

Changing the Narrative: Unlocking the Economic Assets of Niagara in a Changing World

EXECUTIVE SUMMARY

This report aims to shed light on Niagara's evolving economy by investigating the opinions of local stakeholders. Drawing on interviews with policymakers and the private sector, it explores the opportunities and challenges that face Niagara's regional economy, and the role that policy can play in encouraging economic development. The report finds that Niagara's economy is at a turning point, and that stakeholders are eager to tell a new story that positions the region as *the place to be* for emerging industries at the intersection of agriculture, tourism, and advanced manufacturing. At the same time, growth in these industries is hampered by institutional, cultural, and political barriers. The report thus concludes by providing a series of recommendations for policymakers and other stakeholders within Niagara.

INTRODUCTION

Niagara boasts a vibrant and diverse economy. Geographic advantages and proximity to the United States have led to historic strengths in manufacturing, hydroelectric power generation, and marine transportation, with local industry playing an important role in evolving global supply chains. A moderate climate, rich soil, and the availability of fresh water have nurtured the region's agriculture sector, and iconic sites like Niagara Falls have driven growth in tourism (MacFarlane 2020; Gayler 1994). Such natural attractions are bolstered by Niagara's world-class wine industry, gaming industry, and heritage destinations, which draw millions of visitors to the region every year.

Yet Niagara's economy is also undergoing significant transformation. Global competition and technological innovation have disrupted traditionally strong industries



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like automotive manufacturing (Calcott and Conteh 2018). Rapid urbanization and climate change are creating challenges in agriculture, while labour shortages are leading many farmers to invest in new automated technologies (Lemay, Conteh, and Boggs 2021). A rising cost of living, inadequate public transit infrastructure, and broader economic shifts are also exacerbating longstanding concerns around talent development and retention in the region, and many young people are leaving to pursue employment elsewhere (Olmstead and Conteh 2024; Conteh, Phillips, and Ferguson 2017; Blushak et al. 2009). These challenges and others raise questions about the future of Niagara's economy.

This report¹ aims to shed light on Niagara's evolving economy by investigating the opinions of local stakeholders. Drawing on interviews with policymakers and the private sector, it explores the opportunities and challenges that face Niagara's regional economy, and the role that policy can play in encouraging economic development. The report finds that Niagara's economy is at a turning point, and that stakeholders are eager to tell a new story that positions the region as *the place to be* for emerging industries at the intersection of agriculture, tourism, and advanced manufacturing. At the same time, growth in these industries is hampered by institutional, cultural, and political barriers. The report thus concludes by providing a series of recommendations for policymakers and other stakeholders within Niagara:

1. Embrace an "orchestrator-style" approach to economic development within Niagara, with Niagara Economic Development (NED) playing a lead role in creating a coordinated, collaborative, and comprehensive identity for Niagara's future economy.
2. Prioritize "smart industrial specialization" in the crafting of this new economic strategy, paying particular attention to industries that support Niagara's interconnected strengths in agriculture, manufacturing, and tourism.
3. Rethink the division of responsibilities for economic development across Niagara's regional and local

area municipalities, recognizing the interconnected nature of investment attraction, business retention, and innovation in a "smart industrial specialization" approach.

4. Support the creation of industry-led consortia that bring together businesses, post-secondary institutions, and other stakeholders across different scales and geographies.
5. Invest in the expansion of a shared employment-land inventory across local area municipalities, and work to align zoning, standards, and processes wherever possible.
6. Revive and expand Niagara's Open Data program and establish shared data standards across municipalities.
7. Develop an ambitious and comprehensive talent development and retention strategy for the Niagara region. As part of this strategy, work with post-secondary institutions to align curriculum and branding with Niagara's industrial specializations (see below).
8. Develop a region-wide housing and transit strategy. As part of this strategy, ensure that the economic contributions of housing and public transit are considered within the policy process.

The report is structured as follows. In the next section, we contextualize the report and outline the various methods and data sources used in its research, including details regarding the interviews conducted with local stakeholders. We then provide the historical background to some of the issues and themes discussed in this paper. Against this backdrop, we explore common themes that emerged during the interviews, including feedback on the challenges and opportunities that currently face the Niagara region. Finally, we provide a summary of these findings and present recommendations for the future of economic development policy within Niagara.

¹ This paper (Report #2) is one of three completed in the second phase of this two-year project. The first phase sought to map the economic history of Niagara over the past 200 years. This second phase aims to analyze the region's current and emerging economic trends, focusing on industrial strengths and constraints against the backdrop of shifting provincial, national and global trends, opportunities and challenges. Report #1 (Conteh et al, 2024) looks at the numbers behind a case for smart industrial specialization while this current report (#2) examines the interviews conducted with Niagara stakeholders to highlight their suggested opportunities and challenges for the region. Report #3 (Olmstead and Conteh, 2024) is referred to as the report on "Brain Drain", providing an in-depth look at survey data from STEM graduates in programs at Niagara College and Brock University. Several of the recommendations in the three reports closely align with each other, though they draw from different data sources.

CONTEXT & METHOD

This report is the final part of a two-year project with a two-fold goal: first, to map the economic history and assets of the Niagara region over the past 200 years; second, to analyze the region's current and emerging economic trends, focusing on industrial strengths and constraints against the backdrop of shifting provincial, national and global trends, opportunities and challenges. These two goals, taken together, mean that the project is partly a narrative of Niagara's socioeconomic history and partly an analysis of the region's current and future trajectory as an economic hub and an innovation ecosystem in a changing world.

The first goal was accomplished through a combination of working papers that shed light on the general economic history of Niagara.² The papers focus on development trajectories in a select number of key economic sectors: Agribusiness, Manufacturing, Tourism, Marine Commerce, Electric Power Generation, and Information and Communications Technology (ICT). They shed light on how the region has adapted (to varying degrees of success) to the shifting currents of change, thanks to its border location, natural resources, economic, and institutional assets. Another key feature shared by all the papers is the role of local and regional policymakers who envisaged and invested in the requisite infrastructure as well as deployed a plethora of regulatory instruments, fiscal incentives and other policy levers to shape the trajectory of the sectors at critical crossroads over the past 200 years. Together, the papers present the story of a region that has helped to shape and enrich Canada into the nation we know today.

This report focuses on the analysis of the region's current and emerging economic trends, with the goal of prescribing evidence-based recommendations for the future of economic development policy within the region. It builds on the findings of those earlier working papers³ that were based on an archival review conducted through the Brock University Library Archives & Special Collections. Approximately 250 documents pertaining to local economic development were reviewed on-site in early 2023. This archival research was combined with a policy scan of more recent economic development materials. These were collected through municipal websites and direct correspondence with staff at Niagara Region and its 12 local

area municipalities: Fort Erie, Grimsby, Lincoln, Niagara Falls, Niagara-on-the-Lake, Pelham, Port Colborne, St. Catharines, Thorold, Wainfleet, Welland, and West Lincoln.

For this current report, researchers completed 25 in-depth, semi-structured interviews with local stakeholders. This included policymakers, business leaders, and community organizations. Participants were asked to describe the strengths and weaknesses of Niagara's regional economy, as well as the perceived opportunities and challenges for growth and innovation. These interviews form the basis of the following report.

Interviews were conducted between November 2022 and August 2023. Most of these interviews were conducted remotely using Microsoft Teams, though alternative arrangements were made available to participants upon request. Interview transcripts were then analyzed using NVivo, a qualitative analysis software. Results were validated by comparing them to human analysis using the same coding framework. Early results from this research were made publicly available in those earlier-mentioned working papers that were posted in Fall 2023. Researchers also presented their findings at a workshop in March 2024 to gather feedback from local experts. Insights gathered from these public venues are also included in the following analysis.

The analysis of these interviews has been supplemented by additional data collection and analysis conducted under the scope of the project. This includes economic data generated by Statistics Canada and sourced from Lightcast's Labor Market Analytics. This consists of two distinct sets of data that serve as prisms for analyzing economic trends: jobs by industry and jobs by occupation (for in-depth analysis of this data, see Conteh et al. 2024⁴). In addition to this economic data, our analysis is bolstered by a survey of 129 post-secondary graduates from Brock University and Niagara College, conducted between October 2023 and April 2024. Participants were asked questions about their post-graduation experience, including whether they have chosen to live and work in the Niagara region following graduation. Details regarding the survey can be found in Olmstead (2024).⁵ The themes presented below are thus summative, reflecting common themes across quantitative and qualitative datasets analyzed as part of a larger project.

² Readers can access these working papers at the project website <https://bit.ly/4cQq353>

³ *Ibid.*

⁴ Available on the project's website: <https://bit.ly/4cQq353>

⁵ *Ibid.*

Historical Background: Key sector trends of the past 50 years

In this section, we provide a brief overview of major trends, themes and milestones over the past 50 years that shaped the trajectory of key economic drivers in Niagara, namely: agribusiness, manufacturing, tourism, marine commerce, and electric power generation. The trends in these sectors are discussed in detail in the papers completed during the first phase of the project.⁶ Here we only provide a cursory overview to serve as context for the next section's discussion of Niagara's current challenges and opportunities as it charts its course through the next frontier of shifting global markets, technologies, demographics and climate.

What the five papers from the first phase of the project share is that, since the 1970s, Niagara's five key economic sectors have navigated roller-coaster waves of change. It was a period of growth, consolidation and decline punctuated by a gradual post-millennial resurgence in sectors like agribusiness, tourism, manufacturing and marine commerce, and stagnation in electric power generation. Electric power generation remains a vital part of the region's economic landscape but its strategic importance in terms of Niagara's navigation of changing global markets has receded to the background relative to other sectors.

Beginning in the 1970s, Niagara's agribusiness sector has witnessed gradual but consolidating strengths supported by critical investments in infrastructure. This includes the emergence of Niagara as a food and beverage manufacturing powerhouse along with the onset of agritourism and a budding agritech innovation ecosystem. However, the last 50 years have also been marked by shifts in the configuration of the region's labour pool and increasingly evident signs of climate change that threaten to upend the sector. Urbanization, urban sprawl, and rising land values are also transforming the demographic and physical contours of Niagara and raising questions about the viability of the sector. Nevertheless, the past decade has seen Niagara consolidate core sector strengths in food and beverage manufacturing and agritourism.

In manufacturing, the middle of the 20th century saw Niagara leverage locational assets like proximity to the United States and access to cheap hydroelectricity to carve a strong global niche in the auto industry. Policy initiatives over the decades consolidated these early advantages.

However, the 1980s and 1990s saw the decimation of the sector in Niagara (and most of North America and other Western market economies). Like these other places, Niagara had to weather the storms of an energy crisis and the liberalization of trade that shifted the competitive advantage to lost-cost jurisdictions in the Global South. Beyond these macro challenges, Niagara also had to contend with workforce constraints and decreasing land availability, as well as constraints related to transportation and logistics. The past decade has witnessed a gradual resurgence in manufacturing, but it is a mixed story in which some industries in the sector are rebounding while others are stagnating or continuing their decline. Recent policy initiatives such as the Foreign Trade Zone (FTZ) designation are attempting to leverage these industrial gains in areas like food and beverage manufacturing and exploring new opportunities in emerging fields like EVs.

Niagara's tourism sector has seen sustained vibrancy that rests on enduring features like the region's unique geography (including the iconic Niagara Falls), its natural beauty, and its rich pool of heritage assets. In more recent years, Niagara's tourism sector has diversified to include a world-class wine industry, nature-based tourism, sports tourism, and cruise ship tourism. However, the last 50 years have also been punctuated by perennial challenges of seasonal labour, limited transportation connections, and an elusive quest for talent retention. In recent years, COVID-19 wreaked massive havoc on the sector, though signs point to a post-pandemic resurgence. One of the lingering challenges is the age-old internal discord that plagues the capacity of the sector to fully and holistically leverage all the potentials and assets that Niagara offers.

In marine commerce, Niagara has seen roller-coaster waves over the past 50 years. The sector got a boost from the opening of the Welland Canal Bypass in the early 1970s, which cemented its status as a major global commercial artery and a strategic site of marine-based innovation. However, the sector was also vulnerable to global trends that ushered in rail and trucking as dominant modes of transportation, lending themselves well to the imperatives of just-in-time delivery. The sector was also haunted by the challenges of talent development and retention and the intrinsic seasonality of its core industries and businesses. In recent years, a worsening crisis of highway traffic congestion has led to renewed interest in marine transportation, which offers a more efficient alternative for importers and exporters across Canada.

⁶ Available on the project's website <https://bit.ly/4cQq353>

Like the other sectors above, electric power generation has a storied history in Niagara. The provision of cheap electricity through the first half of the 20th century help to make the region a hub for manufacturing. By the 1970s, however, energy rates in Ontario were increasing and Niagara was losing its advantage. The sector also went through structural shifts as Ontario shifted from a largely public grid to the pseudo-privatized system that exists today. These general trends of industrial restructuring and rising energy costs have continued into the present decade. However, stakeholders in the sector have taken note of the increasing focus on the emergence of alternative energies in Canada. How the sector responds to these trends remains

an open question. What is certain is that the historic importance of electricity power generation as a strategic sector in Niagara has faded to the background relative to other traditional sectors and emerging economic clusters.

The preceding discussion provides a brief highlight of the key trends, challenges and opportunities in the five sectors that served as Niagara's key economic drivers over the past 50 years. The discussion, distilled from papers completed in the first phase of the project, provides historical context for this report's analysis of the perspective of economic development stakeholders on the challenges and opportunities currently facing the Niagara region.

*Inside Sir Adam Beck Generating Station 1.
Photo courtesy Ontario Power Generation.*





FINDINGS: TOWARDS SMART INDUSTRIAL SPECIALIZATION

This section outlines common themes that emerged during our interviews with local stakeholders, contextualizing these themes using the several other data sources outlined above. Common themes included questions about Niagara's evolving brand, emerging strengths, and key features of its innovation ecosystem, as well as the challenges facing today's local economy. Some of these challenges are specific to Niagara, while others reflect broader trends and emerging best practices in economic development policy.

Niagara's Evolving Economic Brand

Over the past 50 years, economic development policy in Canada has shifted. Through the first half of the 20th century, economic development was driven largely by the practice of 'smokestack chasing,' with policymakers focused on industrial recruitment as a way to kickstart economic growth coming out of the Great Depression (Olberding 2002). In the 1970s and 1980s, amidst widespread restructuring and rising costs of business, policymakers shifted to focusing on business retention through business grants, cheap loans, and tax holidays. As capital and labour have become increasingly mobile, however, policymakers have adopted a more entrepreneurial approach to development, focusing on regional marketing, branding, and supports for small businesses.



This approach reconceptualizes regions as hubs for building economic competitiveness and supporting business productivity in the face of breakneck global shifts in technologies and markets, while also emphasizing the qualitative features that can make regions attractive to potential businesses, investors, and workers. Thus, over decades, economic development practice has transitioned from a 'shoot anything that flies, claim anything that falls' approach to a more strategic focus on building innovation support systems centred on enhancing the productivity of local businesses and the marketing of regions to businesses, investors, and highly skilled workers from around the world. Through the identification and leveraging of local strengths, this approach aims to answer two fundamental questions: *why here?* and *why now?*

In the context of these broader shifts, those we interviewed for this report felt that Niagara continues to benefit from a globally recognized and respected brand, owing in large part to the international fame of Niagara Falls. Millions are drawn to the famous cataract every year, and participants

noted that the easily exportable image of Niagara Falls provides a convenient reference point for potential investors, students, and businesses from around the world, who may be more familiar with the Falls than with any single municipality in the Niagara region. Within Ontario, as some of the papers in the first phase of this project noted, the region is also well known for its history as a hub for automotive manufacturing—a reputation that has lingered even as employment in the automotive industry has declined relative to the halcyon years of the 1970s to mid-1980s. Many interviewees felt that this legacy puts Niagara in a good position to capitalize on surging interest in electric vehicle (EV) manufacturing and supply chains in the province.

There was nevertheless concern that Niagara’s brand is growing stale and outdated. For example, as one of our earlier reports noted, while Niagara Falls is still integral to regional tourism, participants felt that enthusiasm for the Falls could detract from the diversity of Niagara’s overall tourism industry, including the growth of agricultural tourism and the wine industry (more on this below). There was also concern that memories of manufacturing’s decline relative to the 1970s are overshadowing the diversity and ingenuity of the manufacturers still operating in the region. **Many felt that Niagara is viewed as a region in decline, and that the region’s economic strengths and opportunities are not widely recognized outside of specific circles. This perception is so strong that it tends to overshadow positive growth trends⁷ over the past decade in some manufacturing industries.** This reputation is particularly damaging, participants suggested, to the innovative firms investing in new technologies, who may not be getting the recognition that their efforts deserve.

Those interviewed thus felt that Niagara is in a period of self-discovery, with new strengths and opportunities struggling to supplant the negative memories associated with the decline of local manufacturing towards the end of the 20th century (see Olmstead, Henstra, and Conteh 2023⁸). Most felt that Niagara needs a new story which communicates the strength and diversity of the region’s economy, and which pushes Niagara beyond the confines of its reputation as a struggling automotive town. In turn, participants suggested that an ambitious and easily communicated identity (or ‘elevator pitch’) could help market the region to external stakeholders, including to Canada’s upper levels of government. An identity developed

in collaboration with local post-secondary institutions was also seen as a way to position Niagara as *the place to be* for prospective students interested in specific sectors, technologies, and opportunities.

Participants were consistent in feeling that this new identity should be both region-wide and region-led. More specifically, participants felt that it is Niagara Region’s responsibility to consult and develop a coordinated and comprehensive vision for individual municipalities to follow and support. Though there was a recognition of the Region’s newest Economic Development Strategy as a preliminary effort, many felt that the strategy remains too reactive and non-committal regarding Niagara’s economic future. That is, while most felt that their interests were well-represented in the strategy, there was nevertheless concern that, in casting a wide net, the strategy fails to articulate a concise and marketable vision. There was thus an interest in seeing the Region take a more ambitious leadership role in crafting Niagara’s economic brand, providing a clear vision behind which stakeholders in the region can coalesce and pursue.

In short, Niagara’s regional economy appears to be at a critical juncture. Previously dominant subsectors like automotive manufacturing and commercial tourism are giving way to, or are supplemented by, new opportunities in food and beverage manufacturing, EV manufacturing, agritourism, and more. Amidst these changes, stakeholders are eager to cast off perceptions of Niagara as the place where things *used* to happen. Instead, those we interviewed were eager to craft a new story—one that captures the diversity and vibrancy of the region while articulating a precise and ambitious vision for the future. At the heart of this approach is a recognition of the increasing mobility of labour and capital, and of the need to commit to a clear economic identity that establishes the Niagara region as *the place to be* for those interested in select industries. As one participant put it: “You can get information about any place in the world today because of the power of the Internet. The good news is we have a strong brand. We need to polish the brand. We need to nurture it. We need to steward it. We need to care for it. You can’t take it for granted.”

We can think of this as a shift away from a “concierge” approach to economic development, and towards what we call an “orchestrator” approach. The former connotes

⁷ See Conteh, Martinello, Olmstead and Henstra, 2024 (Wilson Project Report #1).

⁸ Available on the project’s website <https://exhibits.library.brocku.ca/s/NiagEconHist>



Valbruna ASW Inc. in Welland. Photo courtesy Niagara Economic Development.

passive housekeeping while the latter points to a strategic mobilization of actors and resources within industries that are given clear priority in economic development efforts (Asheim et al 2019; Wolfe and Gertler, 2016; Breznitz, 2021). The concierge style is more consistent with a traditional focus on 'shooting anything that flies, claiming anything that falls,' while the orchestrator style is aligned with a focus on strategically framing a compelling narrative and building innovation support systems around select industries. Though this approach maintains traditional commitments to investment attraction, administrative support, incentivization, and so on, it also requires policymakers to think beyond these divides, take a more holistic approach to development efforts, and frame an equally forceful brand narrative.

Smart Industrial Specialization and Niagara's Innovation Ecosystem

Though it is beyond the scope of this report to prescribe a vision for Niagara's economic future, the interviews conducted for this research nevertheless provided a preliminary picture with which to work. More specifically, those interviewed were consistent in feeling that Niagara's strengths rest in the overlap between agriculture, manufacturing, and tourism within the region. Other sectors, such as hydroelectric power generation, marine transportation, and information and communication technologies, or service sectors like health care, were seen as playing a supporting role for industries in these foundational sectors, though they may also constitute economic clusters on their own.

The frequency with which these three sectors were mentioned in our interviews is intuitive given their long history in Niagara. Each also builds on unique and irreplicable locational advantages that set Niagara apart from other city-regions. For instance, a temperate climate and high-quality soil make Niagara uniquely suited to the growing of grapes and other tender fruit, while the region's position along the Canada-United States border, and access to the St. Lawrence Seaway, makes the region an attractive site for export-heavy manufacturers. Proximity to the border has also made Niagara a significant node in Canada's political history, with historical buildings and battlegrounds supplementing the natural wonders of Niagara Falls and the Niagara Escarpment. As participants made clear, these historic and irreplaceable qualities have led to a network of experts, institutional supports, and incentives that support the growth of agriculture, manufacturing, and tourism within Niagara.

Though these sectors have long formed the bedrock of Niagara's economy, however, many of those we spoke with felt that their true strength, and opportunity for growth, rests in their interconnectivity. For instance, the expansion of local farms into tourism and retail offerings was consistently identified as a growth opportunity, and an important tool for improving the resiliency of the agriculture sector. Participants also noted the ability of the tourism industry to leverage Niagara's economic heritage through the repurposing of old industrial sites, power plants, and the Welland Canal into valuable tourist attractions.

Perhaps most significant, however, was the synergy identified between agriculture and advanced manufacturing in the region. Driven, in part, by labour shortages, farmers are investing in new technologies that can automate and improve the efficiency of their operations (see Lemay et al. 2021). Many of these technologies are being developed in collaboration with local manufacturers and innovation centres and are supported by the world-class research being conducted at institutions like Brock University, Niagara College, and Vineland Research and Innovation Centre. More generally, the growth of Niagara's grape and wine industry has given the region a foothold in beverage manufacturing, creating additional connections between manufacturing and tourism within the region. The result is a robust collection of economic clusters that escape traditional sectoral divides.

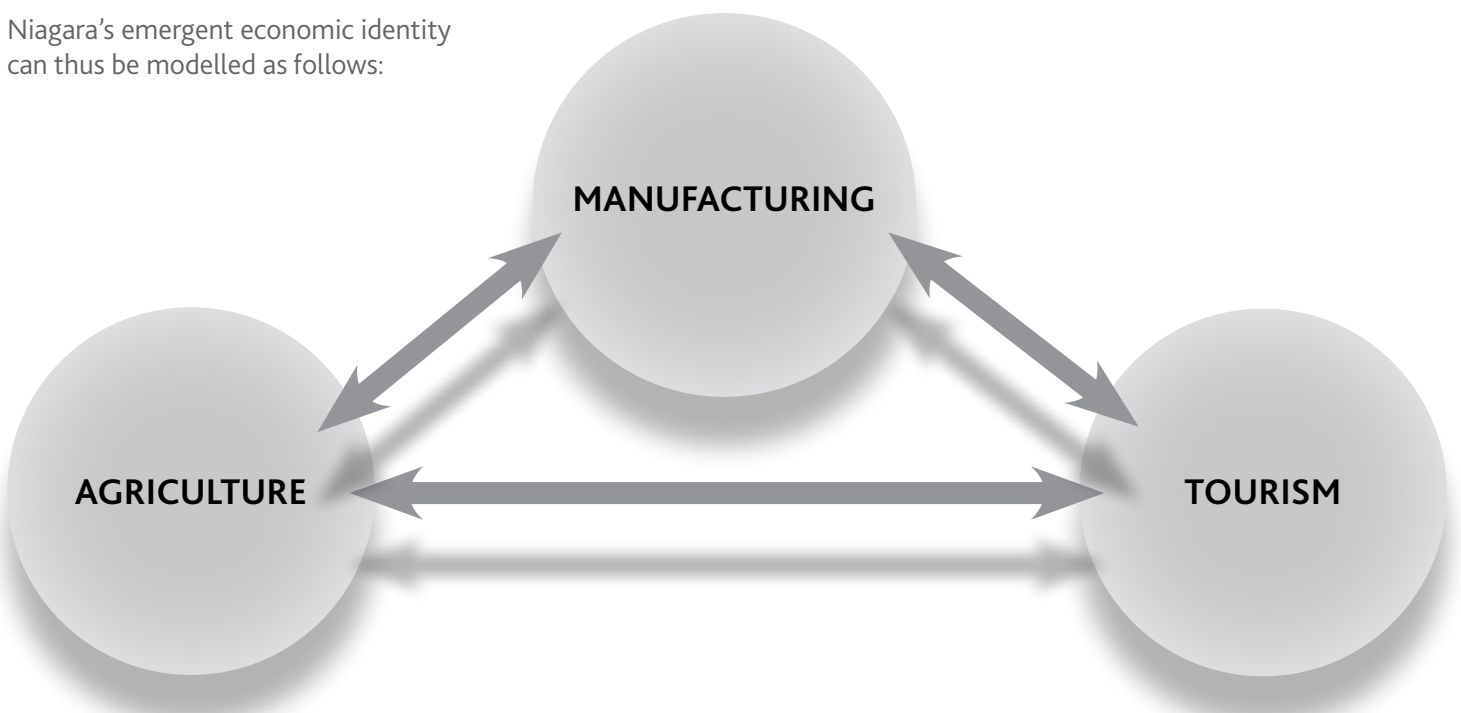
As Conteh et al. (2024) explore in more detail, this perception of Niagara's economy is borne out in local employment data. In addition to the aforementioned strengths in beverage manufacturing, for instance, Niagara is experiencing exponential growth in industries like Animal food manufacturing, Meat product manufacturing, and Other food manufacturing. The region has also seen significant growth in Industrial machinery manufacturing over the last decade, as well as in manufacturing related to health care and life sciences (more on this below). This is in addition to growth in several other industries within the manufacturing sector, pointing to increasing specialization in Niagara's regional economy.

Interestingly, the Niagara region has seen a decline in tourist industries related to Heritage institutions, Traveller accommodations, Drinking places (alcoholic beverages), and Gambling industries, though each remains a significant source of employment within the region. The region has seen substantial growth in employment related to arts, sports, and event promotion, and many in the region are finding work as independent artists, writers, and performers.

Within this model, Niagara's economic strength is not in any single sector, but in the connections and overlap between sectors, and the industries that transcend simple sectoral divides. These interconnected industries are in turn supported by a scaffolding of economic activity that participants also identified as opportunities for growth. For instance, many noted that as Niagara's economy and population grows, professional services and health care will become increasingly important. There are therefore opportunities for additional investment in new hospitals, long-term care facilities, and research and innovation centres that will support Niagara's growing (and aging) population.

Participants also noted the importance of Niagara's transportation network. Access to the Welland Canal, for example, has encouraged the growth of a vibrant marine sector in Niagara, as well as strengths in transportation and logistics. Conteh et al. (2024) note, to that end, that growth in Niagara's marine commerce sector has outpaced Ontario's and Canada's over the past decade, despite competition from other modes of cargo transportation.

Niagara's emergent economic identity can thus be modelled as follows:



Many of those we interviewed also expressed interest in the expansion and development of industrial lands around the Niagara District Airport, and the potential genesis of an aerospace sector in Niagara. While each of these sectors presents an opportunity for further study and growth, they are also what Conteh et al. (2024) call “all purpose sectors,” creating the infrastructure that supports Niagara’s broader economic identity. As Conteh et al. explain, one significant way for regions to think about these sectors is not as stand-alone sectors distinct from, for example, manufacturing, agribusiness, or tourism. Rather, they are foundational to the resilience and adaptive capacity of all sectors of the economy and the very well-being of society. Their full value also may not be captured in traditional metrics like GDP contribution, exports, and the like.

As the region works to orchestrate its economic future, however, there was consensus that its focus should be on the interconnected and irreplicable strengths that exist between industries in agriculture, manufacturing, and tourism within Niagara. One popular concept for explaining this approach among leading regions is “smart industrial specialization.” The term has its roots in Europe but has been adopted worldwide as a concept and practice of economic development by which regions pursue growth and prosperity by identifying and focusing on their industrial strengths. In this context, the notion of ‘smart’ refers to a precise and tailored understanding of composites of industries within and across sectors that offer the greatest promise for a region in the context of fast-changing technology and markets.

In some cases, these industries transcend sectors, such as agritourism or agrifood manufacturing. In other cases, they may be subsections of a sector, such as electric vehicles within automotive manufacturing. Implicit is the recognition that no region, and not even larger ones in Canada like Toronto, Montreal, or Vancouver, can claim competencies in all aspects of a sector.

Essential to this specialization is the identification of, and investment in, core assets. It is also important to pay close attention to those industries that register a high growth rate and a high concentration of jobs within a region. Understanding these trends, and connecting them to a region’s strategic direction, provides the foundation for a smart and focused industrial specialization in which a region deploys its investments into building critical assets in specific industries that constitute an economic cluster.

An economic cluster, in this context, is a geographic concentration of interconnected companies, specialized suppliers, service providers, firms in related industries, and

associated institutions in particular fields that compete but also cooperate (Porter 1990). The core elements of economic clusters are interlinked companies within a given sector’s value chain whose complementary activities create competitive synergies for individual businesses within the cluster. It is important not to confuse these composite industries with an entire sector if a region’s strategic focus is relevant in building on its core competencies.

Niagara’s strategic directions have outlined plans for development and support for established sectors such as agriculture, manufacturing, and tourism, as well as several emerging sectors. However, those we interviewed were consistent in feeling that Niagara could do more to support the industries within and across sectors that set Niagara’s economy apart. Understanding and strategizing along these lines of trans-sectoral industries are the necessary elements of smart industrialization, and those we interviewed expressed a clear mandate for the Region to develop a comprehensive and committed plan that supports growth in these synergistic domains.

As an example, many of our interviewees felt that the region’s assets present a massive potential for growth among agrifood, tourism, and creative industries that could match or exceed places like the much-celebrated Napa Valley and Okanagan Valley. What is lacking, participants suggested, is a cohesive strategy to enable integration and convergence among complementary industries transcending several sectors, and the coalescing of these emerging strengths into a cohesive and digestible economic identity. This would involve constructing an ‘integrated cluster’ that brings together key stakeholders from several distinct and siloed economic sectors in collective forums to identify and address the market, fiscal, and regulatory barriers constraining the agritourism industry.

Just as the conductor of an orchestra depends on each individual musician to create a symphony, so too will the orchestration of Niagara’s economy depend on the ability of the Region to respect, leverage, and coordinate the unique assets and expertise of each local area municipality. In this regard, the perceived strength of the trifold structure outlined above is that each interconnected sector manifests in unique but interrelated ways among Niagara’s townships, towns and cities. While tourism in Niagara-on-the-Lake might include wineries, theatre, and historic buildings, for example, cities like St. Catharines and Niagara Falls offer a more urban tourist experience. While Niagara has a regional strength in agriculture, the number, type, and size of farms also varies between municipalities (Niagara Region 2016).

Welland Canal Lock 1. Photo courtesy St. Lawrence Seaway Management Corporation.



Communities also relate to manufacturing differently. While some municipalities have an abundance of investment-ready employment lands, others are working within the confines of more restrictive land-use policies like the Greenbelt Act and Niagara Escarpment Commission. For these more constrained municipalities, participants noted that tourism and value-added agriculture have been especially attractive.

Smart industrial specialization need not forfeit this economic diversity. In fact, the trifold structure outlined above leaves ample room for local area municipalities to find their own niche *within* Niagara's broader economic identity. Municipalities adjacent to the Welland Canal may cultivate strengths in marine transportation, while others find collaborative ways to promote value-added agriculture in terms of retail and hospitality. What is clear, however, is that traditional divides between investment attraction, business retention, and expansion no longer hold, and that economic development at all levels of government requires a more comprehensive, coordinated, and collaborative effort. We will return to this idea later.

Niagara's Economic Challenges

Though there are reasons to be optimistic about Niagara's capacity for growth and innovation at the intersection of agriculture, tourism, and manufacturing, our interviews also made it clear that there are several challenges facing the region. This includes the lingering impacts of the COVID-19 pandemic, including questions surrounding the rise of remote

work, the popularity of e-commerce, and a shift in the funding and venture capital landscape amidst high interest rates and inflation. In addition to these challenges, however, participants also expressed deeper concerns about Niagara's economic foundation that we can divide into three distinct but interrelated themes: lock-in, organizational thinness, and internal fragmentation (Töttling and Trippl 2005). This section deals with each of these challenges in turn.

LOCK-IN

Lock-in refers to the tendency of an economic sector to become stuck in its ways, from which reinvention and renewal seems nearly impossible or staunchly resisted. Globalization and technology are disruptive forces that need to be leveraged and managed for a region's key economic sectors to remain relevant and competitive, but past successes can lead some stakeholders to become resistant to change. Lock-in thus deals with the question of adaptability, and of a region's capacity to innovate, pursue new opportunities, and grow amidst broader patterns of development.

Our interviews revealed clear concern about lock-in within Niagara. Participants felt that Niagara's high quality of life, and relative resiliency compared to other manufacturing towns, have led many to take economic success for granted within the region. Many expressed concern that there is a cultural divide between those who want to innovate and pursue change and those who would prefer to maintain the status quo.

For some, this divide was attributed to tensions between Niagara's existing residents, who may be comfortable with the way things are, and the influx of new residents arriving from the Toronto area, who want to see more local opportunities. Conversely, participants felt that city-regions facing more immediate crises have been more willing to take risks, pursue innovation, and revitalize their economic identities. The result was an overwhelming feeling of untapped potential among those interviewed for this project.⁹

One area where this lock-in appears to be especially damaging is in the context of new housing development. As we explore in more detail below, the construction of new and more affordable housing across Niagara will be critical to the region's economic success and sustainability. This is especially true in the context of labour shortages in agriculture and tourism, sectors which often depend on seasonal and lower-wage positions. These precarious and low-wage jobs, combined with high housing prices, can be particularly prohibitive to young workers who would find it difficult to meet even their costs of living. Many of those we spoke with nevertheless expressed concern regarding public resistance to new housing across Niagara, and the challenges connecting Niagara's need for housing to an overarching economic vision that residents will support. Escaping this lock-in will require a clear and ambitious strategy that coalesces Niagara's current needs around a cohesive and positive vision for the region's economic future.

ORGANIZATIONAL THINNESS

The second challenge facing Niagara's economy is known as organizational thinness. This refers to the lack of institutional platforms or networks for strategic visioning, collaboration, and planning needed to sustain an economic cluster's resilience and adaptability. Organizational thinness speaks to the quality of local governance but should not be confused with government. Governance refers to any platform that commands the legitimacy to mobilize key actors from government, the private sector, post-secondary institutions, research centres, and other community groups to coordinate efforts and align strategies for building a resilient and adaptive innovation ecosystem. This means building an infrastructure of knowledge generation and mobilization that is well-aligned with the needs of businesses in key industries.

Currently, Niagara is host to a range of industry and institutional supports. Some of the central players within Niagara's agribusiness sector, for instance, include the following: Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI), Niagara College's Agriculture and Environment Innovation Centre (AEIC) and Canadian Food and Wine Institute (CFWI), the Vineland Research and Innovation Centre (VRIC); and Niagara Parks Botanical Gardens and School of Horticulture. Other supports include Brock University's Validation, Prototyping and Manufacturing Institute (VPMI) and Brock LINC, Niagara College's Walker Advanced Manufacturing Innovation Centre (WAMIC), Canadian Food and Wine Institute (CFWI), Agricultural and Environmental Technologies Innovation Centre (AETIC) and Greenhouse Technology Network (GTN). There are also technology incubation platforms like Innovate Niagara and the Niagara Falls-Ryerson Innovation Hub (NFRIH) that offer a range of support services in their specialized domains. These all complement Niagara's longstanding chambers of commerce, industrial associations, and enterprise supports.

As our interview data confirm, these organizations continue to be regarded as distinct centres of excellence. Collectively, they point to a region with the vital foundations of a knowledge-intensive economy. These organizations provide invaluable support to local businesses and entrepreneurs, as well as providing important research and analysis to policymakers in the region. Such resources were viewed as particularly valuable to small businesses, who may not have the resources of expertise needed to innovate and grow on their own. Participants noted, for instance, that post-secondary institutions often have the infrastructure and technical expertise needed to deliver on the visions or needs of local businesses. Participants thus emphasized the importance of keeping these supports up to date, including through progressive intellectual property policies, risk management strategies, and sectoral expertise to track with Niagara's smart industrial specialization.

Still, there was a sense among participants that these organizations do not share a common vision or language when it comes to Niagara's economic future. In many cases, they are also divided by geography, sector, and scale, with some focusing on industry-wide innovation while others work to support small businesses. There was some concern, in this regard, that small businesses—for whom institutional

⁹ Interestingly, some felt that pessimism about Niagara's regional economy has also led to stagnation. As described above, the idea that Niagara continues to be a struggling manufacturing town was seen as a distraction from the opportunities that exist for Niagara today, as well as the range of economic activity already taking place within the region. While many take Niagara's success for granted, others thus suggested that Niagara is hampered by a widespread defeatism, and continued nostalgia for Niagara's economic heyday.

supports are especially critical—are the most overlooked by Niagara’s existing supports. This is particularly worrisome, participants suggested, insofar as small businesses are less likely to have the resources needed to innovate and grow on their own.

They may also lack the time needed to pursue and foster connections with existing supports, with many small business owners spending most of their time busy with the day-to-day operations of their business. This is especially true for older business owners, who may be more worried about succession and retirement planning than modernization and digitization, for example. Given Niagara’s emergent strengths in agri-innovation, the plethora of small agricultural operations within the region, and the shifting demographics of its agriculture sector, this observation by participants is noteworthy.

There is thus a need to collect Niagara’s existing institutional assets around an integrated ecosystem that can support, serve, and drive innovation among existing and new businesses in the region. The primary vehicle for leveraging the full potential of economic clusters in the modern knowledge-driven economy is to create industry-led regional innovation systems. Innovation systems are institutionalized and sustained interactions governed by soft rules and norms, with organizations at their centre committed to facilitating the sharing of information, knowledge, and resources as well as sustaining intense linkages and cooperation among agents and actors (Wolfe and Gertler 2016; Conteh 2025).

The literature on regional innovation systems in pursuit of smart specialization views economic development as more bottom-up than top-down (Asheim et al 2018). The primary rationale behind this approach is acknowledging that even the most carefully crafted economic development strategies or the smartest EDOs often do not possess ‘ex-ante’ knowledge about changing technologies, shifting markets, emerging opportunities and the future. These can only be revealed and exploited through an interactive process of multi-actor experimentation. Businesses are the main drivers of discovery, supported by innovation hubs. A functioning industry innovation consortium would thus have a set of mechanisms and concrete infrastructure to house and foster problem-solving, knowledge creation, distribution, and diffusion.

Innovation systems are the institutional scaffolding of smart industrial specialization. A critical point to note about building innovation systems is to reject the distinction between investment attraction, retention and

expansion. It also means rejecting narrow silos of business support programs in which innovation hubs focus on start-ups. Innovation systems based on smart industrial specialization support businesses across the spectrum, from start-ups to mid-range to anchor firms, within a given industry. They are based on sustained and iterative dialogue among consortium participants to facilitate experimentation with new R&D and innovative activities, technology adoption and adaptation (Asheim et al 2019).

In Niagara’s case, the region’s existing institutional assets could be leveraged into industry-led consortia that can strategically work across geographies and scales, uniting small and medium-sized businesses with larger companies and research centres to pursue a collective vision for Niagara’s economic future. Industry-led consortia could unite businesses within and across priority sectors to participate in the creation of industry-specific regional innovation strategies. These platforms then set priorities for investing in and building productivity and competitive advantage for businesses by developing and matching research and innovation to the needs of local businesses. One example to draw from is that of John Peller, whose work in coordinating and fostering support for Niagara’s wine industry was mentioned frequently in our discussions with local stakeholders. Even these ongoing efforts, however, could do a better job of drawing connections between businesses of varying sizes.

Smart specialization through industry-led innovation consortia means the integration of institutional assets into hubs to avoid duplication and fragmentation of efforts within the region. Industry-led innovation consortia are designed to elicit bottom-up responses by ensuring that projects emerging from these platforms are driven by the needs of businesses. Even as Niagara Region works to chart a course for the future, it must therefore create and maintain the sandbox (or sandboxes) in which businesses and institutional supports in the region can operate, collaborate, and coordinate their efforts. Such networks can play a critical role in supporting and de-risking innovation for Niagara firms. It is worth noting, here, the role that initiatives like data co-operatives, data trusts, and otherwise shared repositories have played in supporting information exchange and innovation within the agriculture sector (Fulton et al. 2021).

INTERNAL FRAGMENTATION

This leads to the third challenge identified in our interviews with local stakeholders: internal fragmentation. This refers to the absence of shared cognitive frames and narratives that provide the glue for

binding together key actors in a given economic cluster. The key question is whether actors share a common understanding of industry trends, including emerging opportunities and challenges. A shared cognitive frame positions a constellation of actors to 'get on the same page', so to speak, and jointly exploit emerging opportunities. Such a cognitive frame sustained by institutionalized and regular policy deliberations is a prerequisite for strategic information flows between government, research centres, and industry groups.

In the case of Niagara, we can also think of fragmentation as it pertains to the relationship between upper and lower levels of government within the region. Indeed, past research has highlighted the disaggregated and sometimes confrontational nature of economic development policy within the region, and the tensions that can arise between Niagara Region and the 12 local area municipalities (Conteh and Panter 2017). The explanation for these apparent tensions is diverse, including friction between urban and rural development, differences between local economies, and even character conflicts among local politicians.

Those we spoke with were nevertheless clear that there is a need and appetite for collaboration in Niagara. The interconnectivity of Niagara's regional economy has created interdependence among local area municipalities, and many participants noted that opportunities which

benefit one municipality often benefit others within the region. Workers in Niagara-on-the-Lake's tourism industry might live and shop in St. Catharines, for instance, while tourists staying in Niagara Falls might explore value-added agriculture offerings available in Pelham. Small businesses in Lincoln might access enterprise supports in St. Catharines, while researchers at Niagara College and Brock University provide resources and expertise to manufacturers in Welland. This interconnectivity necessitates coordination, and participants felt that economic efforts within the Niagara region remain generally positive and collaborative.

Most participants nevertheless suggested that there are institutional and technical barriers that make collaboration difficult in Niagara. Many felt that the economic development efforts of lower-tier municipalities remain quite siloed, even in cases where policymakers want to be more collaborative. Many pointed to institutional disaggregation as a key barrier, beginning with the simple observation that economic development officers work in offices dispersed across Niagara. Others pointed to differences in staff capacity as a challenge, noting that many smaller municipalities in Niagara do not have, or have only recently created, dedicated economic development staff positions. Many also noted the abundance of elected officials in Niagara, and the difficulties that can arise from operating without a shared, comprehensive vision for the future of the region.



Microgreen harvester from Hamill Agricultural Processing Solutions in Niagara Falls. Photo courtesy Niagara Economic Development.

Finally, stakeholders mentioned overlap and confusion in the division of responsibilities between regional and municipal staff, and the interconnected nature of investment attraction, business retention, and business expansion when it comes to economic growth in Niagara.

According to those interviewed for this report, the issues arising from disaggregation are particularly salient when it comes to industrial land development. For starters, the amount of land available for development varies widely between municipalities. The quality and volume of data available on employment lands also varies, with some municipalities lacking the staff capacity needed to build a comprehensive inventory of their available employment lands. This makes coordination an informal and arduous process, often relying on the serendipity of economic development staff. One participant recounted the following story:

“ I remember a gentleman... He would tell a story that he got a call from Welland Economic Development, and then Niagara Falls Economic Development, and they would ask him to come meet a company because they're looking at locating there, and he'd go meet them in Welland, and then go to Niagara Falls, meeting the same people. Why is this happening? Cause that's the structure we set up for ourselves... It's not a personal failure. It's how you set the system up. ”

Participants thus expressed interest in a shared repository of data on employment lands for Niagara municipalities, as well as shared standards and regulations for employment land development. The Region's new "Niagara Signature Sites" initiative is noteworthy, in this regard, and promises to be an important tool for addressing disaggregation in Niagara.

More generally, there is a need for more formal and streamlined venues for collaboration, coordination, and information exchange across industry and government. Despite the interconnected and intraregional nature of Niagara's economy, there continues to be a perceived lack of coordination within the region, and many felt that economic development efforts remain siloed and narrow. Again, participants emphasized the importance of regional leadership in addressing this fragmentation and aligning Niagara's economic stakeholders towards a common goal.

Stakeholders also expressed interest in improving the interoperability of municipal data and services. One participant mentioned the possibility of reviving Niagara's dormant Open Data program as a way to encourage research and innovation in local governance. Though not

directly related to economic development, such initiatives reflect widespread interest in digitalization, service modernization, and the potential value of 'urban data' (Urban Data Centre, n.d.).

TALENT DEVELOPMENT AND RETENTION IN NIAGARA

Another consistent theme in our conversations with local stakeholders was the workforce challenges facing Niagara. Many expressed concerns regarding the development and retention of highly skilled labour in Niagara and suggested that too many post-secondary graduates are leaving Niagara to pursue opportunities elsewhere upon graduation. Such concerns are longstanding, having come to the fore during the protracted decline of manufacturing employment in Niagara (Cassidy 2015). In this section, we explore Niagara's talent development and retention landscape, drawing both on our stakeholder interviews and data collected through a survey of recent post-secondary graduates from Brock University and Niagara College (for a more thorough review of this data, see Report #3 on "Brain Drain").

Concerns over talent development and retention in Niagara are not unfounded. While it is common for many post-secondary students to leave a region upon graduation, Niagara has long trailed the rest of Ontario when it comes to education attainment, with higher percentages of Niagara residents having no certificate, diploma, or degree (Niagara Region 2022; St. Catharines 2017; Niagara Falls 2014; Welland 2004). Niagara also has proportionately fewer young people than the rest of the province, reinforcing the perception that Niagara is for "seniors and tourists"—not young workers and entrepreneurs (Blushak et al. 2009; Phillips and Durrant 2017). Our survey of recent Niagara graduates also finds that, while many come to Niagara from elsewhere to pursue post-secondary education, a higher percentage of students leave upon graduation, resulting in a net-loss of educated labour over time (Olmstead and Conteh 2024).

The reasons given for this particular challenge, both historically and in our interviews, are diverse. Many participants felt that there may not be enough competitive job opportunities available to students coming out of post-secondary school, and that too many of the jobs available are low-paying and precarious. This is consistent with our survey of recent graduates, which suggests job opportunity was a driving force in leading many graduates to pursue employment outside of Niagara (Olmstead and Conteh 2024). In their review of employment data for Niagara, Conteh et al. (2024) similarly find that some of the top occupations in the region include food counter attendants, kitchen helpers, food and beverage servers,

cooks, nursery and greenhouse labourers, harvesting labourers and livestock labourers—traditionally low-wage and precarious employment. This suggests that available opportunities may not necessarily be commensurate with the expectations and skillsets of post-secondary graduates, while also presenting limited opportunities for career advancement.¹⁰

Conversely, interviews with stakeholders suggested that many local businesses are struggling to fill vacant positions. In fact, labour shortages were viewed as a key factor driving innovation and the need to automate in the agriculture sector. While part of this may reflect shifting workforce expectations, stakeholders were also clear that many employers feel like they are struggling to find the specific skillset they are looking for. There is thus an apparent disconnect between Niagara's evolving economy and its current workforce.

One suggestion made by stakeholders was the development of more place-based opportunities for students, and the need for long-term coordination between local programming and the needs of Niagara businesses. One participant noted that students interested in becoming a millwright, for example, must currently go to Hamilton to study, while another mentioned a lack of marine-focused programming as a potential challenge to talent retention in the marine sector.

Research opportunities and co-op placements that familiarize students with Niagara's economic strengths, political landscape, and nature-based offerings were also mentioned as a potential tool for improving connections between students and the region. More generally, participants felt that initiatives showcasing Niagara's economic strengths to current and prospective students could help strengthen the region's identity as *the place to be* for students interested in fields related to Niagara's industrial specialization. In short, opportunities that connect students to the business community *prior* to graduation were seen as an important way to improve Niagara's talent development and retention efforts and create an entryway into the economy.

Conversely, participants noted that partnerships between post-secondary institutions and the community can help introduce employers to the sorts of soft skills that

post-secondary graduates provide. Hackathons, summer employment opportunities, and research internships were all framed as tools for connecting knowledgeable and innovative students to the specific and immediate needs of local businesses. While this could help address existing workforce challenges, participants also felt that this might make the region more attractive to prospective businesses by clearly demarcating the strengths of education programming in the region.

At the same time, programs that mobilize post-secondary students towards current business needs were framed as an important tool for de-risking innovation for small businesses, who may not have the resources or expertise needed to explore opportunities for innovation on their own. For example, programs that connect businesses with students capable of building a website and E-commerce platform, for instance, can be transformational.

Finally, compensation was framed as a critical lever in the talent development and retention conversation. As Niagara transitions towards a post-industrial and service-oriented economy, participants noted that secure, high-wage positions have been replaced by more precarious and often part-time positions—a trend that is borne out in the economic data (Conteh et al. 2024). At the same time, and as we explore in more detail below, the cost of living in the Niagara region is increasing. To that end, our survey of recent graduates finds that compensation is a key factor in driving graduates to pursue employment outside of the Niagara region, and that those working outside of Niagara are more likely to be in higher income brackets than those working in the region (Olmstead and Conteh 2024).

Though it is beyond the scope of this report to explore the issue of local compensation in detail, those we spoke with nevertheless expressed interest in tools that can help to make work in the Niagara region more enticing, such as investments in Niagara's living-wage program, profit-sharing initiatives, more flexible work schedules, work from home opportunities, and so on.

In tandem, these initiatives promise to help chip away at Niagara's talent development and retention challenges. However, as past research has shown, and as our interviews confirm, talent development and retention are about more than creating (or improving) connections

¹⁰ Some of those we spoke with also connected Niagara's workforce challenges to an apparent strength of the region: employee loyalty. Simply put, higher paying jobs are highly coveted, and few people want to leave once they find secure employment in Niagara. While this reflects well on local employees, participants nevertheless suggested it may be exacerbating the shortage of viable career opportunities for new graduates looking to enter management and supervisory positions.

between students and local businesses. They are also about improving connections between students and the broader community, fostering a sense of belonging, and ensuring that the qualities that make a place unique and attractive to workers in the early stages of their careers remain accessible (Florida 2009).

On the surface, given Niagara's high quality of life, its irreplicable geography, and its blend of urban and rural cultural programming, the region would appear to have the winning ingredients for this element of the talent development and retention recipe. However, those we spoke with felt that many of these tremendous offerings remain inaccessible to post-secondary students.

Insofar as many post-secondary students rely on public transit, for instance, participants noted that it is either impossible or impractical for students to visit Niagara's rural municipalities during their studies—preventing them from accessing the landscapes, festivals, and other attractions that help to set Niagara apart. A lack of convenient and reliable public transit also discourages the type of spontaneity and flexibility that many young workers desire, and those we spoke with suggested that students are quick to return to larger cities like Toronto where they can live a more urban lifestyle. This is a sentiment that local policymakers have also expressed (Niagara Falls 2014; St. Catharines 2017). Others mentioned a lack of connection to Niagara's urban cores, and the need for an improved downtown presence on the part of Niagara's post-secondary institutions. This is consistent with Gervais, Fullerton, and Fucile (2020), who find that post-secondary students in Niagara are often confined to a "university bubble" during their studies, without any deeper ties to the community in which they live.

Thinking Beyond the Traditional Confines of Economic Development Policy

As the example of talent development and retention shows, economic development is broader than the traditional confines of economic development policy. Rather, economic growth depends on a holistic and place-based approach to community development, and a broader swath of policies that ensure economic opportunity is accompanied by a sense of belonging and high-quality of life. Niagara has historically benefited, in this regard, from its temperate climate, natural wonders, relative affordability, and blend of urban and rural experiences, even if some of these experiences have remained inaccessible to post-secondary students. Simply put, Niagara is seen as offering something for everyone, and maintaining, improving, and leveraging Niagara's quality of life are viewed as important steps toward future economic growth.



Photo courtesy Brock University, Colin Dewar.



Two challenges were nevertheless identified in our interviews with local stakeholders: public transit and housing. For starters, participants noted that it is getting harder to get to and around the Niagara region. Growing congestion along the QEW highway is making it especially difficult for potential tourists to visit Niagara from the Greater Toronto Area, particularly on busy holiday weekends. Many were thus enthusiastic about the potential for expanded GO Train service between Niagara and Toronto. Others mentioned the potential value of having “a high caliber airport” in the region, and the improved access such an airport would provide for travellers interested in visiting Niagara. Though not explicitly mentioned in our interviews, it is also worth noting past interest in the development of high-speed rail connections between Toronto and New York City, and the value that such a connection would hold for the Niagara Peninsula (Niagara Falls 2019).

A lack of convenient and reliable public transit within the region is also making it difficult (if not impossible) for potential workers to access jobs in rural communities, where industries like agricultural tourism are expected to grow. In fact, a lack of convenient and reliable transit connections between urban and rural communities was framed as one of the key challenges facing Niagara’s workforce, insofar as those working in Niagara’s rural communities are more likely to find housing in the region’s urban centres. As mentioned above, this lack of convenient public transit is especially detrimental to talent development and retention in the region, which also prevents younger workers from accessing the unique amenities that Niagara has to offer. Though things like on-demand transit are helping to bridge the gap, challenges remain.

Those interviewed all agreed that the recent uploading of public transit to the regional municipality is a step in the right direction, albeit long overdue, and expressed a desire to expedite improvements to local transit service. There is also interest in expanding alternative and active transportation facilities in Niagara, and in pursuing micromobility solutions to some of the ‘last mile’ challenges that face Niagara’s existing transit system (see Conteh, Phillips, and Ferguson 2017, p. 7, for a study on transit accessibility).

It is also getting more expensive to live in Niagara, even as housing remains relatively more affordable than other urban centres in the Greater Golden Horseshoe. Though the need for more housing is widely recognized, there was a concern among stakeholders that current conversations around housing do not reflect the significance of its impact on the broader economy. Reflecting on their experience with local council meetings, for instance, one participant noted that the economic contribution of new housing

is rarely discussed during presentations for proposed developments. Others noted that rising housing costs can place upward pressure on local wages and exacerbate the workforce challenges explored above.

Those we interviewed were also clear regarding the need for more diverse types of housing. While Niagara has tended towards sprawling forms of residential development in the past, this is creating challenges around walkability, the efficacy of public transit and other municipal services, and the encroachment of residential development and financial speculation into agricultural land. Detached homes also tend to be more expensive than condos or purpose-built rentals, and entry points into the housing market are limited. Many participants mentioned the shifting preferences of young workers, as well, and the desire for smaller housing units that are located closer to essential services, transit routes, and downtowns. Participants were thus in agreement that Niagara needs to build up its housing density. Those working in agriculture were especially strong proponents of intensification, framing rising land values and encroaching development as one of the most significant challenges local farms. As one agricultural representative put it, Niagara needs to “pack ‘em and stack ‘em” minimizing encroachment onto the prime agricultural lands on which so much of Niagara’s economy depends.

Participants acknowledged the challenges facing housing development in Niagara. For starters, participants argued that the division of responsibilities between upper and lower-tier governments makes it difficult to coordinate transit and housing, align land use and zoning policies, and expedite development processes for prospective developers. Participants felt that there are mismatches between existing incentive programs, as well, and that local and regional plans could be more effectively coordinated to target strategic development.

More generally, and as we touched on above, participants noted concerns among residents that increased housing supply and density will adversely affect Niagara’s quality of life, particularly in rural communities and for those who have chosen Niagara as a place to retire and settle down. This creates additional overlap between housing and transit challenges, since those working in Niagara’s rural communities are often less likely to find housing in those same municipalities. Such concerns reflect deeper tensions between housing and economic development in Niagara, where one of the things driving tourism growth in rural communities, for example, is often the quaintness of the community itself. Economic growth is, nevertheless, what allows many of the unique shops and small businesses in these communities to survive, and the need to support this



Grape & Wine Festival. Photo courtesy Niagara Wine Festivals.

economic activity through the provision of accessible and affordable housing cannot be overstated. Participants thus emphasized the importance of building resident trust and buy-in, and of the pursuit of various forms of development that can accommodate growth while maintaining walkability, minimizing congestion, and so on.

In short, housing and public transit are two policy domains that are evolving adjacent to conventional economic development issues in Niagara. There is thus a need to expand our cognitive boundaries of what constitutes economic development, clarify the economic value of these services, and explore the specific ways in which land and transportation policy can be used to encourage more sustainable forms of growth. There is also a need to coordinate between local and regional governments to ensure that services and incentives are aligned in ways that meet Niagara's strategic priorities.

DISCUSSION & RECOMMENDATIONS

The Niagara region is in a period of self-discovery. Those we spoke with emphasized the vibrant and innovative work taking place within and across Niagara's agriculture, manufacturing, and tourism sectors, and the ecosystem that allows these industries to thrive. Nevertheless, there are concerns that this economic activity is not reflected in Niagara's evolving brand or in existing economic development policies. Niagara is also facing challenges around economic lock-in, organizational thinness, and internal fragmentation, despite the widespread recognition that economic activity across the Niagara peninsula is interconnected and interdependent. In response to these challenges, and the other barriers to development mentioned in our interviews with local stakeholders, we thus conclude with the following recommendations:

1. Embrace an “orchestrator-style” approach to economic development within Niagara, with Niagara Economic Development playing a leading role in creating a coordinated, collaborative, and comprehensive identity for Niagara’s future economy.

Those we interviewed expressed a clear desire for the development of a comprehensive, coordinated, and ambitious economic strategy for the Niagara region, one which commits to positioning Niagara as *the place to be* for select industries that build on Niagara’s irreplicable strengths. As mentioned above, this reflects broader shifts in economic development policy in Canada and can be thought of as the shift from a “conciierge-style” approach to an “orchestrator-style” approach to development. Just as the conductor of an orchestra depends on each instrument and musician to create a symphony, so too does this approach. Despite its ambitious and strategic commitments, there remains room for individual municipalities within Niagara to identify and leverage their strengths under the banner of this overarching economic identity.

2. Prioritize “smart industrial specialization” in the crafting of this new economic strategy, paying particular attention to industries that support Niagara’s interconnected strengths in agriculture, manufacturing, and tourism.

Though it is beyond the scope of this report to prescribe an economic vision for policymakers within Niagara, those we interviewed nevertheless expressed a desire to capitalize on Niagara’s interconnected strengths in agriculture, manufacturing, and tourism. Niagara’s economic identity, in this view, is not in the success of whole sectors, but in the interdependencies and overlap that characterize Niagara’s emerging industrial strengths, including in the manufacturing of agricultural technologies, the growth of agritourism, and the recapturing of Niagara’s economic and political heritage within a unique tourist experience (see details in Report #1 by Conteh et al, 2024). Capitalizing on these strengths will mean prioritizing a ‘smart industrial specialization’ approach to economic development, and a willingness to forego a ‘shoot anything that flies, claim anything that falls’ approach in favour of what strategically builds innovation support systems that enhance the competitiveness and *distinctiveness* of Niagara’s regional economy.

3. Rethink the division of responsibilities for economic development across Niagara’s regional and local area municipalities, recognizing the interconnected nature of investment attraction, business retention,

and innovation in a “smart industrial specialization” approach.

The words of one of our interviewees capture a sentiment shared by many others: “Niagara is a disaggregated economy, disaggregated municipality, and disaggregated culture.” Overcoming this disaggregation will be critical to crafting a cohesive and coordinated vision for Niagara’s economic future. One concrete measure is to mitigate any administrative disjointedness borne out of a false dichotomy between business attraction on the one hand and retention and expansion on the other.

The current division of labour is well-intentioned but misguided and reflects a poor understanding of the complex imperatives of facilitating knowledge-driven economic development in the context of fast-changing markets and technologies (Asheim et al., 2019; Wolfe and Gertler, 2016; Breznitz, 2021; Conteh, 2025). For example, improving talent development and retention within Niagara will depend on improving transit and housing connections between local area municipalities, attracting businesses and students that play to the interconnected strengths of these municipalities, and creating formal and informal connections between existing businesses and Niagara’s workforce.

This recommendation does not call for closing down local economic development offices nor does it suggest that local economic development strategies are redundant. Local economic development officers excel at understanding their respective areas’ peculiar assets and constraints, thus leveraging the region’s economic diversity as strength and resilience. However, it means transcending the two-tier region’s current framework of a division of labour between the ecdev offices of the Region and those of local municipalities. It means empowering Niagara Economic Development to serve as the principal orchestrator of change and the primary (if not sole) conduit for mobilizing federal and provincial resources to support the full spectrum of business attraction, retention and expansion in all of Niagara.

4. Support the creation of industry-led consortia that bring together businesses, post-secondary institutions, and other stakeholders across different scales and geographies.

Though Niagara is home to a range of institutional supports, those we spoke with expressed a concern that these supports operate without a shared vision for Niagara’s economic future, and that they are divided by sector, scale, and location. As Niagara works to identify, market, and support its emerging industrial specialities, the creation

of industry-led consortia can therefore help to build connections between businesses, research centres, and other stakeholders within industries but across scales and geographies.

The operational activities of the consortium should entail initiating ongoing conversations and need assessments with businesses, developing information network events aimed at addressing general issues pertaining to industry-wide technology trends, and forging one-on-one business support related to technology adoption or adaptation. The industry-led consortia will thus serve as the intermediary platform or hub facilitating innovation and entrepreneurship support for individual businesses.

Through such industry-led consortia, policymakers will delegate the ongoing inventory of current assets and constraints for existing and new businesses in their respective industries. For instance, it will be the function of the consortia to investigate gaps in the supply chain pertaining to the productivity and competitiveness of their industry and individual businesses and identify measures to address them. It will be the function of commissioning research to help businesses adopt such technologies.

In turn, each industry-led consortium will serve as an Advisory Group to help explore new investment opportunities and constraints. Niagara Economic Development (and local area municipalities) could collectively scan the relevant federal and provincial programs aligned with the opportunities and challenges to facilitate Niagara-made solutions. Niagara Economic Development can support the work of the industry-led consortia by providing an evidence-based analysis of ongoing industry and occupation trends in Niagara and across the province and Canada.

5. Invest in the expansion of a shared employment-land inventory across local area municipalities, and work to align zoning, standards, and processes wherever possible.

A consistent theme in our conversation with local stakeholders was the issue of employment-land development across Niagara. Despite a willingness among municipal staff to collaborate in identifying suitable land for businesses hoping to relocate to Niagara, differences in staff capacity and the volume and quality of data available on employment lands ensure that this collaboration remains piecemeal, informal, and reliant on the serendipity and relationships of individual staff. As investment-ready lands in Niagara grow scarcer, there is a need to ensure that information on available lands is up to date and of

sufficient quality to be useful to economic development staff. The new Niagara Signature Sites initiative is promising, in this regard, and policymakers from across the region should continue to support and improve the program. Given Niagara's unique governmental context, the alignment of zoning, standards, and incentives could also help to create a more seamless process for prospective developers.

6. Work to develop a digital and data strategy for the Niagara region. As part of this initiative, consider reviving and expanding Niagara's open-data platform and establish shared data standards across municipalities. Pursue research opportunities related to this data, especially for post-secondary students interested in innovating local governance and service delivery within the region.

In conjunction with efforts to improve the sharing and interoperability of employment-land data, stakeholders should coordinate efforts in developing a Digital and Data Strategy for the Niagara region. Recognizing the growing role of information and communication technologies in both local governance and the region's economy, this strategy should aim to improve the integration and interoperability of municipal services, support for innovation through information exchange, and a proactive approach to risks associated with technology adoption at the local level.

7. Create an ambitious and comprehensive talent development and retention strategy that positions Niagara as the place to be for prospective students interested in fields related to the region's smart industrial specialization.

Talent development and retention is a region-wide concern, and it has been for more than 20 years. Despite this, efforts to improve the retention of skilled workers remain piecemeal and informal. As such, stakeholders should work towards a talent development and retention strategy that outlines a comprehensive and multi-layered plan to improve connections between post-secondary students and the Niagara region. This includes working with post-secondary institutions to align local curriculum and branding with Niagara's industrial specialization strategy. It also includes improved connections between students and local businesses, using improved co-op opportunities, internships, research fellowships, hackathons, and so on to showcase students' capabilities while introducing them to the range of innovative work being done by Niagara firms.

This work is also an opportunity to further de-risk innovation for local businesses, and small businesses especially, by mobilizing the resources of post-secondary institutions in ways that serve the interests of Niagara's new industrial strategy.

At the same time, this strategy should identify ways to improve connections between post-secondary students and the unique qualities and programming that make Niagara an attractive place to live and work. This might include efforts to improve the downtown presence of Niagara's post-secondary institutions, through things like satellite campuses, research centres, student housing, maker spaces, downtown events, and so on.

Downtowns are the economic engine of a municipality, and they are host to the collection of restaurants, cafes, clubs, and small businesses that make a place unique. Yet it is not enough to strengthen students' connections

to downtown, either. Those we spoke with articulated persistent barriers to their ability to travel within and across Niagara, most notably in the lack of convenient and reliable public transit. While this prevents students from accessing job opportunities in Niagara's rural municipalities, it also ensures that a lot of Niagara's cultural programming and amenities remain out of reach.

Finally, while it is beyond the scope of this report to review the competitiveness of local compensation packages, wages and opportunities for career growth have been consistently identified as an obstacle to talent development and retention efforts within Niagara. As such, a talent development and retention strategy should outline emerging best practices and identify tools for improving the competitiveness of local employers. This may include further investments in Niagara's living-wage program, profit-sharing initiatives, more flexible work schedules, and hybrid work opportunities.

*Sir Adam Beck Generating Stations 1 & 2.
Photo courtesy Ontario Power Generation.*



8. *Develop a region-wide housing and transit strategy with the goal of creating 10-to-15-minute headways along key transportation routes/corridors.*

Finally, this report has identified a lack of housing and convenient public transit as two critical barriers to economic growth within Niagara. These barriers are, of course, connected. Increased housing density can improve the financial viability of public transit, while convenient public transit can make it possible for young workers to forego the costs of a private vehicle. Yet the division of housing and transit responsibilities between regional and local levels of government has made the coordination of policies difficult, and those we interviewed expressed concerns that housing and transit remain quite disaggregated.

Recognizing the recent uploading of public transit to Niagara Region, and the impending creation of a Municipal Development Corporation in St. Catharines, it is therefore timely for policymakers to coordinate efforts in developing a region-wide housing and transit strategy, with a goal of improving transit service and viability along key transportation corridors within the region. Central to this strategy should be the alignment of development processes, policies, and standards, and the incorporation of economic development considerations into land-use and transportation planning. Given the economic importance of prime agricultural lands in Niagara, such a strategy should also identify available best practices for insulating housing and land from speculative investment, including land trusts, housing cooperatives, and so on.

CONCLUSION

The working papers completed during the first phase of this project set the stage for this report by shedding light on how the region, over the past 50 years, has leveraged its border location, natural resources, and economic and institutional assets to adapt (with varying degrees of success) to the shifting currents of change. In particular, the papers highlight how economic stakeholders at critical junctures over this time period invested in the requisite infrastructure and deployed a plethora of regulatory instruments, fiscal incentives and other policy levers to shape the trajectory of the sectors at critical crossroads.

Today, these same assets support a tremendous quality of life for those who live and work within the region, supplemented by Niagara's proximity to Toronto and the construction of key transportation corridors (including the Welland Canal) throughout the 19th and 20th centuries. Yet Niagara is also in a period of transformation. The roller-coaster trends of

manufacturing employment from the end of the 20th century to the past 10 years, increased automation in agriculture, and the shifting preferences of international tourists are all leaving their mark on local businesses. Furthermore, policymakers must compete on an increasingly global stage to attract workers, businesses, and capital to the Niagara region.

Amidst these changes, those interviewed for this project expressed a clear desire for a comprehensive, coordinated, and ambitious identity that prescribes a direction for the future of economic development in Niagara. Simply put, Niagara needs a new story—one that leverages its historic and geographic advantages to position the region as *the place to be* for prospective talent and investment. In this report, we have made several recommendations intended to advance this goal and bring businesses, policymakers, researchers, educators, students, and other stakeholders together around a shared vision for Niagara's economic future.

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