

Think Like a Region

Strengthening the Toronto Region's Talent Advantage

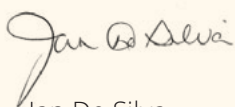
September 2022

Foreword

In September 2020, at the height of the pandemic, The Toronto Region Board of Trade released a playbook, *Shaping Our Future*. We brought together senior municipal executives, business leaders and economic experts from across the region as a team to make recommendations for economic recovery that were regionally-minded in a time of crisis. What emerged was a strong consensus that for our integrated economic region to succeed we required stronger coordination and collaboration among municipalities and a shared understanding of our interconnectedness and dependencies. Today we sit on the other side of the pandemic, and the challenges we face are the challenges we faced a decade ago, only now they are even more acute. The borderless way we live and work has been amplified through substantially accelerated digitization, and we are now at the point where it is no longer enough to see ourselves as one connected economy, it's time to think and act like a region.

Municipalities of the Toronto region are like players on a sports team. They each have different strengths and talents, and there isn't one that can do it all. To compete against the best metropolitan regions in the world, the towns and cities of our region – home to nearly 8 million people and 3.5 million jobs – must work together, pulling in the same direction to win. To succeed in the global competition for talent and foreign direct investment, we need to come together with a game plan. This requires us to recognize that the Toronto region, which generates a quarter of Canada's GDP, is an integrated economic unit facing challenges – and opportunities – that don't recognize lines on a map. Housing affordability, underdeveloped transit and gridlock, labour shortages, the loss of critical industrial lands and the thousands of good paying jobs that come with them – these are issues that are best coordinated at the regional level through leaders who are willing and ready to adopt a metropolitan mindset. What connects all the towns and cities across the Toronto region is people – our talent. We are diverse, highly educated, and hard working, but we are at risk of losing that competitive edge if we don't start moving on these important issues.

That's where this report comes in. By building a better place to live for people, our workforce, we also create a better place for business to grow and invest. Municipalities need to adopt shared regional models and coordinate their economic development activities to present themselves to the world as a strong, seamless region where companies can find what they need to flourish. When we do that, when we rally our individual strengths and showcase them globally as a cohesive whole, we build our talent pool and attract new investment, creating a virtuous cycle that produces a more competitive region for a growing population. When we think like a region, we win the game.



Jan De Silva
President and CEO



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Executive Summary

The Toronto region (the region) is recognized as a rising star, a “quietly booming” tech hub supported by a diverse economy. Underpinning much of the region’s success is talent, its crowning jewel and a key regional asset that drives growth. A close examination of the geography of workers demonstrates the extent to which talent is spread across the region and across all types of skilled occupations. The dynamics of a large, interconnected regional economy are self-reinforcing – firms can draw on a large pool of talent from across the region, and the local ecosystem in turn benefits from expanding multinational enterprises (MNEs) and growing domestic firm operations and economic spillovers from any given investment.

Yet, the regional nature of talent as a key economic asset is underappreciated. Our approach to economic development is often based on inter-municipal rivalry to attract foreign direct investments (FDI), rather than selling the regional labour market as an asset that can benefit all municipalities – no matter where a business locates.

This underappreciation puts at peril our ability to leverage talent to market the region as a top destination to do business, in an environment where there are wide-spread talent shortages and intensifying competition between cities and countries to attract the best and the brightest.



Compounding the competition for talent are several issues that the region must tackle head on. These include limited coordination that leads to intra-regional rivalry, the rise of remote work, and the increased importance of quality of place as a lever for economic growth. Our response to these issues – and efforts to support the attraction and retention of talent more broadly – may ultimately determine whether the Toronto region can propel from a second-tier metro region to a top-tier economic hub.

Municipalities in the region have long had a disjointed approach to economic development and investment attraction. Misalignment in policies and intra-regional competition has often gotten in the way of furthering the collective potential of the region. By integrating and coordinating economic development strategies we can all move forward faster, and further enhance a collective regional value proposition. Ultimately, our real competition are other regions. To compete at the world stage, we must look to economic development best practices and champion a unified approach to regional investment attraction through Toronto

Global. Municipalities should also advocate for municipal finance reform, which has contributed to internal competition for FDI.

Core to a coordinated economic development strategy is a focus on attracting and retaining talent by investing in more affordable, connected, and attractive cities. The advent of remote work has widened the catchment area for workers, as they seek more affordable housing options and an improved quality of life. Municipalities also need to adjust their policy frameworks and economic development approaches to harness the potential of the work-from-home trend to enable growth. For example, the FDI success model must be re-evaluated to accommodate for firms that, despite having a limited physical footprint, can bring in new sources of labour income. The post-pandemic environment marks a good opportunity for municipalities across the region to make room for talent and better position themselves for growth. As is evident in many instances globally, where there is talent, investments will follow.



Introduction

Talent has long been a defining characteristic of the Toronto region²(the region), one that is regularly cited as a propelling force behind the region's success. It is not, however, well understood as a **regional** asset. The region cannot fully position itself for success if it does not embrace the connection between the regional labour force and the integrated nature of the regional economy. What's more, it faces a set of critical challenges and opportunities that require a pivot in our thinking and strategic decision making if the region is to transform itself into a top-tier destination for business and talent. Back in 2010, the Toronto Region Board of Trade (TRBOT) had called for the creation of a regional investment agency to sell the region as a whole because it recognized the power of our collective brand and the integrated nature of the regional economy. Fast forward a decade, we must remind ourselves why regionalism is a strength that must be harnessed to help propel growth and focus on what levers can be pulled to help position the region for further success.

The region cannot fully position itself for success if it does not embrace the connection between the regional labour force and the integrated nature of the regional economy.



Understanding Toronto Region's Labour Market and Integrated Economy

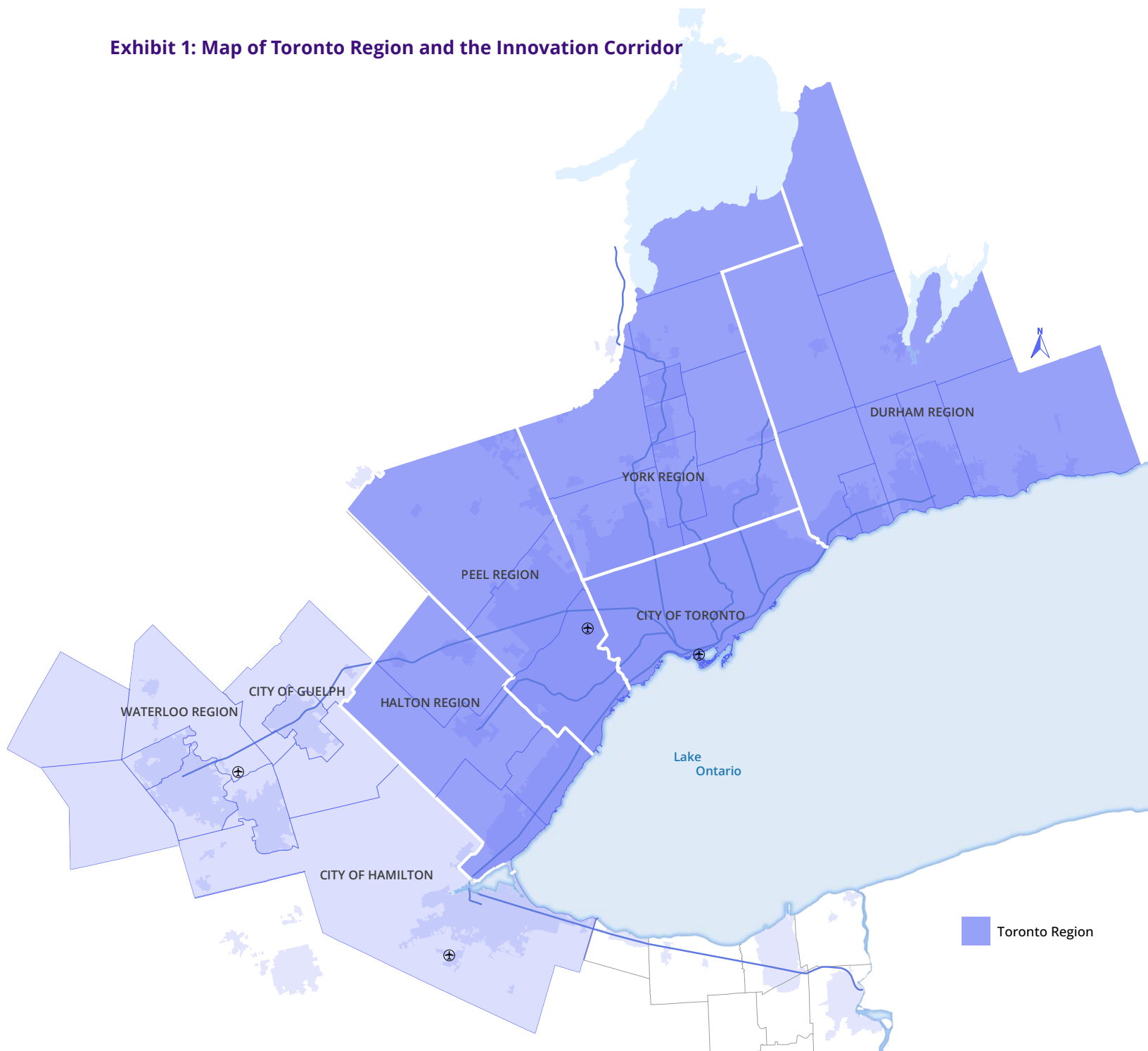
Talent as a Key Competitive Asset for the Region

The Toronto region is Canada's economic engine and one of North America's fastest growing regions, consisting of a diverse ecosystem of high value-added industries. Home to a highly educated pool of talent, the region's labour force is a key ingredient for its success and its ability to attract investments in high-tech/innovation sectors, which now run from advanced manufacturing to life sciences through to agriculture and food & beverage processing.

In the Toronto Census Metropolitan Area (CMA), 41% of the working-age population (between the ages of 25 and 64) have at least a bachelor's degree or a higher level of education attainment.³ At 71%, the share of adults with a post-secondary education in Ontario is higher than the share in any OECD country.⁴ This concentration of highly-educated workers is pivotal for the region's ability to attract foreign direct investment (FDI). Some of the most prominent multinational enterprises (MNEs) within the region (including IBM, Cisco, and General Motors) point to the availability of a qualified pool of talent as the significant motivator for locating and growing in the Toronto region.⁵ According to Toronto Global CEO Stephen Lund, talent is often the deciding factor for a firm's decision.⁶ It is no surprise that it is the key value proposition articulated by Toronto Global, the region's investment attraction agency. The same talent is also critical for the scale-up potential and success of homegrown companies such as Wealthsimple, Clearco, Magna, and Maple Leaf Foods, among others.

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Exhibit 1: Map of Toronto Region and the Innovation Corridor



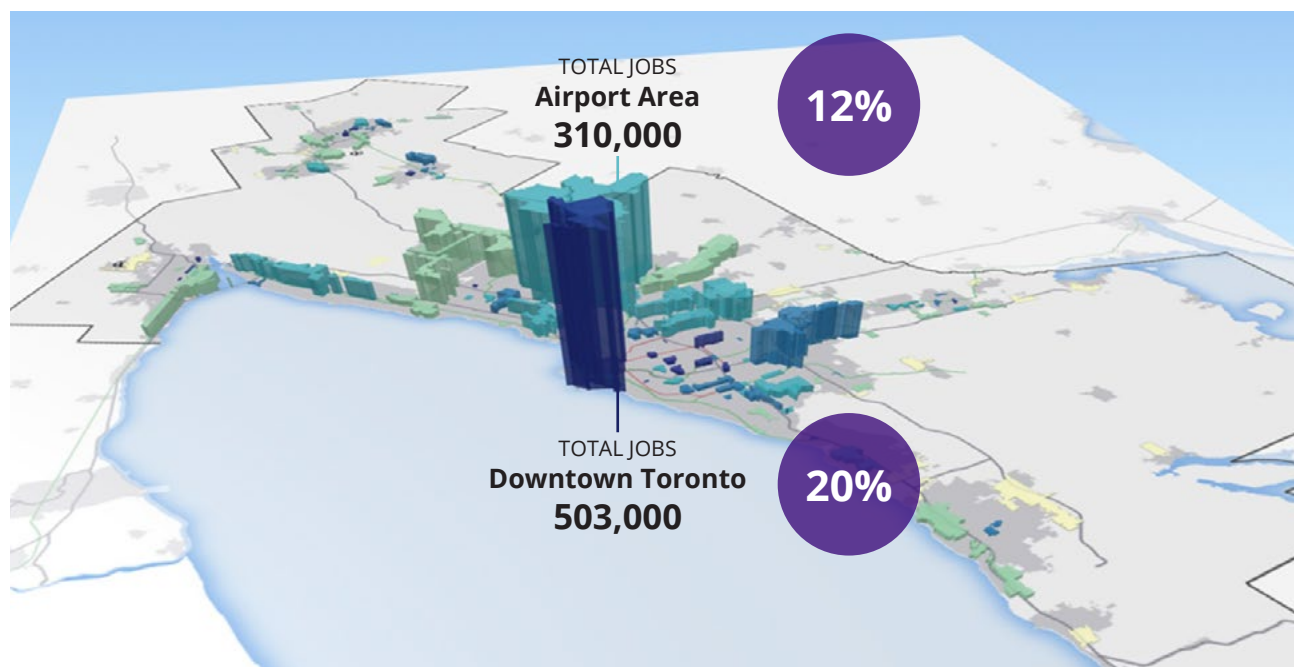
The Toronto region encompasses the municipalities represented by Toronto Global, the region's investment promotion agency. It consists of the Halton Region, Peel Region, York Region, Durham Region, and the City of Toronto. The region is a key component of the larger Innovation Corridor⁷ (the Corridor) which also includes the Waterloo Region, Hamilton, and Guelph and accounts for 25% of Canada's GDP⁸ (Exhibit 1). In response to the call for proposals for Amazon's HQ2, the vast majority of municipalities across the Corridor came together to market the region, including its pool of talent, collectively.

Regional Footprint of the Labour Market

A bird's-eye view of the geography of workers in the Innovation Corridor illustrates that employment is highly concentrated. As of 2016, 32% of all jobs in the Innovation Corridor were in Downtown Toronto and the Pearson Economic Zone (Exhibit 2).⁹ Additionally, the cities of Toronto and Mississauga together accounted for close to 60% of all tradable jobs. The same is not true for where workers live, which is more dispersed. Talent is truly a regional asset in that the workforce – whether researchers, software programmers, engineers, or business professionals – is dispersed across all municipalities in the Corridor. This is evident when we map the locations of key occupation groups by where workers live (Appendix A). Across the three major occupation clusters related to tradable industries¹⁰, at least 60% of workers in the Innovation Corridor live outside the city of Toronto and at least 50% outside of Toronto and Mississauga. Indeed, most municipalities in the Corridor have more than half of their residents commuting outside of their respective cities (Exhibit 3).¹¹ It is partially due to these linkages that the Innovation Corridor as a collective effectively acts as an integrated economic zone.

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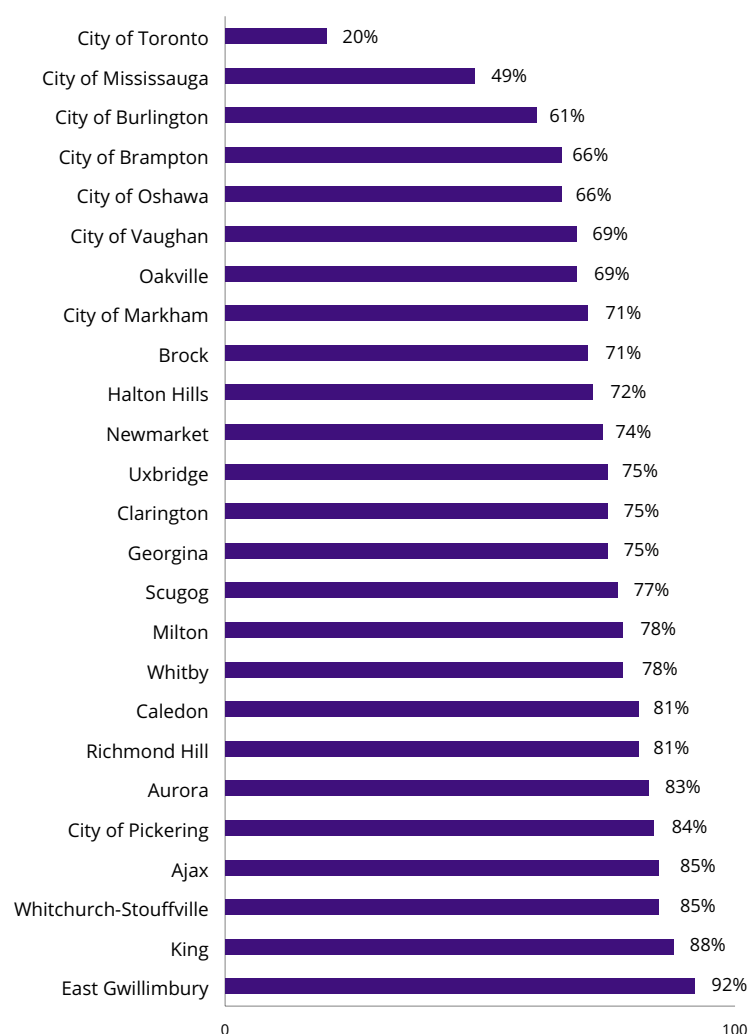
Exhibit 2: Distribution of Jobs in the Innovation Corridor by Place of Work, 2016



Source: Statistics Canada, Census (2016).

The labour force interdependency of the various municipalities across the Corridor is conspicuous. The same way that firms have linkages with surrounding businesses that they source their goods and services from, businesses source their talent from across the region. This connectivity translates into shared prosperity, whereby a worker earning a living in one municipality actively spends time and money in the city they live in, including their contributions to property taxes.

Exhibit 3: Percentage of Trips from Work to Home from Outside the Municipality of Residence, Toronto Region, 2016



Source: Transportation Tomorrow Survey (2016).



Industry Case Studies (Appendix B)

Accompanying this report are six case studies across prominent industries in the region. Each case study identifies factors that drive FDI decisions in the particular industry to demonstrate that decisions are based on a mix of broader business environment and location-specific factors, including talent. For each industry we profile key occupations and their presence across the region as well as the capacity for remote work, showcasing the extent to which talent can be sourced from across the region. The case studies also feature specific locations with a large concentration of jobs in the industry and examine the local characteristics that make it an attractive destination for companies as well as the existing commuting patterns from other municipalities in the region.

The Implications of a Highly Integrated Regional Economy

The economic linkages within the region – from commuting patterns to markets to supply chains – are best exemplified by the spillover impacts of FDI. Irrespective of the location of an investment made by major MNEs into the Toronto region, all regional municipalities see economic benefits, including jobs, wages, taxes, and generally increased economic activity. Moreover, between 78% and 98% of the total economic impact remains within the Toronto region. The economic benefits are further magnified by the level of connectivity to other regions.¹²

In addition to these immediate impacts, once set up in one location leading MNEs often expand their presence throughout the region. Siemens, for example, established its headquarters in Oakville but also has a wide range of operational locations and a distribution network throughout the region.¹³ As certain activities are embedded within the region, the knowledge exchange between MNEs and local actors allows both local and foreign-owned businesses to absorb more knowledge and know-how. This then allows businesses across the region to build on this knowledge and upgrade their capabilities. Surrounding communities are then better positioned to attract high value-add activities as firms look to expand and take advantage of lower costs, greater access to a talent pool, and other amenities offered by different municipalities.



The Importance of FDI

The benefits of FDI have been well documented in Canada and globally. Inward FDI generates sustained economic growth through higher productivity vis-a-vis technology spillovers, greater skills development among local workers, trade linkages through greater exports and imports, and enhanced competitiveness in the business environment. Foreign multinationals are a conduit for innovative activity in Canada; they account for 41% of research and development (R&D) spending in Canada, employ more than a third of R&D personnel, and represent more than 60% of all technological services exports and imports.¹⁴ While representing 12% of all jobs and 15% of Canadian GDP, they are also responsible for the majority of trade activity in and out of the country.¹⁵



Securing the Toronto Region's Position as a Top Destination for Talent: Challenges and Opportunities

The integrated nature of our regional labour force – and regional economy more broadly – is poorly understood and underappreciated. Despite our success as a talent hub and a popular destination for FDI, the region as a collective cannot afford to lose sight of what is needed to strengthen our competitive positioning.

There is an acute shortage of skilled workers globally. A recent analysis of 20 major economies across the world estimates a global talent shortage of 85.2 million people within key knowledge-intensive industries by 2030.¹⁶ Here in Canada, the most recent findings from the Canadian Survey on Business Conditions suggest that labour force shortages and the ability to recruit and retain talent are expected to be key challenges for businesses over the short-term.¹⁷ The global hunt for talent is expected to get more competitive as businesses – including MNEs looking to expand their operations and homegrown businesses looking to grow and scale – compete to hire workers. After visiting 18 global tech hubs, one tech industry observer noted that dozens of cities around the world – both emerging and established – are actively courting talent.¹⁸

Over the past two decades, the Toronto region has welcomed more than 100,000 new immigrants each year.¹⁹ However, ensuring that talent chooses the region as a top choice destination – and to stay and grow here – requires us to be strategic and coordinated in how we prioritize our efforts and resources. In 'Unlocking Talent', TRBOT detailed solutions and opportunities as part of a broader workforce development strategy to enhance our talent ecosystem.²⁰ The objective of this paper is to not only highlight the integrated nature of our regional labour force but also highlight three key challenges and opportunities that the region must tackle to ensure it remains a top choice for talent. For one, the region still suffers from a fractured approach to economic development – including FDI attraction – that is hindering its economic potential. Additionally, the COVID-19 pandemic may have a lasting impact on how and where we choose to live and work, with potential ramifications on the future geography of jobs. Finally, quality of place is increasingly valuable to workers and a key ingredient to economic growth.

Municipalities across the region often compete for investments in ways that undermine its collective potential.



Lack of Coordination Leads to Intra-regional Rivalry for FDI

The Toronto region lacks a coordinated and collaborative approach to economic development. This contrasts with other metro regions such as Montreal and Edmonton, both of which are governed by regional intergovernmental organizations (Communauté métropolitaine de Montréal and Edmonton Metropolitan Region Board) which have a mandate to coordinate economic development activities.

Instead, municipalities undertake their own economic development strategies within their own municipal boundaries, with little coordination. Disparate municipal economic development strategies complicate efforts to align investment attraction in support of economic development objectives. Further complicating the issue is the fact that in addition to Toronto Global, several regional municipalities also undertake their own FDI attraction activities, creating a confusing landscape for investors.

The Toronto region as a collective is first and foremost competing with global competitors. Yet, municipalities across the region often compete for investments in ways that undermine its collective potential. While the benefits of attracting investments, growing economic clusters, creating jobs, and generating a larger tax pool are beneficial to individual municipalities, intra-regional competition comes at a cost. When FDI is seen as a zero-sum game, investment promotion is fractured and disjointed, and the best value proposition is not always put forward to prospective businesses. Municipal booths dispersed across the floor of Exhibition Place at Collision 2022, North America's largest tech conference, was emblematic of this fragmentation, where municipalities were selling themselves as individual destinations rather than embracing the value of the region's collective brand. The regional economy reflects the true nature of economic linkages and transcends municipal boundaries. As such, business location decisions often come down to regional strengths and assets, unrelated to the invisible lines that separate one municipality from another.²¹

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The existing structure of municipal finances in Canada, particularly in Ontario, exacerbates this conflict. The reliance on property taxes has created an environment in which municipalities within the region actively compete for FDI. Dependency on property-related taxes and levies (such as development charges) feed the zero-sum view of investments and ultimately hinder our region's competitiveness. In 2015, municipalities only collected 9 cents for every household tax dollar paid in Ontario, most of which are sourced from property taxes.²² Prior to the pandemic, property taxes represented 36% of total tax revenue and 47% of non-grant related tax revenue in the Innovation Corridor.²³ Until this dependency is resolved, it will continue to incentivize greater intra-regional competition for investments to fund service delivery and growth-related infrastructure.

The benefits of a coordinated and collaborative approach to economic development and investment promotion is becoming more and more apparent. This was the impetus for TRBOT to call for a more regional approach to economic cooperation back in 2010²⁴ and adding 'region' to its name in 2013 to reflect the borderless way that businesses and the workforce operate. It was also the underlying rationale for the creation of Toronto Global in 2017 as a regional investment agency, acknowledging that FDI benefits all jurisdictions in the region and that a collective regional value proposition is stronger than the sum of its parts.

A similar approach is increasingly being taken in metros south of the border in the United States (US). Recognizing that the business community viewed them as a collective regional entity, the three counties within Tampa Bay came to the realization that they had to collaborate to compete on the global stage; Global Tampa Bay was created to expand the export presence of businesses in the region and attract more FDI to the region as a whole.²⁵ Similarly, in 2018, advocates within the Greater Philadelphia Region formed the Philadelphia Global Identity Partnership to enhance its global identity through a stronger *regional* brand.²⁶

The Rise of Remote Work and Potential Impacts to the Regional Economy

COVID-19 forced businesses to quickly adapt to a remote working environment, with potentially lasting impacts on *where* and *how* workers choose to work. The latest indicators demonstrate the extent to which the pandemic has impacted migration, mobility, and spending patterns. While the jury is still out on the sustained impact of remote work, many workers have taken advantage of the flexibility to work from home, while looking to the office as a place for collaboration and meaningful engagement with their peers. The advent of remote work has effectively increased the



As of April 2022, weekday worker volumes in most Business Districts were still at least 20% lower than 2019 levels. In Toronto's downtown core and Financial District, volumes were down 20% and 66%, respectively.²⁹

catchment area for workers in the region, which may further deepen and expand the economic linkages within the region, as individual workers spend more time at home and move further out.

As COVID-19 case numbers have fallen and restrictions have eased, a notable share of employees continue to work from home. One survey of US residents estimates that as of July 2022, more than 30% of paid full days were worked from home.²⁷ In the same month, close to 24% of employed workers across Canada were estimated to be mostly working from home and another 7% split their hours between home and another location.²⁸ TRBOT's analysis of Telus data on weekday workers points to a similar trend across the Innovation Corridor. As of April 2022, weekday worker volumes in most Business Districts were still at least 20% lower than 2019 levels. In Toronto's downtown core and Financial District, volumes were down 20% and 66%, respectively.²⁹ The significant drop in the Financial District is substantiated by the fact that 85% of its pre-pandemic workers can work remotely and that approximately 75% of its workforce consists of workers in financial

or professional services³⁰ – both of which have a substantial proportion of its workers continuing to work from home for several days a week.³¹

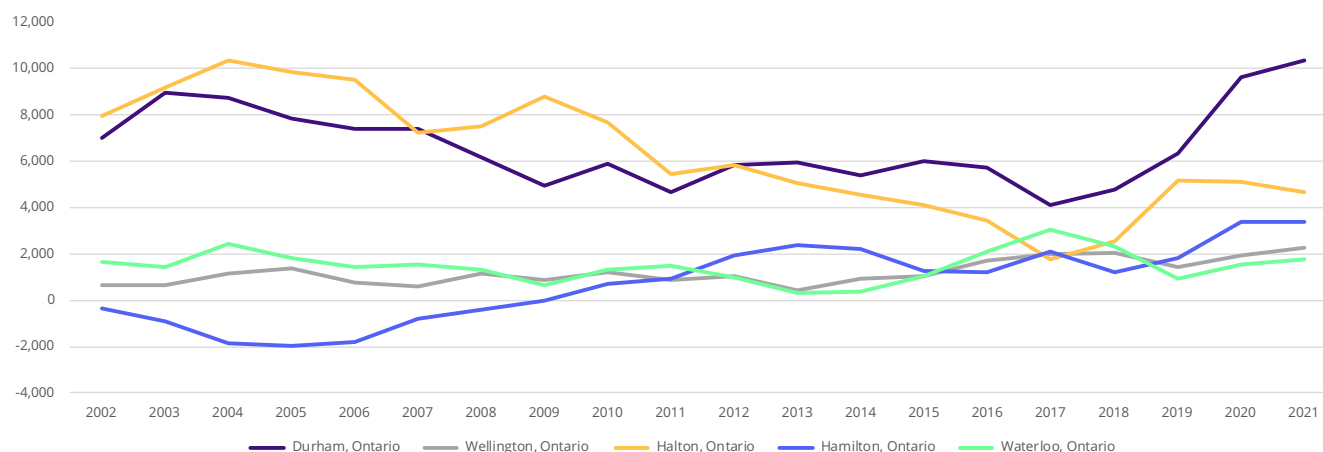
Research from the US demonstrates that during the pandemic professional services workers took advantage of their ability to work remotely and relocated elsewhere. Zip codes with a higher share of these workers among their residential population saw greater outflow relative to other areas. Moreover, these workers tended to move to less populated areas.³² Consistent with these findings, another paper demonstrates a 'donut effect' seen during the pandemic, whereby significant economic activity has moved from established city centers to suburban areas. This effect is most pronounced for large cities and reallocation within the same metro region (as opposed to from one metropolitan area to another).³³ The latest data on tech employment, job postings, and new firms in the US show that tech-related activity has also become more decentralized; while superstar cities continue to grow, activity since the pandemic has increasingly diffused towards rising cities and smaller amenity rich communities.³⁴

In the City of Toronto and Peel Region, an increasing number of residents continued to flock to other areas within the province. In Hamilton, Waterloo, Wellington, and particularly Durham, inflows of residents from other regions in Ontario rose since 2019.

Certainly, more people in the most populous municipalities in the Innovation Corridor are moving to nearby communities since the start of the pandemic. In the City of Toronto and Peel Region, an increasing number of residents continued to flock to other areas within the province. In Hamilton, Waterloo, Wellington, and particularly Durham, inflows of residents from other regions in Ontario rose since 2019 (Exhibit 4). Much of this migration comes directly from the Toronto CMA to other areas within the Corridor. 89% of net intra-provincial migration from Toronto CMA between 2019 and 2020 went to other CMAs in the Innovation Corridor, including 32% to Oshawa CMA and 31% to Hamilton CMA.³⁵

The past decade has seen a growing number of people settling outside of the two largest cities in the region, namely the City of Toronto and City of Mississauga, in part due to housing affordability. Places like Brampton, Kitchener, Oakville, Oshawa, Guelph, Ajax, Milton, and Clarington have seen population growth higher than the provincial average since 2010 and through the pandemic (Exhibit 5). The combination of changing migration patterns and commuting patterns has implications on consumer spending trends within the region. Some established bedroom communities such as Oakville-Burlington-Milton³⁶ and Brampton have seen significant growth in spending within their borders since the pandemic. Consumer spending has lagged in the City of Mississauga comparatively, and in the City of Toronto has only recently recovered to pre-pandemic levels (Exhibit 6). As workers look to settle outside of the most populous areas in the region, cities that can attract these workers will see the associated economic benefits from increased spending and tax revenue.

Exhibit 4: Net Intra-provincial Migration in Census Divisions with Growing Migration, Innovation Corridor, 2002 – 2021



Note: Migration estimates are for the period from July 1 in the previous year to June 30 in the current year.

Source: Statistics Canada, Table 17-10-0139-01.

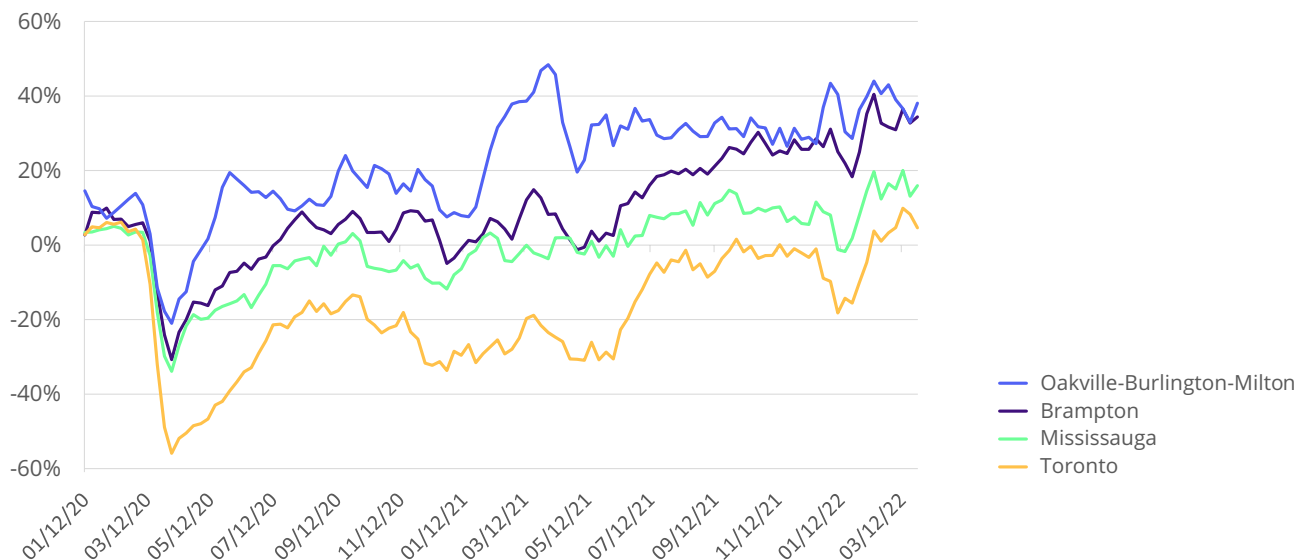
Exhibit 5: Population Growth by Census Subdivision, Innovation Corridor, 2010 – 2021

Census Subdivision	Population		Population Growth (Compounded Annual Growth Rate – CAGR)		
	2010	2021	2010-2015	2015-2019	2019-2021
Toronto	2,675,210	2,974,293	0.9%	1.4%	0.2%
Mississauga	730,264	769,303	0.2%	1.0%	0.0%
Brampton	526,582	721,237	2.5%	3.7%	2.3%
Hamilton	532,232	587,192	0.6%	1.2%	1.1%
Markham	306,761	348,443	1.8%	0.7%	0.4%
Vaughan	290,508	333,692	1.5%	1.0%	1.1%
Kitchener	223,411	270,475	1.0%	2.8%	1.4%
Oakville	185,903	221,484	1.1%	2.0%	2.0%
Richmond Hill	188,352	209,295	1.2%	0.6%	1.1%
Burlington	178,492	193,533	0.9%	0.7%	0.4%
Oshawa	152,286	181,440	1.1%	2.1%	1.7%
Guelph	124,286	146,600	1.3%	1.8%	1.4%
Cambridge	129,248	143,245	0.5%	1.2%	1.5%
Whitby	124,463	145,108	1.1%	1.1%	2.9%
Ajax	110,578	134,450	2.0%	1.6%	1.8%
Milton	81,929	138,495	6.0%	4.0%	3.8%
Waterloo	102,283	123,991	0.7%	3.0%	1.9%
Clarington	85,741	104,234	1.7%	1.9%	1.9%
Pickering	91,166	103,466	0.5%	1.3%	2.4%
Ontario	13,135,778	14,826,276	0.9%	1.5%	1.0%

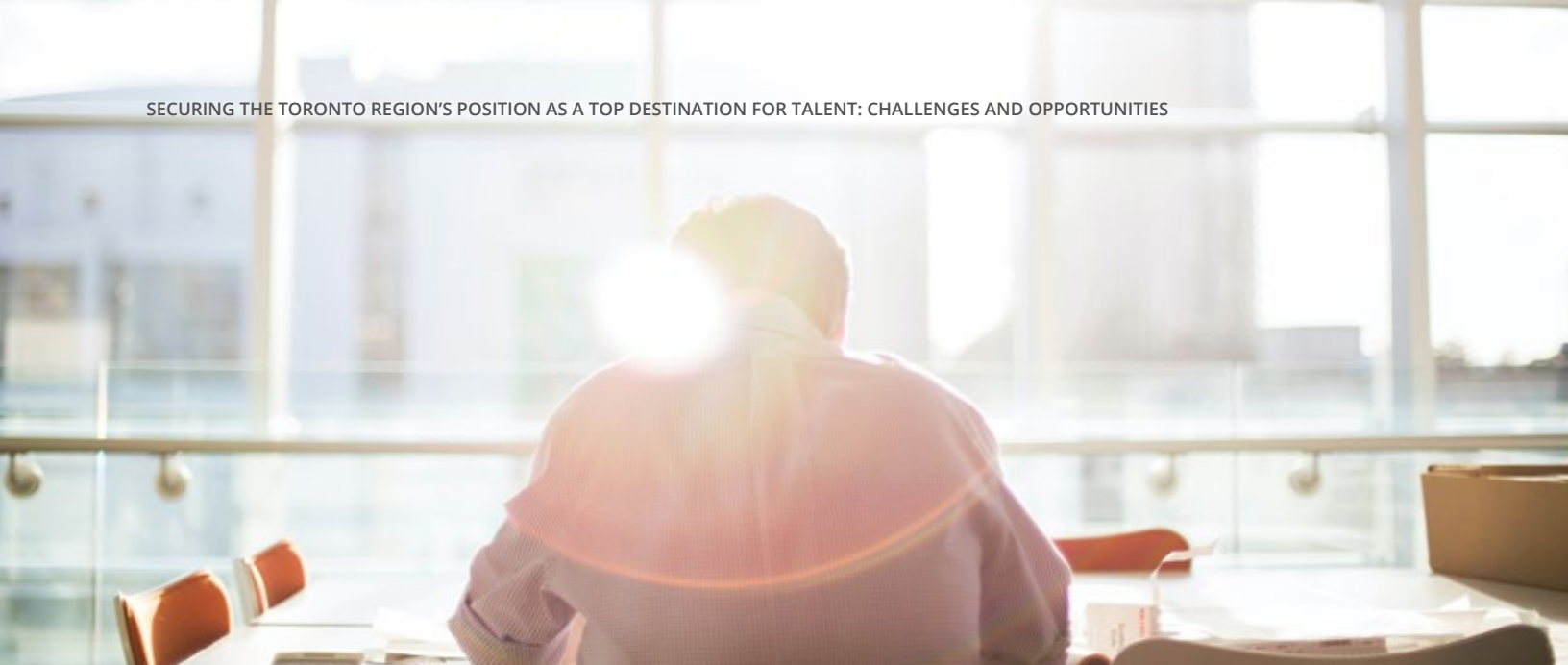
*Cities highlighted experienced a greater growth rate than the Ontario average across all periods of analysis.

Source: Statistics Canada, Table 17-10-0142-01.

Exhibit 6: % Change in Consumer Spending since 2019, Select Geographies in the Toronto Region, Jan 2020 – March 2022



Source: Moneris.



The Shift to Remote Work Has Long-term Consequences

While the majority of workers in the region have to be on-site for work, some experts predict that the shift towards more remote and hybrid work arrangements will have lasting economic impacts, driven by improved perceptions about work-from-home, increased openness to various forms of remote work, significant infrastructure investments made by companies and employees, and employee preferences to remain working from home.³⁷ Findings from a survey administered to 26,000 employees from across Canada show that most workers who worked from home during the pandemic would like to continue to do so. 41% of respondents that worked from home most or all the time indicated that they would like to continue to work remotely 4 to 5 days a week.³⁸ Not only do workers have a preference for flexibility, a poll conducted by Angus Reid found that 23% are prepared to quit and find another job if asked to come in 5 days a week.³⁹

According to Stanford economist Nick Bloom's ongoing survey of work-from-home trends and preferences in America, employers are indicating that those able to work remotely will be working from home for 2.4 days per week.⁴⁰ Given the increased preference of workers to work remotely or in a hybrid situation, employers are expected to offer more opportunities to do so. Three quarters of small and medium-sized businesses surveyed by the Business Development Bank of Canada indicated that they would offer teleworking options going forward.⁴¹ Large employers such as CIBC, Sun Life Financial Inc., Deloitte, Canada Life, and even public sector organizations such as the Treasury Board of Canada Secretariat have all signaled that they intend to offer some form of permanent work-from-home arrangement for their workers.⁴²

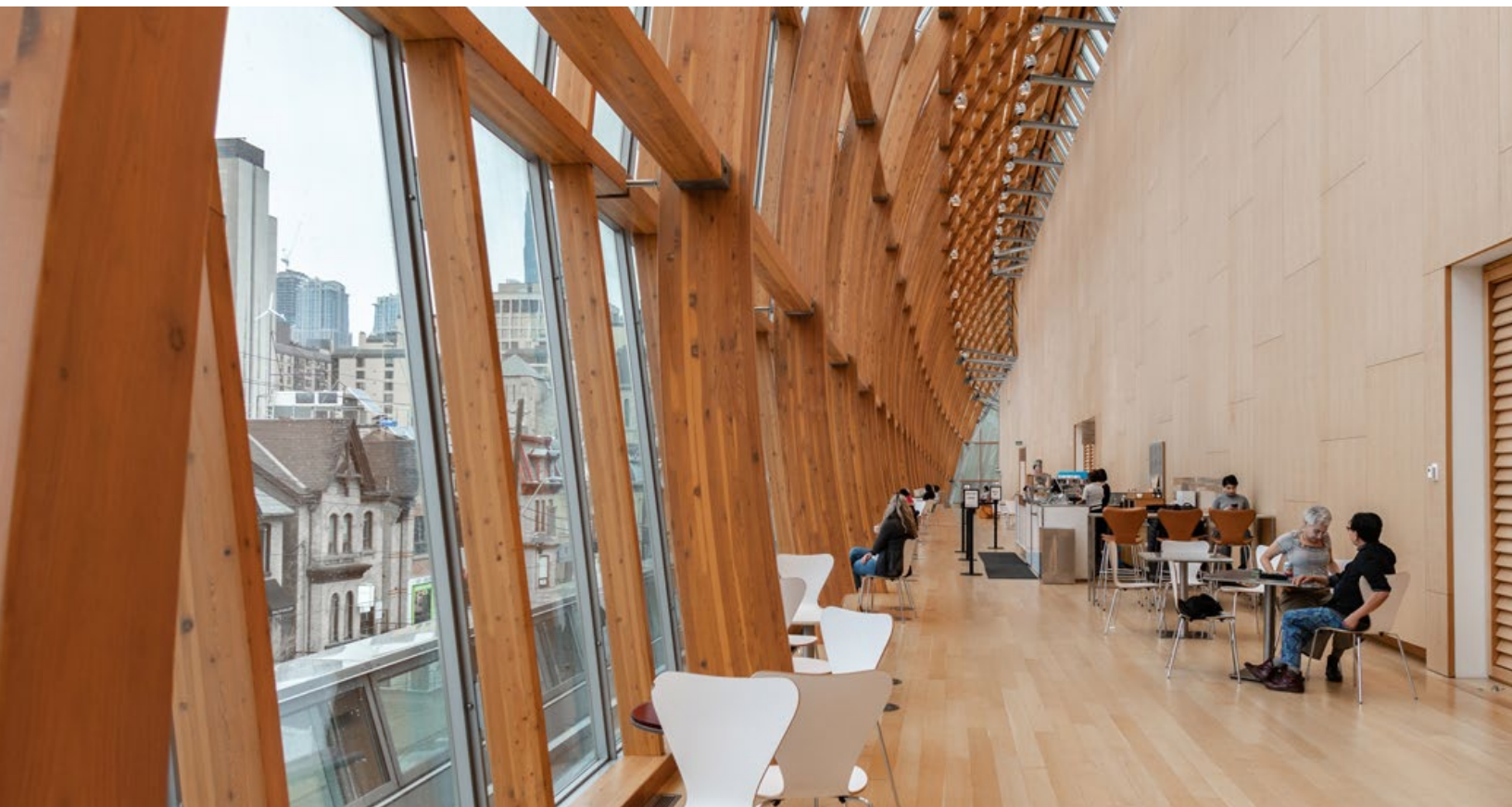
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Going forward, urban centres and proximity to work will likely continue to hold weight. In a future where a hybrid model of work is common and collaboration and agglomeration continue to drive benefits, proximity to work and existing clusters of economic activity will remain a critical factor for workers. Nevertheless, if current preferences endure, it is very possible that flexible work arrangements will permanently become table stakes for talent attraction for business service sectors and more generally for roles that can be done remotely.

A lasting shift to remote work means that the Toronto region's economy is bound to become even more integrated. Workers will spend a greater amount of time in their local communities, and more may look to move to surrounding neighborhoods, effectively widening the geography of jobs. The trend towards remote work has also given rise to more FDI deals without a corresponding real estate transaction, turning the current model of quantifying economic development KPIs on its head. If this shift results in decreased requirements of space or fewer real estate FDI transactions altogether, it further exacerbates the tension related to reliance on property taxes for municipal revenue.





Livability: Growing Importance of 'Quality of Place' as a Key Pillar for Talent Attraction

If talent truly is a key strategic asset for the region, the increased frequency of work-from-home implies that municipalities must invest in making their cities more livable – elevating 'quality of place' as the central tenant to their respective economic strategies. New research on small communities in the US provides compelling evidence that quality of life considerations are greater contributors to economic success than the quality of the business environment. Availability of local amenities such as art and culture establishments, recreational amenities, access to retail and personal care businesses, and transportation options have a stronger link to greater population and employment growth and lower poverty rates than the business environment.⁴³ An earlier study corroborates these results, demonstrating that quality of place factors in mid-sized metropolitan areas explain between 38% and 58% of differences in economic outcomes across different areas.⁴⁴

Availability of local amenities such as art and culture establishments, recreational amenities, access to retail and personal care businesses, and transportation options have a stronger link to greater population and employment growth and lower poverty rates than the business environment.⁴³

Ontario experienced an explosion in population growth between 2015 and 2020, primarily due to the increased inflows of international workers, students, and economic immigrants due to federal policy changes.

The rise of remote work has made 'quality of place' considerations even more important for economic development. With the support of higher levels of government, municipalities can direct their efforts and resources to enhance the livability of their communities to build a stronger regional value proposition. This includes investments in housing, recreational options, green spaces, leveraging existing community assets, and improving connectivity to places of work within and outside of their jurisdictions.

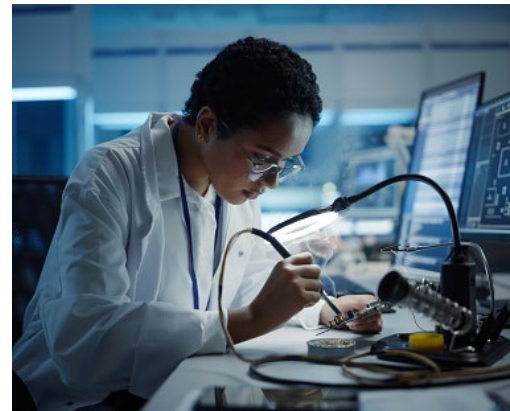
Housing and access to reliable broadband are two particularly acute issues for the region and its ability to attract and retain workers. Ontario experienced an explosion in population growth between 2015 and 2020, primarily due to the increased inflows of international workers, students, and economic immigrants due to federal policy changes. The associated rise in housing demand outpaced the construction of homes and played a role in the region's affordability crisis, leading many workers to move outwards (also known as the 'drive until you qualify' phenomenon).⁴⁵ This demonstrates how a failure to plan and coordinate at the regional level and across various levels of government can lead to reduced competitiveness. Moreover, access to reliable broadband is now a necessity for employees and employers right across the region. This is a policy area that, if addressed with bold action, would provide the region a competitive advantage in attracting businesses that are leveraging remote and hybrid work options for their employees.



Calls to Action

The Toronto region has a clear talent advantage; collectively, it boasts a highly integrated regional labour market that companies can draw on for their needs and a strong pipeline for new talent through immigration and its post-secondary institutions. Still, the region as a collective cannot take this advantage for granted and has much room to stake its position as a world-leading hub for talent. While it's true that the region is among the top global metro regions, it falls within the second-tier and struggles to advance into the top-tier.⁴⁶ The changing landscape of talent attraction presents a challenge but also an opportunity for the region to take stock of its assets and put forward a cohesive strategy to boost its talent advantage and more generally its competitive economic position in the world.

- 1** Develop a collective regional economic strategy for growth, competitiveness, and shared prosperity
- 2** Embrace best practices for investment attraction by doubling-down on a unified approach to FDI promotion
- 3** Focus on the power of place-making to strengthen the regional talent pipeline
- 4** Harness the potential of remote and hybrid work trends to boost economic growth in the region
- 5** Advocate for municipal finance reform



1 Develop a collective regional economic strategy for growth, competitiveness, and shared prosperity

To better position the region, municipalities should develop a regional economic strategy that aligns their respective economic development plans and policies. This includes elements such as workforce development, employment lands, sector/cluster strategies, export promotion, and inward FDI attraction. The current misalignment of plans across the region results in inefficiencies through duplicated efforts, inconsistent policies, and missed opportunities. Instead, policy makers, businesses, and other economic development actors must collaborate to ensure that a comprehensive set of economic development initiatives are put in place and that the region is able to maximize the potential of existing assets and funds available through municipal, provincial, and federal coffers.

2 Embrace best practices for investment attraction by doubling-down on a unified approach to FDI promotion

City-regions across North America are coming to realize that the greatest competition for business investments comes from other city-regions. To this end, many regions – including Montreal (which represents 82 municipalities) – have delegated investment attraction activities (and in many cases, additional economic development activities) to a regional agency, with much success. As is often the case, the whole is greater than the sum of its parts. If the Toronto region hopes to put its best foot forward to attract investments, its individual municipalities must support Toronto Global's mandate as the primary regional investment attraction agency. A fragmented approach will put us at a disadvantage in the face of global competition. The impact of the strong regional value proposition that Toronto Global puts forward on behalf of its members was exemplified in the highly publicized response to Amazon's HQ2 Request for Proposals that put the Toronto region – the sole Canadian candidate – on the short list.

3 Focus on the power of place-making to strengthen the regional talent pipeline

To build on the Toronto region's talent advantage, municipalities must commit resources toward making our communities more affordable, connected, and better places to live. These include expediting more affordable housing, integrated and seamless transit, place-making amenities, recreational and green spaces, and high-capacity broadband. While key infrastructure investments will require support from the provincial and federal governments, municipalities must champion these causes as a region. In addition, municipalities and local economic development institutions should look to build out the regional talent pipeline by identifying labour gaps, engaging with industry and academic institutions to address talent needs, and advocating for a steady stream of qualified talent through our post-secondary institutions and robust immigration policy, including addressing current visa challenges. The onus is on our policy makers across all three levels of government to invest in Canada's business and financial capital by growing the region's talent pipeline and building the infrastructure and housing required to keep them in the region. As the fight for talent rages on, employees will look to relocate to places of opportunity – where they can grow their careers but also where they can live and raise their families – and employers will look to follow the talent.



4 Harness the potential of remote and hybrid work trends to boost economic growth in the region

While the long-term equilibrium of work-from-home remains unknown, municipalities in the region should position themselves to take advantage of remote work trends. This includes making their respective cities more attractive for residents that work for a firm based elsewhere or companies that hire locally but do not have a significant physical presence in the city. As it stands, more than 60% of the regional labour force lives outside the City of Toronto. Increasingly, existing workers and those entering the workforce may be attracted to the prospect of remote or hybrid work opportunities. Current policy frameworks and economic development approaches may not be setting cities up to capitalize on this trend. For example, for many municipalities across the region FDI is assessed against the capital expenditure associated with the investment. This FDI success model must be re-evaluated in the face of the rising number of firms entering the region to hire talent with little or no real estate footprint. Despite the lack of capital expenditure associated with these FDI deals, they bring in net new labour income into the region which fuels further spending and associated tax revenue.

5 Advocate for municipal finance reform

Despite delivering key services, municipalities are under-resourced and unable to meet rising service demands because of the current financing model for municipalities. The reliance on property taxes is also partially responsible for the competition among municipalities to attract businesses to their specific locations. Municipalities must work with the province to redefine their respective roles and responsibilities as they relate to funding and delivery of services. For example, some experts have proposed that redistributive services no longer be funded by property tax revenues as they are not linked to the incomes of those taxed.⁴⁷ Our cities and regions are the nodes of economic activity that drive the provincial economy and so the Ontario government has a vested interest in accelerating reform at the municipal level.



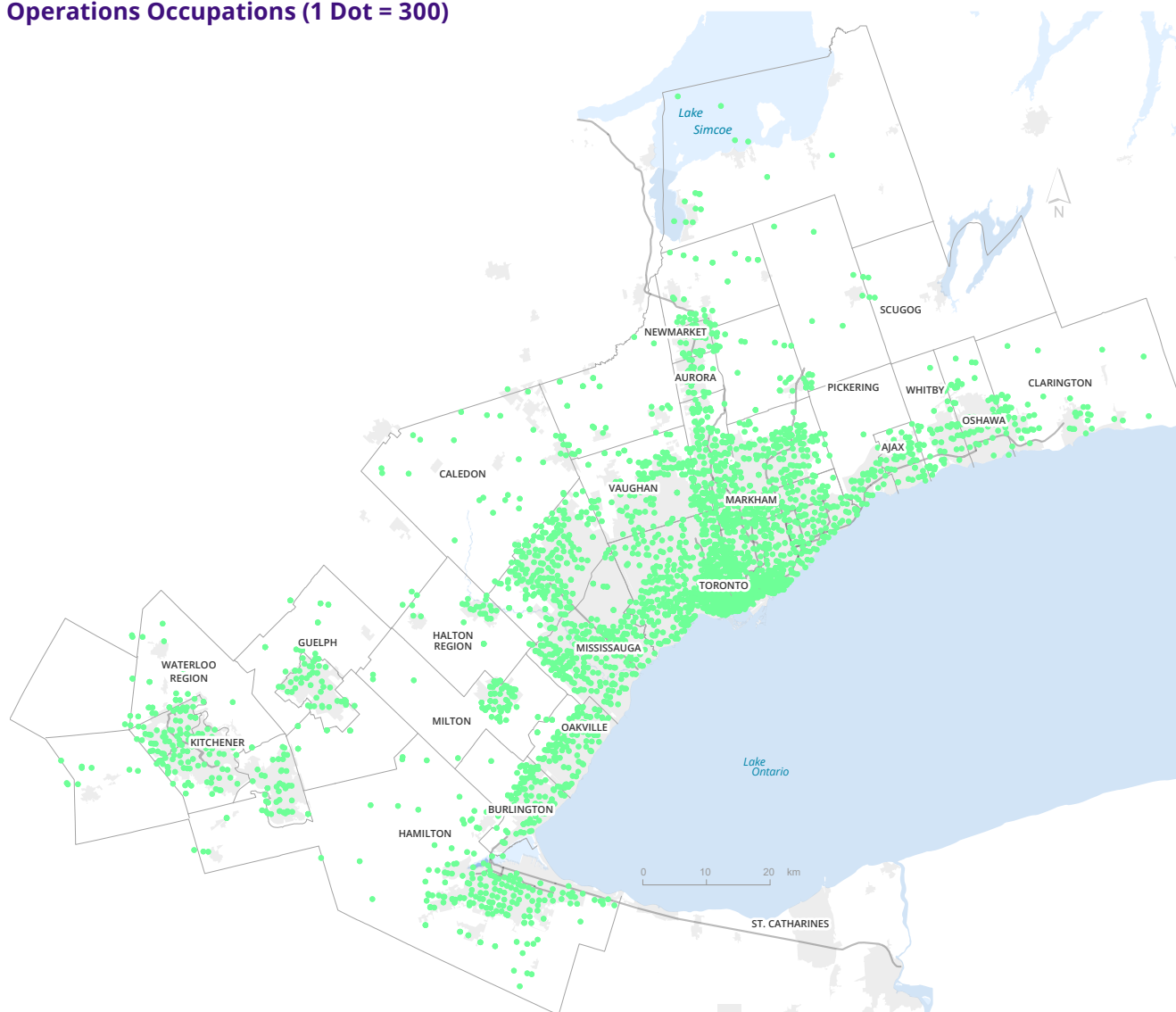
Appendix

APPENDIX A

Total Jobs by Occupation Cluster, Place of Residence, Innovation Corridor, 2016

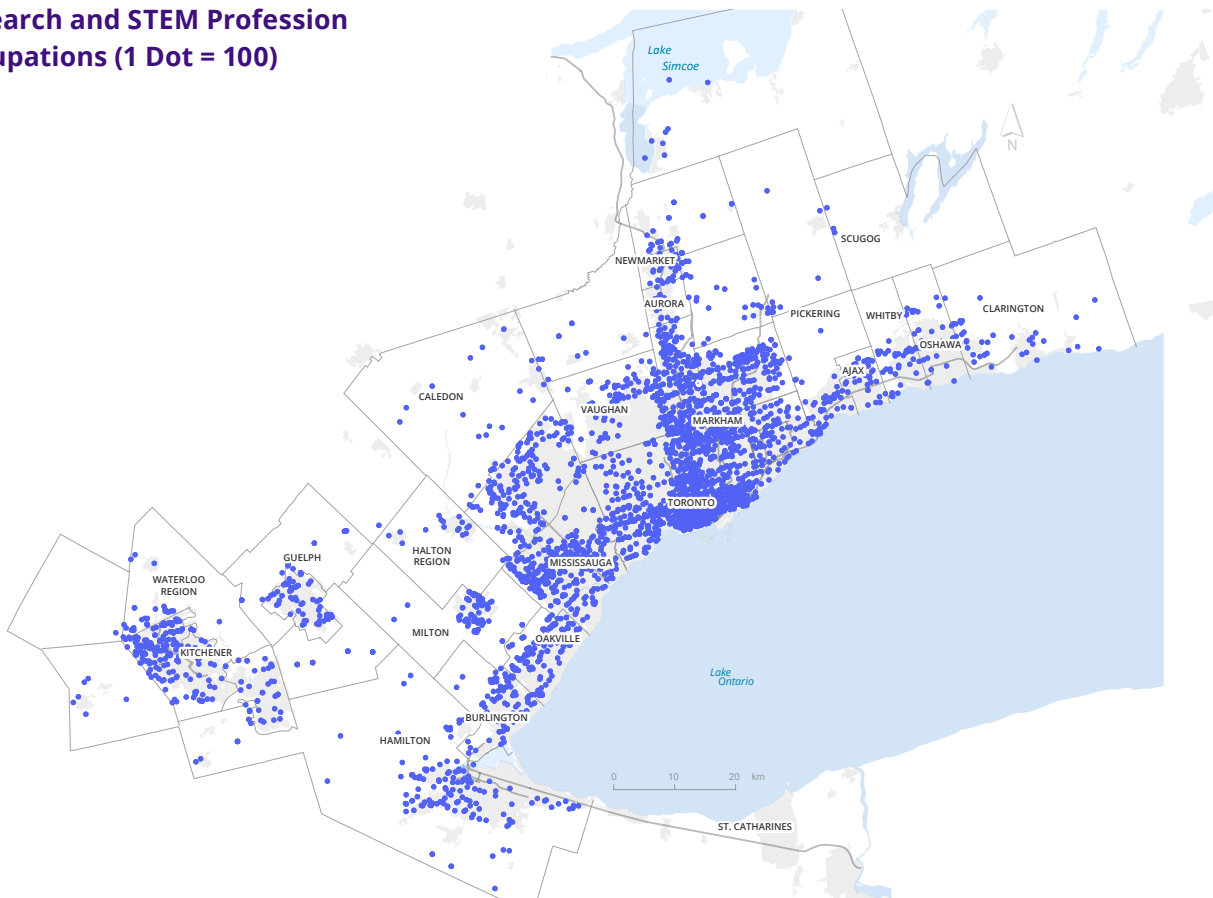
Talent is truly a regional asset for the Toronto region. Employees across various occupations live in municipalities throughout the region, albeit with some concentrations. Below we have mapped the presence of workers across five occupation clusters (or groupings) to demonstrate the dispersion of talent in the region. The Economic Blueprint Institute's (EBI) occupation cluster definitions reflect a set of mutually exclusive categories that represent meaningful segmentations of the labour force that share similar skills and abilities.

Business, Knowledge and Operations Occupations (1 Dot = 300)

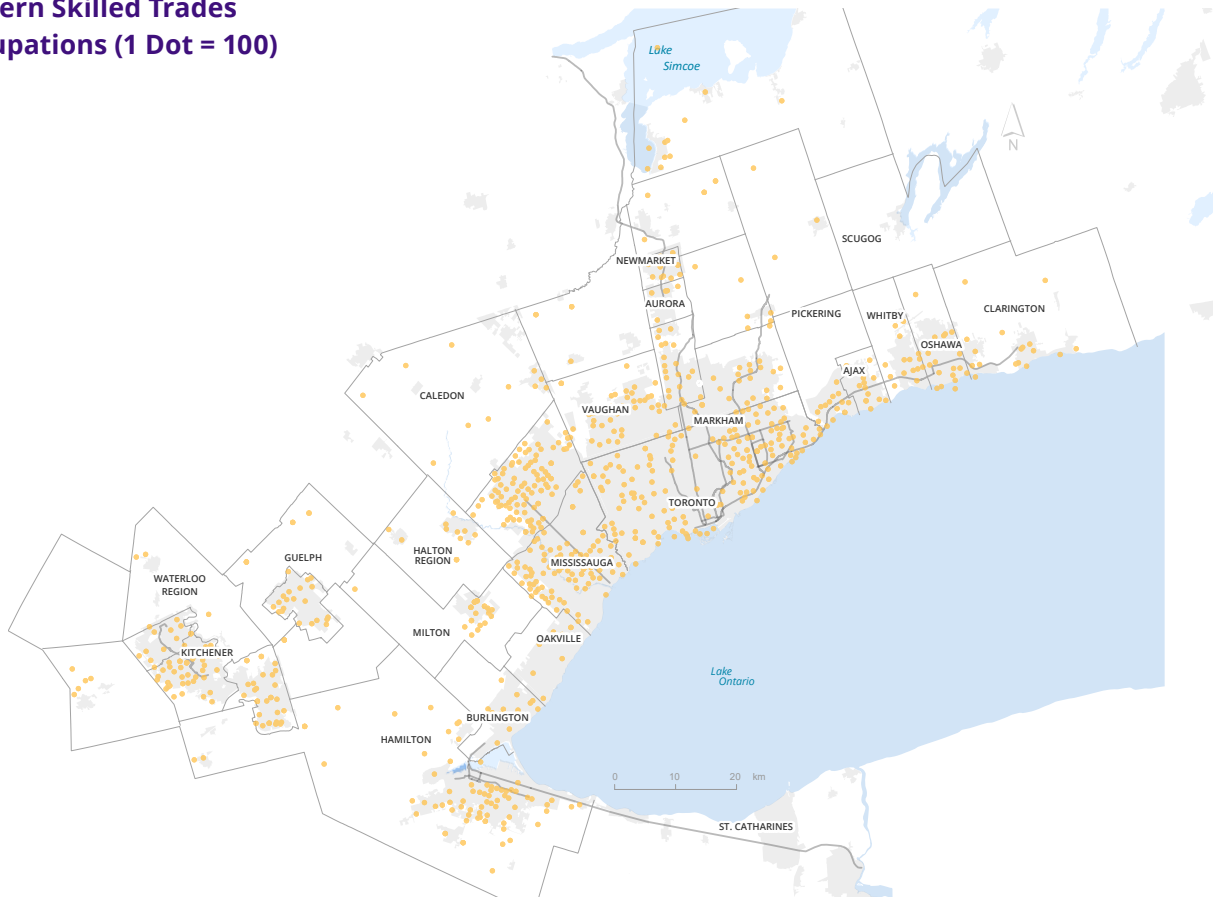


*Note: Analysis is based on employment data available for employment at the Census Tract (CT) level for 4-digit National Occupational Classifications (NOC). There is some data suppression at this level, which is not reflected in the analysis.
Source: Statistics Canada, Census (2016). Occupational clusters are based on EBI typology.*

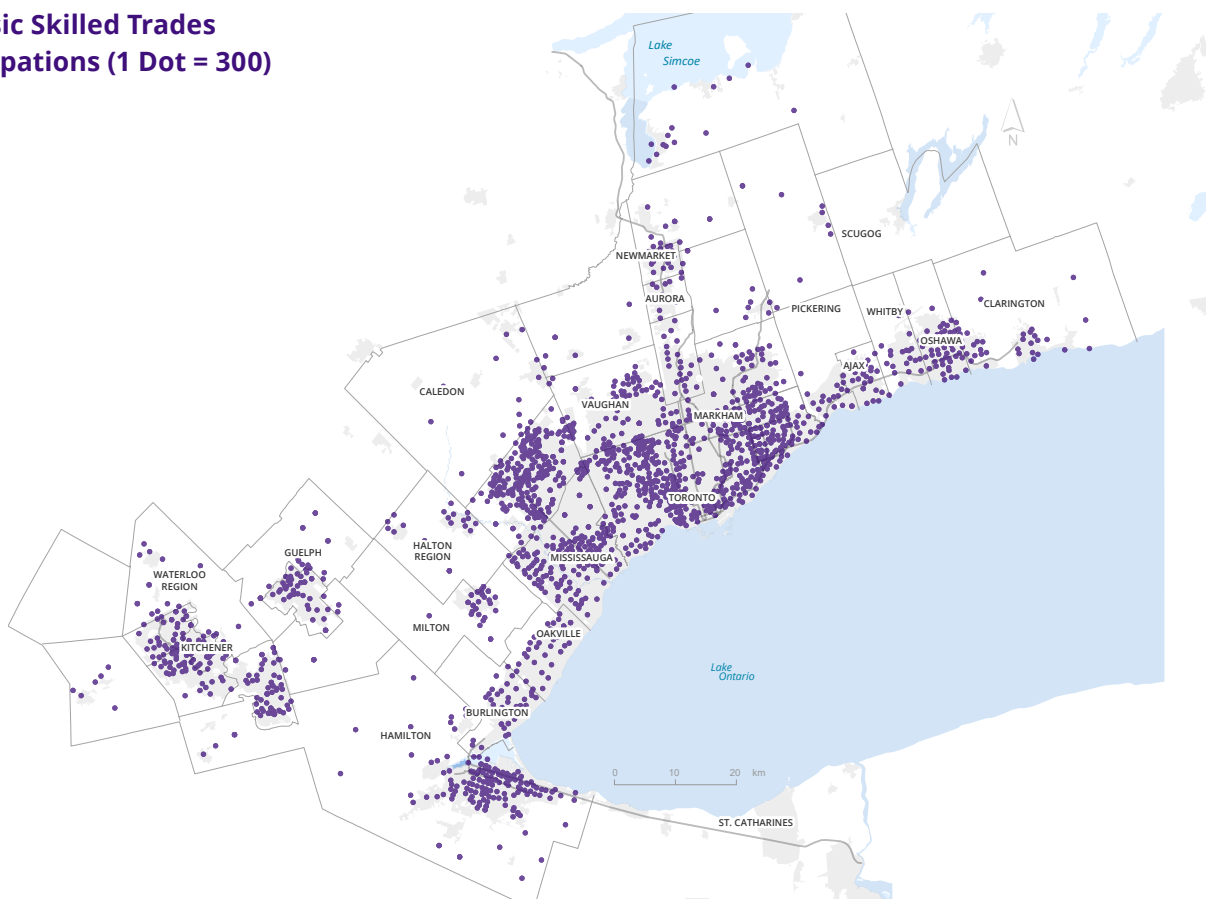
**Research and STEM Profession
Occupations (1 Dot = 100)**



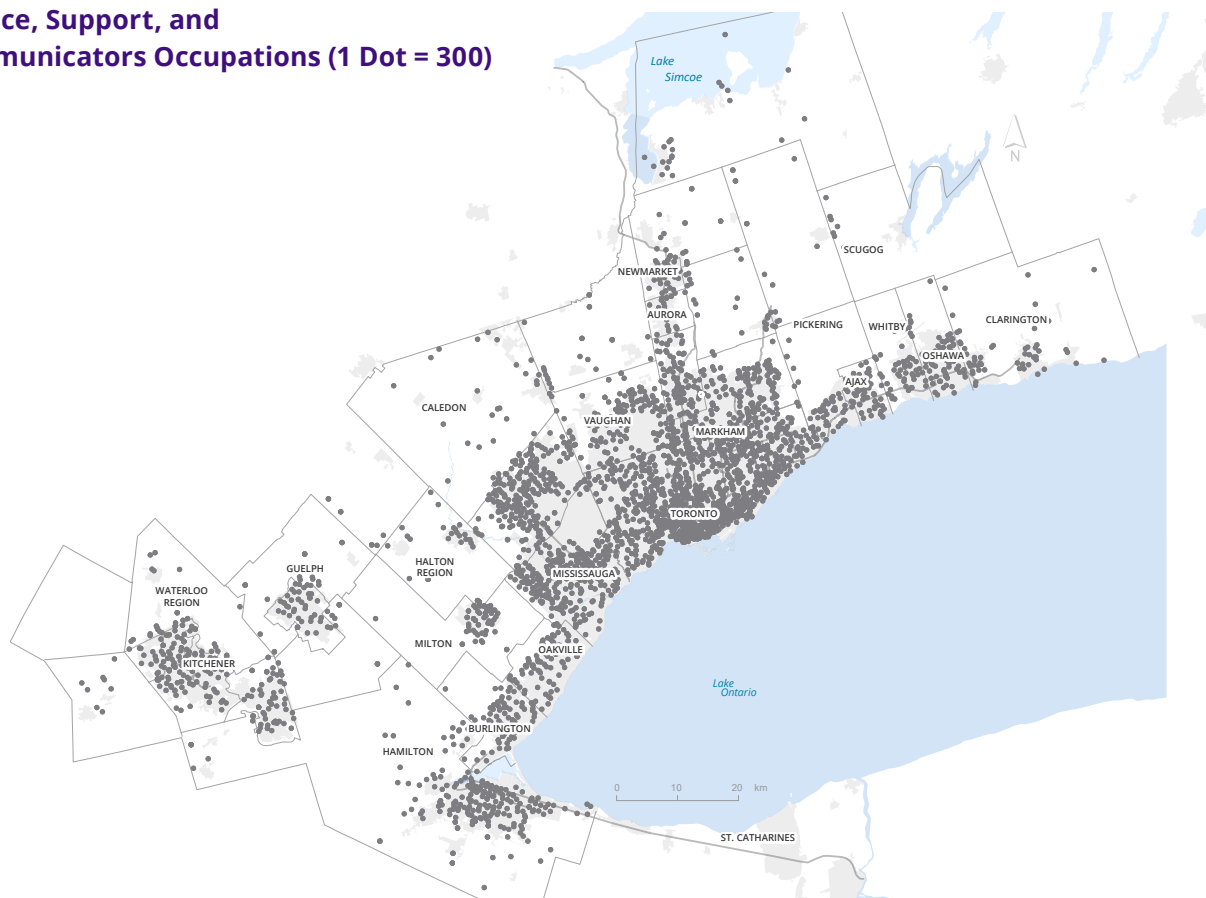
**Modern Skilled Trades
Occupations (1 Dot = 100)**



Classic Skilled Trades Occupations (1 Dot = 300)



Service, Support, and Communicators Occupations (1 Dot = 300)





Appendix B

Industry Case Studies

Toronto region's economy features a diversified mix of industries, with businesses that operate throughout and source talent near and far from across the Toronto region. We have profiled six prominent industries in the region, identifying factors that drive FDI location decisions, highlighting key occupations and their presence across the region, as well as the capacity for remote work in the industry. In addition, each case study features prominent locations with a critical presence of jobs in the industry, identifying characteristics that make it attractive for businesses and the commuter flows of their workers.

FDI Location Considerations

Companies looking to new markets to grow or expand existing operations consider several factors for their decision. These can be broadly bucketed into (a) the general business environment and (b) location-specific drivers. Factors that impact the business environment often apply across broader geographies and include access to finance, regulatory environment, cost of living, and taxes & incentives. Location-specific drivers include attractiveness of the local living environment (amenities), presence of an existing industry cluster, access to appropriate real estate, and the quality and availability of talent.

Real estate and quality of talent are often two of the strongest determinants of location decisions, but with very different scopes. Real estate requirements are often hyper local – they speak to a specific site (or sites) that are appropriate for a company's needs. The combination of an existing industry cluster and

real estate assets may very well be suited to a specific location. Conversely, talent is sourced regionally – in the case of the Innovation Corridor labour it is pulled from municipalities across the region.

Case Study Industries and Locations

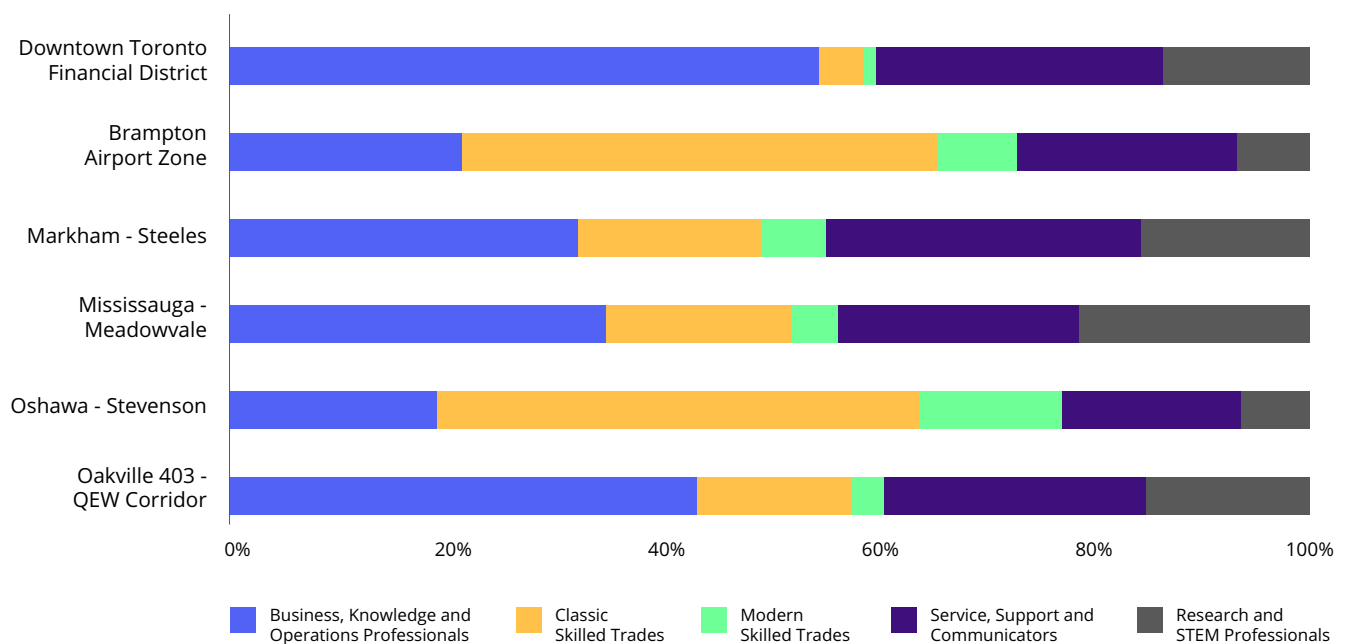
The six case studies, summarized below, profile various industries and prominent locations across the Toronto region. As the individual case studies show, the commuting patterns across locations demonstrates the degree to which businesses in these locations rely on workers from outside the municipality in which they are located. More often than not, far more workers commute from outside the municipality of the business than from within – a credit to mobility within the region and a demonstration of the interlinkages and interdependence between the various municipalities.

Summary of Case Study Findings

Industry Cluster	Case Study Location	Region	% Share of workers who commute from outside municipality	% Share of workers that can work remotely
Life Sciences R&D	Mississauga – Meadowvale	Peel Region	67%	High – 58%
Financial Services	Financial District (Downtown Toronto)	City of Toronto	31%	Very High – 85%
Technology R&D	Markham – Steeles	York Region	71%	High – 59%
Automotive	Oshawa – Stevenson	Durham Region	71%	Low – 24%
Warehousing and Logistics	Brampton Airport Zone	Peel Region	53%	Low – 32%
Professional Services	Oakville 403 – QEW Corridor	Halton Region	76%	High – 68%

Based on analysis by the Economic Blueprint Institute, the proportion of the workforce able to work remotely was estimated according to the occupational profile in each area. As can be seen below, areas with a greater concentration of knowledge-based professions had a higher share of workers with the ability to work from home. For areas with a significant concentration of these occupations, the proportion of commuters coming from outside the municipality might increase further over time if remote working becomes normalized at scale.

Share of Employment by Occupational Cluster and Case Study Location



Note: Occupational clusters based on EBI typology; excludes members of the Canadian Armed Forces.

Source: Statistics Canada, Census (2016).

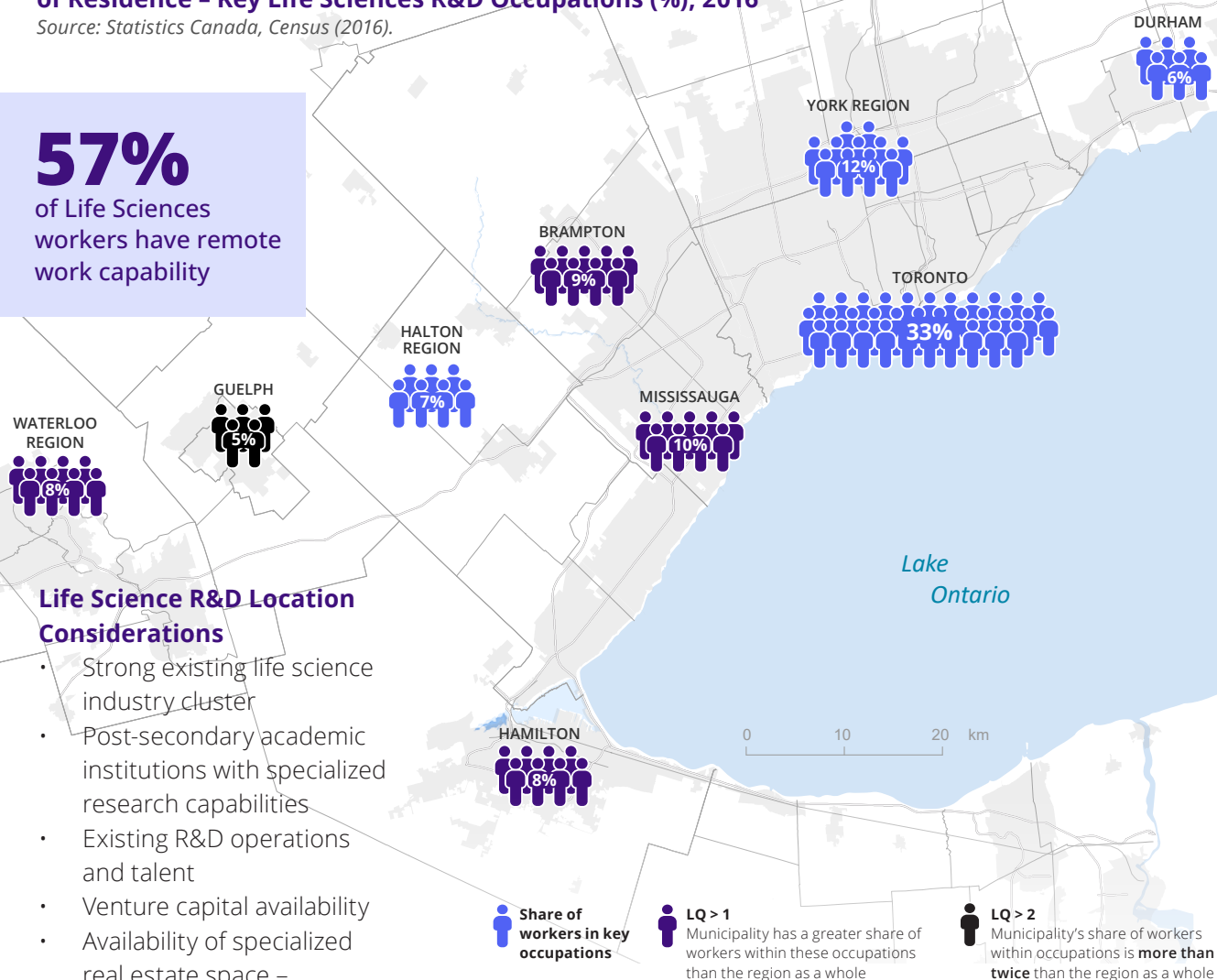
Life Sciences R&D

Mississauga – Meadowvale Case Study

Exhibit 1: Share of Innovation Corridor Employment by Municipality of Residence – Key Life Sciences R&D Occupations (%), 2016ⁱ

Source: Statistics Canada, Census (2016).

57%
of Life Sciences
workers have remote
work capability



Life Sciences R&D in the Innovation Corridor

67% of key occupations related to life sciences R&D within the Innovation Corridor live outside the City of Toronto (Exhibit 1). Waterloo Region and the Cities of Brampton, Guelph, Hamilton, and Mississauga have a high concentration of workers in these key occupations (LQ>1). Life science industry operations are dispersed across the Innovation Corridor, most notably with start-ups clustered in downtown Toronto's Discovery District, and commercialization and manufacturing activities concentrated in the surrounding regions, each with particular specialties across pharmaceuticals, cell and gene therapies, biotech, medtech, etc.

Key Roles

- Laboratory Specialist
- Laboratory Technician
- Scientist
- R&D Team Leader
- Facilities/Offices Services Specialist
- Head of R&D

Meadowvale – Pill Hill

Although the life science industry is strong across the Innovation Corridor, it is especially pronounced in the Meadowvale area of the City of Mississauga. Meadowvale is one of the largest business parks in the Innovation Corridor and a crucial employment zone for the City of Mississauga. Spanning a mix of industrial lands and suburban-style office buildings located along the 401 highway, the area is home to Canadian head offices of over a dozen Fortune 500 companies,⁴⁸ many of which are in life sciences, giving the area its nickname ‘Pill Hill.’ Meadowvale’s industrial make-up is highly geared towards science and technology-oriented fields. 21% of jobs in the location are in Research and STEM professions.⁴⁹ Appropriately for ‘Pill Hill,’ 17% of jobs in the location are in pharmaceutical and medicine manufacturing and another 6% are in pharmaceutical-related wholesaling.

Commuting Patterns and Workforce Dynamics

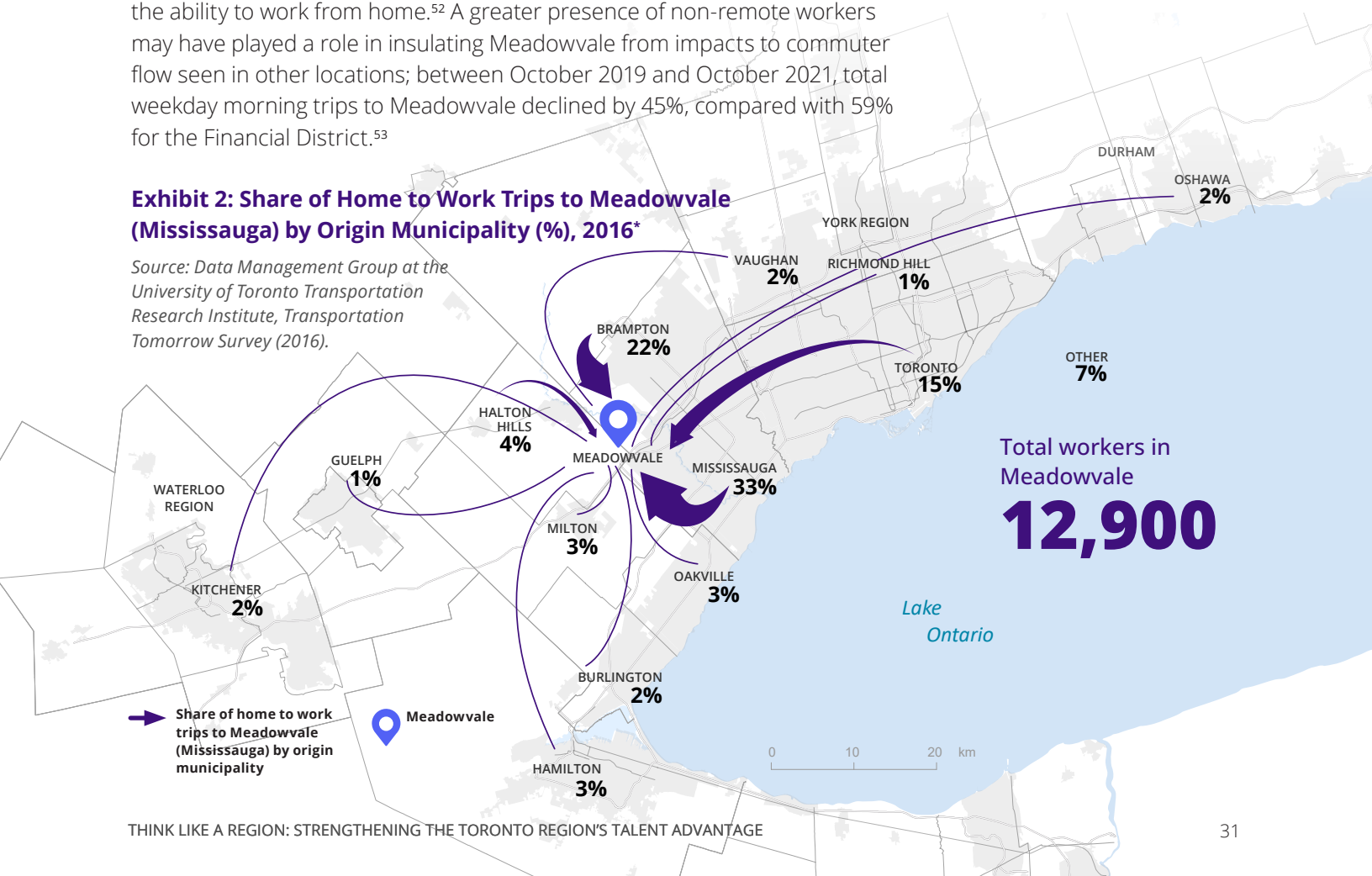
While the largest share of commuters to Meadowvale originate from the City of Mississauga, two-thirds of overall work trips are from outside the municipality (Exhibit 2).⁵⁰

Remote Work Capacity

An estimated 57% of workers in life science industries can work remotely.⁵¹ Similarly, 58% of workers in the Meadowvale location are estimated to have the ability to work from home.⁵² A greater presence of non-remote workers may have played a role in insulating Meadowvale from impacts to commuter flow seen in other locations; between October 2019 and October 2021, total weekday morning trips to Meadowvale declined by 45%, compared with 59% for the Financial District.⁵³

Exhibit 2: Share of Home to Work Trips to Meadowvale (Mississauga) by Origin Municipality (%), 2016*

Source: Data Management Group at the University of Toronto Transportation Research Institute, Transportation Tomorrow Survey (2016).



Companies Located In or Near this Area

LIFE SCIENCE

Abbot
Amgen
Bora Pharmaceuticals
Roche
Thermo Fisher Scientific

TECHNOLOGY

AML Rightsource
Billenium
Cognizant
HCL

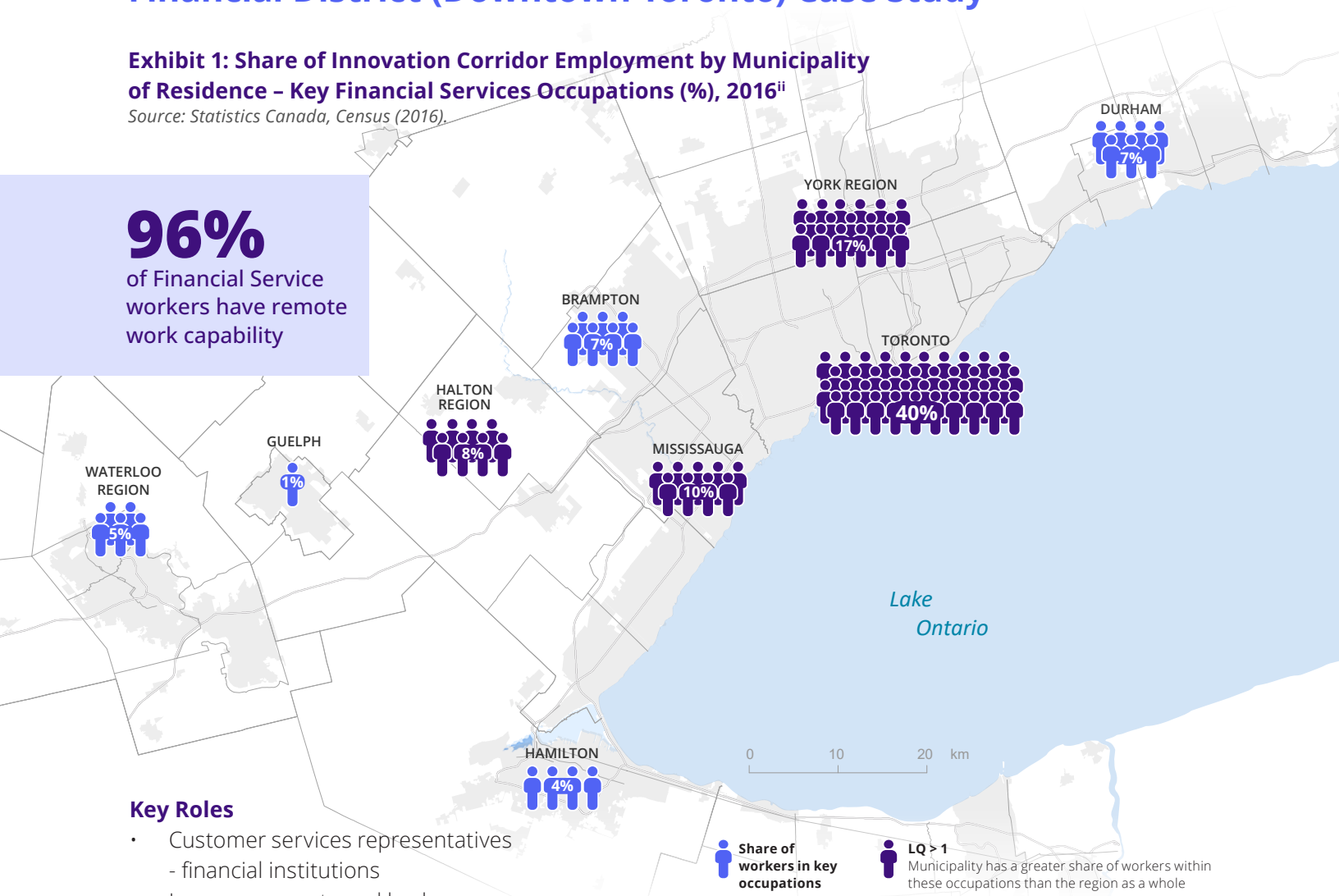
Financial Services

Financial District (Downtown Toronto) Case Study

Exhibit 1: Share of Innovation Corridor Employment by Municipality of Residence – Key Financial Services Occupations (%), 2016ⁱⁱ

Source: Statistics Canada, Census (2016).

96%
of Financial Service
workers have remote
work capability



Key Roles

- Customer services representatives - financial institutions
- Insurance agents and brokers
- Financial sales representatives
- Banking, credit and other investment managers
- Financial and investment analysts
- Other financial officers

Financial Services Location Considerations

- Existing financial centre or hub with major finance and insurance actors
- High-quality urban amenities are attractive, particularly for client-facing firms
- Access to a highly educated talent pool
- Access to both technical support services and back-end operations

Financial Services in the Innovation Corridor

60% of key occupations in financial services industries within the Innovation Corridor live outside the City of Toronto (Exhibit 1). York and Halton Region and the Cities of Mississauga and Toronto have a high concentration of workers in these key occupations (LQ>1). While financial services operations, both retail and commercial, are located throughout the Innovation Corridor, it is heavily concentrated in Downtown Toronto, the second largest financial hub in North America outside of New York City, and home to the headquarters of all five major Canadian Banks.



Financial District (Downtown Toronto)

At 119,000 jobs, the Financial District constitutes the largest employment centre in the Toronto region and is a critical economic driver for the Innovation Corridor.⁵⁴ For nearly half a century, the Financial District has been home to the corporate headquarters for all five national banks along the famed Bay Street, which have in turn helped attract leading multinational professional service firms. Today, employment in the area is heavily concentrated in professional and knowledge-oriented industries such as banking, consulting, and technology. Numerous coworking spaces have opened in the area in recent years, capitalizing on the location's near proximity to talent, postsecondary institutions, and knowledge-oriented firms.

More recently, Downtown Toronto has become a critical node in the region's rapidly growing tech industry. Technological capabilities are also increasingly becoming integrated into the financial services sector as firms adopt sophisticated technology platforms and trading systems. The combination of tech and financial services in this concentrated node has also given rise to a growing fintech sector that blurs the line between the two sectors.

FS Companies Located In or Near this Area

All Major Canadian Banks
(Scotiabank, TD, CIBC, RBC, BMO)

All Major Canadian Pension Plans (CPPIB, Ontario Teachers' Pension Plan, OMERS)

Deloitte, PwC, KPMG, EY

HSBC's Global innovation Centre

Brookfield Asset Management

Wealthsimple

Sun Life

Manulife

Canada Life

Commuting Patterns and Workforce Dynamics

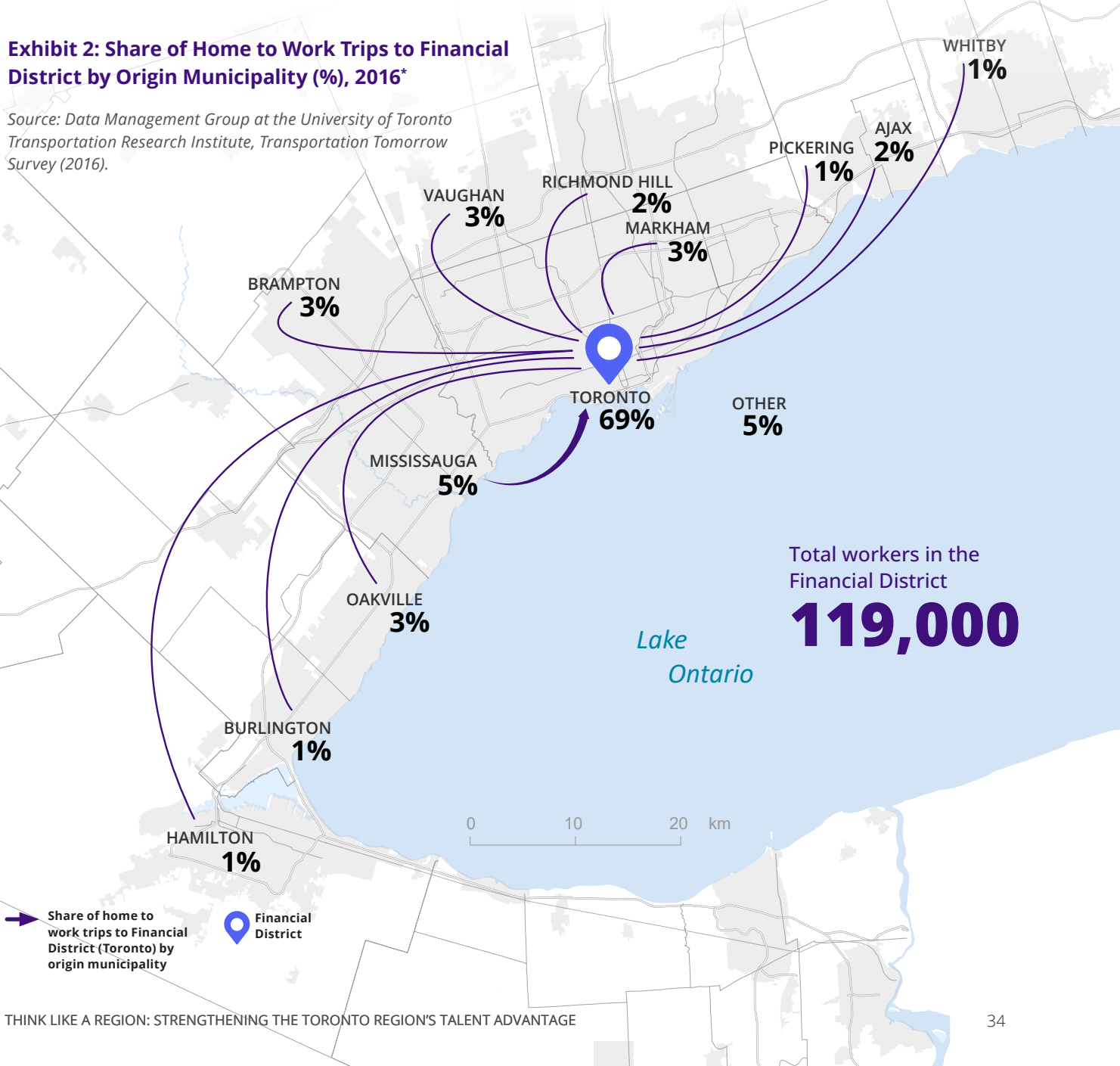
The Financial District is the busiest commuter hub in not just the Toronto region and Innovation Corridor, but all of Canada. Yet most trips to the Financial District (69%) originate within the City of Toronto (Exhibit 2),⁵⁵ a reflection of the city's expansive labour pool and ability to move large numbers of workers from across the municipality into the Financial District.

Remote Work Capacity

An estimated 96% of workers in financial services industries can work remotely.⁵⁶ With most of its workers employed in professional and finance occupations, 85% of workers in the Financial District have the ability to work from home.⁵⁷ This has led to a sharp decline in worker volumes in the Financial District since the start of the pandemic. As of April 2022, according to data from Telus Insights weekday worker volumes were 66% below 2019 levels.⁵⁸

Exhibit 2: Share of Home to Work Trips to Financial District by Origin Municipality (%), 2016*

Source: Data Management Group at the University of Toronto Transportation Research Institute, Transportation Tomorrow Survey (2016).



Technology R&D

Markham – Steeles Case Study

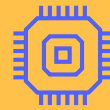


Exhibit 1: Share of Innovation Corridor Employment by Municipality of Residence – Key Technology R&D Occupations (%), 2016ⁱⁱⁱ

Source: Statistics Canada, Census (2016)

82%

of ICT industry workers have remote work capability

Technology R&D Location Considerations

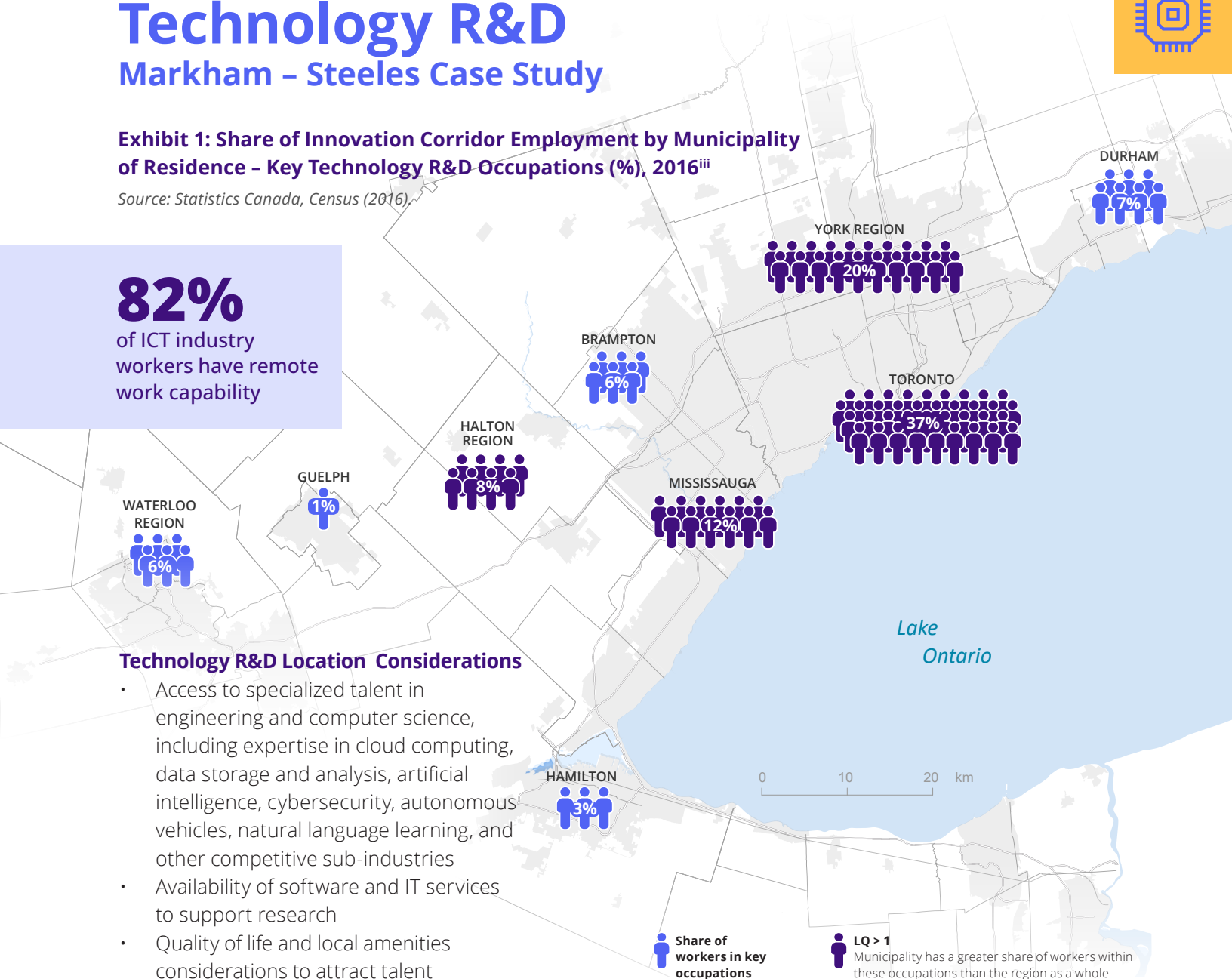
- Access to specialized talent in engineering and computer science, including expertise in cloud computing, data storage and analysis, artificial intelligence, cybersecurity, autonomous vehicles, natural language learning, and other competitive sub-industries
- Availability of software and IT services to support research
- Quality of life and local amenities considerations to attract talent
- Proximity to financial institutions and access to venture capital

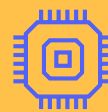
Key Roles

- Computer Operator
- Programmer and Senior Programmer
- Software Development Engineer and Senior Software Development Engineer
- Technology Engineering Specialist
- Web Developer
- R&D Team Leader
- Business Unit Manager

Technology R&D in the Innovation Corridor

63% of key occupations related to Technology R&D within the Innovation Corridor live outside the City of Toronto (Exhibit 1). York and Halton Region and the Cities of Mississauga and Toronto have a high concentration of workers in these key occupations (LQ>1). Strong concentrations of tech employers are found in downtown Toronto and York Region as well as North Mississauga.





Markham – Steeles

Although technology companies are present across the Toronto region, the Markham-Steeles location features a number of global leaders. The area is home to the likes of IBM, Lenovo, Huawei, and GM's Technical Centre, which is carrying out pioneering research and development in autonomous vehicles, just a few doors down from Veoneer, another market leader in the space.

Markham-Steeles is part of an extensive concentration of businesses located along highway 404 in York Region. Identified as one of five suburban knowledge-intensive districts in Ontario's Greater Golden Horseshoe, the area is home to several influential tech companies, as well as smaller clusters in finance, accounting, and other back-office functions. Situated at the intersection of two main highways – the 404 and the 407 – the area offers companies crucial regional access to highly skilled talent. For many international companies, locating in Markham provides the benefit of joining a large East Asian diaspora community and the culturally fitting amenities, restaurants, and social opportunities offered by the area. Given the greater availability of housing options, compared to downtown, this area is also attractive to companies and their employees who prioritize family-friendly neighbourhoods and a suburban lifestyle.

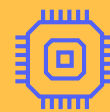
Companies and Institutions Located in or Near this Area

TECHNOLOGY INSTITUTIONS

Huawei
IBM
GM's Technical Centre
Lenovo
Oracle
Veoneer

PROMINENT INSTITUTIONS

YSpace Incubator
ventureLAB
York University (future campus)



Commuting Patterns and Workforce Dynamics

Toronto's importance to the overall regional tech ecosystem is reflected in commuter data to Markham-Steeles. While Markham accounts for 29% of home to work trips to the location, with neighbouring Richmond Hill generating 11% and Vaughan generating 4%, 38% of workers commute from the City of Toronto (Exhibit 2).⁵⁹ In total, 71% of workers in Markham-Steeles commute from outside the City of Markham, one of the highest shares of the six case study locations.

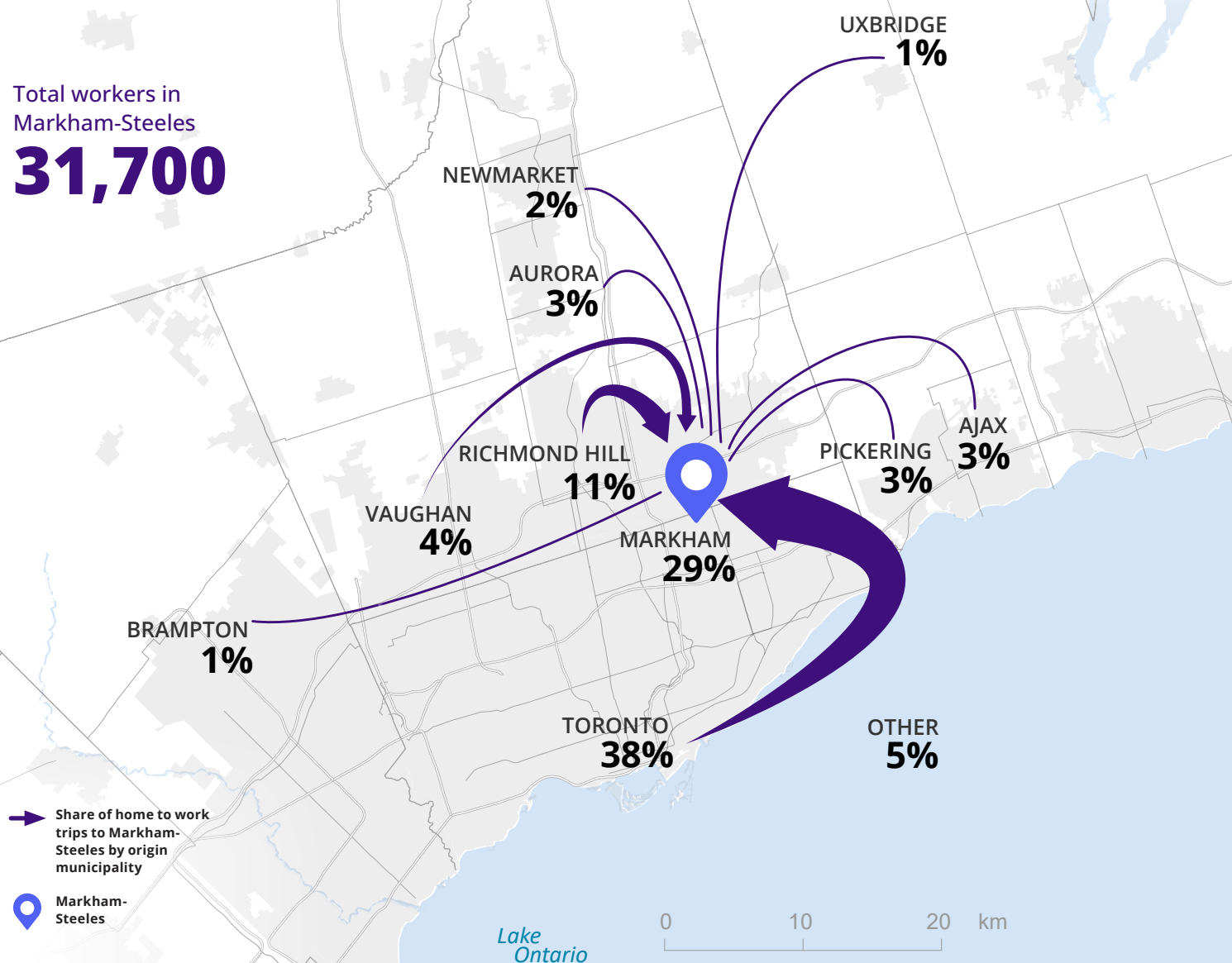
Remote Work Capacity

An estimated 82% of workers in Information and Communications Technology (ICT) industries can work remotely.⁶⁰ 59% of workers in Markham-Steeles are able to work from home, roughly on par with the Meadowvale location.⁶¹ Between 2019 and 2021, weekday morning trips fell by 47% in Markham-Steeles.⁶²

Exhibit 2: Share of Home to Work Trips to Markham-Steeles by Origin Municipality (%), 2016*

Source: Data Management Group at the University of Toronto Transportation Research Institute, Transportation Tomorrow Survey (2016).

Total workers in
Markham-Steeles
31,700



Automotive

Oshawa – Stevenson Case Study

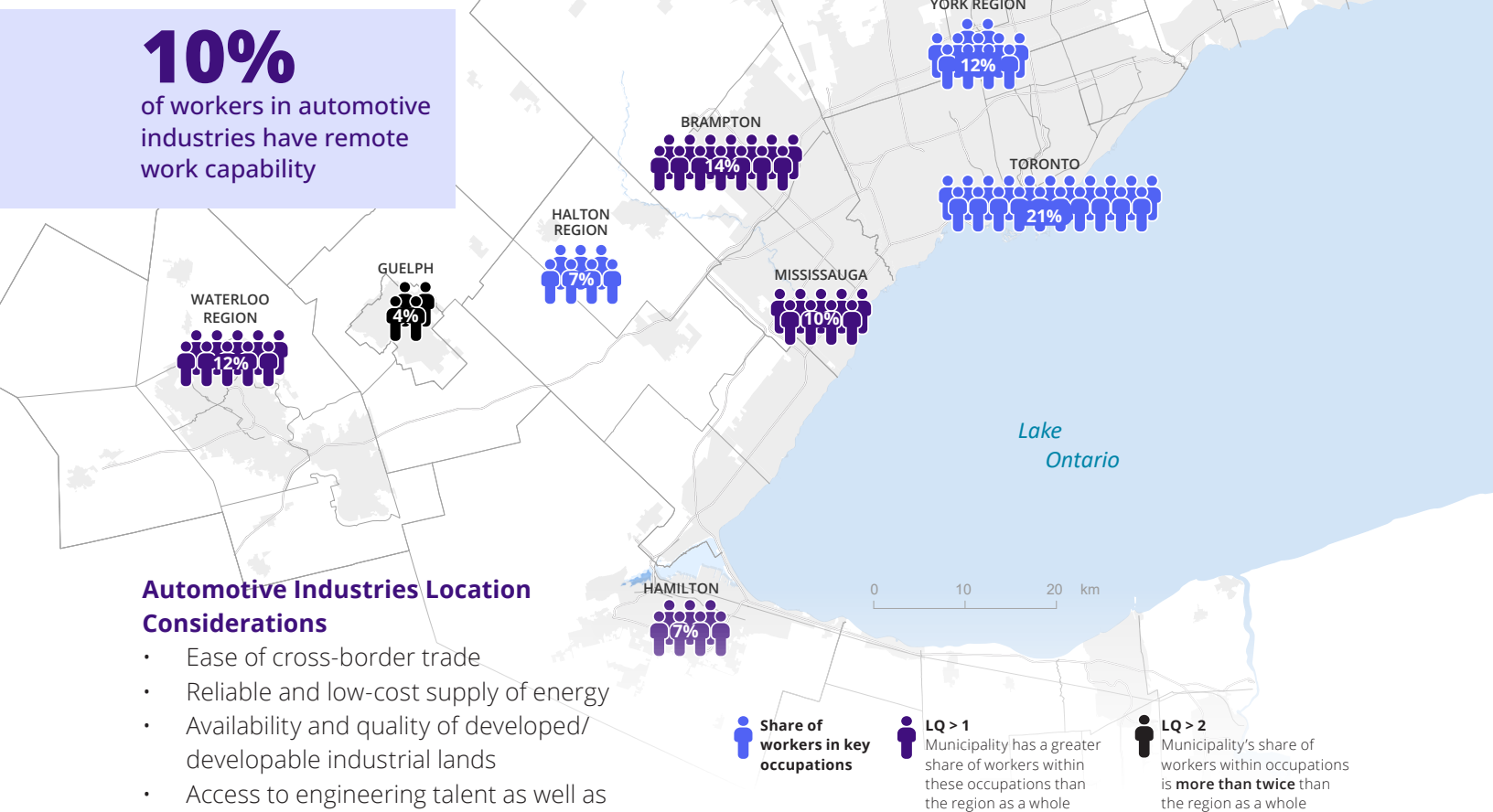


Exhibit 1: Share of Innovation Corridor Employment by Municipality of Residence – Key Automotive Industries Occupations (%), 2016^{iv}

Source: Statistics Canada, Census (2016).

10%

of workers in automotive industries have remote work capability



Automotive Industries Location Considerations

- Ease of cross-border trade
- Reliable and low-cost supply of energy
- Availability and quality of developed/developable industrial lands
- Access to engineering talent as well as skilled trades professionals
- Existing or potential space to develop vehicle testing and R&D facilities
- Local/regional specialized know-how to support transition to electric vehicle manufacturing

Key Roles

- Motor vehicle assemblers, inspectors and testers
- Supervisors, motor vehicle assembling
- Material handlers
- Manufacturing managers
- Welders and related machine operators
- Mechanical engineers

Automotive Industries in the Innovation Corridor

79% of key occupations in automotive industries within the Innovation Corridor live outside the City of Toronto (Exhibit 1). Waterloo Region and the Cities of Brampton, Guelph, Hamilton, and Mississauga have a high concentration of workers in these key occupations (LQ>1). These jobs are distributed throughout the region at several major OEM and automotive parts manufacturing facilities, namely GM in Oshawa (Durham Region), Ford in Oakville (Halton Region), Toyota in Cambridge (Waterloo Region), Linamar in Guelph and several Magna sites, including in Brampton, Mississauga and York Region.



Oshawa – Stevenson

Oshawa-Stevenson forms a key node within Ontario's leading automotive manufacturing network. As the site of GM's Canadian headquarters, the Oshawa-Stevenson business area supports hundreds of manufacturing jobs and is well connected to other parts of the country via highway 401 and train lines for the GO train, VIA Rail, and CN. Approximately one-third of jobs in the Oshawa-Stevenson location are directly related to automotive production, reflecting the importance of the GM plant.⁶³ The City of Oshawa also hosts several innovative institutions that support the automotive industry including the Ontario Technology University and Durham College, both of which offer automotive-specific training and apprenticeship programs.

The automotive industry is undergoing a transformational shift as cars are becoming increasingly connected, autonomous, and electric. As a result, automotive manufacturers and suppliers are re-tooling and investing across the value chain – from R&D to manufacturing – as they transition their business models and operations. Recent substantive investments from the Province of Ontario in the automotive sector – from assembly to new battery manufacturing to mining – could transform the sector to address global competition concerns. This includes a \$259 million investment from the province and federal government – as a part of a broader \$2 billion GM investment – that will support the addition of light-duty Chevy Silverado production and a third shift of production in the Oshawa plant as well as the first full-scale EV manufacturing line at the CAMI Assembly plant in Ingersoll.⁶⁴ As part of the Driving Prosperity Plan, the province plans to maintain and grow Ontario's auto sector by building at least 400,000 electric vehicles and hybrids by 2030.

Companies and Institutions Located In or Near this Area

MANUFACTURING COMPANIES

Cimetrix
EHC Global
General Motors
Safran Landing Systems

PROMINENT INSTITUTIONS

ACE Climatic Wind Tunnel
Brilliant Catalyst
Clean Energy Research Laboratory
Durham College
Microgrid Research and Innovation Park
Ontario Technology University
Spark Centre
Synergy Lab



Commuting Patterns and Workforce Dynamics

The majority of commuters to Oshawa-Stevenson are from within Durham Region, with the largest proportion (32%) coming from Clarington and the second largest (29%) from Oshawa (Exhibit 2).⁶⁵ In total, approximately 71% of commuters commute from outside the City of Oshawa and 7% commute from the City of Toronto, slightly more than the number commuting from Kawartha Lakes.

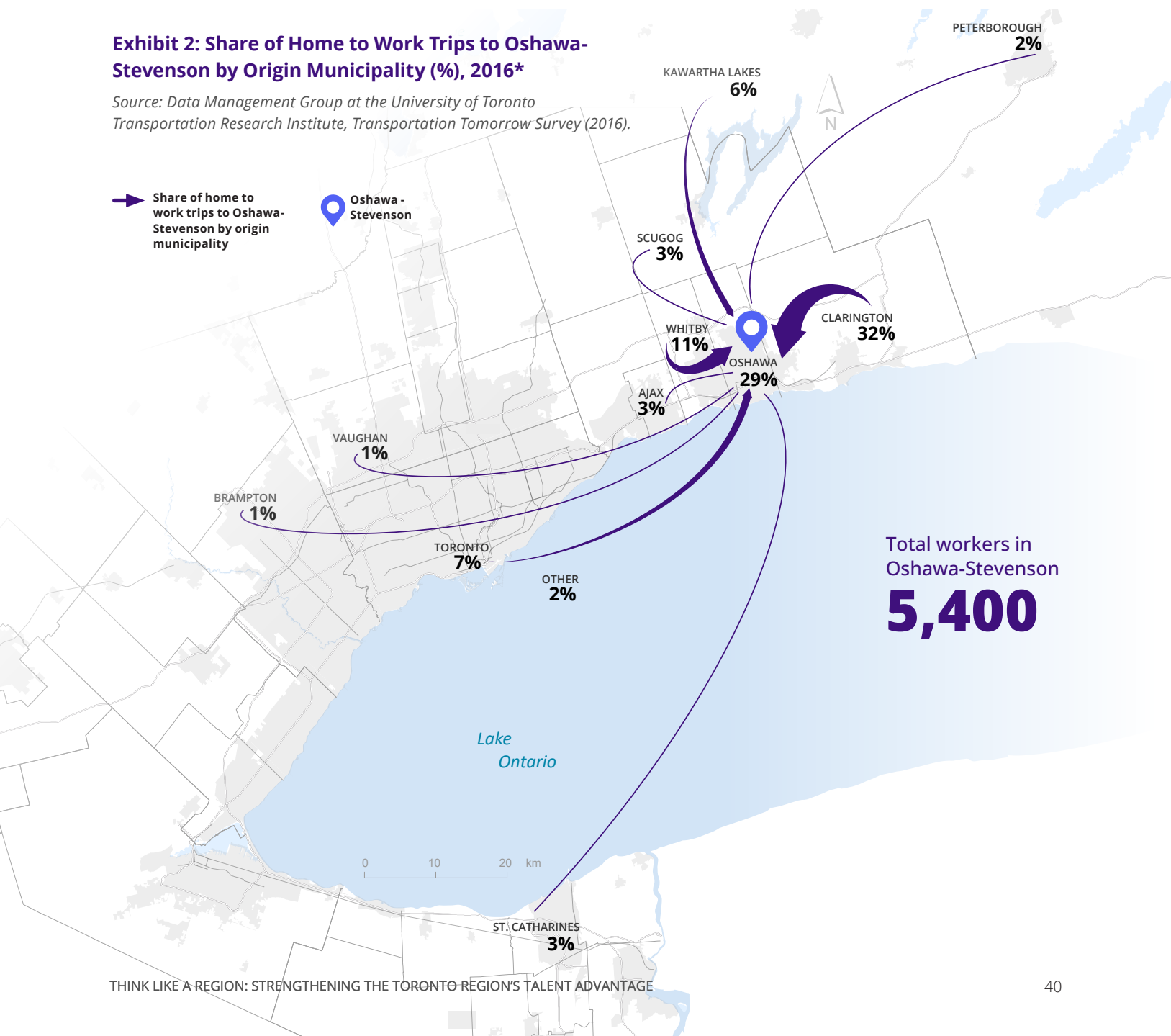
Remote Work Capacity

Only an estimated 10% of workers in automotive industries can work remotely.⁶⁶ 24% of workers in Oshawa-Stevenson are able to work from home, by far the lowest share of the case study locations.⁶⁷ Yet between October 2019 and 2021, average daily weekday morning commutes to the location declined by 66%.⁶⁸ This could be driven in part by the GM plant closure, as production did not resume until November 2021.

Exhibit 2: Share of Home to Work Trips to Oshawa-Stevenson by Origin Municipality (%), 2016*

Source: Data Management Group at the University of Toronto
Transportation Research Institute, Transportation Tomorrow Survey (2016).

➔ Share of home to work trips to Oshawa-Stevenson by origin municipality



Warehousing and Logistics

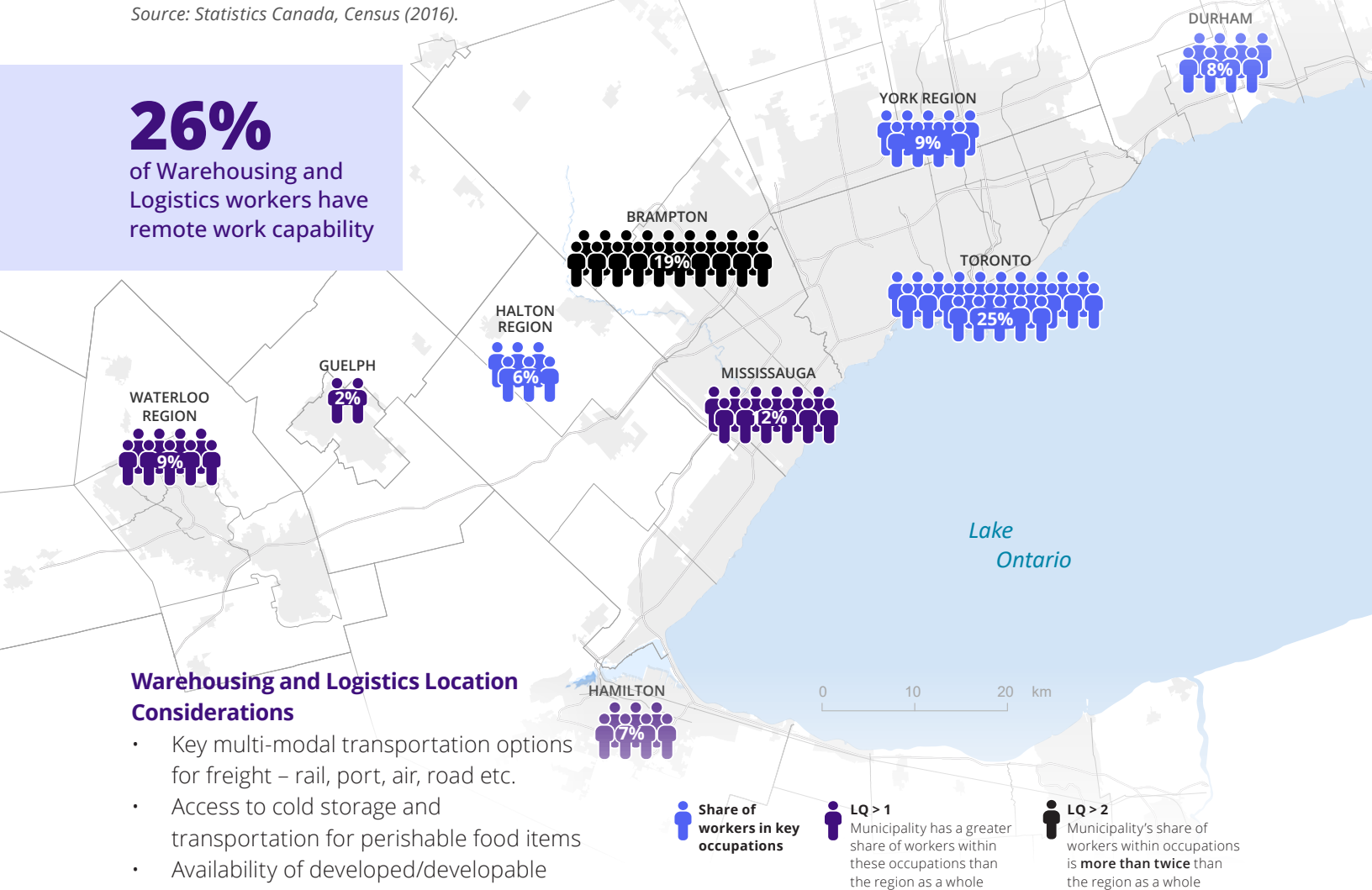
Brampton Airport Zone Case Study



Exhibit 1: Share of Innovation Corridor Employment by Municipality of Residence – Key Warehousing and Logistics Occupations (%), 2016*

Source: Statistics Canada, Census (2016).

26%
of Warehousing and
Logistics workers have
remote work capability



Warehousing and Logistics Location Considerations

- Key multi-modal transportation options for freight – rail, port, air, road etc.
- Access to cold storage and transportation for perishable food items
- Availability of developed/developable industrial employment lands
- Access to labour for physically demanding roles and truck drivers

Key Roles

- Transport truck drivers
- Material handlers
- Delivery and courier service drivers
- Couriers, messengers and door-to-door distributors
- Managers in transportation
- Shippers and receivers

Warehousing and Logistics Industries in the Innovation Corridor

75% of key occupations in warehousing and logistics industries within the Innovation Corridor live outside the City of Toronto (Exhibit 1). Waterloo Region and Cities of Brampton, Guelph, Hamilton, and Mississauga have a high concentration of workers in these key occupations (LQ>1). Warehousing and logistics operations are heavily concentrated along the region's highway 401 corridor.



Brampton Airport Zone

The area surrounding Pearson International Airport – also known as the Pearson Economic Zone – is one of the largest employment zones in the country, straddling the municipalities of Toronto, Brampton, and Mississauga, along the critical 401 (East-West) and 400/410 (North-South) highway corridors. The zone is ideally situated for manufacturers and warehousing businesses to ship and receive significant volumes of goods and attract skilled workers from the surrounding municipalities. The proximity to the airport is a key advantage for companies in this field – as with many manufacturers – but also important is the location's central position between three of Ontario's major OEMs: GM in Oshawa and Markham to the east, Ford in Oakville to the south, and Toyota in Cambridge to the west.

The Brampton Airport Zone, in particular, has some of the most sought after industrial real estate space in the entire Innovation Corridor, with prime access to Canada's largest international airport, handling over 312,000 tons of cargo annually which accounts for 45% of Canadian air cargo,⁶⁹ two CN Intermodal terminals, and highway connections all across the region. Nearly half of all jobs in the Brampton Airport Zone are in manufacturing, transportation, or warehousing, making this one of the most concentrated goods production hubs in the region.⁷⁰

Companies and Institutions Located in or Near this Area

WAREHOUSING & LOGISTICS COMPANIES

Amazon
 Cargo Country Group
 Canadian Tire Corporation
 Distribution Centre
 CHS Logistics
 DSV Solutions Inc.
 FedEx
 Nico Warehousing Trucking Ltd.
 Ryder Logistics
 Schenker

PROMINENT INSTITUTIONS

Pearson International Airport
 CN Intermodal Terminals



Commuting Patterns and Workforce Dynamics

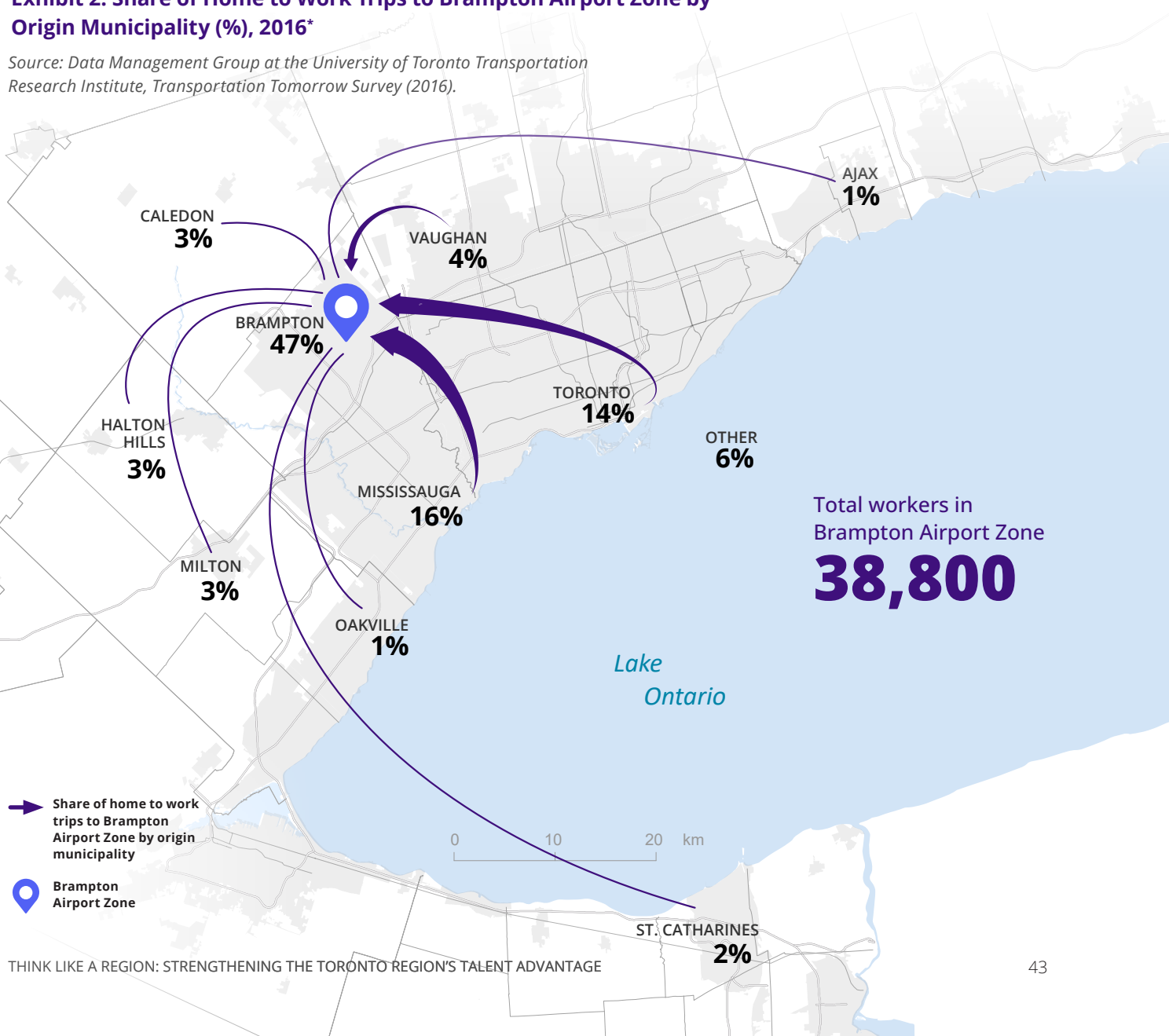
Approximately just over half (53%) of home to work trips to the Brampton Airport Zone originate outside of the City of Brampton (Exhibit 2). This is a relatively low proportion considering the location borders two other larger municipalities (Oakville's 403-QEW Corridor and Mississauga-Meadowvale draw 76% and 67% of their workers from outside their municipalities, respectively).⁷¹

Remote Work Capacity

An estimated 26% of workers within warehousing and logistics industries can work remotely.⁷² Unsurprisingly given the area's density of hands-on, industrial activity, only 32% of workers in the Brampton Airport Zone can work from home.⁷³ Still, in October 2021 average weekday morning trips to the Brampton Airport Zone were down 38% from 2019 levels.⁷⁴ This is likely driven by the steep decline in air traffic, but it could also reflect changes for some smaller occupational groups, such as retail managers and salespersons, who are able to work remotely

Exhibit 2: Share of Home to Work Trips to Brampton Airport Zone by Origin Municipality (%), 2016*

Source: Data Management Group at the University of Toronto Transportation Research Institute, Transportation Tomorrow Survey (2016).





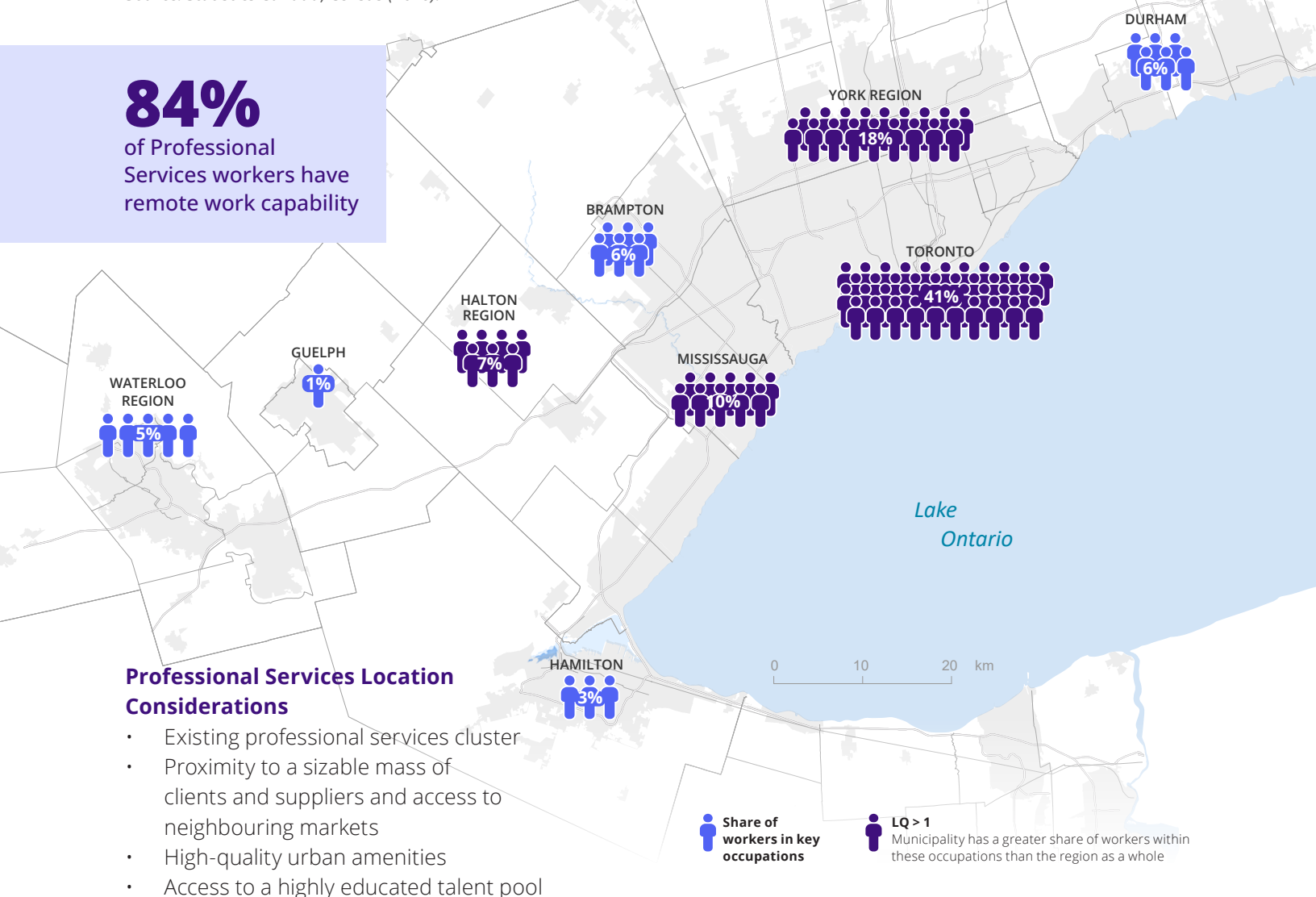
Professional Services

Oakville 403 – QEW Corridor Case Study

Exhibit 1: Share of Innovation Corridor Employment by Municipality of Residence – Key Professional Services Occupations (%), 2016^{vi}

Source: Statistics Canada, Census (2016).

84%
of Professional
Services workers have
remote work capability



Professional Services Location Considerations

- Existing professional services cluster
- Proximity to a sizable mass of clients and suppliers and access to neighbouring markets
- High-quality urban amenities
- Access to a highly educated talent pool

Key Roles

- Information systems analysts and consultants
- Financial auditors and accountants
- Lawyers and Quebec notaries
- Computer programmers and interactive media developers
- Professional occupations in business management consulting
- Accounting technicians and bookkeepers

Professional Services in the Innovation Corridor

59% of key occupations in professional services industries within the Innovation Corridor live outside the City of Toronto (Exhibit 1). York and Halton Region and the Cities of Mississauga and Toronto have a high concentration of workers in these key occupations (LQ>1).



Oakville 403 - QEW Corridor

The Oakville 403-QEW Corridor is prime real estate for the region's industrial and suburban office markets and features a diversified sectoral mix of professional services (accounting, sales, engineering, technology and management) and manufacturing. With easy highway access to many parts of the Innovation Corridor, including Downtown Toronto via the QEW, it has attracted several major businesses, including the Ford Motor Company, which has its Canadian headquarters in the area. Several engineering, tech, and financial services companies are located along the Corridor, who can draw on the highly skilled talent in Oakville, Burlington, Mississauga, and other surrounding municipalities.

Thanks to its regional accessibility via highways and GO Train service, the Oakville 403-QEW Corridor is a desirable location for many types of businesses. Proximity to suppliers and clients – many of which can be a great distance away – is a primary concern for many of these companies and a main reason many of them choose to locate along the 403-QEW Corridor. The GO Train service to downtown's Union Station is only 30-40 minutes, which makes Oakville an attractive location for those who service clients and companies located downtown.

Companies and Institutions Located In or Near this Area

COMPANIES

Aviva Canada
 Ford Motor Company of Canada
 Schaeffler
 Magnum 2000
 Siemens Canada Ltd.
 Peter Kiewit

PROMINENT INSTITUTIONS

Sheridan College's Trafalgar Campus
 McMaster University's DeGroote School of Business



Commuting Patterns and Workforce Dynamics

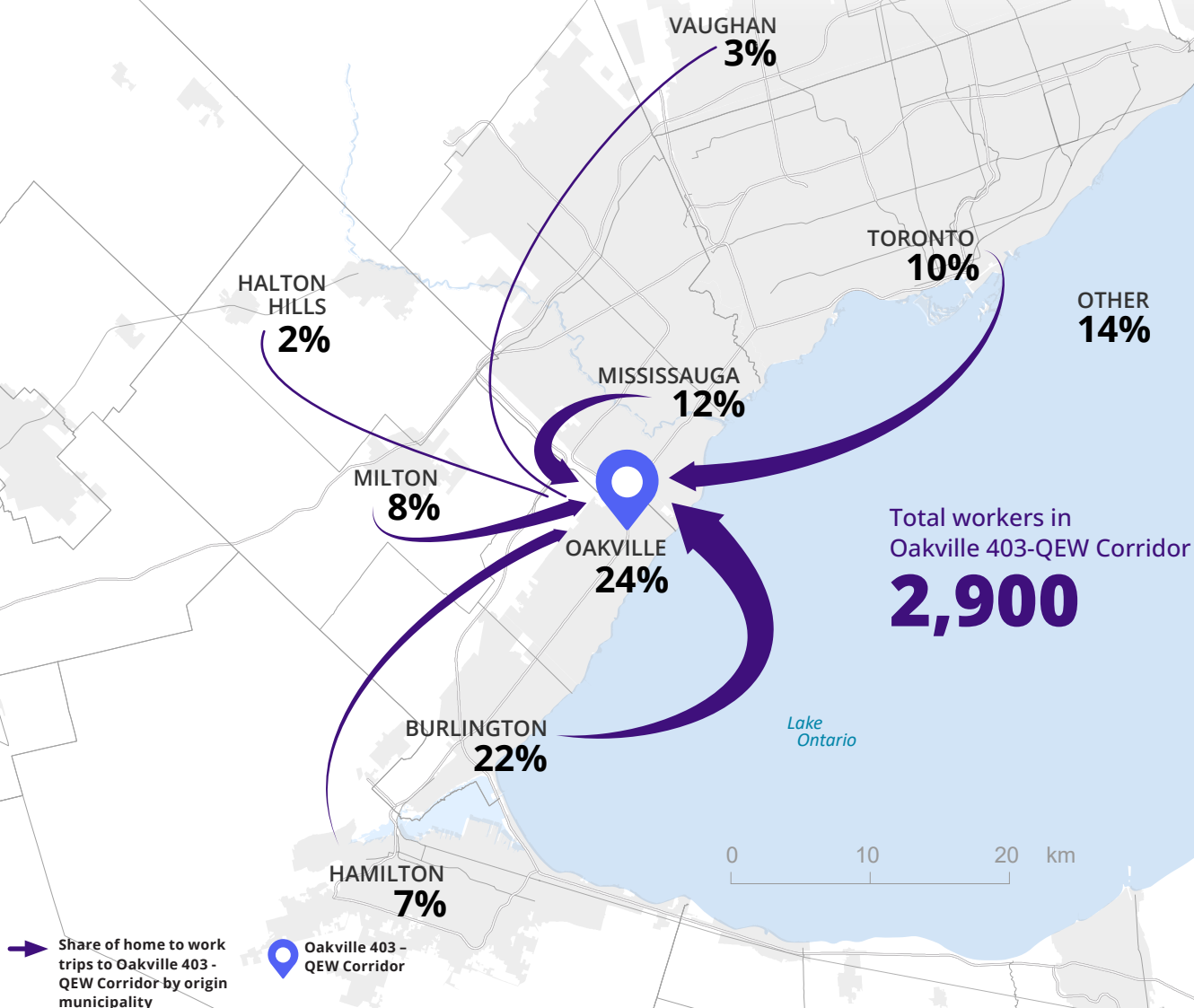
Municipalities in the Halton Region (largely Oakville and Burlington) together account for just under half of all home to work trips to the Oakville 403-QEW Corridor (Exhibit 2).⁷⁵ Another 12% commute from Mississauga, indicating that most workers in the location live in a nearby municipality. Taken together, though, more than three-quarters of all workers come from outside of Oakville, drawing on many different parts across the region.

Remote Work Capacity

An estimated 84% of workers within the professional services industry can work remotely.⁷⁶ Within the Oakville 403-QEW Corridor, an estimated 68% of workers are able to work from home.⁷⁷ This is attributed to the high concentration of workers in office-based professions. Average daily weekday morning traffic for all vehicles to the Oakville 403-QEW Corridor was down 55% in October 2021 from the level two years prior.⁷⁸

Exhibit 2: Share of Home to Work Trips to Oakville 403-QEW Corridor by Origin Municipality (%), 2016*

Source: Data Management Group at the University of Toronto Transportation Research Institute, Transportation Tomorrow Survey (2016).



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ⁱ The Innovation Corridor comprises the five Census Metropolitan Areas of Oshawa, Toronto, Hamilton, Guelph and Kitchener-Cambridge-Waterloo. Key life sciences R&D occupations are classified based on a selection of National Occupation Classification categories that most closely resemble job titles given by FDI Benchmarks in their Life Sciences R&D Centre Benchmarking Report. These include 'Life science professionals', 'Medical laboratory technologists', 'Chemical technologists and technicians', and 'Biological technologists and technicians'. LQ stands for 'Location Quotient' which is estimated as the municipality's share of workers within the occupations divided by the Innovation Corridor's share of workers within the same occupations.

ⁱⁱ The Innovation Corridor comprises the five Census Metropolitan Areas of Oshawa, Toronto, Hamilton, Guelph and Kitchener-Cambridge-Waterloo. Key financial services occupations are classified based on the top six occupations within the finance and insurance sector based on Ontario data. These include 'Customer services representatives - financial institutions', 'Insurance agents and brokers', 'Financial sales representatives', 'Banking, credit and other investment managers', 'Financial and investment analysts', and 'Other financial officers'. LQ stands for 'Location Quotient' which is estimated as the municipality's share of workers within the occupations divided by the Innovation Corridor's share of workers within the same occupations.

ⁱⁱⁱ Note: The Innovation Corridor comprises the five Census Metropolitan Areas of Oshawa, Toronto, Hamilton, Guelph and Kitchener-Cambridge-Waterloo. Key technology R&D occupations are classified based on a selection of National Occupation Classification categories that most closely resemble job titles given by FDI Benchmarks in their Software Development Centre Benchmarking Report. These include 'Web designers and developers', 'software engineers and designers', 'information system analysts and consultants', 'computer and information systems managers', 'computer network technicians', and 'computer engineers (excepts software engineers and designers)'. LQ stands for 'Location Quotient' which is estimated as the municipality's share of workers within the occupations divided by the Innovation Corridor's share of workers within the same occupations.

^{iv} The Innovation Corridor comprises the five Census Metropolitan Areas of Oshawa, Toronto, Hamilton, Guelph and Kitchener-Cambridge-Waterloo. Key automotive industries occupations are classified based on the top six occupations within the motor vehicle, motor vehicle body and trailer, and motor vehicle parts manufacturing industries based on Ontario data. These include 'Motor vehicle assemblers, inspectors and testers', 'Supervisors, motor vehicle assembling', 'Material handlers', 'Manufacturing managers', 'Welders and related machine operators', and 'Mechanical engineers'. LQ stands for 'Location Quotient' which is estimated as the municipality's share of workers within the occupations divided by the Innovation Corridor's share of workers within the same occupations.

^v The Innovation Corridor comprises the five Census Metropolitan Areas of Oshawa, Toronto, Hamilton, Guelph and Kitchener-Cambridge-Waterloo. Key warehousing and logistics occupations are classified based on the top six occupations within the air transportation, rail transportation, water transportation, truck transportation, courier and messengers, and warehousing and storage industries that are not mostly dedicated to the movement of people (e.g. excluding flight attendants) based on Ontario data. These include 'Transport truck drivers', 'Material handlers', 'Delivery and courier service drivers', 'Couriers, messengers and door-to-door distributors', 'Managers in transportation', and 'Shippers and receivers'. LQ stands for 'Location Quotient' which is estimated as the municipality's share of workers within the occupations divided by the Innovation Corridor's share of workers within the same occupations.

^{vi} The Innovation Corridor comprises the five Census Metropolitan Areas of Oshawa, Toronto, Hamilton, Guelph and Kitchener-Cambridge-Waterloo. Key professional services occupations are classified based on the top six occupations within the Professional, scientific and technical services sector based on Ontario data. These include 'Information systems analysts and consultants', 'Financial auditors and accountants', 'Lawyers and Quebec notaries', 'Computer programmers and interactive media developers', 'Professional occupations in business management consulting', and 'Accounting technicians and bookkeepers'. LQ stands for 'Location Quotient' which is estimated as the municipality's share of workers within the occupations divided by the Innovation Corridor's share of workers within the same occupations.

^{*} Shares do not sum to 100%, as null values are omitted. "Work trips" are defined as trips made by workers from their residential zone to their place of employment. Any trips involving intermediate stops between a place of residence and work are ignored in this analysis. Home to work trips captured in this analysis are more representative of commuting patterns. Trip counts represent estimates for trips made during a typical 24 hour weekday in 2016. Percentage values displayed are rounded to the nearest percentage. Other municipalities include those with less than 1% share of total work trips and less than 2% for the Oakville 403-QEW Corridor..

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**Economic
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Institute**

The Toronto Region Board of Trade is one of the largest and most influential chambers of commerce in North America and is a catalyst for the region's economic growth agenda. Backed by more than 11,500 members, we pursue policy change to drive the growth and competitiveness of the Toronto region, and facilitate market opportunities with programs, partnerships and connections to help our members succeed – domestically and internationally.

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