small City FDI Strategy – FDI Communities of the Future, 2018.⁵³
- Ranked #1 for Fastest Growth in Transit Ridership – Statistics Canada, 2017.⁵⁴
- Ranked #4 Top City in Ontario for Millennials – Point2 Homes real estate portal, 2018.⁵⁵
- Ranked #5 Top City to Buy Real Estate in Canada – *MoneySense* magazine, 2020.⁵⁶
- Ranked #6 Small City for Human Capital and Lifestyle – FDI Communities of the Future, 2018.⁵⁷
- Ranked #14 Best Community in Canada, 2019 *Maclean's* magazine.⁵⁸



KINGSTON ECONOMIC Development Corporation

About the Integrated Economic Development Strategy

VISION OF THE STRATEGY

Kingston is evolving to an advanced clusterbased economy. Through collaborative strategic economic development of two cutting-edge clusters – Health and Health Innovation and Sustainable Manufacturing – Kingston has the potential to become a global leader in these areas.

MISSION OF THE STRATEGY

The mission for the Kingston Integrated Economic Development Strategy is to lay the foundation for strategies, tactics, and targeted activities. Achieving this mission will create a sustainable and thriving ecosystem to collaboratively support business growth, start-ups, investment attraction, and new foreign direct investment opportunities. The goal of the strategy is to position Kingston for short- and long-term sustainable economic development growth.

TARGET OUTCOMES AND METRICS

- 1. Industry growth in the identified priority sectors within Kingston.
- 2. Clustered development in identified areas within Kingston.

- A cohesive, collaborative development approach to align with the overall vision(s) for the City of Kingston and Kingston Economic Development.
- 4. Identification of short-term development opportunities that can drive immediate results for overall economic development for the region.
- Identification of long-term development opportunities that can support the longterm economic development plan for Kingston.
- Identification of short and long-term development opportunities to support residents and residential growth in Kingston.
- 7. Identification of short and long-term development opportunities to support business expansion, and potential investment attraction to Kingston.

The following metrics set the overall direction for program assessment. Review *Measuring Success* (page 62) for a more detailed breakdown of metrics and timelines.

- 1. Supports and helps to retain existing businesses.
- 2. Offers business expansion potential.
- 3. Attracts investment.
- 4. Expands opportunities for research and development and innovation.



- Supports diversity in entrepreneurship (e.g., newcomers / immigrant / women / Black, Indigenous, People of Colour (BIPOC)/ LGBTQ2+ entrepreneurs).
- 6. Strengthens community engagement.
- 7. Leverages and builds infrastructure and assets.

GUIDING STRATEGY DEVELOPMENT PRINCIPLES

Throughout the stakeholder consultations, a number of components emerged as consistent themes with a desire to transform Kingston's economic performance. Highlights of recurring themes include:

- Build a cohesive and collaborative community.
- Increase cohesion and collaboration among partners.
- Create a strategic cluster to drive privatesector growth.
- Support the attraction, development, and growth of 40 net new high growth⁵⁹ companies during the next decade.
- Focus on short-term results but start to build foundation for long-term economy.
- Change the mindset in the community to embrace innovation.
- Build on community assets such as heritage, culture, and tourism.
- Where possible, incorporate a climate action agenda in strategies and tactics to help to reduce greenhouse gas (GHG) and the environmental impacts to drive a clean, responsible, and sustainable culture of innovation.
- Ensure diversity and inclusion in the community (cultural, gender and parity)

to continue to build upon the unique attribute of a welcoming and thriving community for personal and professional development for those in minority and under-represented groups.

KEY INPUTS

The concept for the Kingston Integrated Economic Development Strategy incorporated the following essential inputs:

- 1. Identifying the unique community attributes.
- 2. Identifying core foundational elements to utilize:
 - a. Industry composition and business counts.
 - b. Workforce composition and strength.
 - c. Educational institutional performance.
 - d. Research activities and areas of strength.
- 3. Leveraging past performance in accepted community strengths.
- 4. Identifying potential areas of focus based on the potential to augment existing or emerging economic opportunities.
- 5. Ensuring alignment of focus areas with municipal priorities.
- 6. Ensuring alignment of focus areas with provincial and federal priorities.
- 7. Ensuring alignment with multi-stakeholder community activities.

The combination of these seven elements helped to formulate the themes and recommended initiatives of the Integrated Economic Development Strategy.



Strategic Directions: Priority Sector Strengths and Opportunities

Prioritizing specific high-growth sectors will allow Kingston's economy to accelerate, becoming more robust, innovative, and competitive. Clusters will retain and grow the existing job base, facilitate ecosystems for companies to connect and collaborate, support entrepreneurial activities, and encourage large-scale foreign direct investment. It will also make greater use of existing city resources and ensure consistency in economic development strategy applications.

CRITERIA

The following selection criteria were established to identify Kingston's key sectors:

- Share of total city employment (through workforce data).
- Business counts.
- Location quotients.⁶⁰
- Research funding (federally and provincially) by sub-sector.
- Research infrastructure (e.g., laboratories).
- Research centers / institutes / networks.
- Participation of strategic stakeholders.
- Global demand.

Note: the opportunities / threats / impacts of COVID-19 have also been considered as part of the analysis.

Based on this criteria, two high-growth sectors emerged and have been selected: Health and Health Innovation and Sustainable Manufacturing.

Health and Health Innovation

- Health Data
- Healthy Aging
- Veterans Health

Sustainable Manufacturing

- Material & Process Innovation
- Advanced Manufacturing
- Low-impact Food Processing



KINGSTON ECONOMIC Development Corporation

HEALTH AND HEALTH INNOVATION

Figure 3: Top data points for health and health innovation, Kingston

INDUSTRY SNAPSHOT



11.

Workforce increase of 15.8% (2014-19)

Forecasted annual

\$1.00 CAD output):

\$1.61 CAD (2019-24)

economic output (for every

5

(2014-19) Forecasted annual GDP

Business count increase

of 13.3%

growth: Increase of **\$194** million CAD (or 16%)



GDP of **\$1,234M CAD**, increase of **\$370M CAD** (2014-19)



Research funding: **\$159M CAD** (2014-19)

Health and Health Innovation includes all direct and indirect activities related to health and health innovation, from pharmaceutical manufacturing and health technologies to health-based artificial intelligence supports and robotics. A selected list of NAICS codes in this area is available in Appendix A.

SECTOR STRENGTHS TO BUILD ON

- 1. A vibrant health-related research network (national health networks): Several national health research networks are headquartered in Kingston, including the Canadian Cancer Trials Group; the Canadian Primary Care Sentinel Surveillance Network; the Canadian Frailty Network; and the Canadian Institute for Military and Veterans Health Research.⁶¹
- 2. A favorable health-related research funding climate: Government-based health research funding is the top funded sector with approximately \$159 million CAD (32%) of funding received locally. A portion of research funding is directed to national health networks, however, and these funds do not necessarily remain in the city.⁶²

- 3. A significant hub for health-related research: In Kingston, there are 14 Canada Research Chairs worth nearly \$12 million CAD established during the last five years; other research institutes include: Centre for Neuroscience Studies, Centre for Studies in Primary Care, Health Services and Policy Research Institute, and the Translational Institute of Medicine.⁶³
- 4. A varied local talent pipeline: Local post-secondary educational institutions offer diploma, undergraduate, and / or graduate programs, educating talent in a variety of fields from nurse aides and personal support workers to researchers in health-related artificial intelligence. Selected programs show prowess in these areas, including those from Queen's (e.g., combined MD / PhD and MD / Master's programs, Master's of Management Analytics, first fully online Bachelor of Health Sciences), and St. Lawrence College (e.g., Diplomas in Business Analytics and Health Information Management, Bachelors of Science in Nursing).⁶⁴



- 5. A burgeoning cluster of companies to build upon: Commercial-ready technologies and growth-oriented companies, a sample of which include Spectra Plasmonics, Octane / Lonza, D2 Innovations, Kinarm, Kings Distributed Systems (KDS), and Limestone Analytics.⁶⁵
- 6. Strong alignment with existing City of Kingston plans: This cluster is well aligned with the Kingston City Council 2019-22 Strategic Plan⁶⁶ and with a City of Kingston FedDev Ontario proposal (\$3 million CAD across a three-year period for local industry).
- 7. A unique population base makes Kingston an attractive Living Lab for health innovation: This asset leverages Kingston's demographics, including a significant rural component, underserved Indigenous communities, a local prison system, one of the largest staffed military bases in Canada, and a rapidly aging populace.⁶⁷

PROPOSED SUB-SECTORS

Kingston's Health and Health Innovation ecosystem will grow by focusing on strengthening activities along the Innovation Continuum and focusing on sub-sectors that present opportunity for economic growth and differentiation in innovation. The Kingston's Health Innovation Continuum (Figure 4) indicates areas of strength (green), and areas of weakness (red).

Kingston has a strong Health Care and Social Assistance as a service sector (NAICS 62) and has opportunity to distinguish itself in Health Innovation with a focus in the following subsectors.

WHAT'S NEEDED

Integrated Coordination: There is a need for increased coordination among strategies, services, and supports throughout Eastern Ontario, including within Kingston's Health and Health Innovation ecosystem.

Commercialization Space:

Dedicated space(s) will encourage business creation / retention for health and health innovation and provide a place for academia and industry to collide.

Figure 4: Kingston's health and health innovation continuum



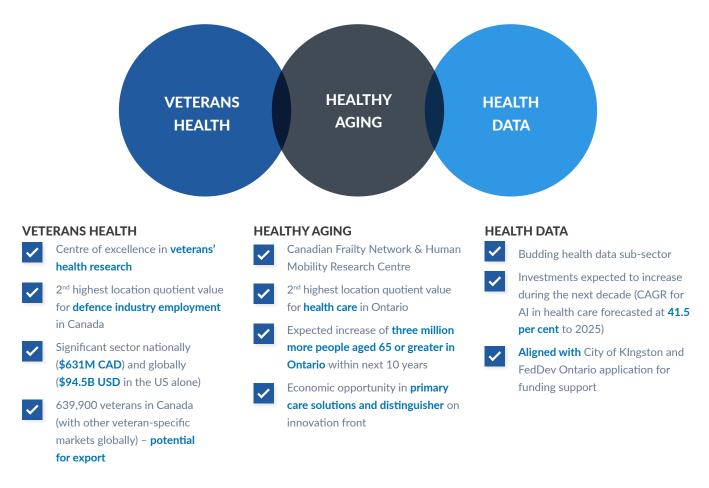


Figure 5: Snapshot of proposed sub-sectors, health and health innovation

Veterans' Health: This sub-sector enjoys the second highest location quotient⁶⁸ value (LQ=7.96) for defence industry employment in Canada. Veterans' health is significant both nationally (\$621 million CAD in 2019),⁶⁹ and globally (\$94.5 billion USD in the US alone).⁷⁰

There is a large global marketplace, with more than 639,900 veterans in Canada,⁷¹ and many thousands of retired military personnel internationally. Other market drivers that are hastening growth include:

• The much higher than average health needs of the Canadian veteran population in the areas of back problems, arthritis, depression, and anxiety;⁷²

- The rising prevalence of PTSD, military sexual abuse, traumatic brain injury, homelessness, suicide, and substance abuse amongst deployed and retired personnel in disproportionate rates compared to civilians;⁷³
- The increase in applying research and treatments to a wider audience base, including first responders, police, firefighters, paramedics, and humanitarian workers; and,
- The increase in rehabilitation programs for injured military personnel.



Kingston currently benefits from the Canadian Institute for Military and Veteran Health Research (CIMVHR) at Queen's University, which was awarded \$25 million CAD from Veterans Affairs Canada (2019).⁷⁴ Since 2010, CIMVHR has built a collaborative network of "46 Canadian universities who have agreed to work together to address the health research requirements of the Canadian military, veterans, and their families."⁷⁵

Healthy Aging: Kingston has a large senior population and could become a leader in the new silver economy. It is estimated that Ontario will support an additional three million more people aged 65 and older within the next 10 years. The city has the second highest location quotient⁷⁶ value (LQ=1.43) for health care in Ontario and provides Kingston with significant economic growth opportunities in the primary care services.

Market drivers that are spurring growth include:

- The rise in telehealth adoption, especially for homebound or rural seniors;⁷⁷
- The increased demand in patient-centric home health care services, and in longterm care in general;⁷⁸
- A greater acknowledgement of the specialized health needs of seniors from different races / ethnicities / cultures;⁷⁹
- The growing prevalence of patients with chronic disease / pain, debilitating illness, and amongst seniors as they live longer lives; and,⁸⁰
- A lack of health care professionals specialized in elder care / gerontology in general.⁸¹

Local assets that can be leveraged include the Canadian Frailty Network and the Human Mobility Research Centre at Queen's University.^{82, 83}

Health Data: Kingston has a nascent health data sector and significant competition from other jurisdictions. Grand View Research estimates that "the global artificial intelligence in health care market size is valued at USD 2.5 billion in 2018 and is expected to grow at a compound annual growth rate (CAGR) of 41.5 per cent from 2019 to 2025."⁸⁴

Market drivers that are stimulating growth include:

- The continuous pressure on lowering overall health care costs;
- The growing importance of big data analytics and complex datasets in health care;⁸⁵
- The rising adoption of precision medicine (understanding genetic makeup at a population / individual level to customize a drug that targets a particular gene type, especially in cancer patients);
- The use of next generation sequencing (DNA sequencing technology) and biomarkers to increase early diagnosis rates; and,⁸⁶
- The vastly increased computing power available for lower costs.⁸⁷

Kingston can build on recent success (such as local business Kings Distributed Systems "Looking Glass" supercluster COVID-19 tracing project)⁸⁸ to attract attention and promote this sub-sector's growth.



SECTOR PERFORMANCE

The following data reveal that this sector is growing in Kingston (through business count) and is moderately labour intensive (through workforce). As a primarily service industry, it generates substantial outputs and GDP locally. In Kingston, the Health and Health Innovation sector enjoys the largest share of Ontario GDP.

Figure 6: Key indicators, health and social assistance sector, NAICS 62, Kingston CMA, various dates

Indicator	Amount	Date
Workforce (percentage)	1 5.8% ⁸⁹	2014-19
Workforce (number of employees)	1 ,388 ⁹⁰	2014-19
Business counts (percentage)	1 3.3% ⁹¹	2014-19
Business counts (number of firms)	↑ 83 ⁹²	2014-19
GDP	\$1,234 million CAD*	2019
GDP as percentage of Ontario's GDP	2.4%*	2019
GDP growth (percentage)	个 30%*	2014-19
GDP growth (dollars)	↑ \$370 million CAD*	2014-19
Forecasted annual economic output of sector	\$1.61 CAD*	2019
Forecasted annual GDP for every \$1 CAD input	\$1.12 CAD*	2019
Research funding dedicated to this sector (PSE institutions, primarily Queen's)	Approximately \$150 million CAD ⁹³	2014-19

* 1. The multipliers are province wide. For most sectors, the bulk of GDP, labour income, and job impacts would accrue in the CMA area.

2. Jobs are shown as full-time equivalent (FTE). They are shown per \$1 million CAD in sector output.

Kingston CMA real GDP (2012), 2014-19 trend and 2019-24 forecast – Conference Board of Canada. The Board does not provide estimates for NAICS 11 Agriculture, forestry, fishing, 21 Mining, quarrying, and oil and gas extraction or 22 Utilities – only an aggregate estimate for primary industries and utilities combined. The Board also combines NAICS 52 Finance and insurance, 53 Real estate, Rental and leasing and 56 Administrative and support into an aggregate estimate.

Ontario real GDP (2012) and 2014-19 trend – Statistics Canada Table 36-10-0402-01.

Economic output multipliers - Statistics Canada Table 36-10-0113-01, except tax multipliers. Tax multipliers (relative to GDP) developed by Jupia Consultants Inc based on Statistics Canada's Survey of Household Spending, income tax by quintile, and indirect tax multipliers as well as HST estimates for 2019.



SUSTAINABLE MANUFACTURING

Figure 7: Top data points for sustainable manufacturing, Kingston

INDUSTRY SNAPSHOT



ıl.

Workforce **increase** of **40.6%** (2014-19)

Forecasted annual

\$1.00 CAD output):

\$1.63 CAD (2019-24)

economic output (for every

T \$

Business count **increase** of 8.5% (2014-19)

Forecasted annual GDP growth: Increase of **\$38** million CAD (or 8%)



GDP of **\$494M CAD**, increase of **\$74M CAD** (2014-19)



Research funding: \$**71M CAD** (2014-19)

In general, there is no common definition of sustainable manufacturing. The US Department of Commerce's Sustainable Manufacturing Initiative sums it up as: "the creation of manufactured products that use processes that minimize negative environmental impacts, conserve energy and natural resources, are safe for employees, communities, and consumers and are economically sound."94 For the purposes of this report, the Sustainable Manufacturing sector includes all direct and indirect activities related to green manufacturing innovation, from resource reduction (water / energy / waste) and emissions reduction to advanced product design and sustainable product materials and processes. A selected list of NAICS codes in this area is available in Appendix A.

The Sustainable Manufacturing cluster further extends the advances made with the Sustainable Kingston Plan into the economic development realm. According to the Organisation for Economic Co-operation and Development (OECD), "many businesses have already started to take important steps towards green growth – ensuring their development is economically and environmentally sustainable. Their pioneering experiences largely show that environmental improvements go hand in hand with profitmaking and improved competitiveness. However, many small- and medium-sized businesses (SMEs), that account for approximately 99 percent of all enterprises and two-thirds of employment across the Organisation for Economic Co-operation and Development, have not yet embraced these great opportunities."⁹⁵

SECTOR STRENGTHS TO BUILD ON

1. An existing manufacturing cluster: A total of 128 Kingston-based companies are involved in industries such as production technology / heavy machinery, and upstream metal manufacturing.⁹⁶ More than 3,400 employees currently work in the sector, a whopping 40.6 per cent increase from 2014. Examples of manufacturing companies include: INVISTA Canada Co. (nylon, spandex, and polyester industries), Pure Ingenuity Inc. (designs / manufactures custom process equipment for the food, pharmaceutical, cosmetics, and



fine chemical sectors), Novelis (rolled aluminum products and recycling), and Transformix Engineering Inc. which was recently purchased by ATS Automation Tooling Systems Inc.⁹⁷

- 2. A rebounding industry: Though the industry had previously declined locally, it has rallied during the past four years, "with output advancing at a robust average annual pace of 3.1 per cent, including an eightyear-high gain of 4.1 per cent in 2018."⁹⁸
- 3. A dedication to research excellence: Research centres with applications in manufacturing include the Ingenuity Labs Research Institute (Queen's University), the Reactor Materials Testing Laboratory (Queen's University), the new Institute for Disruptive Technologies (Queen's University), and the Robotics Laboratory (RMCC). Queen's University also has research excellence in materials, computational analytics, and humanmachine interactions.⁹⁹ There are several Canada Research Chairs, specifically in material sciences.
- **4. A varied local talent pipeline:** Manufacturing degrees of interest include mechanical and materials engineering, computer science, and computer engineering.¹⁰⁰ Local college-

level diplomas, apprenticeships, and other skilled trades training augment the local workforce in full- and part-time programs. Selected programs show specific program strengths in these areas, including those from Queen's University (e.g., Master's in Applied Sustainability, Bachelor's in Megatronics and Robotics) and St. Lawrence College (e.g., Diplomas in Instrumentation and Control Engineering, Computer Systems, Supply Chain Management).

PROPOSED SUB-SECTORS

Manufacturing accounts for 48.6 per cent of all Eastern Ontario exports. It is important to continue supporting the sector while nurturing niche sub-sectors of strength.

GROWTH OPPORTUNITIES

- Identify partnerships and collaboration for material manufacturing.
- 2. Create a defined investment attraction campaign to target marketplace potential.
- Facilitate collaboration between identified key manufacturing subsectors to create a local value chain.
- 4. Collaborate on FDI efforts with local industry to strengthen relationships and create new partnerships in the region.
- 5. Support local manufacturing industry in adopting more sustainable practices by connecting them with talent, service, and information.



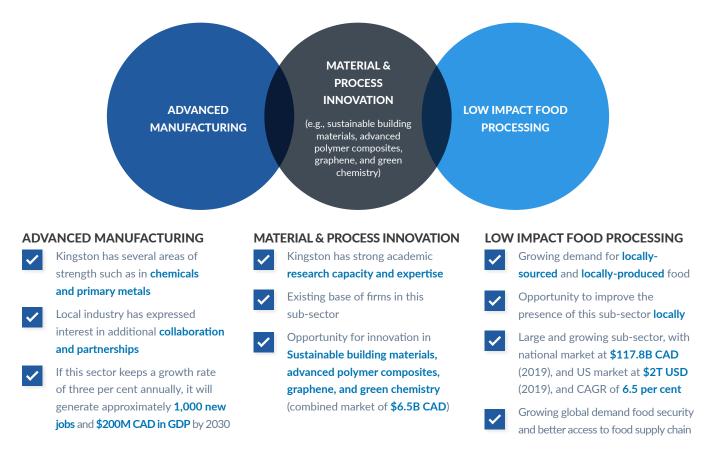


Figure 8: Snapshot of proposed sub-sectors, sustainable manufacturing

Advanced Manufacturing teamed with Material and Process Innovation: The Sustainable Kingston Plan lists advanced manufacturing as a priority.¹⁰¹ The Canadian advanced manufacturing sector is strong (e.g., robotics, 3D printing, and ICT technologies) and is seen as a global leader in system integration, artificial intelligence (AI), sensors, and automation. Kingston has shown strength in the areas of chemicals (e.g., Green Centre Canada, KPM Accelerate) and primary metals (e.g., Novelis).¹⁰² By applying these technologies to the local manufacturing marketplace, a more sustainable manufacturing ecosystem will emerge. Market drivers that are influencing growth include:

- Competitive global government initiatives and policies funding advanced manufacturing R&D;¹⁰³
- Widespread adoption by the aerospace, automotive, medical device, and defence industries;¹⁰⁴
- Increase in conversion of traditional machinery into those incorporating additive manufacturing to increase speed and reliability;¹⁰⁵
- Increasing demand for production efficiencies across the entire value chain; and,
- The rise in development and implementation of international environmental standards for manufacturing.¹⁰⁶



KINGSTON ECONOMIC Development Corporation Kingston also has strong academic research capacity and expertise to leverage in the flagship area of material and process innovation. This capacity includes a national network of university-based micro-macro discovery labs, and the globally recognized Reactor Materials Testing Laboratory. Local innovations in sustainable building materials, advanced polymer composites, graphene, and green chemistry should be supported more fully.¹⁰⁷

From a positioning perspective, material innovation can also include aluminum manufacturing. Secondary aluminum recycles scrap into aluminum that can be used again, an environmentally sound process that is 92 per cent more energy efficient than primary production. In fact, close to 40 per cent of the North American aluminum supply is now created through secondary production, reducing landfill waste, contributing much lower GHG emissions, and reducing international transportation.¹⁰⁸ Kingston has a high location quotient (LQ)¹⁰⁹ in this area (6.38), and can easily supply other markets.

Low-impact Food Processing: The Sustainable Kingston Plan lists advanced manufacturing as a priority.¹¹⁰ With the continuing demand for locally sourced and produced food, Kingston's unique location with access to 14.5 million people within three hours is a strong selling point for this subsector. In Canada, the food and beverage processing industry accounted for the largest share (16.4%) of the GDP of the total manufacturing sector (\$28.5 billion CAD).¹¹¹ Market drivers that are influencing growth include:

- A growth in international packaged and convenience food demand;¹¹²
- An increase in Canadian local, organic, and health food demand, and retail locations specializing in those areas;¹¹³
- Adoption of advanced technologies to reduce overhead and increase manufacturing productivity and output;¹¹⁴
- Increase in demand for plant protein and alternative meat products, as well as functional foods and nutraceuticals;¹¹⁵
- The desire from consumers for more sustainable, environmentally friendly food production practices;¹¹⁶
- A concern about local food security and supply in the light of pandemics, climate change, and increasing global trade protectionism.¹¹⁷

In the way of sustainability manufacturing, capitalizing on low impact food processing is crucial. For the purpose of this strategy, low impact is defined as food processing that requires low usage of water and wastewater. There has been some movement in this sector, from new facilities to microbreweries and equipment suppliers. Specific examples in Kingston include Local Leaf Farms and Spearhead Brewing Co.

SECTOR PERFORMANCE

The following data reveal that the sustainable manufacturing sector is robust and growing in Kingston. Kingston only captures, however, a small fraction of the Ontario manufacturing industry.

Kingston has a high location quotient¹¹⁸ in the manufacturing sector and several areas of strength to build upon (e.g., chemicals, primary metals). Several components within the manufacturing sector in Kingston have a location quotient of more than five, indicating a strong sectoral performance. The local industry has also expressed interest in additional partnerships and collaboration, which can further strengthen the sector. If the sector maintains a three per cent annual growth rate, it will generate about 1,000 new jobs and \$200 million CAD in GDP by 2030.

Figure 9: Key indicators, manufacturing sector, NAICS 31 – 33, Kingston CMA, various dates

Indicator	Amount	Date
Workforce (percentage)	1 40.6% ¹¹⁹	2014-19
Workforce (number of employees)	1 ,004 ¹²⁰	2014-19
Business counts (percentage)	▲ 8.5%121	2014-19
Business counts (number of firms)	1 0 ¹²²	2014-19
GDP	\$494 million CAD*	2019
GDP as percentage of Ontario's GDP	0.6%*	2019
GDP growth (percentage)	↑ 18.0%*	2014-19
GDP growth (dollars)	\$74 million CAD*	2014-19
Forecasted annual economic output of sector	\$1.63 CAD*	2019
Forecasted annual GDP for every \$1 CAD input	\$0.58 CAD*	2019
Research funding dedicated to this sector (PSE institutions, primarily Queen's University)	Approximately \$71 million CAD ¹²³	2014-19

* 1. The multipliers are province wide. For most sectors, the bulk of GDP, labour income and job impacts would accrue in the CMA area. 2. Jobs are shown as full-time equivalent (FTE). They are shown per \$1 million CAD in sector output.

Kingston CMA real GDP (2012), 2014-19 trend and 2019-24 forecast – Conference Board of Canada. The Board does not provide estimates for NAICS 11 Agriculture, forestry, fishing, 21 Mining, quarrying, and oil and gas extraction or 22 Utilities – only an aggregate estimate for primary industries and utilities combined. The Board also combines NAICS 52 Finance and insurance, 53 Real estate, Rental and leasing and 56 Administrative and support into an aggregate estimate.

Ontario real GDP (2012) and 2014-19 trend – Statistics Canada Table 36-10-0402-01.

Economic output multipliers - Statistics Canada Table 36-10-0113-01, except tax multipliers. Tax multipliers (relative to GDP) developed by Jupia Consultants Inc based on Statistics Canada's Survey of Household Spending, income tax by quintile and indirect tax multipliers as well as HST estimates for 2019.

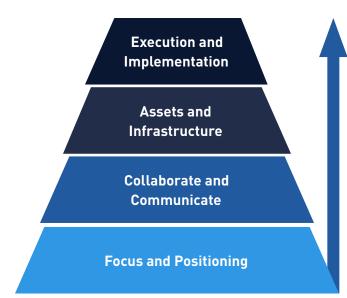


Strategy Framework

Based on the extensive market research and stakeholder consultation throughout the development of the Strategy, **four pillars, 13 themes, and 35 recommended initiatives have emerged.**

The four pillars are intended to build a foundation for economic growth in the City of Kingston. By first committing to a mandate of focus and positioning, each of the three subsequent pillars strategically grow business results for businesses of all stages, including start-ups, SMEs, business expansion, and investment attraction prospects (Figure 10). The recommended initiatives are both strategic and tactical. They intend to serve as a guide to the City of Kingston and Kingston Economic Development to drive short- and long-term results for economic development for the City of Kingston. These recommended initiatives support community business growth and collaboration, start-ups and scale-ups, new investment attraction, workforce development, and foreign direct investment opportunities. Ultimately, they provide a path toward greater prosperity for Kingston business and citizens.

Figure 10: The Economic Development Strategy foundation on four pillars



The recommended initiatives are both strategic and tactical. They intend to serve as a guide to the City of Kingston and Kingston Economic Development to drive short- and long-term results for economic development for the City of Kingston.



KINGSTON ECONOMIC Development Corporation

Figure 11: The four pillars and 13 themes

Pillar One: Focus and Positioning	Pillar Three: Assets and Infrastructure
1. Adopt Concept Framework 2. Develop Two Strategic Clusters 3. Leverage Market Access	 7. Leverage Community Infrastructure 8. Leverage the Economic Potential in Rural Kingston 9. Foster and Support Growth in the Creative Industries
Pillar Two: Collaboration and Communication	Pillar Four: Execution and Implementation





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Figure 12: 13 themes and 35 recommended initiatives

Adopt Concept Framework	Measure and Communicate Success
. Adopt an Integrated Long-term and Short-term Economic Plan	10. Administer Proactive Progress Reporting of Successes
Develop Two Strategic Clusters	Leverage Community and Business Infrastructure
2. Develop Two Strategic Clusters in Health and Health Innovation and Sustainable Manufacturing	 Enhance Broadband Connectivity Maintain Inventory and Access to Employment Land
_everage Market Access	13. Develop a Research and Technology Park 14. Build a Health Innovation Lab
3. Focus on Creative Industries Product Development 4. Develop a Remote Workers Campaign	15. Build a Sustainable Manufacturing Lab
Enhance Partnerships and Collaboration	Leverage the Economic Potential in Rural Kingston
5. Enhance PSE Collaboration 6. Enhance Neighboring Community Collaboration	 16. Support Agicultural Activities and Businesses 17. Plan Hamlet-led Development Opportunities 18. Revitalize Tourism Opportunities
Enhance Marketing and Communications	19. Develop Strategic Rural Business Clusters
 Develop a "Kingston Can" Campaign Align Kingston Branding among Key Partners and Stakeholders Consider Renaming Kingston Economic Development to Invest Kingston 	



Figure 12: 13 themes and 35 recommended initiatives (con't)

Foster and Support Growth in the Creative Industries

- 20. Build a Creative Industries Narrative
- 21. Support Emerging Creative Industries
- 22. Offer Business Skills and Training
- 23. Facilitate Partnerships and Collaboration
- 24. Identify, Develop, and Make Available Sustainable Spaces and Places
- 25. Reinforce Diversity and Inclusion

Mobilize Strategy Execution Team

- 26. Establish a Strategy Execution Team
- 27. Establish Three Working Groups: Health and Health Innovation, Sustainable Manufacturing, and Creative Industries

Reinforce Diversity and Inclusion

- 28. Augment and Follow the Workforce Inclusion Charter
- 29. Support Social Procurement

Build Workforce Capacity

- 30. Employ a Talent Recruitment and Attraction Campaign
- 31. Build on Existing Programs to Create a Future of Work Track
- 32. Offer a Skills Development and Matchmaking Program
- 33. Augment Diversity and Inclusion Programming

Adopt Project Selection and Approval Process

- 34. Create an Economic Opportunity Scorecard
- 35. Create a Future Development Scorecard





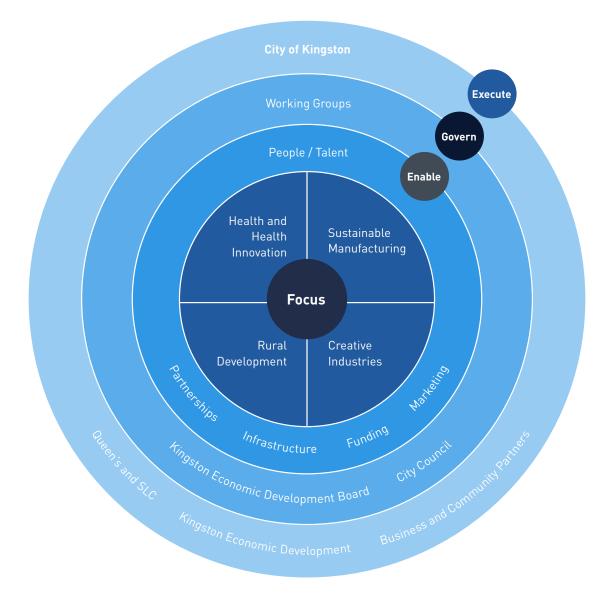


Figure 13: Strategy execution framework

Executing this strategy requires deliberate cooperation and coordination in economic development strategies and initiatives. By intentionally bringing diverse stakeholders together, complex challenges can be thoroughly discussed, integrating Kingston's economic, environmental, social, and cultural values.

From focus to enablement to governance and then execution, the pillars, themes, and recommended initiatives support at least one of each of these four components. Figure 13 provides an illustration of the execution of the strategy framework and how the pieces fit together.

Themes and Recommended Initiatives

 FOCUS AND POSITIONING Adopt Concept Framework Develop Two Strategic Clusters Leverage Market Access 	 ASSETS AND INFRASTRUCTURE Leverage Community and Business Infrastructure Leverage the Economic Potential in Rural Kingston Foster and Support Growth in the Creative Industries
 COLLABORATION AND COMMUNICATION Enhance Partnership and Collaboration Enhance Cohesive Marketing and Communications Measure and Communicate Success 	 EXECUTION AND IMPLEMENTATION Mobilize Strategy Execution Team Maximize Opportunities for Diversity and Inclusion Build Workforce Capacity Adopt Process Selection and Approval Process
ADOPT CONCEPT FRAMEWORK	strategy components, and outputs. Inputs are

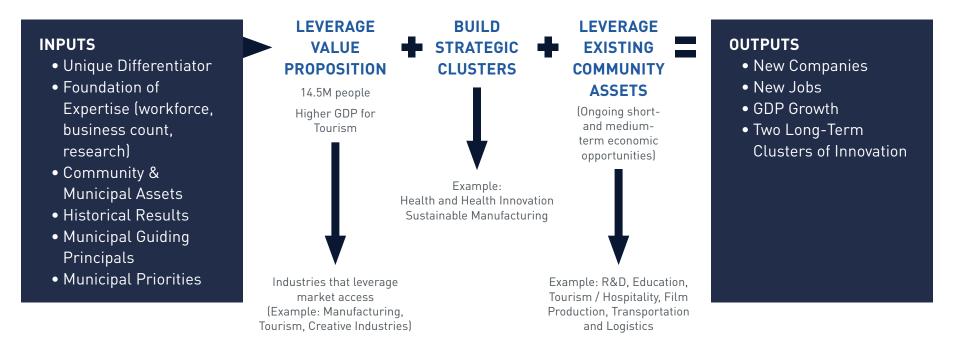
Collaboratively adopting a concept framework will provide the implementation team with a roadmap for acting upon proactive / reactive economic development opportunities. The goal is to follow an intentional rollout for the sequencing of economic development opportunities. Establishing timelines for cluster growth and subsectors where the large population catchment area can be leveraged will assist in managing expectations and driving both short- and long-term results.

This framework (Figure 14) is a visual depiction of everything discussed in the Integrated Economic Development Strategy. The overall concept for the Integrated Economic Development Strategy includes inputs, strategy components, and outputs. Inputs are identified on the left-hand side of the figure, with activities in the centre, timelines at the top, and outputs to the right-hand side.

- **Inputs:** The primary components that will support proactive and reactive economic development opportunities.
- Focus: It is recommended the implementation team focus on:
 1) Leveraging the Kingston Value Proposition, 2) Building Strategic Clusters and 3) Leveraging Existing Community Assets.
- **Outputs:** As a result of the inputs and focus areas, the goal is to drive results for new companies, new jobs, GDP growth, and cluster development.



Figure 14: Concept Framework Roadmap for the Kingston Integrated Economic Development Strategy



Kingston Economic Strategy

Immediate: Foundation Building Medium: Infrastructure Long Term: Clusters of Innovation

TIMELINES / OUTCOMES



FOCUS AND POSITIONING

Adopt Concept	Develop Two Strategic	Leverage Market
Framework	Clusters	Access
 Adopt an Integrated Long-term and Short-term Economic Plan 	 Develop Two Strategic Clusters 	 Creative Industries Product Development Remote Workers Campaign

Through multi-level collaboration on common goals, a more focused approach to economic development can be realized. Sector clusters will provide new opportunities for innovative business development in terms of research, supply-chain integration, and investment. Clusters will create the ideal conditions for growing socially and environmentally responsible businesses and workforces. Clusters now are a competitive feature of virtually every forward-thinking national, regional, provincial, and municipal economy. The Focus and Positioning pillar includes three themes and four recommended initiatives (including the concept framework).

DEVELOP TWO STRATEGIC CLUSTERS

1. Recommended Initiative: Develop Two Strategic Clusters in Health and Health Innovation and Sustainable Manufacturing (in partnership with the City of Kingston, Queen's University, and St. Lawrence College): Align programming and new infrastructure investments to support the foundation needed to build these clusters during the next decade.

Health and Health Innovation

- Health Data
- Healthy Aging
- Veterans Health

Sustainable Manufacturing

- Material & Process Innovation
- Advanced Manufacturing
- Low-impact Food Processing

Strategic clusters allow companies to increase productivity by tapping into a clustered pool of specialized employees, existing resources, and shared knowledge. Cities who create strategic clusters benefit from this cooperation, improving the reputation of their town, attracting a skilled workforce, and



developing industry expertise within their borders.¹²⁴ Two areas have been identified as logical strategic clusters for the City of Kingston: health and health innovation and sustainable manufacturing. Selection of these clusters were chosen based on extensive data collection and analysis, existing community assets, industry profiles, and extensive stakeholder consultations.

Health and health innovation was selected due its current industry strength in Kingston, and the potential growth it has within the city. The past five years (2014-19) in Kingston's health and health innovation sector have shown a strong workforce increase of 15.8 per cent, a business count increase of 13.3 per cent, and a GDP growth of \$370 million CAD.^{125, 126} The health sector received 32 per cent of all research funding in Kingston in 2019, and is supported by an existing cluster of companies, a unique population, key researchers, and national health research networks.¹²⁷

For the purpose of this strategy Sustainable Manufacturing is the combination of manufacturing assets and assets in sustainability. The manufacturing sector is growing in Kingston, with a workforce increase of 40.6 per cent, a business count increase of 8.5 per cent, and a GDP growth of \$74 million CAD between 2014 and 2019.^{128,129} It is further supported by an existing manufacturing cluster focused on production technology, research centres with applications in manufacturing, and local post-secondary educational institutions providing a direct talent pipeline through the offering of manufacturing degrees of interest.

Sustainability includes clean tech and green chemistry. Assets in Sustainability include GreenCentre Canada, Queen's Solar Calorimetry Lab, the Centre for Energy and Power Electronics, and the Sustainable Energy Applied Research Centre (at St. Lawrence College), to name a few. Research funding includes Nickel Catalysts for Electrochemical Clean Energy (NSERC), Photovoltaic Power Systems (Ontario Research Fund), and Oil and water repellent coatings for industrial applications (NSERC). The combination of these two sectors captures the high sector growth of manufacturing and the increasing focus on sustainable practices globally and locally.



Recommended Initiative	Details	Lead	Support	Rationale	Validation
Develop Two Strategic Clusters	• Focus economic development efforts (programs, services, amenities, workforce development) on start- up programming, business expansion and export readiness, and investment attraction and foreign direct investment in the targeted clusters	 Kingston Economic Development 	 City of Kingston Queen's University St. Lawrence College 	 14 Canada Research Chairs Health and Health Innovation: \$158 million CAD in annual health research and innovation to build on, 30% GDP growth during the past five years, 709 existing businesses Sustainable Manufacturing: \$77 million CAD in annual manufacturing research and innovation to build on, 128 existing companies, rebounding industry (3.1% annual growth rate) 	 Validated in stakeholder interview / focus groups Validated in Engage Kingston Survey Aligned with provincial and federal priorities Aligned with city priorities

LEVERAGE MARKET ACCESS

There is an opportunity to leverage the tremendous market access Kingston has that no other CMA in Canada can claim: access to 14.5 million people within a three-hour radius. This amount represents 40 per cent of the Canadian population and significant market potential.

2. Recommended Initiative: Focus on Creative Industries Product Development: In partnership with Tourism Kingston, support new product development in the Creative Industries sector to leverage Kingston's population catchment area. Product development may include new programs, services, amenities, and productions in the strategic priorities of film, music, and theatre for the Creative Industries Sector. The report *"Creative Industries Strategy, October 2020"* offers additional information pertaining to actions and activities within the Creative Industries.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Focus on Creative Industries Product Development	 Increase offering by artists, including music, to create greater momentum for Creative Industries Advance film sector as a driver of economic development Make Kingston an even greater destination for tourism and Creative Industries 	 City of Kingston Cultural Services Department Tourism Kingston 	 Real Estate, Strategy, Facilities City of Kingston 	 Leverage 14.5 million market access Leverage high GDP for tourism sector Augment local and regional tourism opportunities for those within driving distance to Kingston 	 Identified and validated in stakeholder consultations Aligned with global trends Aligned with opportunities resulting from more local travel destinations with COVID-19

3. Recommended Initiative: Develop a Remote Workers Campaign: In partnership with the City of Kingston, develop a campaign to attract potential remote workers from nearby Urban Centres in Ottawa, Montréal, and the GTA to build population and potential workforce. A remote worker campaign may include marketing and promotional activities to companies currently in those markets to provide incentives and outline opportunities for hiring new team members from Kingston. These workers can remotely work for companies in the Urban Centres but consider Kingston as an option for residence. The outreach campaign can be done in partnership with the City of Kingston and Employment Ontario representatives.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Develop a Remote Workers Campaign	 Conduct outreach campaign targeted towards employers in Urban Centres for new workforce resources Conduct outreach campaign targeted towards residents of Urban Centres to 	• City of Kingston	 Kingston Economic Development Tourism Kingston Employment Ontario 	 Leverage shift in remote working due to COVID-19 and real estate market trends 	 Validated in stakeholder consultations Alignment with North American trend for remote working

COLLABORATION AND COMMUNICATION

consider Kingston and work remotely

Enhance Partnership and Collaboration	Enhance Cohesive Marketing and Communications	Measure and Communicate Success
 Enhance PSE Collaboration Enhance Neighboring Community Collaboration 	 Create a "Kingston Can" Campaign Align all Kingston Brands Consider Rebranding Kingston Economic Development 	• Administer Proactive Progress Reporting



Since the City of Kingston exists to serve the community's needs, recommended initiatives within this section focus on citizen and business experience. Kingston will actively market the community and provide a consistent message, positioning the city as a vibrant commercial hub and a destination for visitors, talent, and investment. Collaborations will bring complex initiatives to fruition. Transparent assessment and reporting on these initiatives will allow for iterative, continuous improvement. The Collaboration and Communication pillar includes three themes and six recommended initiatives.

ENHANCE PARTNERSHIP AND COLLABORATION

Strategic partnerships and collaborations are recommended to create better linkages throughout the community. They will also expand the reach of the City of Kingston into nearby regions where alignment of programs, services, amenities, and infrastructure will be a win for all. Post-secondary educational institutions are critical and serve as a foundation of any economic development strategy for talent training, attraction, and retention.

1. Recommended Initiative: Enhance Post-Secondary Institution Collaboration:

Develop a strategic alliance with Queen's University and St. Lawrence College (lead: City of Kingston, in partnership with Kingston Economic Development). Develop a strategic and tactical workplan to leverage these assets to support the cluster development potential. Opportunities for collaboration may include: 1) strategic cluster development, 2) skills and labour force development and alignment, 3) joint funding applications (e.g., infrastructure, research, industry support), 4) target activities to retain graduates, and 5) identify programming to leverage PhD graduates and other highly educated student populations for the local workforce.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Enhance Post- Secondary Institution Collaboration	 Work with PSE for development of clusters Enhance skills and labour force alignment Pursue joint funding applications for infrastructure, research, and industry support Target activities to retain graduates Identify programming to leverage PhD graduates and highly educated student populations 	• City of Kingston	 Kingston Economic Development Queen's University St. Lawrence College 	 More than 95% of Queen's University student population originates from outside Kingston, but only 9% of students surveyed by Kingston Economic Development reported looking for and / or holding post-graduation employment in Kingston¹³⁰ Partnership and strategic planning with post- secondary institutions is critical to retaining educated graduating students within Kingston's workforce 	 65% of Kingston residents identified "Growing overall research and development activities in Kingston" as the greatest business opportunity for the city



2. Recommended Initiative: Enhance Neighboring Community Collaboration: Enhance collaboration with neighboring communities such as Frontenac County and the Frontenac Islands, Lennox and Addington County, Leeds and Grenville United Counties, Prince Edward County, and other communities in the immediate and outlying areas within Eastern Ontario. Activities to advance regional alignment

are currently underway with the Eastern Ontario Leadership Council, Eastern Ontario Wardens' Council, Ontario East Economic Development Commission, and St. Lawrence Corridor Economic Commission. The purpose in greater collaboration is to identify common goals, potential shared assets, and opportunities for joint economic and infrastructure development.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Enhance Neighboring Community Collaboration	 Identify common goals Identify potential shared assets Identify opportunities for joint economic and infrastructure development 	• City of Kingston	• Kingston Economic Development	• Opportunity to better support overall start-up and entrepreneur ecosystem by creating, supporting, and nurturing a broader population base	 Validated as an opportunity in stakeholder outreach and consultations Aligned with City of Kingston current activities for potential areas of growth and partnership

ENHANCE MARKETING AND COMMUNICATIONS

Effective marketing and communications are critical components for telling the story of how Kingston is a great place to do business and to raise a family. Increased brand awareness, alignment, and clarity of messaging across all major economic organizations in the community will create synergies and a cohesive approach.

 Recommended Initiative: Create a "Kingston Can" Campaign: Develop a twelve-month internal / external "Kingston Can" campaign featuring the benefits of living in Kingston, building a business in Kingston, and testimonials of businesses and people who are making a difference. The goal is to target both existing Kingston residents and potential in-migration (e.g., people, businesses). The campaign will be used locally to generate enthusiasm within the community and globally to demonstrate how Kingston is a place to do business. Local residents and businesses will also have a simple, memorable message to act as informal ambassadors for the city.

2. Recommended Initiative: Align all Kingston Brands: Develop joint messaging with the lead promotional agencies in the City of Kingston to ensure the Kingston Brand is aligned and positioned as an inclusive, sustainable, accessible community – one that focuses on sustainability in its policy and decision making and has a mandate for inclusion and diversity.

KINGSTON ECONOMIC Development Corporation

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Create a "Kingston Can" Campaign Align All Kingston Brands	 Build messaging in all marketing campaigns of major agencies and business organizations in Kingston 	• Kingston Economic Development	 City of Kingston Tourism Kingston Downtown Kingston Greater Kingston Chamber of Commerce 	 Build on the success of the "Love Kingston" campaign from COVID-19 	 Confirmed as an area of interest with major agencies and business organizations in Kingston Aligned with trends within leading exemplary jurisdictions

3. Recommended Initiative: Consider Renaming Kingston Economic Development Corporation: to "Invest Kingston" (or something akin to this phrase). Globally, more and more economic development agencies are including a "call to action" verb in the title of the organization. In Canada, organizations whose main mandate is investment attraction and identifying new and emerging economic opportunities use "Invest" or "Innovate" in the title of the organization, including "Invest in Canada," "Invest Ottawa," or "Innovate Calgary." A change in the name of the economic development organization may assist in building greater brand awareness that Kingston is ready for investment, innovation, and business. The intention of the Integrated Economic Development Strategy serves as a starting point and opportunity to shift the mindset both internally and externally to Kingston that Kingston is more than a public-sector city. A change in the name may also support any internal (to Kingston) historical affiliations from previous economic development administrations.

globally

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Consider Renaming Kingston Economic Development Corporation	 Rename the economic development organization to articulate the primary function and role of the organization more clearly Use a "call to action" verb (if "Invest Kingston") is not the selected name 	• Kingston Economic Development	-	 Successful model and exemplary jurisdictions nationally and globally are trending towards including an "action" verb in naming economic development organizations 	 Stakeholder outreach and consultations confirm historical organization performance may cloud current and future opportunities within the



organization

MEASURE AND COMMUNICATE SUCCESS

Measuring and communicating success will help to build community confidence and a sense of pride in all Kingston businesses. Clear communication of milestones and metrics will build momentum and fuel the Kingston narrative for marketing and communications.

1. Recommended Initiative: Administer Proactive Progress Reporting: Build upon existing reporting systems in place

Exhibit A to Report Number 21-012

between Kingston Economic Development and the City of Kingston. Provide proactive ongoing quarterly updates on the progress to the community at large. Showcase notable activities of companies in Kingston, offering testimonials of success stories. The goal is to build community confidence pertaining to progress and leadership for the City of Kingston and Kingston Economic Development.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Measure and Communicate Success	 Select high-level metrics that are tangible, measurable, and realistic on a quarterly and annual basis and share publicly through social media and other media 	• Kingston Economic Development	• City of Kingston	 Current reporting is done as required at Council Meetings Proactive and more regular updates on high-level success stories will help to build community confidence and pride 	 Stakeholder outreach and consultations suggest a lack of clearly understanding the results in the community for private-sector growth and development





ASSETS AND INFRASTRUCTURE

Leverage Community and Business Infrastructure

- Enhance Broadband Connectivity
- Maintain Inventory and Access to Employment Land
- Develop a Research and Technology Park
- Build a Health Innovation Lab
- Build a Sustainable Manufacturing Lab

Leverage the Economic Potential in Rural Kingston

- Support Agriculture Activities and Businesses
- Plan Hamlet-led Development
- Revitalize Tourism Opportunities
- Develop Strategic Rural Business Clusters

Foster and Support Growth in the Creative Industries

- Set a Creative Industries Narrative
- Support Emerging Creative Industries
- Offer Business
 Skills and Training
- Facilitate Partnerships and Collaboration
- Identify, Develop, and Make Available Sustainable Spaces and Places
- Reinforce Diversity and Inclusion

Leveraging existing assets and business infrastructure and considering new strategic investments can support long-term economic development priorities to drive results and produce greater economic output. Funding sources through all levels of government are required to support potential business infrastructure requirements. Community and business infrastructure delivery will support advances for new and existing business initiatives. The Assets and Infrastructure pillar includes three themes and 15 recommended initiatives.

LEVERAGE COMMUNITY AND BUSINESS INFRASTRUCTURE

Having the necessary community and business infrastructure in place will support recommended initiatives for the overall strategy and position the community for success.

1. Recommended Initiative: Enhance Broadband Connectivity: Ensure that access for remote work, remote health care and education, and international eCommerce can be achieved across the city boundaries. This connectivity will



impact any businesses involved with the Internet of Things, digital media, and / or eLearning. Access to broadband will increase service reliability, signal strength, bandwidth, and speed. The recent *Kingston Broadband Gap Analysis* (2020) estimated the value to society in providing broadband. With society moving to a "digital age," equitable access to broadband connectivity is essential to provision of social services activities such as education, health care, and government services.¹³¹

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Enhance Broadband Connectivity	 Increase broadband connectivity, particularly in Rural Kingston Promote deployment of 5G wireless infrastructure 	• Utilities Kingston	• City of Kingston	• Broadband connectivity is an even greater issue with COVID-19 and presents significant opportunities for remote working and repatriation of talent	 Stakeholder outreach and consultations confirmed Broadband connectivity as a gap According to the Kingston Community Survey, investment in reliable broadband internet was the number one answer to facilitating economic development in rural areas (at 3.91 out of five), and the number two answer for which community asset most beneficial in supporting all local businesses (at 54%)

2. Recommended Initiative: Maintain Inventory and Access to Employment Lands: Work in partnership with the City of Kingston and the private-sector to develop or make available developmentready plots of land. This initiative will maximize the potential of private lands and allow for proactive response to development opportunities through investment attraction, foreign direct investment, and business expansion. In addition, explore community improvement programs (CIP) for sector-specific opportunities.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Maintain Inventory and Access to Employment Land	 Identify existing parks where additional land could be valuable for development or prospect recruitment Explore community improvement programs for sector opportunities (see Appendix H for CIP examples) 	• City of Kingston	• Kingston Economic Development	 Proactive planning for additional development-ready lands will support the overall concept framework of the strategy 	• Stakeholder outreach and consultations confirmed consistent access to land would assist in realizing further economic development potential



3. Recommended Initiative: Develop a Research and Technology Park: Develop a research and technology park affiliated with Queen's University. Successful research and technology parks in Canada typically have five collaborative partners: 1) the lead post-secondary institution, 2) the economic development organization, 3) the municipality, 4) the province, and 5) the federal government. The goal is to drive commercialization and private sector growth aligned with the institution's research capacities and expertise. After a suitable site is selected / serviced, a minimum initial development of 100,000 square feet is recommended that would include 20,000 square feet for an accelerator targeted to the strategic clusters. Sufficient land for future development is typically required (30 to 50 acres minimum).

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Develop a Research and Technology Park	 Develop a research and technology park that will provide space for companies (from start-up to scale-up to global leaders) specifically in health and health innovation and sustainable manufacturing The development of the infrastructure should also include development of programming, services, and amenities that will support the growth and development of the targeted clusters 	 Queen's University City of Kingston 	• Kingston Economic Development	 Research and technology parks are critical infrastructure needed to support growth and development of clusters Research and technology parks provide communities of innovation for programming, collision, and collaboration with industry, government, and academia 	 Successful models include: Silicon Valley, Research Triangle Park (North Carolina, USA), David Johnston Research and Technology Park (Waterloo, ON), and MaRS Discovery District (Toronto, ON) City of Kingston and Queen's University are in discussions to re- invigorate the former Innovation Park at Queen's University

4. Recommended Initiative: Build a Health Innovation Lab to be located at the

Research and Technology Park: Identify funding to build lab facilities, including wet labs and standard equipment (approximately 5,000 to 10,000 square feet estimated to be \$5 to \$10 million CAD) to provide the necessary facilities to support health innovation in Kingston. 5. Recommended Initiative: Build a Sustainable Manufacturing Lab to be located at the Research and Technology Park: Identify funding to build a rapid prototyping lab to support growth in the manufacturing sector in Kingston (approximately 5,000 to 10,000 square feet estimated to be \$5 to \$10 million CAD).

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Build a Health Innovation Lab Build a Sustainable Manufacturing Lab	 Build two lab facilities to support commercialization and innovation in the targeted clusters The labs are recommended to be housed at the research and technology park 	 Queen's University City of Kingston 	• Kingston Economic Development	 Having access to strategic lab infrastructure has been proven to support the growth and development of companies and advancements for clusters Access to lab facilities helps companies share space and minimize capital investment so they can focus resources and investments in hiring people and accelerating the path to market 	to scale in these two

LEVERAGE THE ECONOMIC POTENTIAL IN RURAL KINGSTON

Many cities are encouraging the concentration of population and economic activity in the urban core. Reasons for this concentration are plentiful. Concentration can lead to lowering delivery costs for many public services, reducing a municipality's environmental footprint, and generating other economic, social, and health benefits.¹³² Most cities, however, do not have rural areas comparable to those within the City of Kingston. The significance of Kingston's rural areas reflect their importance as a city asset. As such, Rural Kingston requires its own unique rural economic development strategy, and approach to intentional development. In light of the particular importance of Rural Kingston to the City of Kingston as a strategic priority, a full strategic planning exercise was conducted for Rural Kingston. For full discussion on this area, review the Rural Kingston Economic Development Strategy: Mobilizing Opportunities for The Greater Kingston Region report (October 2020). The following are the condensed recommended initiatives from the report.

1. Recommended Initiative: Support Agriculture Activities and Businesses: Consider leveraging or developing programs, initiatives, and funding that will attract new farmers, encourage local food consumption, and foster innovation in farming within the rural area.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Support Agriculture Activities and Businesses	 Attract new farmers Encourage local food consumption Foster innovation in farming Look for niche and value-added food production opportunities 	City of Kingston	• Kingston Economic Development	 There are an estimated 148 farms within the city limits with a minimum of \$30,000 CAD in annual revenue The COVID-19 pandemic has put particular focus on the importance of local food supplies and resiliency 	 The City of Kingston's Strategic Plan 2019-22 has specifically focused on the importance of local agriculture¹³³ Aligns with the council priority for food security



2. Recommended Initiative: Plan Hamletled Development: Pursuant to the City of Kingston Official Plan, target appropriate opportunities for hamlet-led development. Economic development opportunities in hamlets include scaled cluster development for residential, commercial and office spaces to support residents and businesses in rural Kingston. During the next Official Plan Update in 2023/2024, review economic development opportunities in hamlets to support residents and businesses in rural Kingston. This review should include opportunities to designate new lands for rural commercial and rural employment areas. Implement all necessary updates to both the Official Plan and zoning by-law.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Plan Hamlet-led Development	 Develop hamlet- based development opportunities Redirect residential development in hamlets Attract commercial business activities to the hamlets, and support current firms 	• City of Kingston	• Kingston Economic Development	 The six hamlets of Rural Kingston, of which five were shortlisted for development in the Rural Kingston Economic Development Strategy, satisfy several requirements needed for rural development in municipal and provincial planning documents Concentrated development preserves larger rural areas 	• The City of Kingston's Strategic Plan 2019-22 has specifically focused on the importance of rural business parks ¹³⁴

3. Recommended Initiative: Revitalize Rural Tourism Opportunities: Animate Rural Kingston tourism through the support and funding of various tourism activities (e.g., accommodations, adventure tourism experiences) and the pursuit of agritourism initiatives.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Revitalize Tourism Opportunities	 Animate tourism opportunities Encourage agri- tourism initiatives 	• City of Kingston	 Tourism Kingston Kingston Economic Development 	 The City of Kingston is among the top cities for the attraction of domestic tourists each year in Canada The City of Kingston sits mid-point along the Montréal-Ottawa-Toronto Corridor, where 14.5 million people are within a three- hour drive 	• Stakeholder outreach and consultations confirms potential for tourism opportunities in Rural Kingston

KINGSTON ECONOMIC Development Corporation 4. Recommended Initiative: Develop Strategic Rural Business Clusters:

Develop strategic clusters and explore industry-focused business park development within Rural Kingston. Explore the identified available land parcels of 50 or more acres within the area, with a focus on those with access to Kingston's Highway 401.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Develop Strategic Rural Business Clusters	 Encourage industry- focused business park development Leverage opportunities that capitalize on access to Highway 401 	• City of Kingston	• Kingston Economic Development	• Opportunity to redirect businesses with limited servicing requirements into the rural area so we can maximize service lands for businesses that have higher requirements	• The City of Kingston's Strategic Plan 2019-22 calls for the exploration of a rural business park or parks

FOSTER AND SUPPORT GROWTH IN THE CREATIVE INDUSTRIES

Globally, Creative Industries are recognized as key economic drivers. As of 2017, it was estimated that these combined industries generated \$12.2 billion CAD in GDP for Ontario's economy annually, and was number one in Canada by GDP.¹³⁵ The Government of Ontario reported that Creative Industries GDP "is now larger than Ontario's energy industry, is approaching 70 per cent of the auto manufacturing sector, and surpasses those of agriculture, forestry, and mining sectors combined."¹³⁶

The City of Kingston recently recognized the importance of the Creative Industries sector as part of its Strategic Priorities for 2019-22 to strengthen the city's economic development opportunities and foster innovative arts, culture, and social enterprises. To support this Council Priority, the City of Kingston has completed a Creative Industries inventory, investigating how they can be better supported and expanded to develop the sector and enhance economic development opportunities.

In light of the particular importance of Creative Industries to the City of Kingston as a strategic priority, a full strategic planning exercise was conducted for the Creative Industries. For full discussion on this area, review the Creative Industries, City of Kingston addendum report (October 2020). The following are the condensed recommended initiatives from the report.

1. Recommended Initiative: Set a Creative Industries Narrative: Promote the reputation and strength of Kingston's Creative Industries through new and existing marketing campaigns that tell the narrative of the Creative Industries. Identify campaigns to highlight the Creative Industries ecosystem, celebrate local creatives, and promote diverse cultures and histories.



KINGSTON ECONOMIC

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Set a Creative Industries Narrative	 Promote Creative Industries Sector Create local Creative Industries campaign Engage in collaborative and participatory future creative industry storytelling campaigns 	 City of Kingston Cultural Services Department Tourism Kingston 	• Kingston Economic Development	 Align with the Integrated Strategy joint marketing campaigns Showcase the local creatives who live and work in Kingston Develop awareness that lives beyond campaigns 	• Stakeholder outreach and consultations confirms there is a lack of awareness of the success stories and artists in the Creative Industries in Kingston

2. Recommended Initiative: Support Emerging Creative Industries: Support high-profile, high-potential emerging Creative Industries (Film, Music, Theatre). Create separate strategy and implementation plans for each subsector. Establish alignment on the emerging Creative Industries between the municipality, economic development, business agencies, and community partners / organizations.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Support Emerging Creative Industries	 Focus on film, music, and theatre 	 Tourism Kingston City of Kingston Cultural Services Department 	 Kingston Economic Development 	• Foster and support growth in the areas within Creative Industry that have the strongest potential for economic development	 Stakeholder outreach and consultations confirmed the growing trend for film, music, and theatre

3. Recommended Initiative: Offer Business Skills and Training: Leverage available entrepreneurial and business-related training and support for Kingston creatives by identifying existing programming and funding. Build customized content that is specific to Creative Industries' needs.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Support Emerging Creative Industries	 Offer a Creative Industries accelerator program track Explore potential business support programs Examine best practices for digital platforms 	 Kingston Economic Development Tourism Kingston 	 Launch Lab Kingston Arts Council Queen's University St. Lawrence College City of Kingston Cultural Services Department 	• Access to programs, services and support will help Creative Industry artists and entrepreneurs	 Stakeholder outreach and consultation confirms the need to better support the Creative Industries artists as entrepreneurs in the overall ecosystem Access to SEED funding and other programs was identified as a gap



4. Recommended Initiative: Facilitate Partnership and Collaboration: Promote partnerships and collaborations to champion Kingston as a "choice" location for Creative Industries. Establish a Creative Industries Working Group with relevant cultural, business, academic, and municipal stakeholders, increase R&D by academic institutions, and establish collaborations with neighboring communities.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Facilitate Partnerships and Collaboration	 Establish a Creative Industries Working Group Identify new research and development funding Build partnerships with communities outside of Kingston 	 City of Kingston Office of Strategy, Innovation and Partnerships City of Kingston Cultural Services Department 	 Queen's University St. Lawrence College Kingston Economic Development Tourism Kingston 	• Queen's University received more than \$6.1 million CAD in funding from SSHRC for arts and culture research between 2014-15 and 2018-19	• Stakeholder outreach and consultations confirmed the interest in other communities to collaborate and partner with Kingston

5. Recommended Initiative: Identify, Develop, and Make Available Sustainable Spaces and Places: Identify and support affordable and accessible working and collaboration space in Kingston to build their network, encourage cross platform innovation, and safeguard resources. Reanimate or create greater awareness for existing spaces available.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Find Sustainable Spaces and Places	 Leverage and create greater awareness for existing venues Identify existing spaces within the city for co-working spaces 	• Kingston Economic Development	City of Kingston	• Libraries, public parks, and other public spaces are available throughout the city. Greater awareness of the options is needed	 Stakeholder outreach and consultations confirms there is a need for greater access to venues and co- working spaces for the Creative Industries

6. Recommended Initiative: Reinforce Diversity and Inclusion: Create greater diversity and inclusion within

Kingston's Creative Industries through

the undertaking of targeted research related to systemic barriers for underrepresented voices. Commit to diversity and inclusion goals within the sector.



Recommended Initiative	Details	Lead	Support	Rationale	Validation
Reinforce Diversity and Inclusion	 Undertake research to better understand issues of diversity in the sector Establish diversity and inclusion commitments for the Creative Industries as part of the city's advisory committee on diversity and inclusion for the city 	• City of Kingston Cultural Services Department	 Kingston Economic Development Tourism Kingston 	• Diversity and inclusion is a goal of the City of Kingston Cultural Services. Greater information is needed to better understand the needs in the sector and establish programming and metrics to better address barriers and support under- represented groups	 Diversity and inclusion is a priority for the City of Kingston

EXECUTION AND IMPLEMENTATION

Mobilize a Strategy Execution Team	Maximize Opportunities for Diversity and Inclusion
 Establish a Strategy Execution Team Establish Three Working Groups: Health Innovation, Sustainable Manufacturing and Creative Industries 	 Augment the Workforce Inclusion Charter Support Social Procurement
Build Workforce Capacity	Adopt Project Selection and Approval Process
 Employ Talent Recruitment and Attraction Campaign Build on Existing Programs to Create a Future of Work Track Offer a Skills Development and Matchmaking Program Develop Skills Augment Diversity and Inclusion Programming 	 Create an Economic Opportunity Scorecard Create a Future Development Scorecard



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How can the city work better – more effectively and efficiently? The Execution and Implementation pillar recommended initiatives focus on improving and modernizing municipal workflows, streamlining processes, making a more inclusive community, and enhancing value. Successful attraction and retention of skilled and semi-skilled workers will be crucial to meeting Kingston's employment needs, as well as and supporting the next generation of entrepreneur-led private sector companies. There are four themes and ten recommended initiatives for the Execution and Implementation pillar.

MOBILIZE A STRATEGY EXECUTION TEAM

Delivering on the recommended initiatives contained in this strategy requires a full community effort. A team approach led by the City of Kingston and Kingston Economic Development will ensure the necessary resources are in place to implement the recommended initiatives and drive results for the community.

 Recommended Initiative: Establish a Strategy Execution Team: Develop an ongoing Strategy Execution team to manage and monitor the strategy and build collaboration among the partners. The Execution team is recommended to include:

- The CAO and Director of Strategy, Innovation & Partnerships from the City of Kingston;
- Chairperson and CEO of Kingston Economic Development;
- Champion from Queen's University; and,
- Champion from St. Lawrence College.
- 2. Recommended Initiative: Establish Three Working Groups: Health and Health Innovation, Sustainable Manufacturing, and Creative Industries to support the implementation and execution of launching, building, and supporting these priority sectors. It is recommended each of the working groups have a maximum of ten representatives including one (1) member each from Kingston Economic Development, the City of Kingston, Queen's University, St. Lawrence College, three private-sector companies, the affiliated industry association, FedDev Ontario, and the Province of Ontario. The goal of the Working Groups is to assist in the preparation and execution of the action plans required to mobilize each of the priority and targeted cluster areas.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Mobilize a Strategy Execution team	 The recommended initiatives contained in this strategy cannot be undertaken solely by the City of Kingston and Kingston Economic Development Establishing ongoing Working Groups for the priority sectors (Health and Health Innovation, Sustainable Manufacturing and Creative Industries) will ensure a collaborative approach and support needed to execute the strategy 	 City of Kingston Kingston Economic Development 	-	 The development of the Integrated Economic Development Strategy has been undertaken successfully between the two lead organizations Continuing this joint approach through to implementation will help provide the support and alignment needed to position the community for success 	• Stakeholder outreach and consultations confirms previous strategies fell short on implementation and action planning



MAXIMIZE OPPORTUNITIES FOR DIVERSITY AND INCLUSION

Diversity and inclusion are at the core of the values of the City of Kingston. Creating greater focus and opportunities for diversity and inclusion best practices in all aspects of economic development will help to further position the City of Kingston as an ideal location to start and build a business. Building on the existing activities led by the City of Kingston, the following are the recommended initiatives to support diversity and inclusion.

1. Recommended Initiative: Augment the Workplace Inclusion Charter: Support the Inclusive Workplaces Working Group in implementing their Workforce Inclusion Charter, which creates systems for employers of all sizes, service providers, and groups underrepresented in the labour market to work together on creating more inclusive work environments. 2. Recommended Initiative: Support Social Procurement: Adopt policies to provide opportunities to underrepresented groups to access municipal procurement.



Recommended Initiative	Details	Lead	Support	Rationale	Validation
Maximize Opportunities for Diversity and Inclusion	 Support the existing City of Kingston inclusive Workplaces Working Group in implementing their Workforce Inclusion Charter to help create and standardize systems for employers Support existing City of Kingston social procurement to provide opportunities for underrepresented groups to access municipal procurement 	• City of Kingston	• All partners	 Many stakeholders expressed a desire to diversify voices in Kingston industries, and provide greater support for those not born in Kingston A 2017 survey found that a majority of Kingston residents [88%] feel the Kingston community is enriched by having a diverse and inclusive population In 2018, recent immigrants to Canada experienced nearly twice the unemployment rate (9.4%) of the general population (5.8%). Immigrants also made almost 20% less than non-immigrants 	 The City of Kingston places direct focus on workforce inclusion, evidenced by their Workforce Inclusion Charter



BUILD WORKFORCE CAPACITY

Having the necessary workforce in place will help to support all growth businesses, from start-up to scale up to business expansion and retention. New investment attraction or foreign direct investment prospects also highly depend on the quality and quantity of available labour. Four initiatives are recommended to help build Kingston's workforce capacity. Building on the existing activities led by the City of Kingston, the following are the recommended initiatives to support workforce development.

- 1. Recommended Initiative: Employ a Talent Recruitment and Attraction Campaign: Augment existing City of Kingston and Employment Ontario initiatives for developing a talent attraction / recruitment campaign that includes components for supporting students, a spousal support program, and diversity and inclusion program. Talent recruitment can also be a part of the remote worker campaign (recommended initiative #4 in the Focus and Positioning Pillar).
- 2. Recommended Initiative: Build on Existing Programs to Create a Future of Work Track: In partnership with St. Lawrence College, Queen's University, and the City of Kingston, consolidate current offerings to create a Future of Work Program. The program would include entrepreneurship, innovation, dealing with workplace generational shifts, and soft skills related to future employability (e.g., decision making skills, negotiation, emotional intelligence).
- 3. Recommended Initiative: Offer a Skills **Development and Matchmaking Program:** In partnership with St. Lawrence College, Queen's University, Employment Ontario, and the City of Kingston, conduct an inventory of the current skills required in the Kingston workforce, an assessment of the unemployed and / or underemployed, and develop a matchmaking system to connect employees with potential employers where skills are aligned. Based on the gap analysis, review existing programs available through post-secondary institutions to retrain (where applicable) workers to ensure appropriate alignment between employee skill competency and employer / privatesector needs. Consider the development of a locally based Skills Development and Retraining Program that will include retraining of existing workforce (especially in light of COVID-19), in trades and other skills required by local private-sector companies.
- 4. Recommended Initiative: Augment Diversity and Inclusion Programming: In partnership with the City of Kingston and through the current Workforce Strategy, augment programming and toolkits to foster enhanced diversity and inclusion within Kingston industries.

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Recommended Initiative	Details	Lead	Support	Rationale	Validation
Build Workforce Capacity	 Focus on talent recruitment and attraction to ensure the appropriate workforce is available and in place Build on existing programming for skills development Align available skills with employer needs Augment programming and tools to foster enhanced diversity and inclusion within Kingston Industries 	• City of Kingston	 Employment Ontario Kingston Economic Development 	 Kingston's population aged 65+, representing the baby boom generation, increased by 20.4% between 2011 and 2016¹³⁷ Kingston's large senior population and low population growth highlights the need for attraction and retention of students and other workers 	 Many stakeholders expressed challenges with finding and retaining the talent required for their businesses, despite the prevalence of educated graduates in the Kingston area The City of Kingston's Strategic Plan 2019-22 has specifically focused on attracting and retaining workers and have published and operationalized a Workforce In- Migration Strategy

ADOPT PROJECT SELECTION AND APPROVAL PROCESS

Establishing a project selection and approval process will streamline efficiencies and create greater alignment between economic development opportunity identification and municipal proprieties and considerations.

 Recommended Initiative: Create an Economic Opportunity Scorecard: Adopt (Kingston Economic Development) a criteria selection scorecard for the evaluation of new and emerging economic opportunities (i.e., inbound and targeted foreign direct investment and business expansion and retention). This approach will help to prioritize inbound requests and focus on the required areas to support the overall strategic plan.

2. Recommended Initiative: Create a Future Development Scorecard: Adopt (City of Kingston) a development selection scorecard managed by City Staff and adopted by City Council for future large-scale inbound investment and development opportunities (to be completed at the beginning of the development review process). This approach will help to streamline the approval process from end-to-end, creating better alignment between staff and Council.

Recommended Initiative	Details	Lead	Support	Rationale	Validation
Adopt Project Selection and Approval Process	• Adopt a project selection scorecard to reflect the needs and criteria for economic development opportunities and the need for planning and municipal considerations	 City of Kingston Kingston Economic Development 	-	• Establishing criteria for both proactive outreach and inbound investment opportunities will better maximize investment attraction efforts by the economic development agency and create alignment with the needs and limitations of the City of Kingston	• Stakeholder outreach and consultations confirmed a more transparent process would be helpful for investing further in development opportunities in Kingston

Moving to Implementation

LEVERAGING THE KINGSTON NETWORK

The Integrated Economic Development Strategy's recommended initiatives present a collaborative, comprehensive approach towards stakeholder engagement. Youth, entrepreneurs, ecosystem partners, investors, and post-secondary education will benefit from the actions identified.

Figure 18, Leveraging the Kingston Network, provides a full listing of the target audience groups and which recommended initiatives are intended for each.

YOUTH ENGAGEMENT

Youth aged 18 – 30 are an important segment of Kingston's population, and engaging youth will be imperative to sustain long-term economic growth. Of the 35 recommended initiatives included in this strategy, 14 are targeted towards engaging youth within the Kingston community (Figure 18).

The Focus and Prioritization / Assets and Infrastructure pillars will seek to further solidify cluster development, develop futureforward clusters, and expand employment opportunities. The Execution and Implementation pillar directly focuses on improving student retention, developing workplace skills, and hearing youth voices through diversity and inclusion practices. Effective collaborative engagement promotes multi-way conversations. More and more youth are actively seeking to participate in policy conversations and share their insights and ideas. As a vital audience, youth input will be encouraged, especially in the Creative Industries and Rural Kingston strategy implementation. Effective social media practices will also be included in the Collaborations and Communications pillar.

ENTREPRENEURS

Entrepreneurs are the spark within Kingston's business community, supporting key industries and launching innovative new companies and ideas. Of the 35 recommended initiatives included in this strategy, 32 are targeted towards Kingston-based entrepreneurs (Figure 18).

Recommended initiatives within the Integrated Economic Development Strategy's four pillars will seek to: provide entrepreneurs with increased opportunities in sustainable and growing sectors; better leverage the market access unique to Kingston; increase opportunities for entrepreneurs to connect with ecosystem partners; and elevate the reputation of Kingston's innovative firms. The Execution and Implementation initiatives focus on creating a diverse, inclusive, and highly trained workforce for start-up / scaleup business recruitment.



As an important stakeholder group, entrepreneurs will be highly encouraged to participate in the implementation of the Integrated Economic Development Strategy.

ECOSYSTEM PARTNERS

Collaborative partners in an ecosystem can act as an important source of expertise, technological competence, and sector knowledge. To successfully implement the Integrated Economic Development Strategy, dedicated ecosystem participation will be required. Of the 35 recommended initiatives included in this strategy, 19 support increased engagement with ecosystem partners within Kingston (Figure 18).

Ecosystem partners will include tri-level government representation, post-secondary institutions, and industry organizations / associations / coalitions. Kingston's innovation ecosystem has approximately 45 organizations and 59 programs, reflecting an impressive ecosystem landscape to leverage.

Organizations of diverse types (e.g., size, philosophy, approach to innovation, and funding ability) will all be required to reflect and represent various perspectives prior to implementation. The implementation of these recommended initiatives will provide various opportunities for ecosystem partners to have a more direct relationship with Kingston in the future.

INVESTORS

Productive business infrastructure delivery is driven by cities whose governance structures, legal and policy frameworks, fiscal management, and strategic planning offer incentives for development and long-term investment opportunities.

Strategic investments in Kingston will be crucial to sustaining and growing the Kingston economy and maintaining Kingston's high quality of life. Of the 35 recommended initiatives included in this strategy, 21 serve to increase investment into Kingston's business community (Figure 18).

A focus on the two identified future-looking sectors and sub-sectors will create a more focused vision for Kingston, aligning more closely with those interested in investing strategically and specifically in those sectors. Increased branding, collaboration, and communication will heighten Kingston's profile, increasing investor activity in the region. Streamlining systems will be especially advantageous.

POST-SECONDARY EDUCATION INSTITUTIONS

In today's global marketplace, the quality provision of PSE continues to be a vital asset for Ontario. Maintaining these quality levels is also a concern, with international competition continuously rising. The Council of Ministers of Education. Canada (CMEC) believes that "Canada must increase the number of students pursuing postsecondary education by increasing the quality and accessibility of postsecondary education" and continue to work on issues of access, affordability, learning outcomes, and student transition to the workforce.¹³⁸ The Government of Ontario states that more than two-thirds of all new jobs in the province will be expected to require PSE. But there are challenges. Ontario



post-secondary education institutions face pressures to meet five critical demands, to "educate a rising share of the population; help equalize economic and social outcomes across the population; provide an important component of lifelong learning; be an engine of innovation; and deliver quality education in an efficient manner."¹³⁹ National and local economic growth and competitiveness relies considerably on PSE's ability to produce suitable, work-ready graduates to support labour market needs in high and mediumskilled occupations.

Fortunately, Kingston is in a strong position when it comes to student enrollment. The Kingston 2019 *Population, Housing and Employment Growth Forecast* reported that "regardless of which academic institution, full-time post-secondary student enrollment is forecasted to increase by 40 per cent between 2016 and 2041. This enrollment is a total influx of 11,500 students to the Kingston CMA region over the 25-year period" (March 3, 2020 report to Council). Harnessing the graduates from key programs to grow and support local businesses will be the challenge.

In addition to being involved as an ecosystem partner, local PSE institutions play a major role within the Integrated Economic Development Strategy as an economic driver, research hub, and talent pipeline. Of the 35 recommended initiatives included in this strategy, 24 reflect increased engagement between Kingston business organizations, the City of Kingston, and local post-secondary educational institutions (Figure 18). Research strengths and academic foci within PSE institutions were considered in the formulation of recommended initiatives. Recommended initiatives seek to leverage existing research, local commercialize research output, and retain high-skilled labour. Several Asset and Infrastructure recommended initiatives directly engage Queen's University and St. Lawrence College, suggesting additional infrastructure development on existing campuses.

LEVERAGING NEW AND EXISTING BUSINESS POTENTIAL

In addition to benefits to relevant stakeholders, the recommended initiatives in the Kingston Integrated Economic Development Strategy will stimulate new and existing business potential in many ways. Business capacity in real estate, tourism, start-ups, business expansion / retention, and foreign direct investment and investor attraction will all be involved, and benefit from, the actions identified in this strategy.

REAL ESTATE

Real estate development is an important driver for Kingston's economy. Supporting new, pending, and existing real estate allows for commercial and industrial businesses to locate within the city, and supports city services through taxation. There is an opportunity to support in-fill of vacant properties during the next five years. Of the 35 recommended initiatives included in this strategy, 13 support real estate growth within Kingston (Figure 19).

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For example, the Assets and Infrastructure pillar seeks to augment broadband connectivity and expand potential residential development within urban and rural areas. Several recommended initiatives support real estate development within Rural Kingston, encouraging population and economic growth in a post-COVID marketplace.

TOURISM

Sustainable tourism development is crucial to cities that depend on tourism revenues. Kingston possesses an outstanding variety of unique and remarkable natural, cultural, and heritage assets. Of the 35 recommended initiatives included in this strategy, 21 are focused on strengthening tourism businesses and building Kingston's reputation as a domestic tourist location (Figure 19).

Marketing and communication recommended initiatives within the Collaboration and Communication pillar seek to heighten Kingston's reputation among other cities and align branding among Kingston organizations. Recommended initiatives seek to create renewed and invigorated interest in tourism through recommended initiatives targeted at Rural Kingston and Creative Industries sectors.

START-UPS

Start-up ecosystems are well documented in that they make for vibrant city and regional economies. For example, in a 2017 report by the Progressive Policy Institute, the private sector job growth is significantly higher where the start-up activity is high. In contrast, regions with fewer start-ups experience less than half the job growth.¹⁴⁰ Linked with entrepreneurs, start-ups have immense potential within Kingston. Of the 35 recommended initiatives included in this strategy, 30 are focused on assisting the creation of, and strengthening existing start-ups (Figure 19).

Please note that recommended initiatives within all four pillars directly and indirectly support start-ups:

- The Focus and Prioritization recommended initiatives will provide a stable economic base, as well as identify exciting growing sector in which start-ups can operate;
- The Collaboration and Communication recommended initiatives augment postsecondary partnerships and progress monitoring, creating a stronger publicprivate support system;
- The Assets and Infrastructure pillar will provide startups with several potential spaces and places to locate and collaborate; and,
- The focus on workforce retention and skills development within the Execution and Implementation initiatives will allow startups to build their business using educated, local talent.

BUSINESS EXPANSION AND RETENTION

Beyond start-ups, business expansion and retention are integral to creating a stable and sustainable economic base in Kingston. Longterm businesses allow for infrastructure planning, multi-year career paths, and overall community stability. Of the 35 recommended initiatives included in this strategy, 33 are focused on helping businesses expand, grow, and remain in Kingston (Figure 19).



Highlights of these recommended initiatives include the focus on supporting futurelooking sectors that will allow start-ups and existing businesses to grow for years to come. Initiatives in the Assets and Infrastructure pillar are tailored to business expansion in a variety of ways, through creating new spaces, places, and ecosystems for business expansion to occur. Execution and Implementation pillar recommended initiatives focus on strengthening the foundations enabling business expansion, including retention and reskilling of the workforce.

FOREIGN DIRECT INVESTMENT AND INVESTMENT ATTRACTION

Investment attraction and foreign direct investment is critical to building and diversifying Kingston's current assets. Of the 35 recommended initiatives included in this strategy, 27 are focused on making Kingston a go-to investment choice nationally and globally (Figure 19).

The recommended initiatives in this strategy, including timely planning, focus, and prioritization on strategic clusters, and development of innovative infrastructure(s), serve to position Kingston as a "choice location" for foreign direct investment and investment. Initiatives that strengthen Kingston's image and partnerships will further highlight Kingston's value proposition and support the increase in foreign direct investment and investment attraction. Foreign business recruitment will connect to all other aspects of this strategy, from global marketing programs, to export growth, to talent attraction.

MEASURING SUCCESS

With the push towards transparency and evidence-based decision-making, the following metrics can be considered to measure the progress and success of the overall strategy. Return on investment, optimization of resources, and citizen satisfaction levels should be reviewed regularly to comprehensively measure the success of this strategy.

To build community support, metrics must be manageable and timelines realistic to ensure the community can celebrate progress and success through the execution of the recommended initiatives. As a communitybased strategy, success stories must also come from the community to support the combined efforts of both the strategy leads: The City of Kingston and Kingston Economic Development, and the community at large.

Overall, the main Integrated Economic Development Strategy metrics would track how the strategy:

- Supports and helps to retain existing businesses;
- 2. Offers business expansion potential;
- 3. Attracts investment;
- 4. Expands opportunities for research and development and innovation;
- Supports newcomers and immigrant entrepreneurs;
- 6. Strengthens community engagement; and,
- 7. Leverages and builds infrastructure and assets.

QUARTERLY POTENTIAL TARGET METRICS

- Total inquiries into opportunities for economic development in Kingston in the identified target sectors.
- Total leads generated (for new company expansion and / or relocation potential) in the identified target sectors.
- Total active investment opportunities in the identified target sectors.
- New business permits.
- Funding dollars for plan development in the identified target sectors.
- Total programs and events delivered to support the identified target sectors.
- Total number of participants in events to support the identified target sectors.
- Total number of notable activities of Kingston companies (e.g., new market expansion, and case studies).

ANNUAL POTENTIAL TARGET METRICS

- Total Gross Domestic Product (GDP) and by sector.
- Total Gross Domestic Product (GDP) performance in the identified target sectors.
- Total number of jobs created and maintained and by sector.
- Total number of jobs created and maintained in the identified target sectors.
- Total number of companies started and maintained and by sector.
- Total number of companies started and maintained in the identified target sectors.
- Total workforce year-to-year growth.
- Total business counts year-to-year growth.
- Total business counts year-to-year growth in the identified target sectors.
- Funding investment in the identified target sectors.

Note: All quarterly statistics should be reported quarter-to-quarter (within year) and year-over-year. All annual statistics should be year-to-year and tracking long-term trends.





Initiative Metric Targeted Outcome: Industry growth in the identified priority sectors within Kingston • Status update on success stories Quarterly Milestones such as # of companies attracted per sector, # of investment inquiries field from priority sector businesses Annually • # of companies attracted per sector % of overall business count • # of full-time jobs created per sector • % of full-time jobs created per sector • # of patents secured by Kingston companies per sector • Overall unemployment rate • Unemployment rate by sector • Comparison to Ontario data (companies and jobs) • Comparison to peer cities (companies and jobs) Targeted Outcome: Clustered development in identified clusters within Kingston Quarterly • # of cluster firms within identified areas • # of spin-off firms within identified areas Total sq ft occupied in identified areas Average sq ft occupied in identified areas Total and % sq ft occupied in identified areas by sector • Average sq ft occupied in identified areas by sector Annually All guarterly statistics rendered annually Commercial vacancy rates in key locations Industrial vacancy rates in key locations Retail vacancy rates in key locations

Figure 15: Potential metrics by initiative





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Figure 15: Potential metrics by initiative (con't)

Initiative	Metric
	me: A cohesive development approach to align with the overall vision(s) for
the City of King	ston and Kingston Economic Development
Quarterly	 Joint quarterly reports of all quarterly key indicators, local trends
Annually	 Annual business plan to support and align with strategy
	 Annual sector business plans to support and align with strategy
	 Joint annual report of all annual key indicators, local trends
	 Annual environmental scan
	 # of grants written / submitted
	 # of grants approved
	 Total funding dollars secured for new development in Kingston
	• # of partners
	• # of new partners
	 # of new business permits
	• # of business closures
	 Total value of new business permits
	 Total Gross Domestic Product (GDP) increase and by sector (pre- and
	post-strategy)
	 # of jobs created and maintained and by sector
	 # companies started and maintained and by sector
	 % workforce year-to-year growth
	 % business counts year-to-year growth
	 # of new immigrant companies
	 # of new immigrant companies in sectors
	 # of companies exporting
	 # of sector companies exporting
	 # of sector companies attending export seminars / elearning (export orientation)
	 # of new community assets / infrastructure coming online
Targeted Outco	me: Identification of short-term development opportunities that can drive
immediate resu	Ilts for overall economic development for the region
Quarterly	 # of site visits / meetings (on site and virtual) for new investment attraction opportunities
	 # of leads generated from outbound sales activity
	 # of new development opportunities completed
	 % converted from initial contact
Annually	All guarterly statistics rendered annually
	 # of case studies compiled for dissemination

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Figure 15: Potential metrics by initiative (con't)

Initiative	Motric
	Metric
	me: Identification of long-term development opportunities that can support conomic development plan for Kingston
Quarterly	 # of site visits / meetings (on site and virtual) for new investment
Quarterty	attraction opportunities
	 # of leads generated from outbound sales activity
	 # of new development opportunities completed
	% converted from initial contact
Annually	 All quarterly statistics rendered annually
Annually	 Level of R&D activity identified – PSE
	• # of case studies compiled for dissemination
Targeted Outcor	me: Identification of short-term and long-term development opportunities to
	ts and residential growth in Kingston
Quarterly	• # of case studies compiled for dissemination
-	 # of site visits / meetings (on site and virtual) for new investment
	attraction opportunities
	 # of new development opportunities completed
	 % converted from initial contact
Annually	 All quarterly statistics rendered annually
	 # of community-based partners
	 # of new community-based partners
	• # of new graduates from PSE per sector
	 # of 1st year students from PSE per sector (new enrollments)
	• # of international students graduating per sector
	Updated list of current / new aligned programs offered at each post-
Townshed Outson	secondary institution for each sector
-	me: Identification of short-term and long-term development opportunities to
Quarterly	 s expansion, and potential investment attraction to Kingston # of site visits / meetings (on site and virtual) for new investment
Guarterty	attraction opportunities
	 # of leads generated from outbound sales activity
	 # of new development opportunities completed
	 % converted from initial contact
Annually	 All quarterly statistics rendered annually
	• # of case studies compiled for dissemination
	·

TARGET TIMELINES FOR MEASURING SUCCESS

Note the annual progress update of activities to support target outcomes is also recommended. Time horizons of when potential impact may be visible is noted in Figure 16.

Figure 16: Targeted timelines for measuring impact of the pillars, themes and recommended initiatives, 2020-40

Pillar	Theme	Today	In One Year	In Two Years	In Five Years		In 20 Years
Focus and	1. Adopt Concept Framework	•	٠	٠	٠	٠	٠
Prioritization	2. Develop Two Strategic Clusters				•	٠	٠
	3. Leverage Market Access	•	•	•	•	•	•
Collaboration	4. Enhance Partnership and Collaboration	•	٠	٠	٠	٠	•
and Communication	5. Enhance Marketing and Communications		•	•	•	•	•
communication	6. Measure and Communicate Success			•	•	•	•
Assets and Infrastructure	7. Leverage Community and Business Infrastructure			•	•	•	٠
	8. Leverage Economic Potential in Rural Kingston			•	•	٠	٠
	9. Foster and Support Creative Industries		•	•	•	•	•
Execution and	10. Mobilize Strategy Execution Team		•	٠	٠	•	•
Implementation	11. Build Workforce Capacity	•	•	•	•	•	•
	12. Reinforce Diversity and Inclusion		•	•	٠	•	٠
	13. Adopt Project Selection and Approval Process			•	٠	•	٠



Next Steps

Prior to the implementation and execution of the strategy and the proposed themes and recommended initiatives, six primary activities are recommended. These activities will ensure the City of Kingston and Kingston Economic Development are equipped with the tools, resources, and support needed to position the overall Integrated Economic Development Strategy for success.

PRE-IMPLEMENTATION REQUIREMENTS

1	Confirm champion(s) and lead for the Integrated Economic Development Strategy
2	Identify a lead for each of the recommended initiatives
3	Confirm partners for each of the recommended initiatives
4	Confirm resources (e.g., human resources, financial resources, budget allocation) to be allocated to delivering the activities and outcomes for the Integrated Economic Development Strategy
5	Develop a detailed action and implementation plan to confirm how to mobilize the initiatives as part of the recommendations. Consider prioritization of activities, roles, and responsibilities (through the City of Kingston, Kingston Economic Development, and strategic support organizations), and detailed timelines
6	Continue community and stakeholder engagement to solicit input and validation throughout the planning and implementation process



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IMPLEMENTATION ACTIVATION

The following recommended components should be confirmed prior to the implementation of the recommended initiatives contained in this strategy:

- Confirmation of champion(s) for the Integrated Economic Development Strategy
- Identification of roles and responsibilities of key stakeholders and organizations in the community
- Confirmation of resources
 (e.g., budget, people)
- Completion of action and implementation for each approved initiative

Once the implementation activation points have been achieved, the following is a summary of the activities that can take place to mobilize the plan.

SHORT-TERM NEXT STEPS (NEXT THREE TO SIX MONTHS)

- Finalize additional resources that can be accessed or allocated to pursue themes and recommended initiatives.
- Conduct a review of existing economic development programming that supports start-ups and business expansion / retention. Identify synergies in current activities to maximize growth potential in the priority clusters.
- Develop an investment attraction / foreign direct investment action plan to leverage priority cluster potential investment.
 Confirm if there are markets that can be proactively explored to nurture and grow the identified clusters. Identify potential

investment attraction and foreign direct investment opportunities that would be suitable in Kingston.

- 4. Develop a benchmark for current performance. Adjust success metrics to enable progress measurement in one year, two years, and each year thereafter for the next five years.
- Continue community and stakeholder engagement to solicit input and validation throughout the planning and implementation process.
- Conduct a market validation exercise to confirm the market demand and market need by industry for the target priority clusters.
- In partnership with the Planning Department at the City of Kingston, work to adopt a development criteria scorecard to assist with shortlisting and identifying opportunities for development in Kingston.
- 8. In partnership with Tourism Kingston and the City of Kingston Cultural Services Department, identify programming and business support requirements to nurture entrepreneurship in tourism and creative industries.
- 9. Strengthen the value proposition and case for investment: An important part of the action plan is strengthening the "case" for investment. Do we need to change postsecondary programs to boost the talent pipeline? Do we need to attract more R&D investment? Do we need consider targeted incentives? Are there any legislation or regulation changes required? What else can we do to make investment in the opportunity extremely attractive (subject to an ROI on any investment)?



For Consideration

A number of other strategic initiatives are underway in Kingston that support the overall goals and target outcomes of the Integrated Economic Development Strategy. While these components are not included in the strategy framework as part of the Integrated Strategy, it is important for the City of Kingston, Kingston Economic Development, and other key partners to consider these initiatives through the implementation phase of the Integrated Economic Development Strategy. These initiatives include but are not limited to:

- 1. Airport land development: Continued discussions with the City of Kingston are recommended to maximize the potential use of the airport lands in supporting economic development opportunities.
- Air service development: In light of the COVID-19 pandemic, it is anticipated air service from Kingston may be an issue in the short- and medium-term. It is recommended Kingston Economic Development and the City of Kingston work closely with the airport authority to prepare options for air travel and access for Kingston residents and businesses.

- 3. Downtown development intensification: Downtown intensification was underscored as an opportunity by developers in Kingston (with offices in Kingston and in other markets) throughout the engagement process. There is an interest and opportunity to maximize land use in the downtown core. Downtown intensification in markets of all sizes is a growing trend nationally and globally.
- 4. Downtown vibrancy: Kingston offers an unparalleled experience in its downtown core. In light of COVID-19, maintaining the vibrancy of the downtown core should be a focus for the City of Kingston. The heritage, services, and amenities in the downtown core support many components within the overall Integrated Economic Development Strategy framework. Examples within the strategy that depend upon a lively and vital core include: leveraging market access, identifying short-term economic development potential, supporting and fostering Creative Industries, workforce reskilling, reinforcing diversity and inclusion, and aligning marketing and communications activities



- 5. Climate action: As existing businesses are redefined and new businesses emerge as a result of COVID-19, a climate action and sustainability lens should be included in assessing new and expanded business activities. Metrics can be considered for businesses to support the community efforts for greenhouse gas emission reduction, energy efficiencies, and employing practices to support greener process and production methods.
- 6. Housing Task Force and affordable housing: Access to affordable housing will continue to be an important goal for the City of Kingston. As a result of the shift in the workforce due to COVID-19, a greater emphasis will be needed to ensure availability of housing, including affordable housing for vulnerable groups, is a top priority.
- 7. COVID response / recovery: Activities and initiatives underway through the COVID response and recovery team continue to be required in the short-term. Recommended initiatives build on ongoing COVID-19 response and recovery efforts, including alignment of marketing and communications activities and identifying short-term economic development potential for new and existing businesses.
- 8. Transportation: Public transportation and transportation infrastructure access is required to support the Integrated Economic Development Strategy. The City of Kingston continues to make advancements in both aspects of transportation access. This work is recommended to continue to support the long-term development approach for the community.



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Summary of Recommended Initiatives, Potential Partners, and Timelines

Each of the 35 recommended initiatives require varying degrees of resources and funding, which should be assessed and mapped before implementation. Following the confirmation of implementation lead *(Pre-Implementation Requirements)* recommended initiatives will be championed and led by the City of Kingston and / or Kingston Economic Development and supported by the potential partners noted.

Figure 17: Implementation activities

Pillars	Themes	Recommended Initiatives	Key Partners	Short Term (next 6 to 12 months)	Medium Term (next 12 to 24 months)	Long Term (next 3 to 5 years)
Focus and Prioritization	1. Adopt Concept Framework	1. Adopt an Integrated Long-Term and Short-Term Economic Plan	Kingston Economic Development, City of Kingston	~	~	*
	2. Develop Two Strategic Clusters	 Develop Two Strategic Clusters in Health and Health Innovation and Sustainable Manufacturing 	Kingston Economic Development, City of Kingston, PSE institutions	~	~	~
	3. Leverage Market Access	3. Focus on Creative Industries Product Development	City of Kingston, Tourism Kingston		~	~
		4. Develop a Remote Workers Campaign	City of Kingston			
Collaboration and	4. Enhance Partnerships and Collaboration	5. Enhance PSE Collaboration	City of Kingston, Kingston Economic Development	~	~	~
Communication		6. Enhance Neighboring Community Collaboration	City of Kingston, Frontenac, Lennox and Addington	V	~	~



Figure 17: Implementation activities (con't)

Pillars	Themes	Recommended Initiatives	Key Partners	Short Term (next 6 to 12 months)	Medium Term (next 12 to 24 months)	Long Term (next 3 to 5 years)
Collaboration and Communication	5. Enhance Marketing and Communications	7. Create a "Kingston Can" Campaign	Kingston Economic Development, Tourism Kingston, Kingston Chamber of Commerce, Downtown Kingston	~	~	
		8. Align Kingston Branding among Key Partners and Stakeholders	Kingston Economic Development, Tourism Kingston, Kingston Chamber of Commerce, Downtown Kingston	~	~	
		9. Consider Renaming Kingston Economic Development to Invest Kingston	Kingston Economic Development	~		
	6. Measure and Communicate Success	10. Administer Proactive Progress Reporting of Success	Kingston Economic Development		~	~
Assets and Infrastructure	7. Leverage Community and Business Infrastructure	11. Enhance Broadband Connectivity (Particularly in Rural Kingston)	City of Kingston		~	~
		12. Maintain Inventory and Access to Employment Land	City of Kingston			~
		13. Develop a Research and Technology Park (formerly known as Innovation Park at Queen's University)	City of Kingston, Queen's University, Kingston Economic Development	~	~	~
		14. Build a Health Innovation Lab (to be located at the Research and Technology Park site)	City of Kingston, Queen's University, Kingston Economic Development		~	~
		15. Build a Sustainable Manufacturing Lab (to be located at the Research and Technology Park site)	City of Kingston, Queen's University, Kingston Economic Development		~	~
	8. Leverage the Economic Potential in Rural Kingston	16. Support Agricultural Activities and Businesses	City of Kingston		~	~
		17. Plan Hamlet-led Development Opportunities	City of Kingston			~



Figure 17: Implementation activities (con't)

Pillars	Themes	Recommended Initiatives	Key Partners	Short Term (next 6 to 12 months)	Medium Term (next 12 to 24 months)	Long Term (next 3 to 5 years)
Assets and Infrastructure	8. Leverage the Economic Potential in Rural Kingston	18. Revitalize Rural Tourism Opportunities	City of Kingston, Tourism Kingston		~	~
		19. Develop Strategic Rural Business Clusters	City of Kingston			~
	9. Foster and Support Growth in the Creative Industries	20. Set a Creative Industries Narrative (internally and externally)	City of Kingston Cultural Services, Tourism Kingston		~	~
		21. Support Emerging Creative Industries	City of Kingston Cultural Services, Kingston Economic Development		~	~
		22. Offer Business Skills and Training	Post-secondary institutions, innovation ecosystem partners		~	~
		23. Facilitate Partnerships and Collaboration (post-secondary institutions, other exemplary jurisdictions)	City of Kingston Cultural Services Department			~
		24. Identify, Develop, and Make Available Sustainable Spaces and Places	City of Kingston, City of Kingston Cultural Services Department		~	~
		25. Reinforce Diversity and Inclusion	City of Kingston Cultural Services Department		~	~
Execution and Implementation	10. Mobilize Strategy Execution Team	26. Establish a Strategy Execution Team	City of Kingston, Kingston Economic Development	~		
		27. Establish Three Working Groups: Health and Health Innovation, Sustainable Manufacturing, and Creative Industries	Kingston Economic Development, City of Kingston	*		
	11. Maximize Opportunities for Diversity and Inclusion	28. Augment and Follow the Workforce Inclusion Charter	City of Kingston		~	~
		29. Support Social Procurement	City of Kingston		~	~
	12. Build Workforce Capacity	30. Employ a Talent Recruitment and Attraction Campaign	Post-secondary Institutions, City of Kingston		~	~



Figure 17: Implementation activities (con't)

Pillars	Themes	Recommended Initiatives	Key Partners	Short Term (next 6 to 12 months)	Medium Term (next 12 to 24 months)	Long Term (next 3 to 5 years)
Execution and Implementation	12. Build Workforce Capacity	31. Build on Existing Programs to Create a Future of Work Track	Post-secondary Institutions, City of Kingston		~	~
		32. Offer a Skills Development and Matchmaking Program	Post-secondary Institutions, City of Kingston		~	~
		33. Augment Diversity and Inclusion Programming	City of Kingston		~	~
	13. Adopt Project Selection and Approval Process	34. Create an Economic Opportunity Scorecard	Kingston Economic Development	~		
		35. Create a Future Development Opportunity Scorecard and Analysis Framework	City of Kingston Planning Department, Kingston Economic Development	*		



TARGET AUDIENCES

As detailed in *How We Will Get There* section of this strategy, each of the 35 recommended initiatives support a variety of groups and networks in the community. The following table provides a snapshot the alignment of the recommended initiatives with these groups. *Note: in many cases, each recommendation could provide opportunities for all the groups noted. For this exercise, only the main groups who could benefit most from the Integrated Economic Development Strategy themes and recommended initiatives have been highlighted.*

Figure 18: Target audiences

Pillars	Themes	Recommended Initiatives	Key Partners	Youth	Entrepreneurs	Ecosystem Partners	Investors	PSE
Focus and Prioritization	1. Adopt Concept Framework	1. Adopt an Integrated Long-Term and Short-Term Economic Plan	Kingston Economic Development, City of Kingston		*	~	~	~
	2. Develop Two Strategic Clusters	2. Develop Two Strategic Clusters in Health and Health Innovation and Sustainable Manufacturing	Kingston Economic Development, City of Kingston, PSE institutions	~	*	~	~	~
	3. Leverage Market Access	3. Focus on Creative Industries Product Development	City of Kingston, Tourism Kingston	~	*	~	~	
		4. Develop a Remote Workers Campaign	City of Kingston	~	~	~	~	~
Collaboration and	4. Enhance Partnerships and Collaboration	5. Enhance PSE Collaboration	City of Kingston, Kingston Economic Development	~	~	~		~
Communication		6. Enhance Neighboring Community Collaboration	City of Kingston, Frontenac, Lennox and Addington	~	*	~		~
	5. Enhance Marketing and Communications	7. Create a "Kingston Can" Campaign	Kingston Economic Development, Tourism Kingston, Kingston Chamber of Commerce, Downtown Kingston		*	~	~	~
		8. Align Kingston Branding among Key Partners and Stakeholders	Kingston Economic Development, Tourism Kingston, Kingston Chamber of Commerce, Downtown Kingston		*	~	~	~



Figure 18: Target audiences (con't)

Pillars	Themes	Recommended Initiatives	Key Partners	Youth	Entrepreneurs	Ecosystem Partners	Investors	PSE
Collaboration and Communication	5. Enhance Marketing and Communications	9. Consider Renaming Kingston Economic Development to Invest Kingston	Kingston Economic Development		*	~	~	~
	6. Measure and Communicate Success	10. Administer Proactive Progress Reporting of Success	Kingston Economic Development		*	~	~	~
Assets and Infrastructure	7. Leverage Community and Business	11. Enhance Broadband Connectivity (particularly in Rural Kingston)	City of Kingston	~	*	~	~	~
	Infrastructure	12. Maintain Inventory and Access to Employment Land	City of Kingston		~		~	
		13. Develop a Research and Technology Park (formerly known as Innovation Park at Queen's University)	City of Kingston, Queen's University, Kingston Economic Development		*		~	~
		14. Build a Health Innovation Lab (to be located at the Research and Technology Park site)	City of Kingston, Queen's University, Kingston Economic Development		*	~	~	~
		15. Build a Sustainable Manufacturing Lab (to be located at the Research and Technology Park site)	City of Kingston, Queen's University, Kingston Economic Development		*	~	~	~
	8. Leverage the Economic Potential	16. Support Agricultural Activities and Businesses	City of Kingston		~		~	
	in Rural Kingston	17. Plan Hamlet-led Development Opportunities	City of Kingston		~		~	
		18. Revitalize Rural Tourism Opportunities	City of Kingston, Tourism Kingston		~		~	
		19. Develop Strategic Rural Business Clusters	City of Kingston		~		~	
	9. Foster and Support Growth in the Creative Industries	20. Set a Creative Industries Narrative (internally and externally)	City of Kingston Cultural Services, Tourism Kingston		*			
		21. Support Emerging Creative Industries	City of Kingston Cultural Services, Kingston Economic Development	~	*			



Figure 18: Target audiences (con't)

Pillars	Themes	Recommended Initiatives	Key Partners	Youth	Entrepreneurs	Ecosystem Partners	Investors	PSE
Assets and Infrastructure	9. Foster and Support Growth in the Creative Industries	22. Offer Business Skills and Training	Post-secondary institutions, innovation ecosystem partners	~	*			~
		23. Facilitate Partnerships and Collaboration (post- secondary institutions, other exemplary jurisdictions)	City of Kingston Cultural Services Department		~			~
		24. Identify, Develop, and Make Available Sustainable Spaces and Places	City of Kingston, City of Kingston Cultural Services Department		*		~	
		25. Reinforce Diversity and Inclusion	City of Kingston Cultural Services Department	~	~	~	~	~
Execution and Implementation	10. Mobilize Strategy Execution Team	26. Establish a Strategy Execution Team	City of Kingston, Kingston Economic Development		~	~		~
		27. Establish Three Working Groups: Health and Health Innovation, Sustainable Manufacturing, and Creative Industries	Kingston Economic Development, City of Kingston		*	~		~
	11. Maximize Opportunities	28. Augment and Follow the Workforce Inclusion Charter	City of Kingston	~	~			~
	for Diversity and Inclusion	29. Support Social Procurement	City of Kingston		~		~	~
	12. Build Workforce Capacity	30. Employ a Talent Recruitment and Attraction Campaign	Post-secondary Institutions, City of Kingston	~	*			~
		31. Build on Existing Programs to Create a Future of Work Track	Post-secondary Institutions, City of Kingston	~		~		~
		32. Offer a Skills Development and Matchmaking Program	Post-secondary Institutions, City of Kingston	~	*	~		~
		33. Augment Diversity and Inclusion Programming	City of Kingston	~	~	~		~
	13. Adopt Project Selection and	34. Create an Economic Opportunity Scorecard	Kingston Economic Development		~			
i	Approval Process	35. Create a Future Development Opportunity Scorecard and Analysis Framework	City of Kingston Planning Department, Kingston Economic Development		~			
KINGSION	KINGSTON ECONOMIC Development Corporation		79					STILETTO



IMPACT AND OPPORTUNITIES OF BUSINESSES

As detailed in *How We Will Get There* section of this strategy, each of the 35 themes and recommended initiatives are targeted to supporting a variety of industries and stages of businesses in Kingston. The following table provides a snapshot the alignment of the themes and recommended initiatives with these groups. *Note: in many cases, each recommended initiative could provide opportunities for all the groups noted. For this exercise, only the main groups who could benefit most from the Integrated <i>Economic Development Strategy recommended initiatives have been highlighted.*

Figure 19: Impact and opportunities for businesses

Pillars	Themes	Recommended Initiatives	Key Partners	Real Estate	Tourism	Start-ups	BRE	FDI & Investment Attraction
Focus and Prioritization	1. Adopt Concept Framework	1. Adopt an Integrated Long-Term and Short-Term Economic Plan	Kingston Economic Development, City of Kingston	~	~	~	~	~
	2. Develop Two Strategic Clusters	2. Develop Two Strategic Clusters in Health and Health Innovation and Sustainable Manufacturing	Kingston Economic Development, City of Kingston, PSE institutions	~		~	~	~
	3. Leverage Market Access	 Focus on Creative Industries Product Development 	City of Kingston, Tourism Kingston		~	~	~	
		4. Develop a Remote Workers Campaign	City of Kingston				~	~
Collaboration and	4. Enhance Partnerships and	5. Enhance PSE Collaboration	City of Kingston, Kingston Economic Development		~	~	~	~
Communication	Collaboration	6. Enhance Neighboring Community Collaboration	City of Kingston, Frontenac, Lennox and Addington	~	~	~	~	~
	5. Enhance Marketing and Communications	7. Create a "Kingston Can" Campaign	Kingston Economic Development, Tourism Kingston, Kingston Chamber of Commerce, Downtown Kingston		*	~	*	~
		8. Align Kingston Branding among Key Partners and Stakeholders	Kingston Economic Development, Tourism Kingston, Kingston Chamber of Commerce, Downtown Kingston		*			~



Figure 19: Impact and opportunities for businesses (con't)

Pillars	Themes	Recommended Initiatives	Key Partners	Real Estate	Tourism	Start-ups	BRE	FDI & Investment Attraction
Collaboration and Communication	5. Enhance Marketing and Communications	9. Consider Renaming Kingston Economic Development to Invest Kingston	Kingston Economic Development		*	*	~	~
	6. Measure and Communicate Success	10. Administer Proactive Progress Reporting of Success	Kingston Economic Development	~	~	~	~	~
Assets and Infrastructure	7. Leverage Community and Business	11. Enhance Broadband Connectivity (particularly in Rural Kingston)	City of Kingston	~	~	~	~	~
	Infrastructure	12. Maintain Inventory and Access to Employment Land	City of Kingston	~	~		~	~
		13. Develop a Research and Technology Park (formerly known as Innovation Park at Queen's University)	City of Kingston, Queen's University, Kingston Economic Development	~		*		~
		14. Build a Health Innovation Lab (to be located at the Research and Technology Park site)	City of Kingston, Queen's University, Kingston Economic Development			*	~	~
		15. Build a Sustainable Manufacturing Lab (to be located at the Research and Technology Park site)	City of Kingston, Queen's University, Kingston Economic Development			*	~	~
	8. Leverage the Economic Potential	16. Support Agricultural Activities and Businesses	City of Kingston		~	~	~	~
	in Rural Kingston	17. Plan Hamlet-led Development Opportunities	City of Kingston	~			~	
		18. Revitalize Rural Tourism Opportunities	City of Kingston, Tourism Kingston		~	~	~	
		19. Develop Strategic Rural Business Clusters	City of Kingston	~			~	~
	9. Foster and Support Growth in the Creative Industries	20. Set a Creative Industries Narrative (internally and externally)	City of Kingston Cultural Services, Tourism Kingston		~	~	~	
		21. Support Emerging Creative Industries	City of Kingston Cultural Services, Kingston Economic Development		~	~	~	



Figure 19: Impact and opportunities for businesses (con't)

Pillars	Themes	Recommended Initiatives	Key Partners	Real Estate	Tourism	Start-ups	BRE	FDI & Investment Attraction
Assets and Infrastructure	9. Foster and Support Growth in the Creative Industries	22. Offer Business Skills and Training	Post-secondary institutions, innovation ecosystem partners		~	*	~	
		23. Facilitate Partnerships and Collaboration (post- secondary institutions, other exemplary jurisdictions)	City of Kingston Cultural Services Department			*	~	~
		24. Identify, Develop, and Make Available Sustainable Spaces and Places	City of Kingston, City of Kingston Cultural Services Department			~	~	~
		25. Reinforce Diversity and Inclusion	City of Kingston Cultural Services Department			~	~	~
Execution and Implementation	10. Mobilize Strategy Execution Team	26. Establish a Strategy Execution Team	City of Kingston, Kingston Economic Development			~	~	~
		27. Establish Three Working Groups: Health and Health Innovation, Sustainable Manufacturing, and Creative Industries	Kingston Economic Development, City of Kingston	*	*	*	~	~
	11. Maximize Opportunities for Diversity and Inclusion	28. Augment and Follow the Workforce Inclusion Charter	City of Kingston		~	~	~	
		29. Support Social Procurement	City of Kingston			~	~	~
	12. Build Workforce Capacity	30. Employ a Talent Recruitment and Attraction Campaign	Post-secondary Institutions, City of Kingston		~	~	~	~
		31. Build on Existing Programs to Create a Future of Work Track	Post-secondary Institutions, City of Kingston	~	~	~	~	~
		32. Offer a Skills Development and Matchmaking Program	Post-secondary Institutions, City of Kingston	~	~	~	~	v
		33. Augment Diversity and Inclusion Programming	City of Kingston	~		~	~	~
	13. Adopt Project Selection and	34. Create an Economic Opportunity Scorecard	Kingston Economic Development	~		~	~	~
	Approval Process	35. Create a Future Development Opportunity Scorecard and Analysis Framework	City of Kingston Planning Department, Kingston Economic Development	~		*	~	~



Appendix A: NAICS Classification

Please note: NAICS codes that are not 6-level include all classifications that fall under it (unless specified). For the purposes of implementing Kingston's Health and Health Innovation and Sustainable Manufacturing cluster, the following NAICS are suggested. This classification is a selected list that is open for future discussion and refinement.

Data collected for the original data analysis (Appendix C) were 2-Level NAICS codes: Manufacturing (31-33) and Health and social assistance (62).

Figure 20: Suggested NAICS, sustainable manufacturing

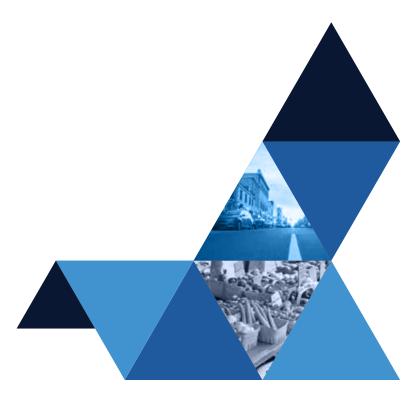
AICS	Description	NAICS	Description
115	Support activities for agriculture and forestry	32519	Other basic organic chemical manufacturing
2211	Electric power generation, transmission, and distribution	3256	Soap, cleaning compound and toilet preparation manufacturing
237130	Power and communications line and related structures construction (power plants, including	325999	All other miscellaneous chemical product manufacturing
	nuclear)	327	Non-metallic mineral product manufacturing
2379	Other heavy and civil engineering construction (hydro)	331	Primary metal manufacturing
22132	Sewage treatment facilities	332	Fabricated metal product manufacturing
3711	Water and sewer line and related structures	333	Machinery manufacturing
23711	construction	334	Computer and electronic product manufacturing
	Food manufacturing (except 3115 dairy product manufacturing and 3116 meat product	335	Electrical equipment, appliance, and component manufacturing
	manufacturing)	336	Transportation equipment manufacturing
313	Textile mills	337	Furniture and related product manufacturing
14	Textile product mills	339	Miscellaneous manufacturing
815	Clothing manufacturing	4181	Recyclable material merchant wholesalers
816	Leather and allied product manufacturing	4183	Agricultural supplies merchant wholesalers
21	Wood product manufacturing	54137	Surveying and mapping (except geophysical services
322	Paper manufacturing	562	Waste management and remediation services
323	Printing and related support activities	54162	Environmental consulting services
325	Chemical manufacturing		-



Note: Clean technology specific NAICS codes have been defined by Statistics Canada (2020) as: "Support activities for agriculture and forestry industries (NAICS 115), Oil and gas extraction industries (NAICS 211), Utilities industries (NAICS 221), Construction industries (NAICS 236, 237, 238), Manufacturing industries (NAICS 311, 321, 324, 325, 326, 327, 332, 333, 334, 335, 336, 339), Wholesale trade industries (NAICS 412, 415, 416, 417, 418, 419), Software publishers industry (NAICS 511), the Data processing, hosting, and related services industry (NAICS 518), the Professional, scientific, and technical services industry (NAICS 541), the Management, scientific, and technical consulting services industry (NAICS 5416), the Administrative and support, waste management and remediation services industries (NAICS 561, 562), and the Repair and maintenance industry (NAICS 811)."141

Figure 21: Suggested NAICS, health and health innovation

NAICS	Description
3254	Pharmaceutical and medicine manufacturing
511211	Software publishers (except video game publishers)
518	Data processing, hosting, and related services
5416	Management, scientific, and technical consulting services
5433	Engineering services
54138	Testing laboratories
54171	Research and development in the physical, engineering, and life sci-ence
54199	All other professional, scientific, and technical services
62	Health care and social assistance





Appendix B: Core Community Assets

The list of community assets is comprehensive and includes post-secondary institutions, research and development capabilities, heritage properties, a deep-water waterfront ideal for tourists and transportation, and a thriving business base. Queen's University was named as Kingston's single main asset throughout the stakeholder engagement process. As one of Canada's oldest degree-granting universities, Queen's University has a reputation of excellence, drawing more than 30,000 students annually, generating more than \$200 million CAD per year in research funding, and regularly ranking within the top 15 Canadian research-intensive universities.¹⁴²

As part of the development of the Integrated Economic Development Strategy, nearly 5,000 of the 6,400 data points collected pertain to the city's assets. These data points were collected and reviewed to illustrate the core assets in the community.

COMMUNITY ASSETS

A Kingston community asset map was developed to assess community assets such as infrastructure, institutions, and companies. In total, the community mapping exercise found 85 community assets. These assets were further divided into two categories.

- General Community Assets include assets related to the following categories: culture, government, networks nonprofits / charities, and post-secondary.
 Forty-six assets were identified, including: Agnes Etherington Art Centre, Canada Border Services Agency, Community
 Foundation for Kingston and Area, Correctional Service of Canada Museum, Greater Kingston Chamber of Commerce, Queen's University, Royal Military College of Canada (RMCC), Service Canada, St. Lawrence College, Sustainable Kingston, Transport Canada, and United Way.
- Community Infrastructure Assets include community spaces, health care, penitentiaries, sports facilities, transportation, and utilities. Thirtynine assets were identified, including: Cataraqui Community Centre, City Central Water Purification, Collin's Bay Institution / Joyceville Institution, Kingston Airport, Kingston East Community Centre, Kingston General Hospital, Maple Leaf Fibre, Providence Care, and the Leon's Centre.¹⁴³



POST-SECONDARY INSTITUTIONS

There are three post-secondary institutions in Kingston: Queen's University, Royal Military College of Canada (RMCC), and St. Lawrence College. Note that the private Trillium College career school also has a location in Kingston.¹⁴⁴

RESEARCH CENTRES, NETWORK CENTRES, AND RESEARCH INSTITUTES

Kingston has strong community assets in their research centres and institutes, including two Network of Centres of Excellence (NCEs) and many network and research centres. The two NCEs, the Canadian Frailty Network at Queen's University and GreenCentre Canada, are valued at \$67.5 million CAD combined.

Kingston's research centres and research institutes include:

- The Arthur B. McDonald Canadian Astroparticle Physics Institute.
- The Beaty Water Research Centre.
- The Canadian Institute for Military and Veteran Health Research.
- The Cancer Research Institute.
- The Centre for Energy and Power Electronics Research (ePower).
- The Centre for Advanced Computing.
- The Centre for Business Venturing.
- The Centre for International and Defence Policy.
- The Centre for Neuroscience Studies.
- The Centre of Social Impact.

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- The Centre for Study and Democracy and Diversity.
- The Centre for Studies in Primary Care.
- The Centre for Law in the Contemporary Workplace.
- The CPA Centre for Governance.
- The GeoEngineering Centre.¹⁴⁵

ACCESS TO FUNDING TO SUPPORT RESEARCH AND INNOVATION

The government has a number of funding mechanisms to support excellence in research including Canada Research Chairs, the Canada Foundation for Innovation, the Natural Science and Engineering Research Council of Canada, the Canada Institute for Health Research, the Social Sciences and Humanities Research Council, the Canada First Research Excellence Fund, and the Ontario Centres of Excellence.

A summary of recent federal and provincial government funding awards for research in Kingston includes:

- A total of 47 Canada Research Chairs (CRCs) in Kingston, with 91 per cent (43 CRCs) at Queen's University, and the remaining nine per cent at Royal Military College (four CRCs). As of May 2018, the chairs had an estimated value of \$46.9 million CAD to be received across the next seven years.
- Sixty-five Canadian Foundation for Innovation projects totaling \$87.4 million CAD in funding during the past five years, all at Queen's University.



Exhibit A to Report Number 21-012

- More than 3,100 Natural Science and Engineering Research Council of Canada awards valued at \$208.3 million CAD in the past five years, with 96 per cent of the award value at Queen's University, three per cent at Royal Military College, and one per cent at St. Lawrence College.
- \$63.4 million CAD for 260 Canada Institute for Health Research funded projects at Queen's University in the past five years.
- \$15.3 million CAD for 594 Social Sciences and Humanities Research Council funded projects in the past five years, with 98 per cent of the award value at Queen's University, and two per cent at Royal Military College (St. Lawrence also received two awards at a value of \$20,000).
- Of note, Queen's University received a Canada First Research Excellence Fund for the Arthur B. McDonald Canadian Astroparticle Physics Research Institute, valued at \$63.7 million CAD in 2016.¹⁴⁶

Figure 22: Provincial and federal research funding, \$CAD

Selected Sectors	Federal and Provincial Research Funding
Health	158,645,258
Physics (including S&T consulting services, R&D in the physical, engineering, and life sciences)	119,910,821
Manufacturing	71,227,668
Social sciences and humanities	46,838,882
Chemical	41,746,366
Environment (environmental consulting)	17,758,613
Cleantech (including energy)	16,140,346
ICT	14,848,201
Natural resources (including mining, water)	3,387,200
Artificial intelligence	449,000
Total	490,952,355



Appendix C: Selected Kingston Baseline Data

DEMOGRAPHIC SUMMARY

To better understand trends, gaps, and opportunities for economic development, a synopsis of key Kingston demographic data has been aggregated from different sources and time periods. Data has been provided by the City of Kingston for ease of reference.

Population: According to the Statistics Canada 2016 Census, the Kingston CMA was home to approximately 123,789 residents, representing an increase of 1.0 per cent from 2011. This increase was low in comparison to the provincial average growth of 4.7 per cent and the national average growth of 5.0 per cent.¹⁴⁷ Slower growth can potentially be attributed to low or no natural increase (difference between births and death), lower migration into the area, and urban spread.¹⁴⁸

Age: The 2016 census stated the working age population (15 to 64) represented 65.8 per cent of the total population, comparable to the national average of 66.5 per cent at that time and was a significant change from 2011 to 2016 (-0.4%). The Kingston CMA's population aged 65 and greater increased by 20.4 per cent between 2011 and 2016.¹⁴⁹

Working age population: According to the annual Statistics Canada Labour Force Survey, the working age population (15 to 64) has fluctuated during the last several years within the Kingston CMA, with the latest estimates in 2019 being approximately 110,000.¹⁵⁰



Figure 23: Labour force estimates, Kingston CMA, population 15 to 64 years, 2011-19¹⁵¹

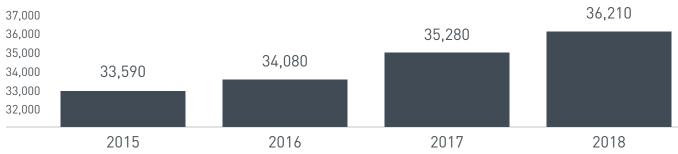
Source: Statistics Canada, Labour force survey estimates (LFS), by sex and age group for Canada, provinces, economic regions and census metropolitan areas, 2006 and 2011 to 2019, annual averages



Exhibit A to Report Number 21-012

Household Income: The Kingston CMA had a median after-tax household income of \$62,652 CAD in 2015, with the City of Kingston having the lowest median at \$59,541 CAD and South Frontenac having the highest median at \$77,378 CAD.¹⁵² **Individual Income:** Kingston CMA median aftertax income of individuals was \$36,210 CAD¹⁵³ and has been steadily increasing during the last several years. The median after-tax income is higher when compared to Ontario in 2018 (\$33,710 CAD).¹⁵⁴

Figure 24: Median after-tax income of individuals, Kingston CMA, \$CAD, 2015-18¹⁵⁵



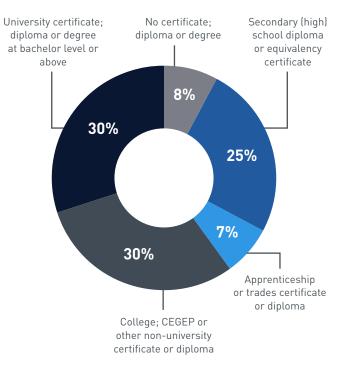
Source: Statistics Canada, T1 Family file, Centre for Income and Socioeconomic Well-being Statistics, Reference 20044-985310

Education: According to the 2016 census, more than 90 per cent of the population aged 25 to 64 had at least a high school education. Approximately 67 per cent of Kingston CMA residents aged 25-64 had some postsecondary education, compared to 65 per cent across Ontario.¹⁵⁶ Notably, Kingston had the highest concentration of PhD degrees in the country. In 2016, 46 PhD degrees were conferred at Queen's University in Engineering alone (Common University Data 2017).

Annual Labour Force Characteristics:

Kingston CMA's unemployment rate estimates have been decreasing during the last several years, with an estimated rate of 5.3 per cent in 2019. With increased retirements and slower population growth, there has been a shift in those actively looking for work, or those not in the labour force. In 2019, there has also been an estimated increase of 1,500 people from 2018 of individuals that were not in the labour force or actively looking for work.¹⁵⁷

Figure 25: Highest certificate; diploma or degree for the population aged 25 to 64 years in private households, Kingston CMA, 2016¹⁵⁸



Source: Statistics Canada, Kingston [census metropolitan area], Census Profile, 2016 Census



KINGSTON ECONOMIC Development Corporation



Figure 26: Unemployment rate estimates, Kingston CMA, 2011-19¹⁵⁹

Source: Statistics Canada, Labour force survey estimates (LFS), by sex and age group for Canada, provinces, economic regions and census metropolitan areas, 2006 and 2011 to 2019, annual averages

Figure 27: Number of individuals not in the labour force (estimate), Kingston CMA, 2011-19¹⁶⁰

Note: Figures reflects the estimated number of individuals not working or actively looking for work.



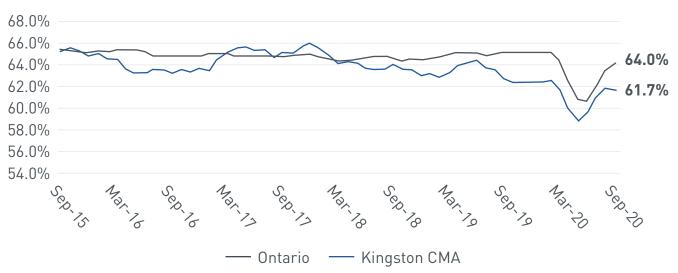
Source: Statistics Canada, Labour force survey estimates (LFS), by sex and age group for Canada, provinces, economic regions and census metropolitan areas, 2006 and 2011 to 2019, annual averages

Monthly Labour Force Characteristics:

Statistics Canada has been closely monitoring the labour market during 2020, helping to highlight the fluctuations in the labour market during the COVID-19 pandemic. As of September 2020, Statistics Canada estimated the unemployment rate in Kingston CMA at 9.1 per cent, which was a significant increase from the estimate of 5.3 per cent in 2019.¹⁶¹ Kingston is on par with the national unemployment rate for September 2020 (9.0%) as well as the provincial rate (9.5%).



Figure 28: Participation rate estimates within the labour force, Kingston CMA, 2015-20¹⁶²



Note: Figures reflects the estimated number of individuals working or actively looking for work.

Source: Statistics Canada, Table 14-10-0294-01, Labour force characteristics by census metropolitan area, three-month moving average, seasonally adjusted and unadjusted

14.0% 12.0% 10.5% 10.0% 9.1% 8.0% 6.0% 4.0% 2.0% 0.0% Marilo SERIE Ser SERING Mar - Kingston CMA Ontario

Figure 29: Unemployment rate estimates, seasonally adjusted, Kingston CMA, 2015-20¹⁶³

Source: Statistics Canada, Table 14-10-0294-01, Labour force characteristics by census metropolitan area, three-month moving average, seasonally adjusted and unadjusted

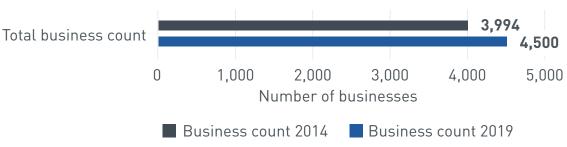


BUSINESS AND INDUSTRY SUMMARY

BY BUSINESS COUNT

To determine Kingston's business count, the North American Industry Classification System (NAICS) codes from Statistics Canada were used to assess unit change and percentage change for various outputs at a 2-Digit, 4-Digit, and 6-Digit level. In total, Kingston had approximately 4,500 businesses with formal employment in 2019. This represented an increase of 26 per cent during the past five years, from 3,994 businesses in 2014.

Figure 30: Total business count, Kingston CMA, 2014-19¹⁶⁵



Source: Statistics Canada, 2019

BY SECTOR

As shown in Figure 31, the Health care and social insurance sector is the largest NAICS code found in the Kingston CMA and has seen substantial growth between 2014 and 2019. The sector accounted for 767 businesses in 2019, and was followed closely by Retail trade with 714 firms, and Construction with 640 companies.

These sectors represent Kingston's strong foundational economy and workforce in 2019. Companies within these sectors provide the city with stable stimulus and growth, and the opportunity for sector clusters. Examples of companies in these sectors include:

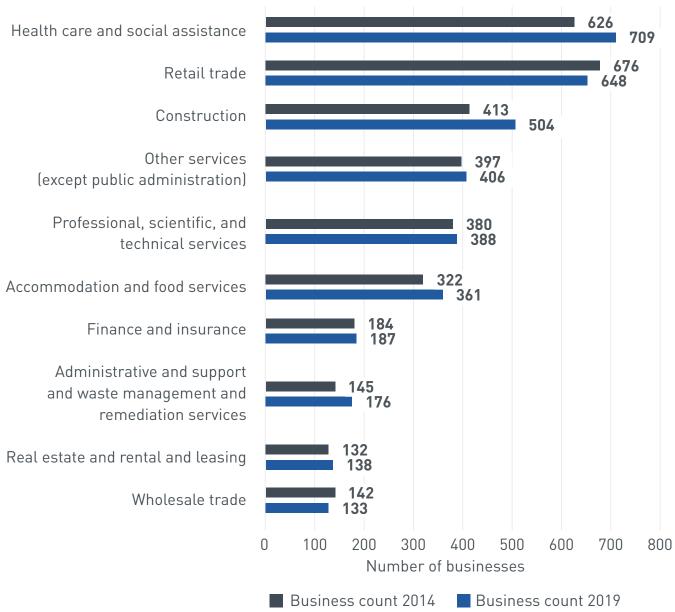
- 1. Health Care and Social Assistance:
 - Cancer Care Ontario, Extendicare (Canada) Inc., Specialty Care East Inc., Community Living Kingston and District, Kingston,

Frontenac and Lennox and Addington Public Health

- Retail Trade: Derbyshire E.D. & Sons Limited, Metro Ontario Inc., Loblaws Supermarkets Limited, Provigo Distribution Inc, Sysco Canada Inc., Hudson's Bay Company, Wal-Mart Canada Corp., Rona Inc., Home Depot of Canada Inc.
- 3. Construction: Rigney Building Supplies, Action Flooring Kingston, Braebury Homes Corporation, Laframboise Construction Inc., Andre & Sons, M. Sullivan & Sons Ltd., Taggart Construction Ltd., Emmons & Mitchell Construction Ltd., K.B. Home Insulation Ltd., CaraCo Development Corporation, Llynlea Fine Homes and Brookland Fine Homes, V. Marques Construction Ltd., SafeStep Building Treatments¹⁶⁴







Source: Statistics Canada, 2019

BY SELF-EMPLOYMENT

Kingston has a large self-employed population that can be tapped to grow the city's start-up ecosystem.

In 2016, approximately 10 per cent of the total employed labour force was self-employed (incorporated or unincorporated). Those 25 to 64 years old represented the largest selfemployed age group, at 80.5 per cent. Those aged 65 years old and up had the highest proportion of self-employment within their age group; 33.3 per cent of Kingston individuals aged 65 and up were self-employed.¹⁶⁷

In 2016 Kingston had self-employment on par with its peer Ontario cities, at 10.3 per cent. Self-employment within the city was lower than only Barrie, Hamilton, and London, and slightly below the Ontario average of 11.8 per cent.¹⁶⁸

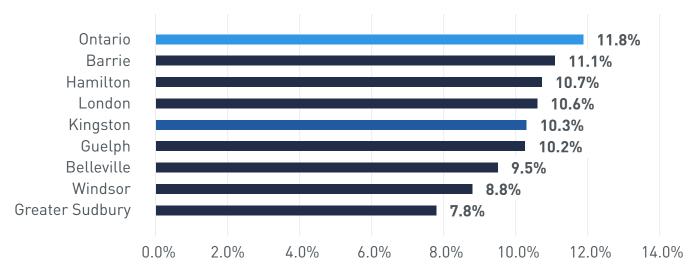


Figure 32: Breakdown of self-employment, Kingston CMA, 2016¹⁶⁹

Class of Worker	Tota	ι	15 to	24	25 to 64		65 and over	
	Number	%	Number	%	Number	%	Number	%
Total employed labour force	77,325	100.0	10,775	100.0	62,585	100.0	3,960	100.0
Employee	69,390	89.7	10,555	98.0	56,190	89.8	2,650	66.9
Self-employed (incorporated or unincorporated)	7,940	10.3	230	2.1	6,395	10.2	1,320	33.3

Source: Statistics Canada, 2016

Figure 33: Self-employment rate of selected Ontario CMAs, 2016¹⁷⁰



Source: Statistics Canada, 2016

Kingston's 2019 business counts reveal that the Kingston CMA had a similar percentage breakdown of employer businesses by size to Canada and Ontario, and on a city comparison to Hamilton, Ontario. Moving forward, medium-sized business could be an especial target for the city. As shown in Figure 34, Kingston had approximately 4,500 companies in 2019, with the largest concentration of businesses being defined as "Small (1 to 99)."

Figure 34: Breakdown comparison of businesses by size: Canada, Ontario, Kingston CMA, and City of Hamilton, 2018 and 2019

Workforce Size	Canada (2	2 019) ¹⁷¹	Ontario (2	2019) ¹⁷²	Kingston CMA (2019) ¹⁷³		City of Ha (2018) ¹⁷⁴	milton
Small (1 to 99)	1,178,690	97.9%	429,852	97.6%	4,409	98.0%	14,942	97.9%
Medium (100 to 499)	22,266	1.9%	9,070	2.1%	78	1.7%	281	1.8%
Large (More than 500)	3,010	0.2%	1,273	0.3%	13	0.3%	33	0.2%

Source: ISED, City of Hamilton, Statistics Canada, 2019



WORKFORCE COUNTS

In an analysis of the breakdown of workforce growth from 2014 to 2019, 40 per cent of growth came from businesses with one to four employees. Growth in businesses with 200 to 499 employees and more than 500 employees reported the lowest growth, at less than one per cent each. These findings signal a high concentration of start-ups within the city, and correspondingly, a notable lack of larger corporations.¹⁷⁵

The top three sectors by size in the Kingston CMA (relying on business counts and classified by 2-level NAICS codes) were:

- Retail trade with 12,218 workers
- Health care and social assistance with 10,151 workers
- Accommodation and food services with 8,430 workers¹⁷⁶

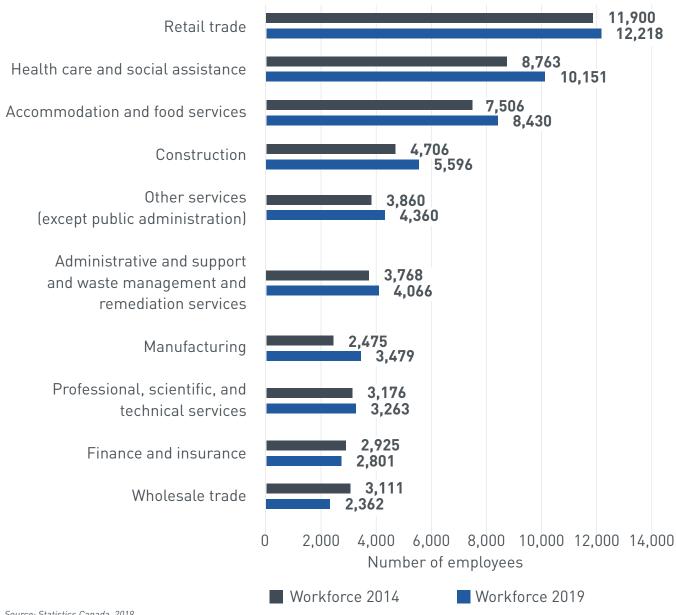
Figure 35 shows a detailed breakdown of the ten 2-Digit NAICS from 2014 to 2019.

Workforce growth mirrored business count growth, with some minor differences. Arts, entertainment, and recreation saw the largest workforce growth through 2014 to 2019 (58.1%), with Manufacturing (40.6%) and Utilities (24.9%) also seeing strong workforce growth.

Public administration (0.4%), Retail trade (2.7%), Professional, scientific, and technical services (2.7%) saw the lowest workforce growth levels from 2014 to 2019, with Agriculture, forestry and fishing (-46.1%) and Wholesale trade (-24.1%) showing negative workforce growth.



Figure 35: Top 10 industries, workforce, Kingston CMA, 2014-19¹⁷⁷



Source: Statistics Canada, 2019



WORKFORCE FORECAST

Most recent figures compiled for the Kingston CMA (at the 2-level NAICS level) estimated a pre-COVID total workforce growth rate of ten per cent by 2024. Areas of highest growth included arts, entertainment, and recreation / creative industries (22%), health care and social assistance (21%), and accommodation and food services (17%).

Figure 36: Industry growth forecast, 2017-24, (place of work)¹⁷⁸

Arts, entertainment, and recreation22%Health care and social assistance21%Accommodation and food services17%Mining, quarrying, and oil and gas extraction14%Administrative and support, waste management and remediation services12%Construction10%Professional, scientific, and technical services8%Public administration7%Educational services6%Other services (except public administration)6%Real estate and rental and leasing tholesale trade6%Information and cultural industries4%Manufacturing trians4%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting total[21%]	Industry	2017-24 %
Health care and social assistance21%Accommodation and food services17%Mining, quarrying, and oil and gas extraction14%Administrative and support, waste management and remediation services12%Construction10%Professional, scientific, and technical services8%Public administration7%Educational services6%Other services (except public administration)6%Transportation and warehousing6%Molesale trade6%Information and cultural industries4%Manufacturing4%Finance and insurance2%Utilities[1%)Agriculture, forestry, fishing, and hunting(21%)	Auto anti-statement and as manufactor	Ţ
Accommodation and food services17%Aining, quarrying, and oil and gas extraction14%Administrative and support, waste management and remediation services12%Construction10%Professional, scientific, and technical services8%Public administration7%Educational services6%Other services (except public administration)6%Real estate and rental and leasing6%Wholesale trade6%Information and cultural industries4%Manufacturing4%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)	, ,	22.70
Mining, quarrying, and oil and gas extraction14% extractionAdministrative and support, waste management and remediation services12%Construction10%Professional, scientific, and technical services8%Public administration7%Educational services6%Other services (except public administration)6%Transportation and warehousing6%Wholesale trade6%Information and cultural industries4%Retail trade3%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)		2170
extractionAdministrative and support, waste management and remediation services12%Construction10%Professional, scientific, and technical services8%Public administration7%Educational services6%Other services (except public administration)6%Real estate and rental and leasing6%Transportation and warehousing6%Information and cultural industries4%Manufacturing4%Finance and insurance2%Utilities[1%)Agriculture, forestry, fishing, and hunting(21%)	Accommodation and food services	17.70
management and remediation servicesConstruction10%Professional, scientific, and technical services8%Public administration7%Educational services6%Other services (except public administration)6%Real estate and rental and leasing6%Wholesale trade6%Information and cultural industries4%Manufacturing4%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting21%	5,1 , 5, 5	14%
Professional, scientific, and technical services8%Public administration7%Educational services6%Other services (except public administration)6%Real estate and rental and leasing6%Transportation and warehousing6%Wholesale trade6%Information and cultural industries4%Retail trade3%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)		12%
services Public administration 7% Educational services 6% Other services (except public 6% administration) 8% Real estate and rental and leasing 6% Transportation and warehousing 6% Wholesale trade 6% Information and cultural industries 4% Manufacturing 4% Retail trade 3% Finance and insurance 2% Utilities [1%] Agriculture, forestry, fishing, and hunting (21%)	Construction	10%
Educational services6%Other services (except public administration)6%Real estate and rental and leasing6%Transportation and warehousing6%Wholesale trade6%Information and cultural industries4%Manufacturing4%Retail trade3%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)	· ·	8%
Other services (except public administration)6%Real estate and rental and leasing6%Transportation and warehousing6%Wholesale trade6%Information and cultural industries4%Manufacturing4%Retail trade3%Finance and insurance2%Utilities[1%)Agriculture, forestry, fishing, and hunting(21%)	Public administration	7%
administration)administrationReal estate and rental and leasing6%Transportation and warehousing6%Wholesale trade6%Information and cultural industries4%Manufacturing4%Retail trade3%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)	Educational services	6%
Transportation and warehousing6%Wholesale trade6%Information and cultural industries4%Manufacturing4%Retail trade3%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)		6%
Wholesale trade6%Information and cultural industries4%Manufacturing4%Retail trade3%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)	Real estate and rental and leasing	6%
Information and cultural industries4%Manufacturing4%Retail trade3%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)	Transportation and warehousing	6%
Manufacturing4%Retail trade3%Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)	Wholesale trade	6%
Retail trade3%Finance and insurance2%Utilities(1%)Agriculture, forestry, fishing, and hunting(21%)	Information and cultural industries	4%
Finance and insurance2%Utilities[1%]Agriculture, forestry, fishing, and hunting(21%)	Manufacturing	4%
Utilities [1%] Agriculture, forestry, fishing, and hunting (21%)	Retail trade	3%
Agriculture, forestry, fishing, and hunting (21%)	Finance and insurance	2%
	Utilities	(1%)
	Agriculture, forestry, fishing, and hunting	(21%)
	· · · ·	10%

Source: CIA Global, 2019

WORKFORCE GAPS IN KINGSTON

According to Eastern Workforce Innovation Board's latest *Local Labour Market Planning Report* (2019), the occupations with the greatest number of vacancies for Kingston-Pembroke Region include service support and other service occupations (460), transport truck and heavy equipment operations (343 average vacancies per quarter), and service representatives and other customer service (303).¹⁷⁹

Figure 37: Occupations with the greatest number of vacancies, Kingston-Pembroke Region, 2019¹⁸⁰

NOC Major Group	Occupation	Average No. of Vacancies per Quarter
67	Service support and other service occupations	460
75	Transport truck and heavy equipment operation	343
65	Service representatives and other customer service	303*
30	Professional occupations in nursing	162
34	Assisting occupations in health	143*
32	Technical occupations in health	128
94	Processing and manufacturing machine operators	125*
12	Administrative and financial supervisors and administrative occupa-tions	100
14	Office support occupations	98*
01-05	Specialized middle management	82
	management	

Source: Statistics Canada Vacancy and Wage Report – January 2018 to March 31, 2019

*Information not available for all quarters



WORKFORCE CONSIDERATIONS AND OBSERVATIONS

Following our analysis of workforce statistics in Kingston and an assessment of strengths and weaknesses within the region, several observations stood out for consideration. The following characteristics were acknowledged and weaved into subsequent themes and recommended initiatives.

KINGSTON'S AGING POPULATION

The City of Kingston's population was older: In 2016, the 65 years and older age group was higher (18%) relative to the provincial average (16%).¹⁸¹ There is an expected increase in retirements due to the aging population. According to Eastern Workforce Innovation Board's latest Local Labour Market Planning Report (2019), KEYS, a Kingston job centre, reported a 15 per cent increase in older workers in their case load in 2019.¹⁸²

Aging workers were largely responsible for the two per cent decline in the labour force participation rate in the Kingston CMA (from 65% in 2001 to 63% in 2016). It is forecasted that the labour force participation rate will continue to moderately decline, from 59 per cent in 2016 to 55 per cent in 2046.¹⁸³

LOW LEVELS OF INTRA-PROVINCIAL, INTER-PROVINCIAL, AND INTERNATIONAL MIGRANTS

Smaller cities are particularly susceptible to labour shortages as they struggle to attract immigrant workers vs. competitive larger cities like Toronto and Montréal.¹⁸⁴ Kingston's ability to entice and employ immigrants and those from other provinces is vital to address the gaps in labour supply.¹⁸⁵ According to the Watson and Associates report (2019): "The share of intra-provincial net migration to Kingston CMA (historically, from the GTA and GOA) declined from 79 per cent of total net migration between 2001 and 2006 to -131 per cent between 2011 and 2016."¹⁸⁶

EMPLOYERS WANT MORE PARTNERSHIPS WITH PSE TO ADDRESS WORKFORCE GAPS

A 2018 survey of large Canadian private sector companies found that 83 per cent of respondents reported that they are working with one or more post-secondary educational institutions to better prepare students for the workforce (an increase from 76 per cent in 2016).¹⁸⁷ Ninety leading Canadian private sector employers surveyed by the Business Council of Canada (2016) have formal partnerships with post-secondary institutions, yet felt that "more is needed. Amongst our closest trading partners, business-higher education partnerships are more firmly established and have a stronger strategic focus ... Canadian firms and institutions should consider these as partnership models that could ease schoolto-work transitions and provide needed talent pipelines."188

According to the literature, community engagement, particularly through work experiences such as summer jobs, is a critical factor for postgraduate retention in small and medium cities.¹⁸⁹ It is also worth noting that according to one study, "visible minority individuals who participate in university co-op programs receive larger



returns than their peers, and these larger returns are generally sufficient to offset the wage penalty associated with race.^{"190} Co-op programs and other workplace learning programs might have a role to play in reducing wage and employment gaps typically created due to bias toward individual characteristics (e.g., race, gender).

PSE STUDENTS NEED MORE OPPORTUNITIES TO STAY IN KINGSTON

According to a 2019 qualitative research report on positioning Kingston as an exceptional destination for living, learning, and visiting: "By and large, most [Queen's University] students are not considering living and working in Kingston post-graduation." Primary reasons included:¹⁹¹

- Job opportunities are limited; there are not many entry-level jobs;
- There are more opportunities in Toronto, Montréal, Ottawa;
- Students worry about having a peer group and believe there are limited networking opportunities for young professionals in Kingston after graduation;
- Students are unfamiliar with the city as a whole: they do not know where they would live as most have only lived in residence or the University District; and,
- There is a lack of diversity in the city's population.

Interestingly, students indicated that "while they would not consider Kingston immediately postgraduation, they would consider moving back later in life when their career is more developed. This finding underscores the importance of younger alumni (10 to 15 years postgraduation) as a demographic against Kingston Economic Development's goal around attracting and retaining a skilled workforce."¹⁹²

This lack of desire to work in Kingston postgraduation was shown in a separate survey conducted by Queen's Business Consulting (2019). Forty-one per cent of respondents strongly disagreed that they were interested in post-graduate employment in Kingston.¹⁹³ Only nine per cent of respondents either looked for and / or held post-graduate employment in Kingston.¹⁹⁴ Many students believed that prospects in Kingston were lackluster: only 38 per cent felt there were employment opportunities for their ideal employer in Kingston.

At the college level, however, the story is much different. Glenn Vollebregt, CEO of St. Lawrence College, recently stated that 90 per cent of the school's students remain within the Eastern Ontario area after graduation.¹⁹⁵ With 90,000 alumni, approximately 25 per cent of Eastern Ontario households have at least one St. Lawrence College graduate.¹⁹⁶

As seen, finding local and willing skilled and semi-skilled talent is not easy. Connecting local talent with employers will require a deliberate and collaborative effort on the part of the many institutions and organizations that are charged with developing Kingston's workforce. The Integrated Economic Development Strategy provides the initial framework towards making that ideal a reality. The implementation of strategies will



take a sector-based approach, beginning with Kingston's two priority sectors, Health and Health Innovation and Sustainable Manufacturing, as well as the secondary priority sectors of Creative Industries and Rural Kingston. Various outreach, education / training, and engagement strategies will be targeted specifically to these sectors. At the same time, the overall workforce system change that is anticipated will not be exclusive to these three industries. It will enhance the entire workforce ecosystem to the benefit of all local employers and residents, and provide opportunities for cross-industry career building, increased satisfaction levels, and innovative practice.

Finding local and willing skilled and semiskilled talent is not easy. Connecting local talent with employers will require a deliberate and collaborative effort on the part of the many institutions and organizations that are charged with developing Kingston's workforce.





Appendix D: SWOT Analysis

Figure 38: SWOT analysis for Kingston, 2020¹⁹⁷

Strength

- High concentration of employment in the public sector (38.5% of Kingston's workforce or 33,400 people in health care, education, and public administration). This concentration provides a stable and consistent economic base
- Kingston has an enviable quality of life according to competitive rankings, partly thanks to a vibrant downtown¹⁹⁸
- Short commute time of under 15 minutes on average
- Kingston has been focused on fostering strengths in three priority sectors: food processing, health care, and manufacturing¹⁹⁹
- "Smartest" workforce in Canada (second largest pool of PhD degree holders among the 12 cities benchmarked)²⁰⁰
- Well-connected through road (location along Highway 401) and rail (Kingston is a stop on both the Toronto-Montréal and Toronto-Ottawa VIA Rail lines); proximity to large urban centres (Toronto, Ottawa, and Montréal) and the Canada / US border (shorter wait times than most access points in Ontario). This connectivity supports quality of life and ability of doing business
- 14 million population within a three-hour radius of Kingston; no other CMA in Canada can make this claim
- Sustainability focus: Kingston as the first Canadian city to adopt a protocol for sustainable energy procurement²⁰¹
- Tourism attractions (including historic sites, festivals, unique architecture, Frontenac Arch UNESCO Biosphere, waterfront and accessible waterways including freshwater sailing harbor, thriving culinary scene)
- Military presence and history
- Large post-secondary education presence (Queen's University, St Lawrence College, Royal Military College of Canada)
- Picton Terminals only 45 minutes away access to deep water docks for shipping
- Commercial / residential costs are low compared to other urban centres in Ontario

Weakness

- Low vacancy rate and availability of land
- Low international immigration rate
- Difficulty retaining highly educated young people (i.e., most Queen's University grads move away)²⁰²
- No clear long-term local academic and / or private-sector champion(s) for economic development and the community
- Limited airport service²⁰³
- Difficulty doing business in Kingston due to policy and regulatory restraints (comparatively takes longer, costs more money)²⁰⁴
- Limited access to private-sector capital (and difficulty to relocate companies as local investors only want to invest in "born in Kingston" companies)²⁰⁵
- Divisive community (community groups, as well as key organizations, disagree on economic development, city planning, and other priorities, or key performance indicators to measure success)
- Lack of long-term sector focus and long-term investment in strategic infrastructure
- Underperformance on commercializing research and development
- Difficult to get around the city outside of the downtown core without a car due to an insufficient public transportation system
- Risk averse community (not embracing long-term visionary projects and initiative)²⁰⁶



Figure 38: SWOT analysis for Kingston, 2020 (con't)

Opportunity	Threats
 Strong start-up ecosystem (Ranked #4 by Startup Link in 2020 as best start-up community) Film industry expressed strong interest in Kingston as a filming hub Potential to leverage and support development of existing strategic infrastructure (i.e., Technology Park) As more individuals begin to work from home due to COVID-19, Kingston can be an attractive location for remote employees, thanks to the high quality of life²⁰⁷ The provincial government prioritizes "we can make anything in Ontario" and repatriation of Canadian companies can support company attraction Kingston is a very active participant with regional collaboration initiatives (such as the Eastern Ontario Leadership Council) 	 COVID-19 poses several threats to Kingston including: The Conference Board of Canada named Kingston as one of five Canadian cities most at risk due to COVID-19 impact on Accommodation and Food Services Sector (which contributes strongly to the local economy, both directly and indirectly), also affected by travel restrictions²¹² High-level of displaced workforce which may cause a mismatch in current, growing jobs (because of COVID-19) Potential loss of some of the critical social fabric (downtown) if we are not proactive (because of COVID-19) Demographic challenges (including low population growth; aging population) affecting the local workforce and vibrancy of the community
 Recent announcement of \$25 million CAD for the next 10 years into the Canadian Institute for Military and Veteran Health Research (CIMVHR) institution will help keep veterans in Kingston and attract / support 	 Surrounding communities are staking their claim in strategic clusters of focus (Kingston needs to stake theirs) The provincial government had made cuts to municipal budgets in 2019,

threatening large projects²¹³

veteran-owned companiess²⁰⁸
Kingston is known as an ideal location for retirement, which can attract wealthy individuals who can invest and / or relocate in the community^{209,210,211}





Appendix E: Comparative Analysis: Kingston and its Peers

A detailed analysis was conducted between Kingston and peer cities in Canada (note: cities were chosen based on an analysis of social and economic data such as population, income, and heritage focus).

Figure 39: Comparative analysis on economic development, Kingston and its comparators, by assets, 2020

	Proximity to > 10M people within a three- hour radius	Waterfront (tourism)	Harbour (transport)	International airport	Proximity to US / border crossings	Part of an economic trade corridor	Military base (CFB)
Kingston	~	~	~		~	~	~
Guelph						~	
Victoria		~	~	V	~	~	~
Halifax		~	~	~		~	~
Kitchener-Waterloo				~		~	
Saskatoon				*		~	
St. Catharines		~	~		~	~	



Figure 40: Comparative analysis on economic development, Kingston and its comparators, by benchmarks

	Total business counts (2019)	GDP growth greater than 10% from 2012- 16*	CPI Index lower than CDN average (December 2019)	Broadband access of at least 50 Mbps ↓ and 10 Mbps ↑	Housing starts greater 10% (Canada percentage change from December 2019 to January 2020 SAAR)	Industrial development charges higher than Kingston (sq. ft.)	Commuting time less than CDN average (26.2 min)	Ranked top 5 cities in Canada to be a woman (2019) ²¹⁴
Kingston	4,173	~	n/a	~		\$8.51	~	~
Guelph	15,987	~	n/a	~	~	~	~	
Victoria	15,359	~	~	~			~	~
Halifax	n/a			~		Depends on construction parameters / value	~	
Kitchener- Waterloo	52,664	~	n/a	~			~	
Saskatoon	11,743		~	~	~	Depends on construction parameters / value	~	
St. Catharines	42,692		n/a	~		Depends on construction parameters / value	~	



Figure 41: Comparative analysis on workforce, talent and education, Kingston and its comparators, by benchmarks

	Less than 13%* unemployment rate (June 2020)	More than 61.7* labour force participation rate	More than \$70,336 CAD* median family income	Greater than 1,500 per 100,000 earned doctorates (2016)	Greater than 30,000 enrolled students in 2019	CIHR funding greater than \$50M CAD from 2014-20 ²¹⁵	NSERC funding greater than \$200M CAD from 2014-19	SSHRC funding greater than \$50M CAD from 2014-19	CFI funding greater than \$90M CAD from 2014-19	Top 15 Research intensity (2018) ²¹⁶
Kingston	~		~	* 1,942	~	~	~	~	~	~
Guelph		~	~	* 1,698	~					
Victoria	~									
Halifax	~	~			~	~		~		
Kitchener- Waterloo	~	~	~		~		~	~		~
Saskatoon		~	~						~	~
St. Catharines	~									

*National average



Appendix F: Community Input for Themes and Framework

Figure 42: Interviews / focus groups results²¹⁷

Themes	Stakeholder Validation Key Takeaways
Adopt Concept Framework	It was validated by community stakeholders that they would like to see both short- and long-term opportunities for economic growth.
Develop Two Strategic Clusters	 When discussing key industry strengths in Kingston with stakeholders, there was a focus on manufacturing, health innovation, and sustainability. Manufacturing: In particular, materials manufacturing, food manufacturing, and advanced manufacturing were discussed as areas of strength in Kingston. Manufacturing was agreed to be a significant strength in Kingston, aligning with industry, research, and community priorities. Health Innovation: With the local talent and expertise, strong company presence and PSE institutions. Subsectors included: health data, veterans' health, aging population, cancer trials, and medical equipment. Sustainability was an area of strength that had mixed results from stakeholders. It was emphasized that the local PSEs, City of Kingston, Kingston Economic Development, and other community stakeholders focus on sustainability. Stakeholders emphasized the potential for sustainability to tie into different sectors such as chemistry, social services, and agriculture. Subsectors within sustainability included: green chemistry, material innovation, and cleantech.
Leverage Market Access	 Stakeholders emphasized the need to better leverage the proximity to markets and it was identified as one of Kingston's biggest strength. It was clear that the stakeholders wanted to see an increase in tourism and Creative Industries. The following opportunities were identified: Increase shoulder season (such as develop wellness spas, hosting ghost tours and events at the Kingston Penitentiary, and develop a conference centre downtown). Expand the airport and create more convenient flights to close markets such as Montréal, GTA, and Ottawa. Position Kingston as a desirable location for remote employees.
Enhance Partnership and Collaboration	 There is an opportunity for added collaboration with local PSEs to enable and implement activities such as: Work with community to develop more creative co-op placements. Collaborate with St. Lawrence College to develop a Tourism Centre of Excellence. Work with local industry to fill skills gaps by creating customized academic programming. Leverage alumni networks. Create working groups for the target industries. Develop corporate training options to reskill and upskill the current workforce.
Enhance Marketing and Communications	It was evident during stakeholder sessions that there are some assumptions and bias that attribute to the overall KEDC brand. This finding has provided validation to better strategize the overall marketing and positioning for the Kingston Community (specifically Kingston Economic Development Corporation, and the City of Kingston).
Measure and Communicate Success	Many stakeholders highlighted that the City of Kingston and Kingston Economic Development Corporation lack identified metrics to measure community success.



Figure 42: Interviews / focus groups results (con't)

Themes	Stakeholder Validation Key Takeaways
Leverage Community and Business Infrastructure: Broadband Connectivity	 Community infrastructure was identified as a community challenge: Broadband and connectivity were a common challenge identified by stakeholders from different industries and locations. Land for development is difficult to acquire.
Leverage the Economic Potential in Rural Kingston	Besides the discussion regarding broadband and connectivity, Rural Kingston was described as an asset that should be leveraged in the future by Kingston Economic Development and the City of Kingston.
Mobilize Strategy Execution Team	Although this area was not a specific recommendation validated with stakeholders, there was a clear sense that the community wanted to see added collaboration between industry, academia, and government.
Maximize Opportunities for Diversity and Inclusion	 One of the challenges described by many stakeholders was the lack of diversity and inclusion in the city. The main finding when discussing inclusion and diversity was: Kingston Local Mentality: It was expressed that there is a stigma regarding "non Kingstonian's." For example, Kingston makes doing business more difficult for people who were not born and raised in Kingston
Build Workforce Capacity	 Stakeholders discussed the need for Kingston Economic Development and the City of Kingston to implement activities to address workforce development and in-migration challenges: Lack of opportunities for spouses / partners moving for the other spouse's job. Companies find it difficult to recruit employees with the skill set they require. Low student retention rate (in particular, Queen's University students).
Adopt Project Selection and Approval Process	 The project selection and approval process was criticized through stakeholder sessions: Difficulty developing and expanding development opportunities. Zoning by-laws are out of date and need to be re-assessed. The project selection and approval process has a slow turnaround. City council overrides staff recommendations and prolongs the development process.

Source: Stiletto Stakeholder Sessions, 2020





Appendix G: Engage Kingston Survey Summary

To further develop concepts proposed in the Integrated Economic Development Strategy, the City of Kingston distributed an open survey through its Get Involved Kingston public engagement platform.

The survey sought input on potential sector clusters, tactics to advance growth, and ideas on measuring success. The survey also included several questions specific to the City of Kingston's Rural Economic Development Strategy and Creative Industries Profile Sector Report. The survey was open for three weeks (September 29 to October 20, 2020) and was promoted to residents on social media, in newspapers, and on radio. A total of 375 surveys were completed. Results from this survey were incorporated into the themes and recommended initiatives, implementation, and next step sections of the strategy. Responses further validate the recommended initiatives in the Kingston Integrated Economic Development Strategy and further clarify the need for the strategy's implementation. The results have been formally compiled and are summarized, grouped by pillars and recommended initiatives within the strategy.

RESPONDENT DEMOGRAPHICS

AGE

Of the 375 respondents, more than 26 per cent were between the ages of 55-64, with 23 per cent with between the ages of 35-44. Figure 43 shows a detailed breakdown of respondent age.

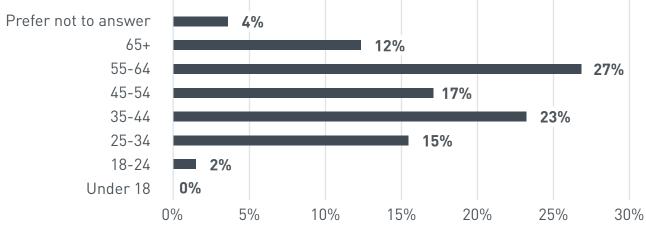


Figure 43: Respondent age

Source: Engage Kingston Survey, 2020



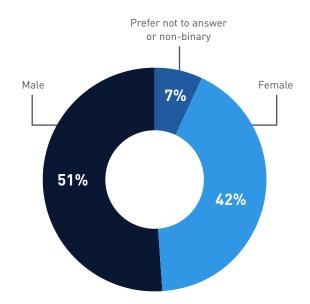
GENDER

Of the 375 respondents, 51 per cent identified as male, 42 per cent identified as female, seven per cent preferred not to answer or identified as non-binary. Figure 44 shows a visual breakdown of respondent gender.

RESIDENT OF KINGSTON

Of the 375 respondents, 61 per cent have lived in Kingston for more than 10 years. Approximately 21 per cent were more recent residents of five or fewer years. Figure 45 shows a visual breakdown of how long respondents have lived in Kingston.

Figure 44: Respondent gender



Source: Engage Kingston Survey, 2020

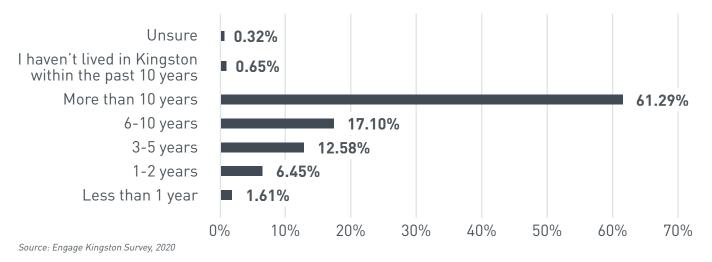


Figure 45: Respondent length of living in Kingston

EMPLOYMENT

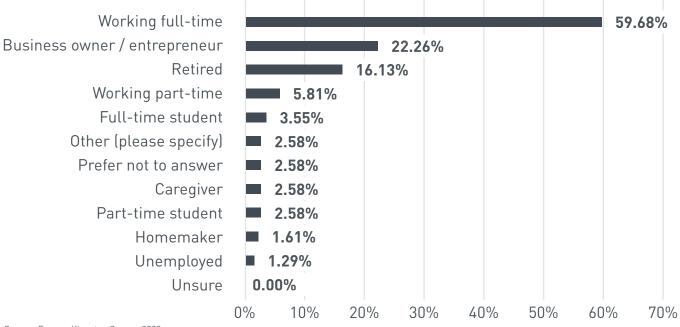
Of the 375 respondents, 60 per cent were working full time, 22 per cent were business owners / entrepreneurs, and 16 per cent were retired. Figure 46 shows a visual breakdown of respondent's employment status.

URBAN VS. RURAL VS. SUBURBAN

Of the 375 respondents, 40 per cent reported living in an Urban area, 33 per cent in a Suburban area, and 25 per cent in a Rural area. Figure 47 shows a visual breakdown of resident status.

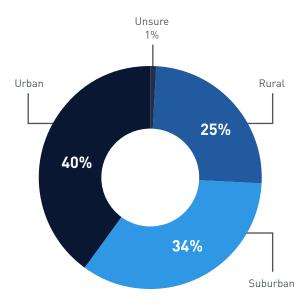


Figure 46: Respondent employment status



Source: Engage Kingston Survey, 2020





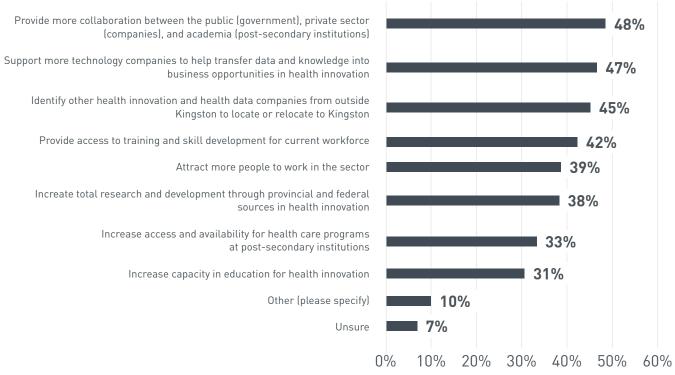
Source: Engage Kingston Survey, 2020



FOCUS AND POSITIONING

Questions in this section pertain to the Focus and Positioning pillar of the Kingston Integrated Economic Development Strategy.

Q1. What could the City of Kingston do to develop and grow the health care and innovation sector? Select all that apply.

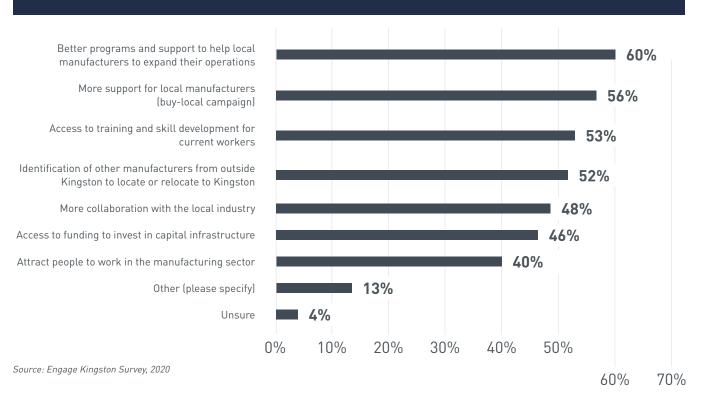


Source: Engage Kingston Survey, 2020

Answer Choices	Respons	ies
Provide more collaboration between the public (government), private sector (companies), and academia (post-secondary institutions)	48.49%	177
Support more technology companies to help transfer data and knowledge into business opportunities in health innovation	46.58%	170
Identify other health innovation and health data companies from outside Kingston to locate or relocate to Kingston	45.21%	165
Provide access to training and skill development for current workforce	42.19%	154
Attract more people to work in the sector	38.63%	141
Increase total research and development through provincial and federal sources in health innovation	38.36%	140
Increase access and availability for health care programs at post-secondary institutions	33.42%	122
Increase capacity in education for health innovation	30.68%	112
Other (please specify)	10.41%	38
Unsure	7.12%	26

KINGSTON

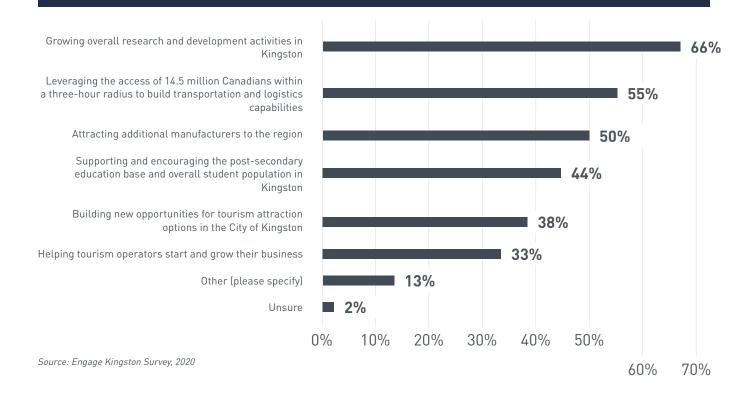
Q2. What could the City of Kingston do to develop and grow the sustainable manufacturing sector? Select all that apply.



Answer Choices	Respons	es
Better programs and support to help local manufacturers to expand their operations	60. 11%	211
More support for local manufacturers (buy-local campaign)	55.84%	196
Access to training and skill development for current workforce	52.7 1%	185
Identification of other manufacturers from outside Kingston to locate or relocate to Kingston	51.85%	182
More collaboration within the local industry	48.43%	170
Access to funding to invest in capital infrastructure	45.58%	160
Attract people to work in the manufacturing sector	40.17%	141
Other (please specify)	12.54%	44
Unsure	3.99%	14

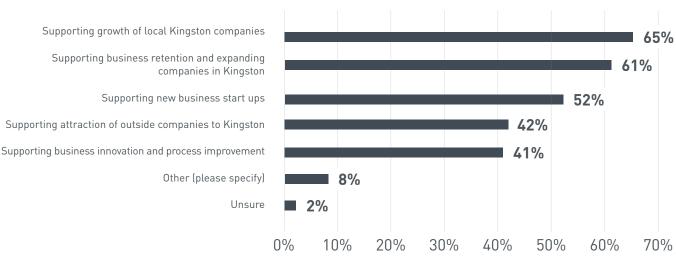


Q3. In addition to the health innovation, sustainable manufacturing and creative industry sectors, what business opportunities do you believe Kingston has the greatest potential to pursue? Select all that apply.



Answer Choices	Respons	es
Growing overall research and development activities in Kingston	65.73%	211
Leveraging the access of 14.5 million Canadians within a three-hour radius to build transportation and logistics capabilities	55.14%	177
Attracting additional manufacturers to the region	50.16%	161
Supporting and encouraging the post-secondary education base and overall stu-dent population in Kingston	44.24%	142
Building new opportunities for tourism attraction options in the City of Kingston	38.32%	123
Helping tourism operators start and grow their business	33.02%	106
Other (please specify)	13.40%	43
Unsure	2.49%	8

Q4. In what ways do you believe the City of Kingston should support local economic development and growth in the community? Select up to three responses.



Source: Engage Kingston Survey, 2020

Answer Choices	Responses	
Supporting growth of local Kingston companies	64.81%	210
Supporting business retention and expanding companies in Kingston	61.42%	199
Supporting new business start ups	52.16%	169
Supporting attraction of outside companies to Kingston	42.28%	137
Supporting business innovation and process improvement	41.05%	133
Other (please specify)	8.33%	27
Unsure	1.54%	5

INTEGRATION WITH THE KINGSTON INTEGRATED ECONOMIC DEVELOPMENT STRATEGY

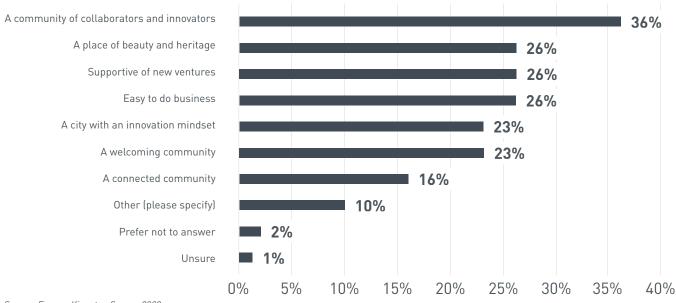
Findings from these questions crossvalidated the selection of Health and Health Innovation and Sustainable Manufacturing as priority sectors, selected after a comprehensive industry review. Findings from Questions 1 and 2 were then used to inform and create recommended initiatives in the Kingston Integrated Economic Development Strategy. Specifically, these questions informed Theme 2 in the strategy. The theme aligns with answers from respondents that suggest investing in better programming and support for local manufacturers.

In addition to Health and Health Innovation and Sustainable Manufacturing, the strategy also placed focus on increased research and collaboration with research focused postsecondary educational institutes, due to residents' responses in Question 3.

COLLABORATION AND COMMUNICATION

Questions in this section pertain to the Collaboration and Communication pillar of the Kingston Integrated Economic Development Strategy.

Q5. How do you most want Kingston to be viewed by others both inside and outside of the city? Select up to two responses.

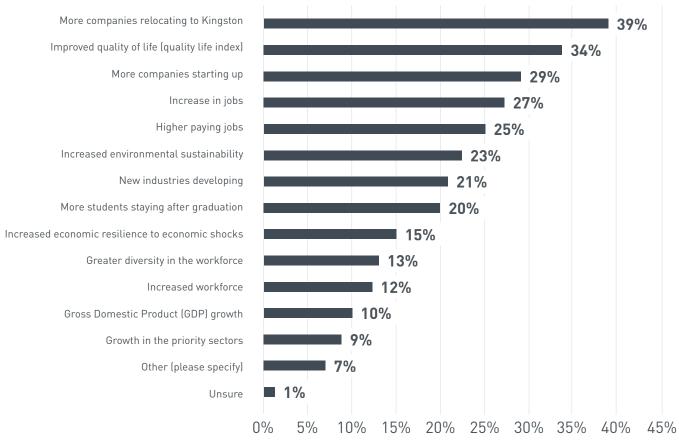


Source: Engage Kingston Survey, 2020

Answer Choices	Response	es
A community of collaborators and innovators	35.67%	122
Easy to do business	26.02%	89
Supportive of new ventures	26.02%	89
A place of beauty and heritage	26.02%	89
A city with an innovation mindset	23.39%	80
A welcoming community	23.10%	79
A connected community	15.79%	54
Other (please specify)	9.65%	33
Prefer not to answer	1.75%	6
Unsure	0.88%	3



Q6. What are the most important ways to measure economic success in Kingston? Select up to three responses.



Source: Engage Kingston Survey, 2020

Answer Choices	Respons	es
More companies relocating to Kingston	38.62%	129
Improved quality of life (quality life index)	34.13%	114
More companies starting up	28.74%	96
Increase in jobs	26.65%	89
Higher paying jobs	24.55%	82
Increased environmental sustainability	23.35%	78
New industries developing	20.66%	69
More students staying after graduation	20.06%	67
Increased economic resilience to economic shocks	14.97%	50
Greater diversity in the workforce	12.57%	42
Increased workforce	11.98%	40
Gross Domestic Product (GDP) Growth	10.48%	35
Growth in the priority sectors	8.98%	30
Other (please specify)	7.49%	25
Unsure	0.90%	3



INTEGRATION WITH THE KINGSTON INTEGRATED ECONOMIC DEVELOPMENT **STRATEGY**

Findings from these questions were used to inform recommended initiatives within the Communication and Collaboration pillar in the Kingston Integrated Economic Development Strategy, specifically the Marketing and Communication and Measuring and Communicating Success themes.

Kingston residents wish that the city is viewed in the future as a "community of collaborators and innovators." These answers informed recommended initiatives such as creating marketing campaigns, aligning branding, and renaming the Kingston Economic Development Corporation. Enhancing post-secondary institutional

Exhibit A to Report Number 21-012

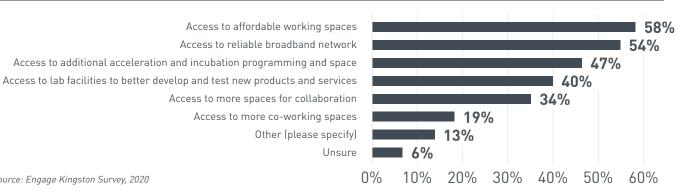
collaboration was also positioned prominently in the strategy because of these findings.

Answers for the most important way to measure success in Kingston are integrated within the Measure and Communicate Success pillar of the Integrated Economic Development Strategy. For example, the most popular answer in Question 6, that of measuring the numbers of companies moving to Kingston, could be addressed by quarterly update reports.

ASSETS AND INFRASTRUCTURE

Questions in this section pertain to the Assets and Infrastructure pillar of the Kingston Integrated Economic Development Strategy.

Q7. What community assets do you believe would be most beneficial to support local businesses, start-ups, businesses expanding and new businesses in Kingston. Select all that apply.

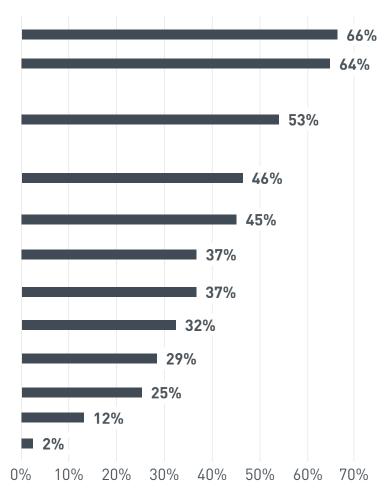


Source: Engage Kingston Survey, 2020

Answer Choices	Respons	ies
Access to affordable working spaces	57.62%	189
Access to reliable broadband network	54.27%	178
Access to additional acceleration and incuba-tion programming and space	46.65%	153
Access to lab facilities to better develop and test new products and services	40.24%	132
Access to more spaces for collaboration	33.84%	111
Access to more co-working spaces	19.21%	63
Other (please specify)	13.11%	43
Unsure	6.10%	20



Q8. How can these assets be leveraged for economic development potential? Select all that apply.



Provide more co-op or internship opportunities for students

Link businesses with students to drive more job opportunities for students post-graduation

Work with researchers within the institutions to identify new potential products, services, or business process improvement that could stimulate new business start-up potential from research activities

Greater access to post-secondary institution infrastructure (space, equipment, labs, where applicable, appropriate, and available) to businesses in the community

Better alignment for skills training with business needs

Offer micro-credentialing to business people and residents (one-off courses that can be applied to a degree or a diploma)

Leverage university and college alumni to act as advocates for Kingston in other markets

Offer non-degree and non-diploma online group training

Offer peer mentoring program to train the next generation of professors and / or educators

Offer non-degree and non-diploma in-person group training

Other (please specify)

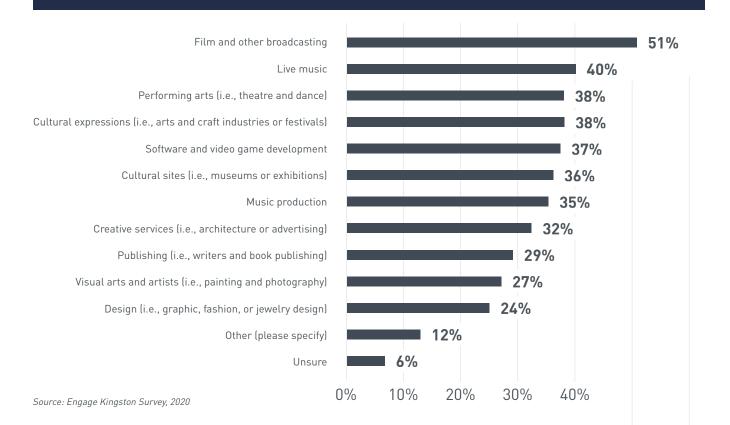
Unsure

Source: Engage Kingston Survey, 2020

Answer Choices	Respons	es
Provide more co-op or internship opportunities for students	65.68%	222
Link businesses with students to drive more job opportunities for student's post-graduation	63.61%	215
Work with researchers within the institutions to identify new potential products, services, or business process improvement that could stimulate new business start-up potential from research activities	53.25%	180
Greater access to post-secondary institution infrastructure (space, equipment, labs, where applicable, appropriate, and available) to businesses in the community	45.56%	154
Better alignment for skills training with business needs	44.97%	152
Offer micro-credentialling to businesspeople and residents (one-off courses that can be applied to a degree or a diploma)	37.28%	126
Leverage university and college alumni to act as advocates for Kingston in other markets	36.69%	124
Offer non-degree and non-diploma online group training	32.25%	109
Offer peer mentoring program to train the next generation of professors and / or educators	29.29%	99
Offer non-degree and non-diploma in-person group training	24.56%	83
Other (please specify)	12.43%	42
Unsure	2.37%	8

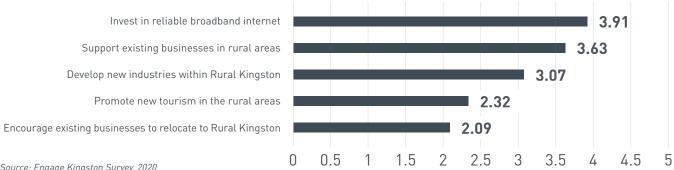


Q9. Which of the following areas do you think have the most potential to grow if supported by the City of Kingston? Select all that apply.



Answer Choices	Responses	
Film and other broadcasting	51.45%	178
Live music	40.17%	139
Performing arts (i.e., theatre and dance)	37.86%	131
Cultural expressions (i.e., arts and craft industries or festivals)	37.57%	130
Software and video game development	37.28%	129
Cultural sites (i.e., museums or exhibitions)	36.42%	126
Music production	35.26%	122
Creative services (i.e., architecture or advertising)	32.37%	112
Publishing (i.e., writers and book publishing)	29.19%	101
Visual arts and artists (i.e., painting and photography)	27.17%	94
Design (i.e., graphic, fashion, or jewelry design)	24.28%	84
Other (please specify)	11.85%	41

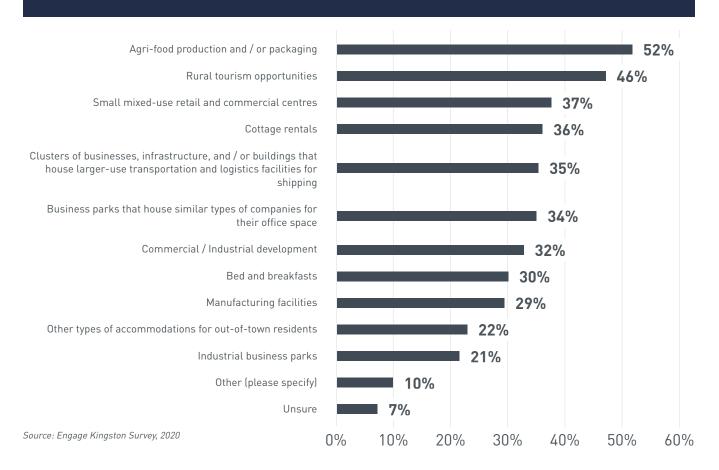
Q10. What do you think the city should focus on to facilitate economic development in rural areas? Rank the following in order of priority, with 1 being most important and 5 being least important.



Source: Engage Kingston Survey, 2020

Answer		1		2		3		4		5	Index	ed
Choices	%	Number	%	Number	%	Number	%	Number	%	Number	Total	
Invest in reliable broadband internet	50%	163	21%	68	9 %	29	8%	26	11%	37	323	3.91
Support existing businesses in the rural areas	25%	80	34%	108	24%	76	12%	37	5%	16	317	3.63
Develop new industries within Rural Kingston	13%	41	22%	70	33%	106	22%	71	9 %	30	318	3.07
Promote new tourism in the rural areas	8%	24	11%	35	20%	63	27%	85	34%	106	313	2.32
Encourage existing businesses to relocate to Rural Kingston	4%	12	12%	38	14%	45	29%	92	40%	128	315	2.09

Q11. Which opportunities would you most like to see implemented within Rural Kingston considering existing infrastructure constraints? Select all that apply.



Answer Choices	Responses		
Agri-food production and / or packaging	52.16%	169	
Rural tourism opportunities	45.99 %	149	
Small mixed-use retail and commercial centres	37.04%	120	
Cottage rentals	35.80%	116	
Clusters of businesses, infrastructure and / or buildings that house larger-use transportation and logistics facilities for shipping	34.88%	113	
Business parks that house similar types of companies for their office space	33.64%	109	
Commercial / Industrial Development	31.79%	103	
Bed and breakfasts	29.63%	96	
Manufacturing facilities	29.32%	95	
Other types of accommodations for out-of-town residents	21.60%	70	
Industrial business parks	21.30%	69	
Other (please specify)	9.88%	32	
Unsure	7.41%	24	

KINGSTON

INTEGRATION WITH THE KINGSTON INTEGRATED ECONOMIC DEVELOPMENT STRATEGY

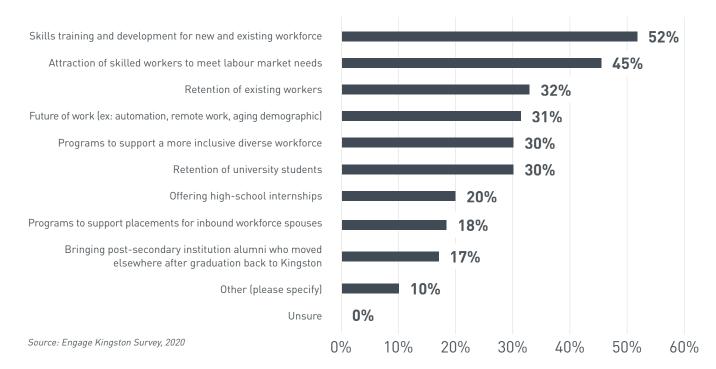
Findings from the Assets and Infrastructure questions both informed recommended initiatives and validated existing direction within the Kingston Integrated Economic Development Strategy.

Resident responses from Question 9 validated the Creative Industries emerging sectors selected for focus in the strategy. Originally chosen due to the Kingston Industry breakdown, survey results show that Film and Music industries are also supported by residents, receiving 51 per cent and 40 per cent of responses, respectively. Recommended initiatives that concern Rural Kingston were informed by the results of Questions 10 and 11. With "invest in reliable broadband internet" being most popular answer for Rural Kingston economic development focus, broadband was highlighted in the strategy as its own recommended initiative, with a focus on the rural area. Question 11 informed specific Rural Kingston recommended initiative, and led to a focus on agri-food and rural tourism.

EXECUTION AND IMPLEMENTATION

Questions in this section pertain to the Execution and Implementation pillar of the strategy.

Q12. In order to ensure the appropriate workforce is available for new and existing business growth, what do you believe are the most important areas on which to focus? Select up to three responses.





Answer Choices	Respons	es
Skills training and development for new and existing workforce	51.57%	164
Attraction of skilled workers to meet labour market needs	44.97 %	143
Retention of existing workforce	32.39%	103
Future of work (ex: automation, remote work, aging demographic)	31.45%	100
Retention of university students	29.56%	94
Programs to support a more inclusive diverse workforce	29.56%	94
Offering high-school internships	20.13%	64
Programs to support placements for inbound workforce spouses	18.24%	58
Bringing post-secondary institution alumni who moved elsewhere after graduation back to Kingston	16.67%	53
Other (please specify)	10.06%	32
Unsure	0.31%	1

INTEGRATION WITH THE KINGSTON INTEGRATED ECONOMIC DEVELOPMENT STRATEGY

Findings from question feed directly into the Execution and Implementation pillar recommended initiatives. Recommended initiatives 30-33 of that pillar are a result of the responses to this question, including initiatives to develop skills in our workforce, attract students, and retain Kingston's existing workforce.



Appendix H: Selected Community Improvement Plans, Business Improvement Areas, and Activities

Figure 48: Selected community improvement areas and activities, by peer city

City	Title of Plan / Initiative	Date	Example Incentives / Initiatives
Atlanta	Atlanta Downtown Improvement District	Founded in 1995	 "Downtown Atlanta Master Plan: The Downtown Atlanta Master Plan is the result of a year-long collaborative process that engaged more than 5,000 entrepreneurs, students, neighborhood leaders, and dreamers in answering the question: "What kind of place do you want Downtown to be?" The Plan offers a strategic blueprint for the next fifteen years. The Stitch: "The Stitch" proposes to add millions of square feet of new real estate inventory by creating approximately 14 acres of new urban greenspace atop a new platform structure spanning a portion of the Downtown Connector. It is estimated that The Stitch could result in \$1.1 to \$3.1 billion USD in value creation, generate \$21 to \$58 million USD in new revenue, and increase the city's bonding capacity by \$308 billion USD. Arts & Entertainment Atlanta: Arts & Entertainment Atlanta (AEA) is a neighborhood activation and economic development project for Downtown Atlanta. AEA fuses new outdoor media, local art, and advertising and funds cultural and public space programming. Downtown Daffodil Project: The worldwide Daffodil Project aims to build a Living Holocaust Memorial by planting 1.5 million daffodils around the world to remember and represent the one and a half million children who died in Nazi-occupied Europe and bring awareness to those currently suffering human rights crises throughout the world. CAP/ADID contributes to the worldwide effort by creating a "ribbon of consciousness" between the Center for Civil and Human Rights and the King Center, with over 275,000 bulbs planted to date."²¹⁸

Figure 48: Selected community improvement areas and activities, by peer city (con't)

City	Title of Plan / Initiative	Date	Example Incentives / Initiatives
Kingston	Brownfields Community Improvement Plan	2017	 "Initial Study Grant: The purpose of the Initial Study Grant (ISG) is to promote the undertaking of environmental studies that result in a more complete understanding with respect to the type, concentration and location of Contamination that exists on a Brownfield Site, the potential costs of Rehabilitation, and development of a plan to remove, treat or otherwise manage the Contamination found on the property. Brownfields Financial Tax Incentive Program (BFTIP): The purpose of the BFTIP (Tax Assistance) is to encourage private sector Rehabilitation of Brownfield Sites for future redevelopment purposes by cancelling all or a portion of the municipal property taxes to offset the approved eligible Rehabilitation costs incurred by the Property Owner. Tax Increment-Based Rehabilitation Grant Program (TIRGP): The purpose of the TIRGP is to encourage private sector Rehabilitation and adaptive reuse of Brownfield Sites by providing an annual grant to help pay for eligible site City of Kingston Brownfields Community Improvement Plan (CIP) 31 Rehabilitation costs incurred by the Property Owner that are not fully covered by the BFTIP. Municipal Brownfields Reserve Fund (MBRF): The Municipal Brownfield Reserve Fund (MBRF) is intended to facilitate direct City financial involvement in the Rehabilitation and redevelopment of Brownfield Sites in the Community Improvement Project Areas."²¹⁹
Sudbury	Downtown Sudbury Community Improvement Plan	January 2017	 "Tax Increment Equivalent Grant Program to encourage the development and redevelopment of eligible properties by providing grants equivalent to the incremental increase in municipal property tax assessment and revenue resulting from property improvements such as, but not limited to, new construction. Façade Improvement Program would provide grants to owners or tenants who rehabilitate and improve façades (including signs and lighting) of buildings within the Community Improvement Project Area. Planning and Building Fee Rebate Program to encourage the development and redevelopment of eligible properties by rebating fees associated with Planning Act and Ontario Building Code applications. Residential Incentive Program (Per-door grant) to jump-start a downtown residential market. The program will be limited in value and in duration, and will be carefully monitored to allow for its retirement once a market is established. Feasibility Grant Program to stimulate private sector investigation of the potential adaptive reuse or redevelopment of buildings or vacant land within the project area. Financial assistance for feasibility studies, building renovation design, and business plans will be provided through this program. Downtown Sudbury Multi-Residential Interest-Free Loan Program seeks to stimulate private sector investment in, and revitalization and rehabilitation of residential development within Downtown Sudbury. The program offers financial assistance to projects that result in predominately residential development."²²⁰



Figure 48: Selected community improvement areas and activities, by peer city (con't)

City	Title of Plan / Initiative	Date	Example Incentives / Initiatives
Toronto	Business Improvement Areas	First BIA originated in 1970	 "Commercial Façade Improvement Program: Funding for commercial property owners to redesign, renovate or restore their building's façade. Outside Mural & Street Art Program: Funding for businesses and community organizations to create murals and art projects in commercial or employment areas. Streetscape Improvement Program: Capital cost-share program to improve streetscapes and help BIAs create safe, attractive retail areas. Streetscape Master Plan Program: Funding for eligible BIAs to acquire consulting services to develop comprehensive streetscape plans that guide future improvements. Local Leadership Fund: Funding for emerging leaders in the BIA movement who are interested in acquiring specialized training in Local Economic Development. Innovation Fund: Funding to test innovative or creative solutions to BIA issues and share findings and results with other BIAs."²²¹
Vancouver	West End Community Plan	2013	 "Jim Deva Plaza was Vancouver's first pavement-to-plaza project, and a key priority in the West End Community Plan's Public Benefit Strategy. West End Parking Strategy: This plan will make it easier for residents and their visitors to find a parking near home, while reducing the emissions and potential safety incidents that come with driving around looking for a parking space."²²²
	Downtown Vancouver Business Improvement Association	2017	• "Perch Program: "Downtown Vancouver has limited public or park space, there are however, many privately owned public spaces (POPS). Because many of these spaces are publicly accessible in their design, it provides a huge opportunity to increase the number of spaces that can be utilized by the public to gather, engage, create a sense of community, or simply sit down to enjoy the fresh air. We call these opportunistic spaces Perches." ²²³



BUSINESS IMPROVEMENT AREAS

According to the Government of Ontario, "a Business Improvement Area (BIA) is a "made-in-Ontario" innovation that allows local business people and commercial property owners and tenants to join together and, with the support of the municipality, to organize, finance, and carry out physical improvements and promote economic development in their district."224 The first BIA was created in 1970 in Bloor West Village, Toronto, with the concept going global to thousands of communities. There are currently more than 270 BIAs in Ontario alone. If executed successfully, BIA's improve neighbourhood quality of life and enhance economic opportunities.²²⁵ Example BIA activities include:

- **Beautification** is comprised of enhancements made to a business area. These enhancements improve both the feel and appearance of the business area.²²⁶ A common method used for beautification is streetscape improvement (i.e., street furniture, banners, planters, seasonal decorations). If implemented correctly, beautification efforts can help attract new businesses and residents.²²⁷
- **Revitalization and maintenance** activities are focused on the revitalization and improvement of physical infrastructure in the BIA with a goal to make the area safer and cleaner. For example, this approach can be accomplished through enhanced street cleaning, redevelopment of historic buildings, and removing graffiti.

- **Marketing and promotion** activities inspire purchasing behaviour within the BIA. Collaborative campaigns encourage residents and visitors to visit the business improvement areas for their shopping and service needs.²²⁸
- **Special events** are created in partnership with community businesses to help to promote their business offerings. Example events include studio tours, farmer's markets, seasonal and thematic festivals, and ethnic / cultural celebrations.²²⁹
- **Business recruitment** is an important BIA activity to ensure property owners (commercial and industrial) occupy available space and maintain the desired industry mix.²³⁰ For example, some BIAs encourage retail and restaurant space to have a more vibrant streetscape instead of medical and office space.
- Advocacy and communication are needed to ensure collaboration and success of the BIA activities. For example, "BIAs can act as a voice for the business community and often establish important relationships with other community voices, such as city council, municipal departments, local community groups (e.g., schools, churches, citizen groups) and institutions (e.g., chambers of commerce, committees of council)."²³¹

Endnotes

All hyperlinks within have been validated as of the date of this research report.

"Council Priorities 2019-2022," City of Kingston, 2019, https://www.cityofkingston.ca/city-hall/city-council/council-priorities

² "Kingston's Strategic Plan," City of Kingston, 2019, https://www.cityofkingston.ca/apps/councilpriorities/

³ "KEDCO Strategic Plan 2015-2020," Kingston Economic Development Corporation, 2015, https://www.kingstonecdev.com/sites/default/files/ strategic-plans/Strategic-Plan-2015-2020.pdf

⁴ "COVID-19 Business Response/Recovery Plan," City of Kingston, April 2020, https://www.cityofkingston.ca/documents/10180/38522324/ City-Council_Meeting-15-2020_Report-20-127_COVID19-Business-Response-Recovery-Plan.pdf/e6725e10-d440-235a-7425a48b64ff4f0e?t=1588240697646

⁵IBIS World, "Industry Exposure Intensity by Country," 2020 https://www.ibisworld.com/coronavirus-industry-exposure/

⁶ Hanna Ziady, "The Pandemic is Speeding Up Automation, and 85 Million Jobs Are On the Line," *CNN*, October 21, 2020, https://amp-cnn-com. cdn.ampproject.org/c/s/amp.cnn.com/cnn/2020/10/20/business/wef-future-of-jobs-report/index.html

⁷ "Population, Housing and Employment Growth Forecast, 2016 to 2046, City of Kingston," Watson & Associates Economists Ltd, February 2019, https://www.cityofkingston.ca/documents/10180/31619068/Projects_Planning_PopulationHousingEmploymentForecast_Draft+Report_ February2019.pdf/f5d09cb6-e371-4740-9515-4f99b78766a6

⁸ Most recent information available as of November 14, 2020 from FAO

[°] "Kingston," Financial Accountability Office of Ontario, June 23, 2020, https://www.fao-on.org/web/default/files/publications/EC2006%20 Regional%20Labour%20Market/Labour%20Market-June-EN-Kingston.pdf

¹⁰ "Kingston," Financial Accountability Office of Ontario, June 23, 2020, https://www.fao-on.org/web/default/files/publications/EC2006%20 Regional%20Labour%20Market/Labour%20Market-June-EN-Kingston.pdf

¹¹ "Economic and Budget Outlook, Fall 2020," Financial Accountability Office of Ontario, October 15, 2020, https://www.fao-on.org/en/Blog/ Publications/EB0-FA2020

¹² "2020 Ontario Budget — Ontario's Action Plan: Protect, Support, Recover," Government of Ontario, November 5, 2020, https://budget.ontario. ca/2020/contents.html

¹³ "COVID-19 Business Response/Recovery Plan," City of Kingston, April 2020, https://www.cityofkingston.ca/documents/10180/38522324/ City-Council_Meeting-15-2020_Report-20-127_COVID19-Business-Response-Recovery-Plan.pdf/e6725e10-d440-235a-7425a48b64ff4f0e?t=1588240697646

¹⁴ "Freeland, Trudeau Push for Green Recovery as Finance Portfolio Changes Hands," *BNN Bloomberg*, August 19, 2020, https://www. bnnbloomberg.ca/freeland-trudeau-push-for-green-recovery-as-finance-portfolio-changes-hands-1.1482039

¹⁵ "Clean Growth Hub," Government of Canada, October 30, 2020, https://www.ic.gc.ca/eic/site/099.nsf/eng/home

¹⁶ "Research in Priority Areas," "Canadian Institutes of Health Research," October 15, 2020, https://cihr-irsc.gc.ca/e/50077.html ¹⁷ "Alliance Grants," Natural Sciences and Engineering Research Council of Canada, October 18, 2020, https://www.nserc-crsng.gc.ca/ Innovate-Innover/alliance-alliance/research topics-sujets de recherche eng.asp

¹⁸ "Exporting for Creative Industries," Canadian Heritage, March 13, 2019, https://www.canada.ca/en/canadian-heritage/services/exportingcreative-industries.html

¹⁹ "Invest in Canada," Government of Canada, 2020, https://www.investcanada.ca/about

²⁰ "2020 Ontario Budget — Ontario's Action Plan: Protect, Support, Recover," Government of Ontario, November 5, 2020, https://budget.ontario. ca/2020/contents.html

²¹ "About Invest Ontario," Government of Ontario, 2020, https://www.investinontario.com/invest-ontario

²² "Focus on Geography Series," 2016 Census, Statistics Canada, 2017, https://www12.statcan.gc.ca/census-recensement/2016/as-sa/fogs-spg/Facts-cma-eng.cfm?LANG=Eng&GK=CMA&GC=521

²³ "Population, Housing and Employment Growth Forecast, 2016 to 2046, City of Kingston," Watson & Associates Economists Ltd, February 2019, https://www.cityofkingston.ca/documents/10180/31619068/Projects_Planning_PopulationHousingEmploymentForecast_Draft+Report_February2019.pdf/f5d09cb6-e371-4740-9515-4f99b78766a6

²⁴ "2016 Census Bulletin: Age and Sex Counts," City of Kingston, 2017, https://www.cityofkingston.ca/documents/10180/94869/ Planning_2016CensusBulletin_Kingston_AgeSexCounts.pdf/c1dcb290-cb3a-4cfd-895b-2b66d224fcb3?t=1498143358000

²⁵ Labour Force Survey Estimates (LFS), by Sex and Age Group for Canada, Provinces, Economic Regions and Census Metropolitan Areas, 2006 and 2011 to 2019, Annual Averages (Persons Unless Otherwise Noted)," Statistics Canada, April 3, 2020 https://communitydata.ca/content/ table-4-labour-force-survey-estimates-lfs-sex-and-age-group-canada-provinces-economic-0

²⁶ "Population, Housing and Employment Growth Forecast, 2016 to 2046, City of Kingston," Watson & Associates Economists Ltd, February 2019, https://www.cityofkingston.ca/documents/10180/31619068/Projects_Planning_PopulationHousingEmploymentForecast_Draft+Report_February2019.pdf/f5d09cb6-e371-4740-9515-4f99b78766a6

²⁷ "Population, Housing and Employment Growth Forecast, 2016 to 2046, City of Kingston," Watson & Associates Economists Ltd, February 2019, https://www.cityofkingston.ca/documents/10180/31619068/Projects_Planning_PopulationHousingEmploymentForecast_Draft+Report_February2019.pdf/f5d09cb6-e371-4740-9515-4f99b78766a6

²⁸ "2016 Census Bulletin: Education and Labour," City of Kingston, 2017, https://www.cityofkingston.ca/documents/10180/94869/ Planning_2016CensusBulletin_Kingston_IncomeSummary.pdf/98670fa6-b840-40b3-9d41-40b8ee804698?t=1508771903000



²⁹ "Labour Force Characteristics by Census Metropolitan Area, Three-Month Moving Average, Seasonally Adjusted and Unadjusted, Last 5 Months," Statistics Canada, November 11, 2020, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410029401

³⁰ "2016 Census," Statistics Canada, 2016, https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/Page.cfm? Lang=E&Geo1=PR&Code1=35&Geo2=&Code2=&Data=Count&SearchText=Ontario&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR &GeoCode=35

³¹ Queen's University Enrollment Reports, Queen's University, 2018-2019, http://www.queensu.ca/registrar/sites/webpublish.queensu.ca.uregwww/files/files/Enrolment%20Report%202018-19%20FINAL%20.pdf

³² St. Lawrence College Annual Report, St. Lawrence College, 2019, https://www.stlawrencecollege.ca/about/college-reports-and-policies/ annual-report/

³³ Stiletto Asset Mapping, 2020

³⁴ "Major City Insights: Kingston," Conference Board of Canada, July 20, 2020, https://www.conferenceboard.ca/focus-areas/canadianeconomics/major-city-insights/kingston

³⁵ "Major City Insights: Kingston," Conference Board of Canada, July 20, 2020, https://www.conferenceboard.ca/focus-areas/canadianeconomics/major-city-insights/kingston

³⁶ "Major City Insights: Kingston," Conference Board of Canada, July 20, 2020, https://www.conferenceboard.ca/focus-areas/canadianeconomics/major-city-insights/kingston

³⁷ "Building Permits, by Type of Structure and Type of Work (x 1,000)," Statistics Canada, October 2020, https://www150.statcan.gc.ca/t1/tbl1/ en/v.action?pid=3410006601&pickMembers%5B0%5D=1.37&pickMembers%5B1%5D=3.1&pickMembers%5B2%5D=4.1&pickMembers%5B3% 5D=5.1&cubeTimeFrame.startMonth=09&cubeTimeFrame.startYear=2020&cubeTimeFrame.endMonth=09&cubeTimeFrame.endYear=2020& referencePeriods=20200901%2C20200901

³⁸ "Building Permits, by Type of Structure and Type of Work (x 1,000)," Statistics Canada, October 2020, https://www150.statcan.gc.ca/t1/tbl1/ en/v.action?pid=3410006601&pickMembers%5B0%5D=1.37&pickMembers%5B1%5D=3.1&pickMembers%5B2%5D=4.1&pickMembers%5B3% 5D=5.1&cubeTimeFrame.startMonth=09&cubeTimeFrame.startYear=2020&cubeTimeFrame.endMonth=09&cubeTimeFrame.endYear=2020& referencePeriods=20200901%2C20200901

³⁹ "Building Permits, by Type of Structure and Type of Work (x 1,000)," Statistics Canada, October 2020, https://www150.statcan.gc.ca/t1/tbl1/ en/v.action?pid=3410006601&pickMembers%5B0%5D=1.37&pickMembers%5B1%5D=3.1&pickMembers%5B2%5D=4.1&pickMembers%5B3% 5D=5.1&cubeTimeFrame.startMonth=09&cubeTimeFrame.startYear=2020&cubeTimeFrame.endMonth=09&cubeTimeFrame.endYear=2020& referencePeriods=20200901%2C20200901

⁴⁰ "Building Permits, by Type of Structure and Type of Work (x 1,000)," Statistics Canada, October 2020, https://www150.statcan.gc.ca/t1/tbl1/ en/v.action?pid=3410006601&pickMembers%5B0%5D=1.37&pickMembers%5B1%5D=3.1&pickMembers%5B2%5D=4.1&pickMembers%5B3% 5D=5.1&cubeTimeFrame.startMonth=09&cubeTimeFrame.startYear=2020&cubeTimeFrame.endMonth=09&cubeTimeFrame.endYear=2020& referencePeriods=20200901%2C20200901

⁴¹ "Kingston and Area MLS® Home Sales Set New Monthly Record for September," CREA, n.d., https://creastats.crea.ca/board/king

⁴² "Housing Market Information Portal," CMHC, October 2019, https://www03.cmhc-schl.gc.ca/hmip-pimh/en/TableMapChart/

Table? Table 12.1.31.2& Geography Id=35& Geography Type Id=2& Display As=Table & Geography Name=Ontario # April Control April Name=Contario Apri

⁴³ City of Kingston Commercial Land Review, City of Kingston, 2016

⁴⁴ Stiletto Asset Mapping, 2020

⁴⁵ From the 2016 Census, 475 commuted daily from Ottawa to Kingston for work and 315 from Kingston to Ottawa

⁴⁶ "Towards a Stronger Southern Ontario; Enabling Tomorrow's Economy, Today," Federal Economic Development Agency for Southern Ontario,

2019, https://www.feddevontario.gc.ca/eic/site/723.nsf/vwapj/fdo-towardsastrongersouthon.pdf/\$file/fdo-towardsastrongersouthon.pdf

⁴⁷ "About Kingston," City of Kingston, 2020, https://www.cityofkingston.ca/explore/about-kingston

⁴⁸ Stiletto Asset Mapping, 2020

⁴⁹ "Startup Ecosystem Ranking of Startups – Canada," StartupBlink, 2020, https://www.startupblink.com/startups/canada

⁵⁰ Cathy Mullan, "fDi American Cities of the Future 2017/18 – FDI Strategy winners," fDi Intelligence, April 2017, https://www.fdiintelligence. com/article/68864

⁵¹ Aileen Doyle, "We have had Record Sales,' Real Estate Market has Dramatic Rebound in Cottage Country," *CTV News*, July 2020, https://barrie.ctvnews.ca/we-have-had-record-sales-real-estate-market-has-dramatic-rebound-in-cottage-country-1.5019870

⁵² Katherine Scott, "The Best and Worst Places to be a Woman in Canada 2019," Canadian Centre for Policy Alternatives, March 2019, https:// www.policyalternatives.ca/sites/default/files/uploads/publications/National%200ffice/2019/03/Best%20and%20Worst%20Places%20to%20 Be%20a%20Woman%202019.pdf

⁵³ Cathy Mullan, "fDi American Cities of the Future 2017/18 – FDI Strategy Winner," fDi Intelligence, April 2017, https://www.fdiintelligence. com/article/68864

⁵⁴ "Kingston Transit hit a Record Six Million Riders in 2017," City of Kingston, January 2018, https://www.cityofkingston.ca/-/kingston-transithit-a-record-six-million-riders-in-2017

⁵⁵ "Top Millennial Hot Spots in 2018 – 85 Canadian Cities Ranked," Point2Homes, 2018, https://www.point2homes.com/news/canada-realestate/millennial-cities-ranked.html

⁵⁶ "Where to Buy Real Estate in 2020: Top 35 cities," *Moneysense* Magazine, June 2020, https://www.moneysense.ca/spend/real-estate/where-to-buy-real-estate-in-2020-top-35-cities/

⁵⁷ "Kingston Ranked Top City in North America," iHeartRadio, 2018, https://www.iheartradio.ca/purecountry/kingston/kingston-ranked-topcity-in-north-america-1.2534918#:~:text=Kingston%20is%20the%20number%20one,for%20human%20capital%20and%20lifestyle.

⁵⁸ "Best Communities in Canada," *Maclean's* Magazine, 2019, https://www.macleans.ca/best-communities-canada-2019-full-ranking-tool/ ⁵⁹ High-growth companies are defined as demonstrating a minimum of 30 per cent year-over-year growth for five consecutive years to double revenues every three years

⁶⁰ The location quotient (LQ) provides a measure of the intensity of employment in a given sector in a region relative to the level of employment in that sector at the national level. The LQ is presented as the ratio of the percent of the total regional employment in a sector to the per-cent of the total employment in that sector at the national level. "LQ Conveys Regional Intensity of Employment, to Describe the Strength of an Industry" Statistics Canada, November 27, 2015 https://www150.statcan.gc.ca/n1/pub/21-006-x/2008007/def-eng.htm ⁶¹ Stiletto Asset Mapping, 2020

KINGSTON

⁶² Stiletto Asset Mapping, 2020

⁶³ Stiletto Asset Mapping, 2020

⁶⁴ Stiletto Asset Mapping, 2020

⁶⁵ Stiletto Asset Mapping, 2020

⁶⁶ "Kingston's Strategic Plan 2019-2022," City of Kingston, 2019, https://www.cityofkingston.ca/apps/councilpriorities/

⁶⁷ Stiletto Asset Mapping, 2020

⁶⁸ The location quotient (LQ) provides a measure of the intensity of employment in a given sector in a region relative to the level of employ-ment in that sector at the national level. The LQ is presented as the ratio of the percent of the total regional employment in a sector to the per-cent of the total employment in that sector at the national level. "LQ Conveys Regional Intensity of Employment, to Describe the Strength of an Industry" Statistics Canada, November 27, 2015 https://www150.statcan.gc.ca/n1/pub/21-006-x/2008007/def-eng.htm

⁶⁹ "5.0 Health Care Programs," Veterans Affairs Canada, 2020, https://www.veterans.gc.ca/eng/about-vac/news-media/facts-figures/5-0 ⁷⁰ "VA 2021 Budget Request: Fast Facts," US Department of Veterans Affairs, https://www.va.gov/budget/products.asp

⁷¹ "Facts and Figures," Veterans Affairs Canada, July 22, 2022, https://www.veterans.gc.ca/eng/about-vac/news-media/facts-figures/summary
 ⁷² "Understanding Future Needs of Canadian Veterans," Statistics Canada, November 21, 2018, https://www150.statcan.gc.ca/n1/en/pub/82-003-x/2018011/article/00003-eng.pdf?st=7qRNZ6ZP

⁷³ "Federal Framework on Posttraumatic Stress Disorder: Recognition, collaboration and support," Government of Canada, 2018, https://www. canada.ca/en/public-health/services/publications/healthy-living/federal-framework-post-traumatic-stress-disorder.html

⁷⁴ Raechel Huizinga, "Veterans Affairs to invest \$25 million in Physical, Mental Health Research," *The Kingston Whig Standard*, July 10, 2019, https://www.thewhig.com/news/local-news/veterans-affairs-to-invest-25-million-in-physical-mental-health-research
⁷⁵ "About Us," CIMVHR, 2020, https://cimvhr.ca/about-us/

⁷⁶ The location quotient (LQ) provides a measure of the intensity of employment in a given sector in a region relative to the level of employ-ment in that sector at the national level. The LQ is presented as the ratio of the percent of the total regional employment in a sector to the per-cent of the total employment in that sector at the national level.

⁷⁷ Winifred V. Quinn, Ellen O'Brien, and Gregg Springan, "Using Telehealth to Improve Home-based Care for Older Adults and Family Caregivers," AARP Public Policy Institute, May 2018, https://www.aarp.org/content/dam/aarp/ppi/2018/05/using-telehealth-to-improve-home-based-care-for-older-adults-and-family-caregivers.pdf

⁷⁸ "Patient First: A Proposal to Strengthen Patient-centred Health Care in Ontario," Government of Ontario, December 2015, http://www.health. gov.on.ca/en/news/bulletin/2015/docs/discussion_paper_20151217.pdf

⁷⁹ Sharon Koehn and Melissa Badger, "Health Care Equity for Ethric Minority Older Adults," Simon Fraser University, June 2015

⁸⁰ "Chronic Pain in Canada: Laying a Foundation for Action," Health Canada, June 2019, https://www.canada.ca/content/dam/hc-sc/documents/ corporate/about-health-canada/public-engagement/external-advisory-bodies/canadian-pain-task-force/report-2019/canadian-pain-taskforce-June-2019-report-en.pdf

⁸¹ "Ensuring Older Canadians Have access to Care Providers that are Trained to Specifically Provide the Care They Need," National Seniors Strategy, 2019, http://nationalseniorsstrategy.ca/the-four-pillars/pillar-3/access-to-care-providers/

⁸² "Canadian Frailty Network – CFN," Networks of Centres of Excellence of Canada, 2020, https://www.nce-rce.gc.ca/NetworksCentres-CentresReseaux/NCE-RCE/CFN_eng.asp

⁸³ "Human Mobility Research Centre," Queen's University, n.d., https://www.queensu.ca/hmrc/home

⁸⁴ "Artificial Intelligence In Healthcare Market Size, Share & Trends Analysis Report By Component (Hardware, Software, Services), By Application, By Region, Competitive Insights, And Segment Forecasts, 2019 – 2025," Grand View Research, October 2019, https://www. grandviewresearch.com/industry-analysis/artificial-intelligence-ai-healthcare-market

⁸⁵ "Digital Health And Data Platforms: An Opportunity For Canadian Excellence In Evidence-Based Health Research," HealthCareCAN, 2019, https://www.healthcarecan.ca/2019/01/25/digital-health-and-data-platforms-an-opportunity-for-canadian-excellence-in-evidence-basedhealth-research/

⁸⁶ Stephen Yip et al., "A Canadian Guideline on the Use of Next-Generation Sequencing in Oncology," April 2019

⁸⁷ "Government of Canada Cloud Adoption Strategy: 2018," Treasury Board of Canada, 2020, https://www.canada.ca/en/government/system/ digital-government/digital-government-innovations/cloud-services/government-canada-cloud-adoption-strategy.html

⁸⁸ "Using Computing Power to Track and Project Covid-19's Spread," CENGN, July 2020, https://www.cengn.ca/computing-power-trackcovid19/

⁸⁹ Stiletto Midpoint Analysis, 2020

⁹⁰ Stiletto Midpoint Analysis, 2020

⁹¹ "Kingston CMA Business Counts 2014-2019," Statistics Canada, 2019

⁹² "Kingston CMA Business Counts 2014-2019," Statistics Canada, 2019

⁹³ Stiletto Asset Mapping, 2020

⁹⁴ "Sustainable Manufacturing," U.S. Environmental Protection Agency, 2020, https://archive.epa.gov/sustainablemanufacturing/web/html/ programs.html

⁹⁵ "About Sustainable Manufacturing and the Toolkit," OECD, n.d., https://www.oecd.org/innovation/green/toolkit/aboutsustainable manufacturingandthetoolkit.htm#about

⁹⁶ "Canadian Cluster Data: Kingston," Institute for Competitiveness & Prosperity, 2020, https://www.competeprosper.ca/clusters/data/byregion/kingston

⁹⁷ Stiletto Asset Mapping, 2020

⁹⁸ Constantinos Bougas and Christopher Heschl, "Metropolitan Outlook 2: Kingston-Winter 2020," The Conference Board of Canada, April 2, 2020, https://www.conferenceboard.ca/e-library/abstract.aspx?did=10666

⁹⁹ "Strategic Research Plan 2018-2023," Queen's University, 2018, https://www.queensu.ca/vpr/sites/webpublish.queensu.ca.vprwww/files/ files/SRP%20pages/SRP2018/20180406StrategicResearchPlan2018FINAL.pdf

¹⁰⁰ "Queen's University Can Launch Your Career in Manufacturing," Ontario East Economic Development, September 13, 2019, https://blog. ontarioeast.ca/queens-university-can-launch-your-career-in-manufacturing

¹⁰¹ "Sustainable Kingston Plan," City of Kingston, 2010, https://static1.squarespace.com/static/58934b2459cc6801da2b638e/t/593edb94c534a5c 8d10adddf/1497291676591/sk-plan-final-f-112310.pdf



¹⁰² Stiletto Asset Mapping, 2020

¹⁰³ "Report from Canada's Economic Strategy Tables: Advanced Manufacturing," Innovation, Science and Economic Devel-opment Canada, 2018, https://www.ic.gc.ca/eic/site/098.nsf/eng/00021.html

¹⁰⁴ "National Aerospace and Defence Strategic Framework 2005-2025," Government of Canada, 2005, https://www.ic.gc.ca/eic/site/ad-ad.nsf/ vwapj/nasf-csna_eng.pdf/\$file/nasf-csna_eng.pdf

¹⁰⁵ "Additive Manufacturing in Canada: The Impending Talent Paradign," Information and Communications Technology Council (ICTC), 2017, https://www.ictc-ctic.ca/wp-content/uploads/2017/07/ICTC-Additive-Manufacturing-ENG-Final.pdf

¹⁰⁶ "Global Affairs Canada – Departmental Sustainable Development Strategy 2020 to 2023," Government of Canada, 2020, https://www. international.gc.ca/gac-amc/publications/sea-ees/sustainable-durable.aspx?lang=eng

¹⁰⁷ Stiletto Asset Mapping, 2020

¹⁰⁸ "Secondary Production," The Aluminum Association, 2020, https://www.aluminum.org/industries/production/secondary-production ¹⁰⁹ The location quotient (LQ) provides a measure of the intensity of employment in a given sector in a region relative to the level of employment in that sector at the national level. The LQ is presented as the ratio of the percent of the total regional employment in a sector to the per-cent of the total employment in that sector at the national level

¹¹⁰ "Sustainable Kingston Plan," City of Kingston, 2010, https://static1.squarespace.com/static/58934b2459cc6801da2b638e/t/593edb94c534a5c 8d10adddf/1497291676591/sk-plan-final-f-112310.pdf

¹¹¹ "Fast Facts," Food Processors of Canada, n.d., https://foodprocessorsofcanada.ca/

¹¹² "Convience – Anything, Anytime, Anywhere," Monitor Deloitte, 2020, https://www2.deloitte.com/content/dam/Deloitte/de/Documents/ consumer-business/convenience-food-study1.pdf

¹¹³ "Customized report service – Health and wellness trends in Canada," Government of Canada, April 2019, https://www5.agr.gc.ca/eng/ customized-report-service-health-and-wellness-trends-in-canada/?id=1554401656839

¹¹⁴ "Industrie 2030: Accelerating Adoption of Advanced Manufacturing Technologies," Canadian Manufacturers & Exporters, 2017, http://www. rbcroyalbank.com/commercial/campaign/supplychain/_assets-custom/pdfs/Accelerating_Adoption_of_Advanced_Manufacturig_Technologies. pdf

¹¹⁵ "Plant-based Protein Market: Global and Canadian Market Analysis," National Research Council Canada, October 2019, https://nrc.canada. ca/en/research-development/research-collaboration/programs/plant-based-protein-market-global-canadian-market-analysis

¹¹⁶ "Environmental Sustainability Becoming a Business Imperative," pwc Canada, 2019, https://www.pwc.com/ca/en/industries/retailconsumer/environmental-sustainability-becoming-a-business-imperative.html#:~:text=It%20showed%20that%20when%20it,and%20 ethically%20or%20sustainably%20produced

¹¹⁷ "COVID-19 and the Food and Agriculture Sector: Issues and Policy Responses," Organisation for Economic Co-operation and Development, April 2020, https://www.oecd.org/coronavirus/policy-responses/covid-19-and-the-food-and-agriculture-sector-issues-and-policy-responsesa23f764b/

¹¹⁸ The location quotient (LQ) provides a measure of the intensity of employment in a given sector in a region relative to the level of employment in that sector at the national level. The LQ is presented as the ratio of the percent of the total regional employment in a sector to the per-cent of the total employment in that sector at the national level

¹¹⁹ Stiletto Midpoint Analysis, 2020

¹²⁰ Stiletto Midpoint Analysis, 2020

¹²¹ "Kingston CMA Business Counts 2014-2019," Statistics Canada, 2019

¹²² "Kingston CMA Business Counts 2014-2019," Statistics Canada, 2019

¹²³ Stiletto Asset Mapping, 2020

¹²⁴ Michael Porter, "Clusters and the New Economics of Competition," Harvard Business Review, December 1998, https://hbr.org/1998/11/ clusters-and-the-new-economics-of-competition

¹²⁵ "Ontario Real GDP," Statistics Canada, 2012

¹²⁶ "Kingston CMA Business Counts 2014-2019," Statistics Canada, 2019

¹²⁷ Stiletto Asset Mapping, 2019

¹²⁸ "Ontario Real GDP," Statistics Canada, 2012

¹²⁹ "Kingston CMA Business Counts 2014-2019," Statistics Canada, 2019

¹³⁰ Ioana Tabra and Yangchen Zhang, "A New Perspective: Retention of Queen's Graduates in Kingston," Queen's Business Consulting and Kingston Economic Development Corporation, 2018.

¹³¹ "Kingston Broadband Gap Analysis," Limestone Analytics, 2020

¹³² "Cluster / Open Space Development," Chester County Planning Commission, 2018, https://www.chescoplanning.org/MuniCorner/Tools/ Cluster.cfm#:~:text=Cluster%20development%20is%20a%20land,for%20protection%20by%20the%20municipality.

¹³³ "Kingston's Strategic Plan 2019-2022," City of Kingston, 2019, https://www.cityofkingston.ca/apps/councilpriorities/

¹³⁴ "Kingston's Strategic Plan 2019-2022," City of Kingston, 2019, https://www.cityofkingston.ca/apps/councilpriorities/

¹³⁵ "Ontario's Creative Cluster: Growing Faster than the Rest of the Economy," Government of Ontario, February 28, 2017, http://www.mtc.gov. on.ca/en/creative_cluster/cluster_report_growth.shtml

¹³⁶ Ontario's Creative Cluster: Growing Faster than the Rest of the Economy," Government of Ontario, February 28, 2017, http://www.mtc.gov. on.ca/en/creative_cluster/cluster_report_growth.shtml

¹³⁷ "2016 Census Bulletin: Age and Sex Counts," City of Kingston, 2017, https://www.cityofkingston.ca/documents/10180/94869/

Planning_2016CensusBulletin_Kingston_AgeSexCounts.pdf/c1dcb290-cb3a-4cfd-895b-2b66d224fcb3?t=1498143358000

¹³⁸ "Council of Ministers of Education, Canada," CMEC, 2020, https://www.cmec.ca/158/Postsecondary_Education.html

¹³⁹ "Chapter 7: Post-Secondary Education," *Public Services for Ontarians: A Path to Sustainability and Excellence*, Government of Ontario, 2019, https://www.fin.gov.on.ca/en/reformcommission/chapters/ch7.html

¹⁴⁰ Michael Mandel, "How the Startup Economy is Spreading Across the Country — and How It Can Be Accelerated," Progressive Policy Institute, March 29, 2017, https://www.progressivepolicy.org/wp-content/uploads/2017/05/How-the-Startup-Economy-is-Spreading-Across-the-Country-%E2%80%94-and-How-It-Can-Be-Accelerate-final.pdf

¹⁴¹ "Survey of Environmental Goods and Services (SEGS)," Statistics Canada, 2020, https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=get Survey&SDDS=1209&lang=en&db=imdb&adm=8&dis=2#a2



¹⁴² "Quick Facts," Queen's University, 2020, https://www.queensu.ca/about/quickfacts

¹⁴³ Stiletto Asset Mapping, 2020

¹⁴⁴ Stiletto Asset Mapping, 2020

¹⁴⁵ Stiletto Asset Mapping, 2020

¹⁴⁶ Government of Canada, "Canada First Research Excellence Fund: Competition Results," https://www.cfref-apogee.gc.ca/results-resultats/ index-eng.aspx#a5

¹⁴⁷ "Focus on Geography Series," 2016 Census, Statistics Canada, 2017, https://www12.statcan.gc.ca/census-recensement/2016/as-sa/fogs-spg/Facts-cma-eng.cfm?LANG=Eng&GK=CMA&GC=521

¹⁴⁸ ^{*} ²2016 Census Bulletin: Population and Dwelling Counts, ^{*} City of Kingston, 2017, https://www.cityofkingston.ca/documents/10180/94869/ Planning_2016CensusBulletin_Kingston_PopulationDwellingCounts.pdf/5e3a023e-8cd1-4bc0-ae56-4948de06a7da

¹⁴⁹ "2016 Census Bulletin: Age and Sex Counts," City of Kingston, 2017, https://www.cityofkingston.ca/documents/10180/94869/ Planning_2016CensusBulletin_Kingston_AgeSexCounts.pdf/c1dcb290-cb3a-4cfd-895b-2b66d224fcb3?t=1498143358000

¹⁵⁰ " Labour Force Survey Estimates (LFS), by Sex and Age Group for Canada, Provinces, Economic Regions and Census Metropolitan Areas, 2006 and 2011 to 2019, Annual Averages (Persons Unless Otherwise Noted)," Statistics Canada, April 3, 2020 https://communitydata.ca/content/table-4-labour-force-survey-estimates-lfs-sex-and-age-group-canada-provinces-economic-0

¹⁵¹ Labour Force Survey Estimates (LFS), by Sex and Age Group for Canada, Provinces, Economic Regions and Census Metropolitan Areas, 2006 and 2011 to 2019, Annual Averages (Persons Unless Otherwise Noted), "Statistics Canada, April 3, 2020 https://communitydata.ca/content/ table-4-labour-force-survey-estimates-lfs-sex-and-age-group-canada-provinces-economic-0

¹⁵² "2016 Census Bulletin: Education and Labour," City of Kingston, 2017, https://www.cityofkingston.ca/documents/10180/94869/ Planning_2016CensusBulletin_Kingston_IncomeSummary.pdf/98670fa6-b840-40b3-9d41-40b8ee804698?t=1508771903000

¹⁵³ "T1 Family File, Centre for Income and Socioeconomic Well-being Statistics, Reference 20044-985310," Statistics Canada, October 5, 2020, https://communitydata.ca/content/i-07-tax-filers-and-dependants-income-after-tax-income-sex-and-age-groups-2018 Please note this is custom data (Reference # 20044) is provided for use in accordance with the terms and conditions of the Statistics Canada Open Licence Agreement

¹⁵⁴ T1 Family File, Centre for Income and Socioeconomic Well-being Statistics, Reference 20044-985310," Statistics Canada, October 5, 2020, https://communitydata.ca/content/i-07-tax-filers-and-dependants-income-after-tax-income-sex-and-age-groups-2018 Please note this is custom data (Reference # 20044) is provided for use in accordance with the terms and conditions of the Statistics Canada Open Licence Agreement

¹⁵⁵ T1 Family File, Centre for Income and Socioeconomic Well-being Statistics, Reference 20044-985310," Statistics Canada, October 5, 2020, https://communitydata.ca/content/i-07-tax-filers-and-dependants-income-after-tax-income-sex-and-age-groups-2018 Please note this is custom data (Reference # 20044) is provided for use in accordance with the terms and conditions of the Statistics Canada Open Licence Agreement

¹⁵⁶ "Kingston [Census Metropolitan Area], Ontario and Ontario [Province] (Table). Census Profile. 2016 Census," Catalogue no. 98-316-X2016001, Statistics Canada. 2017, https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

¹⁵⁷ "Kingston [Census Metropolitan Area], Ontario and Ontario [Province] (Table). Census Profile. 2016 Census," Catalogue no. 98-316-X2016001, Statistics Canada. 2017, https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

¹⁵⁸ Labour Force Survey Estimates (LFS), by Sex and Age Group for Canada, Provinces, Economic Regions and Census Metropolitan Areas, 2006 and 2011 to 2019, Annual Averages (Persons Unless Otherwise Noted), "Statistics Canada, April 3, 2020 https://communitydata.ca/content/ table-4-labour-force-survey-estimates-lfs-sex-and-age-group-canada-provinces-economic-0

¹⁵⁹ Labour Force Survey Estimates (LFS), by Sex and Age Group for Canada, Provinces, Economic Regions and Census Metropolitan Areas, 2006 and 2011 to 2019, Annual Averages (Persons Unless Otherwise Noted), "Statistics Canada, April 3, 2020 https://communitydata.ca/content/ table-4-labour-force-survey-estimates-lfs-sex-and-age-group-canada-provinces-economic-0

¹⁶⁰ Labour Force Survey Estimates (LFS), by Sex and Age Group for Canada, Provinces, Economic Regions and Census Metropolitan Areas, 2006 and 2011 to 2019, Annual Averages (Persons Unless Otherwise Noted)," Statistics Canada, April 3, 2020 https://communitydata.ca/content/ table-4-labour-force-survey-estimates-lfs-sex-and-age-group-canada-provinces-economic-0

¹⁶¹ "Labour Force Characteristics by Census Metropolitan Area, Three-Month Moving Average, Seasonally Adjusted and Unadjusted," Table 14-10-0294-01, Statistics Canada, November 11, 2020, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410029401

¹⁶² "Labour Force Characteristics by Census Metropolitan Area, Three-Month Moving Average, Seasonally Adjusted and Unadjusted," Table 14-10-0294-01, Statistics Canada, November 11, 2020, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410029401

¹⁶³ "Labour Force Characteristics by Census Metropolitan Area, Three-Month Moving Average, Seasonally Adjusted and Unadjusted," Table 14-10-0294-01, Statistics Canada, November 11, 2020, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410029401

¹⁶⁴ Kingston Business Count 2019, Statistics Canada, 2019
 ¹⁶⁵ Stiletto Asset Mapping, 2020

¹⁶⁶ Kingston Business Count 2019, Statistics Canada, 2019

¹⁶⁷ "2016 Census," Statistics Canada, 2016, https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/Page.cfm?Lang=E&Ge o1=PR&Code1=35&Geo2=&Code2=&Data=Count&SearchText=Ontario&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR& GeoCode=35

¹⁶⁸ "2016 Census," Statistics Canada, 2016, https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/Page.cfm?Lang=E&Ge o1=PR&Code1=35&Geo2=&Code2=&Data=Count&SearchText=Ontario&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR& GeoCode=35

¹⁶⁹ "2016 Census," Statistics Canada, 2016, https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/Page.cfm?Lang=E&Ge o1=PR&Code1=35&Geo2=&Code2=&Data=Count&SearchText=Ontario&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR& GeoCode=35

¹⁷⁰ "2016 Census," Statistics Canada, 2016, https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/Page.cfm? Lang=E&Geo1=PR&Code1=35&Geo2=&Code2=&Data=Count&SearchText=Ontario&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR &GeoCode=35

¹⁷¹ Innovation, Science and Economic Development Canada, "Key Small Business Statistics," November 2019, https://www.ic.gc.ca/eic/site/061. nsf/vwapj/KSBS_Nov-2019_En_Final_5.pdf/\$file/KSBS_Nov-2019_En_Final_5.pdf



¹⁷² Innovation, Science and Economic Development Canada, "Key Small Business Statistics," November 2019, https://www.ic.gc.ca/eic/site/061. nsf/vwapj/KSBS_Nov-2019_En_Final_5.pdf/\$file/KSBS_Nov-2019_En_Final_5.pdf

¹⁷³ Kingston Business Count 2019, Statistics Canada, 2019

¹⁷⁴ Invest in Hamilton, "Hamilton by the Numbers: Discover Data about Hamilton, Ontario," 2018, https://investinhamilton.ca/tools-data/all-data/ ¹⁷⁵ Kingston Business Count 2019, Statistics Canada, 2019

¹⁷⁶ Kingston Business Count 2019, Statistics Canada, 2019

¹⁷⁷ Kingston Business Count 2019, Statistics Canada, 2019

¹⁷⁸ "Comprehensive Workforce Profile and Analysis: for Kingston, Ontario Canada," CIA Global, 2019.

¹⁷⁹ "Local Labour Market Planning Report," Eastern Workforce Innovation Board, 2019 http://www.workforcedev.ca/images/llmp_reports/ EasternWFB_LLMP_english.pdf

¹⁸⁰ "Local Labour Market Planning Report," Eastern Workforce Innovation Board, 2019 http://www.workforcedev.ca/images/llmp_reports/ EasternWFB_LLMP_english.pdf

¹⁸¹ "Population, Housing and Employment Growth Forecast, 2016 to 2046: City of Kingston," Watson & Associates, 2019, https://www. cityofkingston.ca/documents/10180/31619068/Projects_Planning_PopulationHousingEmploymentForecast_Final-Report_March2019.pdf/ d39310e1-e11c-4f05-b1fb-2695b9a9ea71

¹⁸² Local Labour Market Planning Report," Eastern Workforce Innovation Board, 2019 http://www.workforcedev.ca/images/llmp_reports/ EasternWFB_LLMP_english.pdf

¹⁸³ "Population, Housing and Employment Growth Forecast, 2016 to 2046: City of Kingston," Watson & Associates, 2019, https://www. cityofkingston.ca/documents/10180/31619068/Projects_Planning_PopulationHousingEmploymentForecast_Final-Report_March2019.pdf/ d39310e1-e11c-4f05-b1fb-2695b9a9ea71

¹⁸⁴ Elliot Ferguson, "Labour Shortage Growing Concern for Kingston," *The Kingston Whig Standard*, January 31, 2019, https://www.thewhig. com/news/local-news/labour-shortage-growing-concern-for-kingston

¹⁸⁵ David Rockne Corrigan, "A Place to Move: What Eastern Ontario Needs to Draw – and Retain – Immigrants," TVO, October 11, 2019, https:// www.tvo.org/article/a-place-to-move-what-eastern-ontario-needs-to-draw-and-retain-immigrants

¹⁸⁶ "Population, Housing and Employment Growth Forecast, 2016 to 2046: City of Kingston," Watson & Associates, 2019, https://www. cityofkingston.ca/documents/10180/31619068/Projects_Planning_PopulationHousingEmploymentForecast_Final-Report_March2019.pdf/ d39310e1-e11c-4f05-b1fb-2695b9a9ea71

¹⁸⁷ "Navigating Change: 2018 Business Council Skills Survey," Business Council of Canada, 2018, https://thebusinesscouncil.ca/report/ navigating-change-2018-business-council-skills-survey/

¹⁸⁸ "Developing Canada's Future Workforce: A Survey of Large Private-sector Employers," The Business Council of Canada, March 2016, https:// thebusinesscouncil.ca/report/developing-canadas-future-workforce-a-survey-of-large-private-sector-employers/

¹⁸⁹ Jennifer Massey, Sean Field, and Yolande Chan, "Partnering for Economic Development: How Town-Gown Relations Impact Local Eco-nomic Development in Small and Medium Cities," *Canadian Journal of Higher Education*, Volume 44, No. 2, 2014, pages 152-169

¹⁹⁰ Rosalie Wyonch, "Work-Ready Graduates: The Role of Co-op Programs in Labour Market Success," C.D. Howe Institute, January 2020, https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/Commentary%20562.pdf

¹⁹¹ Alison Migneault, "Qualitative Research Report: Kingston and Queen's University," April 2019

¹⁹² Alison Migneault, "Qualitative Research Report: Kingston and Queen's University," April 2019

193 Ioana Tabra and Yangchen Zhang, "A New Perspective: Retention of Queen's Graduates in Kingston," Queen's Business Consulting, 2019

¹⁹⁴ Ioana Tabra and Yangchen Zhang, "A New Perspective: Retention of Queen's Graduates in Kingston," Queen's Business Consulting, 2019

¹⁹⁵ Adam Langenberg, "Tackling Eastern Ontario's Talent Shortage," *Ottawa Business Journal*, February 21, 2020, https://www.obj.ca/regional-tackling-eastern-ontario-talent-shortage

¹⁹⁶ "2017-2020 Strategic Mandate Agreement: St. Lawrence College of Applied Arts and Technology," Province of Ontario, October 21, 2019, https://www.ontario.ca/page/2017-20-strategic-mandate-agreement-st-lawrence-college-applied-arts-and-technology

¹⁹⁷ Stiletto Analysis, 2020

¹⁹⁸ Stiletto Stakeholder Sessions

¹⁹⁹ "Towards a Stronger Southern Ontario; Enabling Tomorrow's Economy, Today," Federal Economic Development Agency for Southern Ontario, 2019, https://www.feddevontario.gc.ca/eic/site/723.nsf/vwapj/fdo-towardsastrongersouthon.pdf/\$file/fdo-towardsastrongersouthon.pdf

²⁰⁰ Conference Board of Canada's 2018 Kingston Socio-Economic Scorecard

²⁰¹ "About Kingston, " City of Kingston, 2020 https://www.cityofkingston.ca/explore/about-kingston

²⁰² Stiletto Stakeholder Sessions, 2020

²⁰³ Stiletto Stakeholder Sessions, 2020

²⁰⁴ Stiletto Stakeholder Sessions, 2020

²⁰⁵ Stiletto Stakeholder Sessions, 2020

²⁰⁶ Stiletto Stakeholder Sessions, 2020

²⁰⁷ Stiletto Stakeholder Sessions, 2020

²⁰⁸ Raechel Huizinga, "Veterans Affairs to Invest \$25 Million in Physical, Mental Health Research," *The Kingston Whig-Standard*, July 10, 2019, https://www.thewhig.com/news/local-news/veterans-affairs-to-invest-25-million-in-physical-mental-health-research

²⁰⁹ Wendy Haaf, "Canada's Top Retirement Destinations: Kingston, ON," *GoodTimes.ca*, November 14, 2017, https://goodtimes.ca/canadas-top-retirement-destinations-kingston/

²¹⁰ Warren Bland, "Best Places to Retire in Canada, Kingston ON," *RetireWOW*, April 20, 2018, http://www.retirewow.com/best-places-to-retirein-canada-kingston-ontario/

²¹¹ Stiletto Stakeholder Sessions

²¹² "Five Canadian Cities Most at Risk due to COVID-19's Impact on the Accommodation and Food Services Sector," Conference Board of Canada, March 31, 2020, https://www.conferenceboard.ca/insights/blogs/five-canadian-cities-most-at-risk-due-to-covid-19-s-impact-on-theaccommodation-and-food-services-sector

²¹³ Allison Jones, "Ontario's Municipalities Grapple with Hundreds of Millions in Provincial Funding Cuts," *The Star*, May 20, 2019, https://www. thestar.com/news/canada/2019/05/20/ontarios-municipalities-grapple-with-hundreds-of-millions-in-provincial-funding-cuts.html

KINGSTON

²¹⁴ Katherine Scott, "The Best and Worst Places to be a Woman in Canada 2019: The Gender Gap in Canada's 26 Biggest Cities," Canadian Centre for Policy Alternatives, March 2019, https://www.policyalternatives.ca/newsroom/news-releases/best-and-worst-cities-canada-be-woman-2019

²¹⁵ "Funding Decisions," Canadian Institutes of Health Research, October 1, 2020, https://cihr-irsc.gc.ca/e/38021.html

²¹⁶ "Canada's Top 50 Research Universities 2019," Research Infosource, n.d., https://researchinfosource.com/top-50-research-universities/ 2019/list

²¹⁷ Stiletto Stakeholder Sessions, 2020

 ²¹⁸ "Signature and Visionary Projects," Atlantic Downtown Improvement District, 2020, https://www.atlantadowntown.com/adid/initiatives
 ²¹⁹ "Brownfields Community Improvement Plan," City of Kingston Community Services Group, December 19, 2017, https://www.cityofkingston. ca/documents/10180/19597/BrownfieldsCIP-Final.pdf/3b821ee0-259d-4d15-a195-1507578cdd4c

²²⁰ "Downtown Sudbury Community Improvement Plan," Greater Sudbury, January 2017, https://www.greatersudbury.ca/do-business/ planning-and-development/community-improvement-plans-and-incentive-programs/financial-incentive-programs/downtown-communityimprovement-plan/community-improvement-plan/

²²¹ "BIA Financial Incentives," City of Toronto, 2020, https://www.toronto.ca/business-economy/business-operation-growth/business-improvement-areas/bia-financial-incentives/

²²² "West End Community Plan," City of Vancouver, n.d., https://vancouver.ca/home-property-development/west-end-community-plan.aspx

²²³ "Perches Program, "Downtown Vancouver, 2020, https://www.dtvan.ca/what-we-do/perch-program/

²²⁴ "Introduction to Business Improvement Areas," Government of Ontario, September 28, 2019, https://www.ontario.ca/document/businessimprovement-area-handbook/introduction-business-improvement-areas

²²⁵ "Benefits of a BIA," Toronto Association of Business Improvement Areas, 2020, https://www.toronto-bia.com/whats-a-bia/benefits-of-a-bia/#:~:text=By%20creating%20a%20strong%20and,box%20retailing%20and%20e%2Dcommerce.

²²⁶ "Introduction to Business Improvement Areas," Government of Ontario, September 28, 2019, https://www.ontario.ca/document/businessimprovement-area-handbook/introduction-business-improvement-areas

²²⁷ "Section 10: Establishing Neighbourhood Beautification Programs," Community Toolbox, 2020, https://ctb.ku.edu/en/table-of-contents/ implement/physical-social-environment/neighborhood-beautification-programs/main

²²⁸ "Introduction to Business Improvement Areas," Government of Ontario, September 28, 2019, https://www.ontario.ca/document/businessimprovement-area-handbook/introduction-business-improvement-areas

²²⁹ "Introduction to Business Improvement Areas," Government of Ontario, September 28, 2019, https://www.ontario.ca/document/businessimprovement-area-handbook/introduction-business-improvement-areas

²³⁰ "Introduction to Business Improvement Areas," Government of Ontario, September 28, 2019, https://www.ontario.ca/document/businessimprovement-area-handbook/introduction-business-improvement-areas

²³¹ "Introduction to Business Improvement Areas," Government of Ontario, September 28, 2019, https://www.ontario.ca/document/businessimprovement-area-handbook/introduction-business-improvement-areas

