

Special Meeting of Council

Date: Monday, February 8, 2021

Time: 11:00 o'clock a.m.

Location: Council Chambers, 1st Floor, Windsor City Hall

All members will be participating electronically and will be counted towards quorum in accordance with Procedure By-law 98-2011 as amended, which allows for electronic meetings during a declared emergency. The minutes will reflect this accordingly.

MEMBERS:

Mayor Drew Dilkens

Ward 1 – Councillor Fred Francis

Ward 2 – Councillor Fabio Costante

Ward 3 – Councillor Rino Bortolin

Ward 4 – Councillor Chris Holt

Ward 5 – Councillor Ed Sleiman

Ward 6 – Councillor Jo-Anne Gignac

Ward 7 – Councillor Jeewen Gill

Ward 8 – Councillor Gary Kaschak

Ward 9 – Councillor Kieran McKenzie

Ward 10 - Councillor Jim Morrison

ORDER OF BUSINESS

- | Item # | Item Description |
|---------------|---|
| 1. | ORDER OF BUSINESS |
| 1.1. | In the event of the absence of the Mayor, Councillor Gill has been appointed Acting Mayor for the month of February, 2021 in accordance with By-Law 176-2018, as amended. |
| 2. | CALL TO ORDER |
| 3. | DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF |
| 6. | COMMITTEE OF THE WHOLE |
| 9. | REQUESTS FOR DEFERRALS, REFERRALS OR WITHDRAWALS |
| 10. | PRESENTATIONS AND DELEGATIONS |
| | PRESENTATION: |
| 10.1. | Windsor Works - An Economic Development Strategy for the City's Future Growth (SCM 44/2021)
a) Rachel Wolf, Founding Partner, Public First; and Blair Gibbs, Director, Public First |
| 13. | BY-LAWS (First and Second Readings) |
| 14. | MOVE BACK INTO FORMAL SESSION |
| 16. | THIRD AND FINAL READING OF THE BY-LAWS |
| 21. | ADJOURNMENT |



Committee Matters: SCM 44/2021

**Subject: Windsor Works - An Economic Development Strategy for the City's
Future Growth**

PUBLICFIRST 

Windsor Works

An economic development
strategy for the city's future growth

Windsor Works

An economic development strategy
for the city's future growth



This project was undertaken by Public First, a public policy, strategy, and research consultancy based in London, UK. Research was led by Rachel Wolf, the founding partner, supported by Blair Gibbs, Director of Canada, and Jonathan Dupont. Additional research input was provided by Carly Munnely, Edward Bottomley and Frederick Ellery.

A: Public First Ltd, Ashleigh Villas, 143 Tamworth Road, Long Eaton, Nottingham, NG10 1BY

E: contact@publicfirst.co.uk

www.publicfirst.co.uk

Contents

- 4** Executive Summary
- 19** Introduction
 - Project Overview
 - Methodology
- 22** Part I – Analysis
 - The City and its economy
 - How Windsor is seen – inside and out
 - How cities like Windsor grow and thrive
 - How Windsor scores
 - Summary
- 71** Part II – Strategy
 - Key Lessons for Windsor
 - Horizon-scanning
 - Proposed Strategy: L.I.F.T.
- 99** Part III – Recommendations
 - L.I.F.T. Policy Proposals
 - Key Enablers
 - Key Success Metrics
- 111** Conclusion



Executive Summary



Executive Summary

Windsor is a city of strength and opportunity, but also one that faces historic challenges. This report proposes a strategic direction for the City of Windsor to reject complacency, seize on new opportunities, and grow the regional economy for the decades ahead.

Windsor is rich in community spirit and civic pride. It has succeeded in attracting large numbers of new Canadians in the recent decades. Major employers are embracing the emerging electric and autonomous vehicle industries. City governance is disciplined with public finances and pragmatic with investments. New developments, and new attractions, are starting to revive parts of its downtown and adding to the tourism industry. Windsor is in a strong position to emerge from the global pandemic.


But Windsor faces headwinds. As an automotive city, it was hit hard by offshoring and the aftermath of the 2008 financial crisis. As a border community, it is impacted by unfavourable trade and 'Buy-America' policies south of the border. It is intertwined with the economic success and failures of its Detroit neighbour, in fact Windsor's historic growth follows Detroit's far more than Canada's. At a time when automation will transform traditional industries, Windsor's economic mix and skills base remains manufacturing-heavy. A recent joint Amazon HQ2 bid with Detroit highlighted the opportunities for the two cities to work together, but also that talent may be a barrier for future investment and growth.

Our task is to map out a strategy that builds on Windsor's strengths and stands the test of time. Many of the City's opportunities, in our view, emerge from proximity to the United States. In the wake of COVID-19, the completed Gordie Howe International Bridge will allow Windsor to take advantage of improved US-Canadian trade flows and cooperation. The new Biden Administration will position the United States and Canada as partners in a drive to a low-emissions future. Amidst these changes, Windsor can be a site of the green manufacturing revolution.

Fundamentally, we believe that diversification beyond manufacturing is the key to Windsor's future. Windsor will always maintain a substantial automotive industry, bolstered by the global shift towards electric vehicles. A new, modern hospital presents opportunities to grow in health services industries. New investments in Colleges and Universities will help to diversify the Windsor workforce, offering new assets in economic diversification.

Our report envisions a series of efforts and initiatives to leverage Windsor's opportunity, many of which are entirely within the jurisdiction of the Municipal and Regional governance. But we have also outlined areas where the support of the provincial and federal governments will be required, and at times include the support of Windsor's southern neighbours.





Working Together for Windsor's Future

No one level of government can change a city's trajectory alone. Windsor Works can only succeed if it is built from a deep partnership with the other great institutions of the city and region.

- The College and University are, in our view, key anchor institutions and must be integral players and co-architects of the city's decisions and actions. Skills and talent retention and attraction must be a key part of Windsor's strategy and both post-secondary institutions should be more closely tethered to the economic development agenda that the city and council lead.
- Our work has also built from the pre-existing analysis and strategies of other bodies within Windsor-Essex, and many of our recommendations are designed to further increase the impact of civic initiatives such as the Windsor International Film Festival.
- The relationship with employers will be vital – many of our most important recommendations come from our interviews.

Other levels of government will also be instrumental in Windsor's success. In devising this strategy, we sought to strike a balance between areas where Windsor can make an impact alone – such as building greater links with Detroit – and areas where national and provincial support will be necessary for success – such as the adaptation to the electric and autonomous automotive industry.

Our analysis

Public First conducted extensive analysis on i) how and why cities prosper; and ii) specific lessons for Windsor. In our analysis of post-industrial cities, we have identified four key factors for growth and prosperity:



SCALE

Bigger, integrated city-regions often diversify and enjoy the economic advantages of scale¹. This not only leads to higher productivity and hedges a city's bets against global economic trends, but also allows cities to support amenities that in turn attract more people. Ways of achieving scale including building links with other metropolitan areas or encouraging inward immigration. It is the best strategy for growth, and in Windsor's case the proximity of Detroit makes it a near-term opportunity.

SECTORS & CLUSTERS

Many turn-around stories from 'rust belt' cities have relied on investment in research and development, such as Pittsburgh in the U.S. and Coventry in the United Kingdom. Government policy to spur growth has included tax credits or investment to attract new facilities. The evidence, though, suggests it is hard to force a city to sprout an entirely new sector top-down. Instead, cities must build upon organically growing sectors. For Windsor that means both large and growing manufacturing sectors, but also new technology start-ups that are growing rapidly in Detroit and starting to move into Windsor.



¹ Economists use the term agglomeration. We have generally used scale or, occasionally, clustering, to make it easier for the reader to understand.

PEOPLE & CULTURE



Successful cities have a close relationship between population growth and cultural diversity. A virtuous cycle, in which great jobs attract skilled workers, who in turn provide the income for cultural amenities. People want to both train and stay in the area. The question is how you kickstart this cycle. Expensive cultural and retail-driven investments are rarely successful on their own, often becoming symbols of failed strategies that never pay off. What is required is a more robust strategy for training, attracting, and retaining talent. This is an educational challenge and a developmental one: highly-skilled workers want to live in a cosmopolitan place that is attractive and where there is plenty to do. Windsor is currently not scoring highly enough in this area.

COMPETITIVENESS

Infrastructure, regulations and tax policies have a significant impact in making a city more competitive, attractive to businesses, and often lead to growth. Businesses themselves are often best positioned to counsel decision-makers on where these challenges persist. In Windsor's case, it is already operating a number of Community Improvement Plans and has some entrepreneurship initiatives. But in our consultations with the Windsor business community, several areas were identified for improvement.





Our analysis, summarized in Part I of this report, has concluded that across these four areas, Windsor has the potential to significantly grow and be positioned for success.

To start, Windsor has clear medium-term **opportunities** that it should work to emphasize:

Location: Windsor's position on the US-Canada border must be emphasized and given extra prominence. Its proximity to the wider metropolitan area of Detroit gives it access to the benefits of a city much bigger than Windsor.

Infrastructure: The City has new assets coming online, including the new bridge and hospital, which can help further support links to Detroit and the development of sectors that can spur innovative employment opportunities



However, the city will also need to work to overcome current **weaknesses**:

The Past: Windsor's economy was originally built on the automotive industry. In recent decades Windsor has lost out on investment to other countries with cheaper labor. Adding complexity, the car industry will undergo significant disruption with the shift to electric and autonomous vehicles. To prepare for this **future economy**, Windsor will need to invest more to help transition its car industry, and work to develop new strengths in emerging technologies.

Skills Diversity: Windsor will need to do more to train, retain, and attract different kinds of talent. The local College and University are key players in identifying and training for current and new skills shortages, and also in forging even deeper links with other institutions, including in the United States, and with new companies. On the attraction side, despite its many underlying cultural and environmental advantages, our opinion research showed that Windsor's quality of living had a mixed reputation across Canada. In order to retain and attract leading **talent**, the city should do more to proactively appeal to skilled workers, and invest in cultural assets that can make the city one that is more appealing for young professional and working families to settle in.

While many factors, such as the long-term impact of COVID-19 and the future of the border and United States trade policy will remain outside of Windsor's control, the raw materials of the city's geography, infrastructure and talent pool provide a strong base for Windsor to build back better after the pandemic.

Our methodology

Public First conducted extensive analysis for this report including:

- Comparative analysis of Windsor internationally and nationally on a wide range of metrics;
- Economic modelling of the potential impact of different strategies on Windsor's economic performance;
- Quantitative research on understanding and perceptions of Windsor within Canada and particularly within Ontario;
- In-depth qualitative research with dozens of political, business, and institutional leaders across Windsor;
- An extensive analysis of the academic literature on the growth and performance of cities;
- In-depth case studies of comparator cities in the US and across Europe;
- Additional qualitative research with experts in the automotive industry, and on cities and growth;
- A review of past initiatives by the city alone and with its counterparts, and their budgetary implications;
- Political and policy analysis of the federal and provincial government's priorities and opportunities.

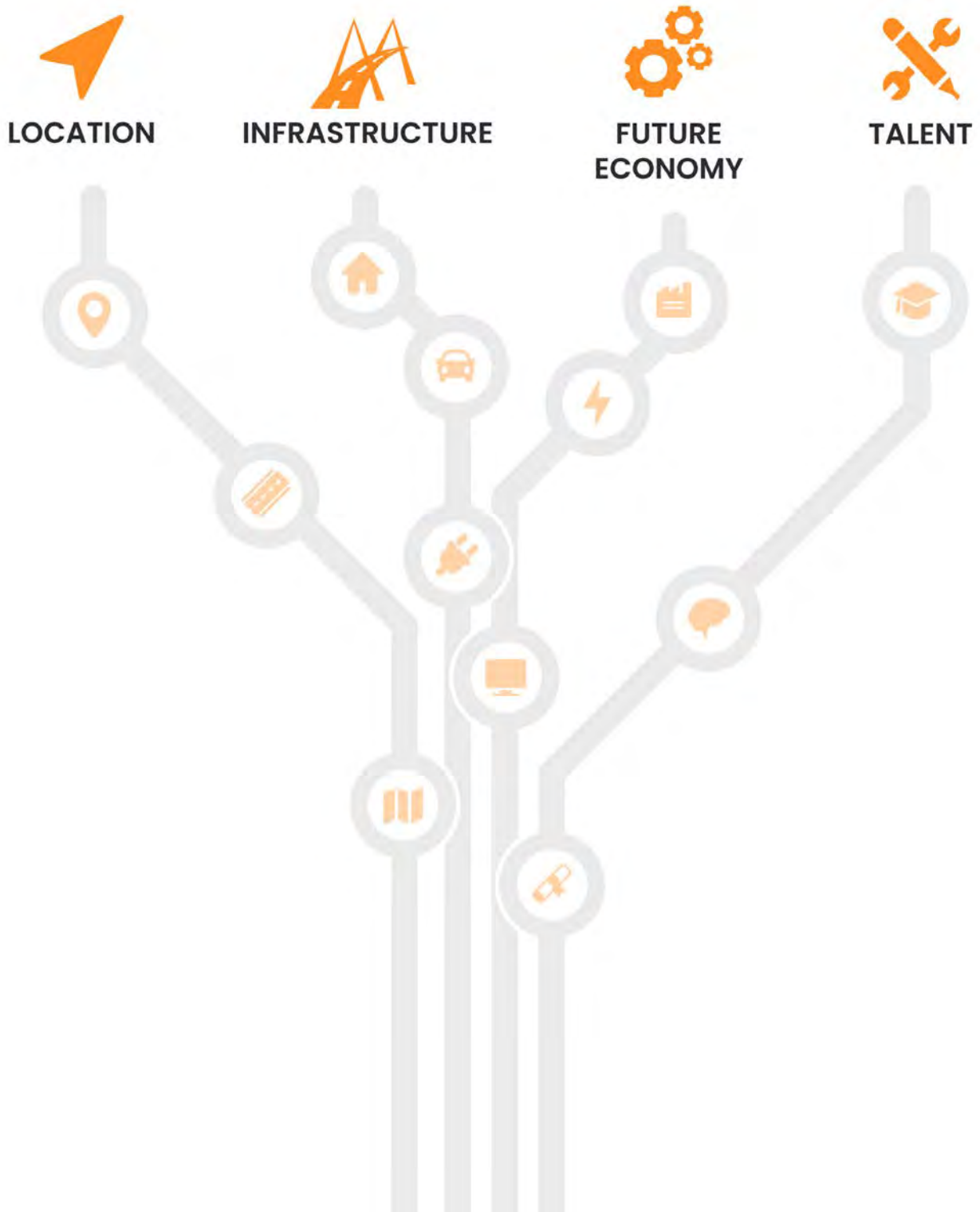
We have also brought to bear our own experience advising national governments and cities on innovation and growth.

We are very grateful to the city administration, WEEDC, institutions including the University and College, as well as to the many leaders in Windsor, for their support and time.

(Please see the full report for methodological detail.)

Windsor Works: L.I.F.T. Strategy

Parts 2 and 3 of this report outlines the proposed “L.I.F.T.” strategy to make Windsor the best community for Canada’s working families. This is described under the banner ‘Windsor Works’ and the strategy has four core pillars:





LOCATION

Taking advantage of Windsor's position and working more closely with Detroit and Michigan

Windsor Works recommends a renewed focus on enhanced economic linkages with Greater Detroit and Michigan economic sectors by:

- Making Windsor a better place for Michigan businesses to operate by offering relocation packages and support.
- Establishing more structural links between Windsor and Detroit, including through the College and University, by creating a skills and R&D Arc between the two cities.

Windsor Works recommends strategies to attract and retain talent from within Ontario and Canada, including:

- Attracting businesses into Windsor-Detroit through economic partnerships and joint investment attraction bids.
- Using Windsor's and Detroit's rich histories to create targeted cultural events, such as an expanded film festival, and 'Prohibition Week'. Most people do not think of Windsor as being tied to a large city, and if they do, they are unlikely to have noticed Detroit's revival. These cultural events can make the city a more attractive place to live, while also reminding outsiders of its unique assets.





INFRASTRUCTURE

Investing in downtown districts, improving mobility and pursuing development that allow Windsor to seize forthcoming opportunities

Windsor will benefit from two pieces of foundational infrastructure – a new bridge and a new acute care hospital. But more needs to be done on everyday infrastructure to improve residents' quality of life and make Windsor more liveable for young working families. Windsor Works recommends:



- Building a better more diverse housing stock that appeals to young families, with a housing target for downtown that helps drive revitalisation.
- Enhancing the appeal and economic potential of Windsor's riverfront – completing the full set of river beacons as tourism drivers and encouraging economic activity through craft/ holiday markets and other cultural activities. This is intrinsically linked to our 'Talent' strand below: to attract and keep the best people, Windsor must have enough events and amenities to be desirable.
- Improving transport links across the city and demonstrating Windsor's readiness to be a site where new low-emission vehicles are used as well as made, for instance through a public e-scooter scheme that would be ideally suited to Windsor's flat topography.



FUTURE ECONOMY

Building on Windsor's manufacturing strength to become a hub for new innovation and the auto sector of the future

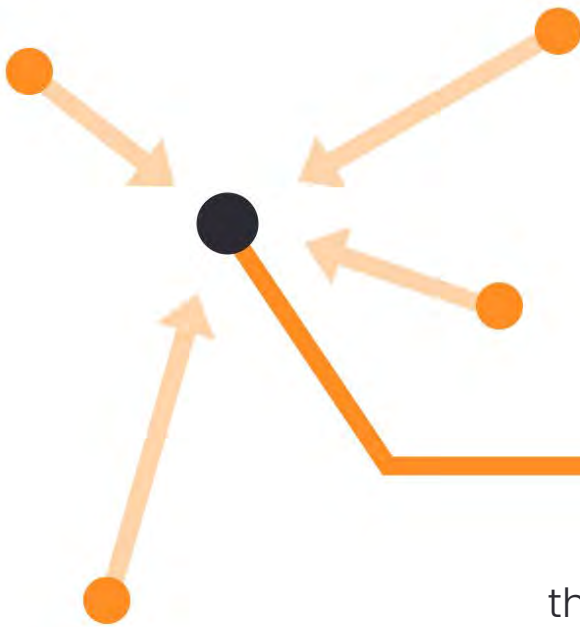
Windsor Works is, in part, designed to help diversify Windsor in sectors other than manufacturing: Windsor is unusually dependant, even by post-industrial city standards, on manufacturing jobs. Alongside this, the future economy element of the L.I.F.T. strategy will both seek to protect Windsor's current strengths in the auto sector, and diversify into adjacent sectors, such as border technology and health care. This part of the strategy will require higher levels of government to play their part in the transition to new vehicles. Windsor Works recommends:

- Establishing Canada's first ramp up factory for electric and autonomous vehicles and working with the Province to prioritize the area for battery production by 2025.
- Building expertise in software and cyber security for autonomous vehicles.
- Advocating for stronger government leadership around electric, hybrid, hydrogen and autonomous vehicles and working with the national labor movement to support the transition into EV manufacturing.

In the longer term, Windsor Works recommends:

- Building on existing health manufacturing strengths, including in wellness. The construction of the new hospital will provide new opportunities, for instance by enabling plans to upgrade the University of Windsor's medical education and training offering.
- Exploring the potential to become a world leader in cross-border technology, for instance by showcasing new border technologies and promoting 21st century border policies and procedures and hosting an international conference and expo.





TALENT

Training, retaining, and attracting the best talent from across Canada and the world

Ensuring the appropriate mix of talent, innovators and entrepreneurs for the local labor pool is the single most critical factor, which underpins all other Windsor Works recommendations. This includes attracting talented people from outside the region and retaining graduates from the University of Windsor and St. Clair College. But talent is not just about graduate skills. The existing labor market in Windsor will not benefit from sectoral shifts, growth and evolution of existing businesses if they are unable to train and retrain appropriately in technical disciplines.

Our talent pillar must therefore achieve three goals:

- Training people in Windsor: meeting current skills shortages, including technical roles in manufacturing and in health, and rapidly adapting courses and programmes to meet new company needs in tech and other sectors;
- Retaining talent in Windsor: increasing retention from the College and the University into Windsor and the wider Michigan-Windsor-Essex region;
- Attracting talent into Windsor: making it easier for companies to attract new talent, including from overseas, as part of their plans.



Windsor Works recommends:

- A 'Windsor Talent' steering committee, chaired by the Mayor, with attendance from the Presidents of the University of Windsor and St. Clair College and representation from the private sector. The steering committee would be focused on meeting the needs of businesses and planning for sectoral shifts and would have the remit to drive changes across a wide range of institutions, including the educational providers, to meet economic need;
- Supporting a new incubator and space for tech, linked to the University and training opportunities;
- Attracting highly skilled workers, for instance by subsidising visa fees for immigrants serving Windsor/Michigan businesses, advertising Windsor more directly in Detroit, supporting spin out businesses and graduates from a new R+D arc, while targeting overseas talent.

DELIVERY



The delivery of Windsor Works will require the full backing of City Hall and civic leaders from the Windsor community. This report also outlines key enablers that will be vital to realising the strategy. They are:

- A dedicated delivery unit based in City Hall, reporting to the Mayor with a clear remit of strategy implementation.
- Support and engagement from external parties such as key local businesses and post-secondary institutions.
- Reporting on key metrics that show progress against strategy implementation and help to identify any blockers or impediments.

Elements of this strategy can be explored immediately, but by design, this strategy is long-term, and it will take a serious and concerted effort not only by the city but by the institutions, businesses, and people within Windsor over many years. It is therefore recommended in the report that a new team within the City is created to oversee delivery, along with metrics and partnerships for city administrators, for councillors, and for the organisations of Windsor – such as the University and College – which have an outsized impact on the city's success and reputation.

The L.I.F.T. strategy is broad and ambitious, but crucially it is also rooted in Windsor's existing strengths. By taking an approach that builds on the best of Windsor, the L.I.F.T. strategy should be both deliverable and effective, securing the future of Windsor as a great place to live, work and play, for the next chapter in the city's history.



Introduction

Project Overview

In Spring 2020, the City of Windsor commissioned a new project to analyze the economic development goals of the city and make concrete recommendations that could be taken to secure Windsor's economic future.

This project was sponsored by the Mayor's Office and participants were aware that research was being undertaken on behalf of the City of Windsor. Public First was selected to conduct this project with support from a team based in Toronto.

Three of the core research questions at the outset of this project were:

- What opportunities are available to Windsor in the coming decades?
- What lessons can the region learn from other cities internationally and historically?
- What practical steps should the city take in the next six to twelve months (and how is unanimity achieved around those steps)?

This report is the product of a four-month research project which began in August due to delays resulting from the COVID-19 pandemic. The first half of the project was spent gathering data and engaging with stakeholders to help inform our assessment of the city and its current opportunities. The research sought to understand the city on its own terms, based on available data and drawing upon a large number of interviews with key stakeholders and elected officials, and also by reference to comparative analysis with other cities, data modelling to show Windsor's relative position, and then quantitative research to gather the views held by a sample of the public in Ontario about Windsor. This analysis was used to put Windsor's present economic position in context, and to understand how the city was seen by outsiders, and together they provided valuable new insight into Windsor's strengths as a mid-size Canadian city, and also some of its challenges (including the perceptions some people have of it). The second half of the project involved applying the evidence base on urban development, along with opinions gathered and ideas proposed, to create a coherent economic development strategy for Windsor.

Part I summarizes the analysis undertaken to inform the approach and provides relevant context for the strategy that follows in Part II. Recommendations flowing from the four pillars of the proposed strategy are contained in Part III, which also includes some key enablers and proposed metrics for measuring progress. Additional background material is included in a collection of Appendices. Detail on the engagement undertaken for the project and the source material is listed in the Appendix.

Methodology

Research was undertaken between August–November 2020 and comprised the following:

- Quantitative economic analysis, benchmarking the city's productivity and labor market performance against other similar industrial or post-industrial cities internationally
- Deep-dive case studies into a large number of cities across Europe and North America, their economic strategies, and their success
- A review of relevant and current academic literature and meta-analyses
- In-depth qualitative interviews (August–October) with Windsor's political, civic, and economic leaders, and with external experts in the automotive industry and urban development and regeneration.
- Scenario analysis of future growth pathways on the city, looking at the potential from boosting agglomeration effects and developing new manufacturing strengths, with quantified potential effects
- Site visits (October & November 2020) including City Hall, waterfront, Ambassador Bridge, Ford engine plant, University of Windsor, College of St. Clair, Institute for Border Logistics and Security (IBLS) at WEEDC, Windsor Detroit Bridge Authority (WDBA), Windsor Airport, and the Walkerville, Sandwich, Ford City and Riverfront neighbourhoods
- Quantitative opinion research in Ontario (conducted in September 2020)
- Political and policy analysis of the national and provincial government
- Consultation with decision-makers – council members, the Mayor and municipal officials
- Briefings and presentation of themes (November 2020)

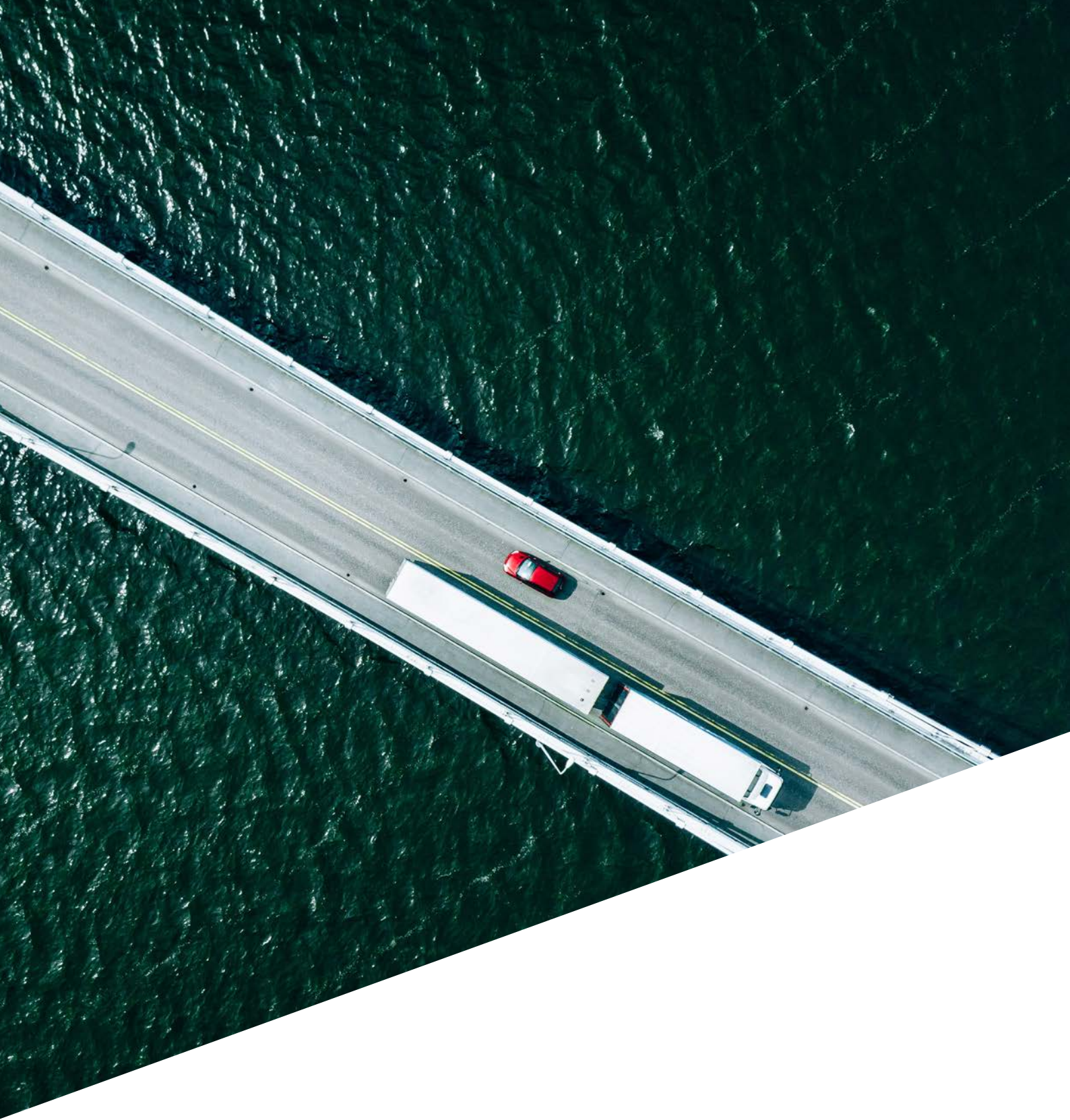
The data referenced in Part I of this report come from:

- The comparative data compiled on Windsor and other cities ([here](#))
- The quantitative scenarios that were produced ([here](#))
- Data provided to the project team by WEEDC; the city; WorkforceWindsorEssex; St. Clair College and the University of Windsor.

In Part I: Analysis, the focus is mostly on an 'outside in' view in terms of the data – partly because the city of Windsor already knows the situation in its own city and may face inherent bias – however Windsor-only information is brought in where it is important.

The analysis and recommendations in this report relate to the city of Windsor and not to the wider Windsor-Essex region.² The economic profile of Windsor was illustrated for this project using official statistics (see [Bibliography](#)). For a full summary of consultees and research methods, see the [Appendix](#).

² The Windsor-Essex region is a larger unit comprising rural areas to the south and east of the city of Windsor in the larger county of Essex (comprising 7 municipalities). The economic development of the area is led by the Windsor-Essex Economic Development Corporation (WEEDC) which is predominantly co-funded by both the city and the county, with the Mayor of Windsor and the Warden of Essex County members of WEEDC's governing board.



Part I: Analysis

1. The City and its Economy

Windsor is a mid-size Canadian city located in Southwestern Ontario. Due to its historic importance as an industrial border town, Windsor has a rich history and a shared heritage with the United States and neighbouring Detroit, across the Detroit River and Canada-US border.

Windsor has a reputation for being a proud industrial city with a strong working-class community. Demographically, Windsor is one of the most diverse cities in Canada³, and it is a relatively safe city with average rates of crime for a Canadian municipality of its size.⁴

The city is the original home of the Canadian car industry and it remains one of the most important centres for auto manufacturing in North America, with a concentration of highly skilled manufacturers. Even as the manufacturing sector has declined across major economies in recent decades, the car industry has remained a core pillar of Windsor's prosperity. At the same time, new economic opportunities have also emerged.

The City of Windsor, Ontario

As the southernmost part of Canada, Windsor has a comparatively mild climate, and its location provides easy access to local lakes, wineries and trails, and the surrounding region grows a large proportion of fresh produce, much of it exported into the United States. The city is in an ecologically diverse region with strong natural environmental assets including lakes and rivers. Windsor also has strong tourism assets (gaming, food and drink, as well as outdoor activities and culture) and continues to attract people, with a growing population. It has a good University, and a dynamic business community, and despite its size, the city also has its own symphony orchestra, international airport, and new civic infrastructure including an aquatic centre and an art gallery. The city has long looked across the Detroit River and has enjoyed two fixed-land crossings (the Ambassador Bridge and the Windsor-Detroit Tunnel) for ninety years, and more recently, Windsor has benefited from a developed riverfront adjoining the historic downtown and will soon be the site of a new international bridge providing a further link across the Detroit River.

3 The City of Windsor (2020) Diversity. Retrieved from: <https://www.citywindsor.ca/business/physician-recruitment/Live/Pages/Diversity-.aspx>

4 Statistics Canada. Table 35-10-0026-01 Crime severity index and weighted clearance rates, Canada, provinces, territories and Census Metropolitan Areas. Retrieved from: <https://doi.org/10.25318/3510002601-eng>

Windsor's economy has become less dependent on traditional manufacturing industries and successive city administrations have sought to stimulate other sectors as part of a goal to diversify Windsor's economy, so it is less reliant on the auto industry, with some clear successes. Major employers such as Ford and Fiat Chrysler Automobiles (FCA), alongside others representing another facet of Windsor's past, such as the Hiram Walker distillery, have been joined in recent years by new businesses like Jamieson Laboratories and Quicken Loans/Edison Financial.

In many respects, Windsor is fortunate. The city was built on industry and trade and as the global economy has shifted against it, the city has nonetheless avoided some of the negative consequences of de-industrialisation that have afflicted many similar cities. Given its proximity to the enormous US market, and its other natural assets, it also has many fundamental strengths that other so-called 'rust belt' cities lack, and that Windsor should be able to exploit to significantly improve its economy in future decades.

But Windsor also suffers from negative connotations, stereotypes that undermine or limit its appeal and have made it harder to attract and retain new families. Many of these perceptions are inaccurate, and do not reflect a fair assessment of Windsor. However, they are still influencing behaviour and it is therefore important to understand these stereotypes and devise steps to address negative perceptions or turn them into advantages. The city must accept this challenge and work to overcome it. In other words, do more to sell what Windsor already is and the comparative advantages it already enjoys – so that more people come to recognize them. Such people will be Windsor's future visitors, investors and, ultimately, residents.

"Windsor was just one of the great places to grow up, and still is"

**Paul Martin, former Prime Minister of Canada
(‘Straight Outta Windsor’ Podcast, 14 February 2018).**

During this project, the research pointed to several key questions that an economic development strategy for Windsor should attempt to answer:

- How best can Windsor use its existing (and innate) advantages, and then seize the opportunities that present themselves, so it becomes a more prosperous place in the decades ahead?
- How can Windsor work to embrace and/or overcome the perceptions that impact the city's reputation and desirability, so it can grow faster and attract more people to visit, invest and reside?
- How can Windsor go from being a 'big-small city' with some strong assets, to become a 'small-big city' with exceptional assets that is ambitious for the future, one that is a demonstrably more dynamic place that more people want to take a stake in?

This project is one attempt to answer these key questions.

Snapshot of Windsor's Economy

In common with many mid-sized Canadian cities, Windsor's economy has been cyclical and often defined by the fortunes of certain sectors on which it has historically depended. The following snapshot paints a picture of a city that was economically struggling even before the COVID-19 pandemic – the long-term impact of which remains unclear.

Before 2020, Windsor had been enjoying several years of modest, steady growth and rising employment. In fact, it had nearly regained its mid-2000s peak in terms of total GDP by 2018. However, much of this was caused by a growing population, and real GDP per capita remains significantly down.

Real GDP per capita (\$2019)



After the downturn of the 2000s, when Windsor's growing population stalled (and declined for several years after 2007), the city has seen net population growth since 2011. The city has experienced accelerated population growth since 2016.

Jamieson Wellness

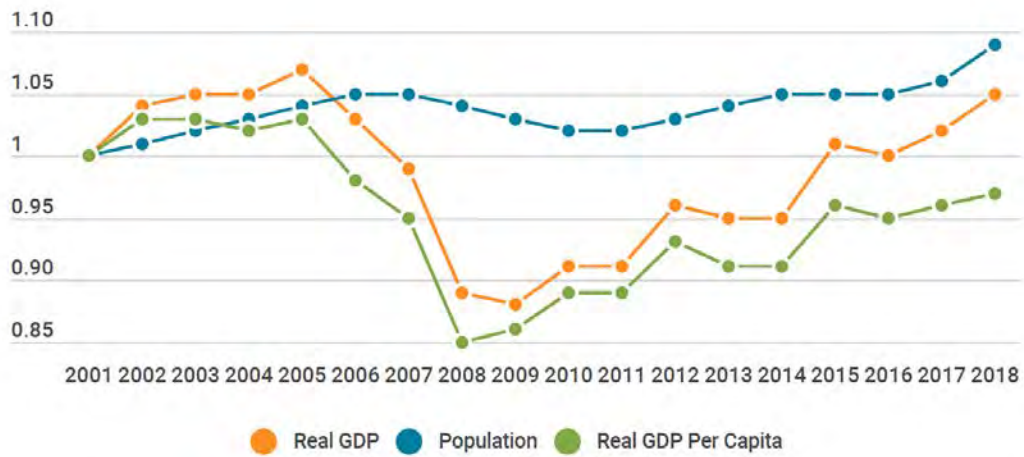
Jamieson started in 1922 and is now Canada's leading provider of vitamins, minerals, and nutrition supplements. Jamieson holds 25% of the market share, more than the combined market share of the next top 5 brands. The company made more than \$345 million in revenue in 2019 and employs over 500 workers between its three Windsor facilities: the manufacturing facility, distribution centre, and International Nutrient Technologies soft gel manufacturing plant.⁵

In 2014, Jamieson was acquired by a US-based private equity firm, CCMP Capital Advisors, LLP for more than \$300 million. The value of the company more than doubled over the next three years before going public in 2017.⁶

Jamieson has become a market leader by building a reputation in safety through rigorous product testing. Through their 360 Pure promise, they have committed to exceeding industry standards and ensuring their products are the safest, purest, and most effective on the market. This includes selecting only high-quality ingredients, guaranteeing product purity, and ensuring products retain potency throughout the manufacturing process.⁷

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- 5 Cross, B. (2017) Jamieson goes public, stock prices soar on debut day. *Windsor Star*. Retrieved from: <https://windsorstar.com/news/local-news/jamieson-goes-public-stock-price-soars-on-debut-day>
- 6 Ibid.
- 7 Jamieson Vitamins (2020) Our Pure Promise. Retrieved from: <https://www.jamiesonvitamins.com/pages/360-pure>

Main aggregates (2001=100)



Fundamentally, the city’s economy is far more closely aligned to that of Detroit than the rest of Canada. After the financial crisis of 2007–08, Windsor’s real GDP declined in line with that of Detroit (the mid-2000s downturn saw a 17% fall in real GDP) and recovered no earlier – with both cities only returning to their 2001 position in 2015.

Real GDP (2001=100)



Total employment in Windsor has grown steadily since 2009 and the number of manufacturing jobs continues to comprise a significant share. Windsor had the highest share of manufacturing employment of any of the so-called ‘rust belt’ cities analysed for this project, leaving it vulnerable to any downturn, and reinforcing the long-term argument for diversification – but also the need to adapt the manufacturing sector to emerging trends, given that it still sustains tens of thousands of jobs.

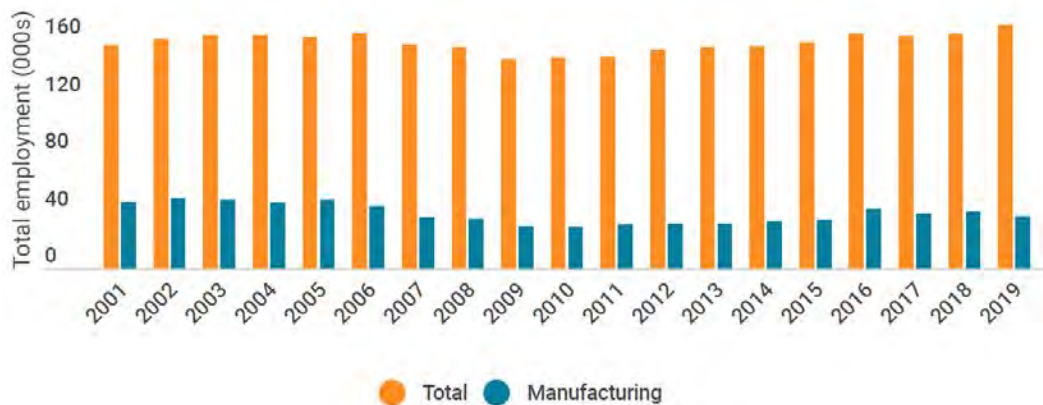
Fiat Chrysler Automotive Canada Manufacturing Plant Windsor

The FCA assembly plant was built in Windsor in 1928. Since its inception, the plant has produced a wide array of automobiles, including Plymouth two- and four-door sedans, Dodge hardtops, DeSoto convertibles, most Chrysler station wagons. Some of the most recent cars produced at the plant include the Chrysler Pacifica and Dodge Charger.⁸

The Windsor plant adopted the World Class Manufacturing (WCM) operating system in 2006, which is a methodology focusing on reducing waste, increasing productivity, and improving quality and safety. In 2014, the plant achieved silver status for its successful implementation of WCM, the highest ranking of any of FCA's North American facilities.⁹

For the past nearly thirty years, the plant has run a three-shift rota to accommodate high demand for their automobiles. However, the third shift was cut in July 2020 to match a lower demand, eliminating 1,500 positions along with it. In October 2020, the union representing the automobile industry, Unifor, announced a new agreement with FCA, including a \$1.35-\$1.5 billion investment for upgrading the Windsor plant to produce at least one electric vehicle. Unifor states that the deal will add about 2,000 jobs by 2024, helping the company bounce back from the recent staff cuts and prepare for the future of the automotive industry.¹⁰

Windsor Total Employment



8 FCA (2020) *Windsor Assembly Plant*. Retrieved from: <https://media.fcanorthamerica.com/newsrelease.do?cid=344>

9 FCA (2014) *Chrysler Group's Windsor Assembly Receives Silver Designation; First Chrysler Group Plant to Achieve the World Class Manufacturing Milestone in North America*. Retrieved from: <https://media.fcanorthamerica.com/newsrelease.do?cid=15473&mid=792>

10 The Canadian Press (2020) *FCA workers approve Unifor deal to retool Windsor plant for making electric vehicles*. *The Star*. Retrieved from: <https://www.thestar.com/business/2020/10/19/fca-workers-approve-unifor-deal-to-retool-windsor-plant-for-making-electric-vehicles.html>



Ford Motor Company of Canada

The Ford Motor Company of Canada has a long history in Windsor dating back to 1904, when it was created through Gordon McGregor's (president of Walkerville Wagon Works) partnership with Henry Ford. The company's Walkerville plant (located in what is now known as Windsor) became the first automobile production site in Canada with the Ford Model C.¹¹ The Canadian company grew exponentially over the following decades, opening large production plants in Oakville in 1953 and St. Thomas in 1968, along with engine and casting plants in Windsor. Although the casting plant has since closed, Windsor has remained an important location for the company as the home to two engine plants, which currently employ a total of 1,880 people.¹²

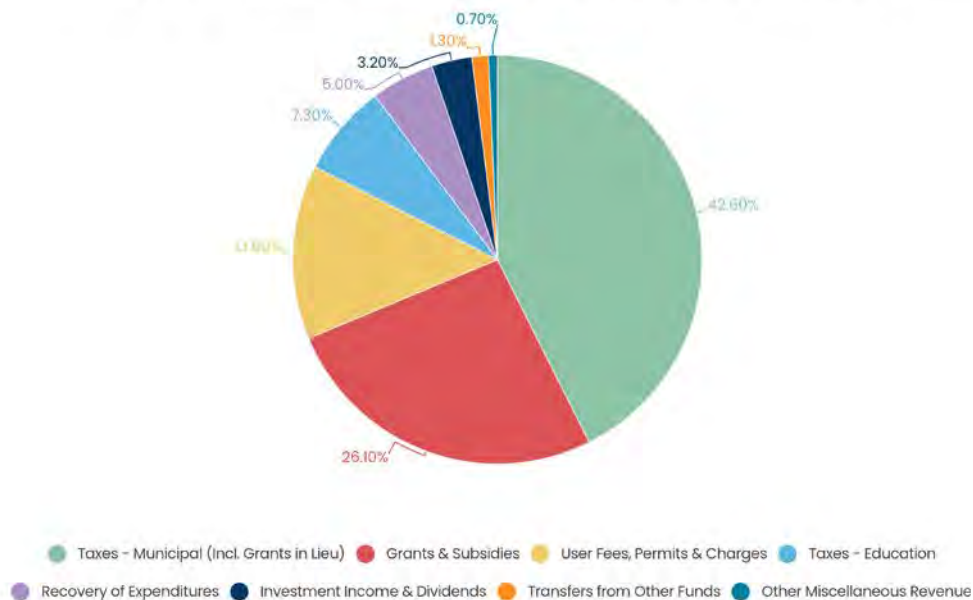
Recently, both industry and government have shown their commitment to supporting the future of the Canadian automobile industry. Ford has announced plans to invest \$1.98 billion towards introducing new products, including new electric car models and engines, in both the Oakville plant and the two Windsor plants. Introducing these new products will help secure the longevity of the Ontario plants and prepare them for the future automotive sector.¹³ The federal and provincial governments have also announced \$590 million in funding to support upgrading the Oakville plant.¹⁴

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- 11 Windsor Public Library (n.y.) *Ford Motor Company of Canada: Walkerville, Ford City & Windsor, 1904-present*. Retrieved from: <https://projects.windsorpubliclibrary.com/digi/wow/plants/ford.htm>
- 12 Ford (2020) *Worldwide Locations*. Retrieved from: <https://corporate.ford.com/operations/locations/global-plants/windsor-engine-plant.html>
- 13 Fraser, K. (2020) Unifor's 'unique' Ford deal includes 5 new electric vehicles in Oakville, engine for Windsor plants. *CBC news*. Retrieved from: <https://www.cbc.ca/news/canada/windsor/unifor-strike-deadline-extended-contract-talks-ford-1.5733592>
- 14 CBC News (2020) Governments unveil details of \$590M investment to help Ford Oakville plant make electric cars. *CBC News*. Retrieved from: <https://www.cbc.ca/news/business/ford-oakville-government-1.5754974>

Windsor's City Administration

The City of Windsor is governed according to the legal structures established by the Province of Ontario. Managing an overall budget of almost \$900M, Windsor has municipal obligations including roads and sewers. Public services such as schools and hospitals are a provincial responsibility and, in common with other cities in Ontario, Windsor distributes funding from the provincial and federal governments (received as grants) for local social services and welfare provision. Aside from grants and subsidies from higher levels of government, the city's main income is from property tax and service-user charges and permits, including fees paid for parking and leisure activities and charges for water and sewage.¹⁵

City of Windsor's Operating Budget 2020



15

The City of Windsor (2020) *Operating Budget*. Retrieved from: <https://www.citywindsor.ca/cityhall/Budget/Documents/2020%20Approved%20Operating%20Budget.pdf>

One constraint on economic development is the fiscal capacity to invest in measures that catalyse growth. The City of Windsor is limited in what fiscal powers it has to stimulate direct investment, and, as a municipality, does not have the ability to significantly increase its revenue. Nevertheless, the financial position of the city is relevant to any strategy that it may seek to pursue, informing the extent to which it is able to invest in certain initiatives to support future growth. Cities that shoulder significant agency costs or debt burdens are often unable to make key investments – too often cycles of decline and disinvestment can follow. Notable changes in Windsor’s budgetary position since 2014 include:¹⁶

- The overall operation budget has increased from \$756M in 2015 to \$851M in 2019, with around half of this increase due to increased revenue from grants and subsidies from federal and provincial governments, and half from increases in charges levied locally;
- The growth in property tax income since 2014 has come almost entirely from newly built residential properties as the city has grown. Income from user-fees has also increased;
- The city contributes to the funding of the Windsor Police Department, and there have been sizeable increases in the police budget (rising from \$77M in 2015 to an approved budget of \$92M in 2020). Funding for fire and rescue services has also seen upward pressure, rising from \$42M to \$50M in 2020;
- The largest proportionate increases have occurred in parks and recreation/ culture, with the city budget for parks and their facilities doubling from \$14M to \$28M over the last five years and recreation and culture growing 43% to \$13M in 2020;
- Some budget areas have seen only modest increases, including TransitWindsor (\$14M to \$15M 2015-20) and the Windsor Essex Community Housing Corporation (\$10M to \$12M) over the same period.

The city realized efficiencies in the past decade by outsourcing daycare services, and parking collection/enforcement, and garbage disposal. Another key aspect of the city’s administration has been the progress on municipal debt servicing. Under the current administration, the city continues to pay down debt, which has been reduced by a third in six years (2014-19), resulting in a significant reduction in interest payments:

2014	\$104,121,000
2015	\$98,211,000
2016	\$91,899,000
2017	\$85,152,000
2018	\$78,154,000
2019	\$70,670,000

16 The City of Windsor (2020) *Operating Budget*. Retrieved from: <https://www.citywindsor.ca/cityhall/Budget/Documents/2020%20Approved%20Operating%20Budget.pdf>

The City of Windsor (2016) *Operating Budget*. Retrieved from: <https://www.citywindsor.ca/cityhall/Budget/Documents/2016%20Approved%20Operating%20Budget.pdf>

As a result of prudent fiscal management, including decisions taken by the Council to modernize service delivery, Windsor's high debt burden of the early 2010s has been turned around. Finances in spring 2020 were in a significantly improved state compared to 2014, while at the same time reserves have also grown.

As the city considers the right investments to support economic development it should accept that – COVID-19 aside – the city's budgetary position is much better than it was even five years ago and there is scope to make major investments. It is also advisable for the City of Windsor to consider long-term debt financing if tied to core, economic infrastructure that increases competitiveness and supports job creation. Properly structured, this financing would boost local productivity and increase economic growth, earning more for the City through growth that would easily sustain servicing costs.

While the economy was growing and employment was rising, increased revenue enabled the city to tackle debt and 'fix the roof while the sun was shining' and now, with uncertainty ahead and the challenge of securing Windsor's competitive position for future decades, it is both possible and necessary to make long-term investments, including using reserves and preparing an ambitious 10-year capital plan. Again, Windsor is fortunate – other mid-sized Canadian cities are not in such a fortunate position and the municipality should leverage this opportunity.

2. How Windsor is seen – inside and out

People in Windsor expressed a variety of views about their city – and had strong opinions and good ideas about how it needs to improve. The goal of any strategy designed to serve the residents of a given area is to meet their needs but also to reflect their concerns and priorities. In the course of this project, the economic analysis was supplemented with interviews and opinion research to try and understand how Windsor is seen, and then to use this insight to devise realistic policy proposals that the city's political leadership could adopt and promote.

One significant part of our methodology was therefore quantitative and qualitative assessments of Windsor, through:

- Extensive interviews with political, institutional, and business leaders within Windsor to understand priorities, concerns, and perceptions;
- A quantitative survey of views on Windsor from residents of Canada as a whole, and then weighted for those within Ontario.

We discuss each in turn, but it is worth noting up front that there was a gulf between internal perceptions of Windsor, and the results of our wider survey.

The view of leaders within Windsor

Throughout this project, Public First has engaged with the elected city councillors of Windsor; the main employers of Windsor; entrepreneurs and their representatives; the leaders of the College; the University; various members of the economic development corporations, including WEEDC; and the leadership of major infrastructure assets, such as the airport and the upcoming Gordie Howe International Bridge; and authorities in sectors such as tourism.

Those leaders have been generous with their time and have made an immense contribution to this report and its conclusions. Several interviewees mentioned how the city should be commended for commissioning this study, and for engaging in longer-term thinking.

We have divided the results of those interviews into core themes. Further detail of our interviewees is provided in the Appendix.

Theme 1 – what it is like to live in Windsor

Windsor is a great community, and a great place to live – if more people understood that, they would come.

A number of people interviewed had moved to Windsor almost by accident but were now evangelists for the city and its offer. There was a widespread view that Windsor was incorrectly and harshly perceived (an assertion supported by our quantitative survey results). They remarked upon the stereotype of Windsor as a *'hard working, hard drinking, lunch-bucket, blue-collar'* town.

The consensus is that Windsor has great assets: a beautiful waterfront; affordable housing and a great community that was safe and good for raising a family.

The need for a "PR exercise" was mentioned by many of our interviewees. There was less consensus on the nature of that PR– should it remarket Windsor as a professional, services-based city, or lean into its history of car making, whiskey, and the casino?

There is not enough to attract younger professionals – particularly in the emerging tech sectors.

Across our interviews the desire for more 'white collar' jobs came up – and in particular a desire to attract more tech start-ups and scale-ups as part of diversification. Linked to this, there was concern from those already working in the tech sector, and from others, that Windsor did not have enough amenities for young professionals. The lack of amenities downtown, which is discussed below, was raised by many.

"We don't do enough to cultivate white collar positions in this town."

City Councillor

"We need more good news stories. Windsor proper has a reputation as a blue collar and labor-focussed town, but there's a lot of start-ups and innovation. The lifestyle on offer is really good compared to the rest of Canada, but we're not telling that story enough, and people aren't willing to stay here."

Academic

Detroit is an enormous opportunity.

Many of our interviewees mentioned the restaurants and sporting events of Detroit as a way of providing big city living, but with small city crime rates and house prices. Many of our interviewees believed more could be done to sell Windsor's links with Detroit to the rest of Canada.

"You can live in downtown Windsor and go to anything Detroit has to offer and not even own your own car. We do a poor job at selling that lifestyle."

City Councillor

Theme 2 – diversification opportunities for Windsor

Diversifying the manufacturing base, or diversifying away from manufacturing?

There was a split in our interviewees between those who believed Windsor needed to seek non-manufacturing jobs, and those who believed that manufacturing was Windsor's core strength, and that this needed to be the focus.

"How we do over the next few decades depends on whether we diversify."

Business Leader

"It's long been my thought that Windsor has needed to diversify, but we also need to make use of the assets we have."

Academic

Working with Detroit.

Detroit came up in two contexts. First, that there are large numbers of successful companies in Detroit and Michigan that could be persuaded to set up a new office in Windsor, as Quicken Loans had done. Second, that together Detroit and Windsor could market themselves to companies outside the area – as was attempted in the Amazon bid in 2017-18.

Economic diversification.

"Detroit are a partner in all of this... I think we haven't leveraged the US network as well as we should have."

Business Leader

"We hear people say it's the end of the auto industry, but I don't think so. Cars will be built for a long time. Somebody will design and build them, and that somebody will be us."

Academic

Most agreed that diversification was a key challenge. A wide range of industries and jobs were mentioned as candidates, which fit into the following categories:

New tech jobs. Many of our interviewees thought Windsor could do more to attract high-growth, high-pay new tech companies, focusing initially on start-ups. There was some interest in 'fintech' since companies in Detroit and Windsor were already growing in this area.

"I don't think we're going to get an Amazon situation, but I think we can do tech start-ups and play on some of Detroit's tech start-ups."

City Councillor

Tech related to manufacturing/general advanced manufacturing. A number brought up the potential for the intersection of data, technology, and manufacturing (either auto or other manufacturing). This has been a substantial part of WEEDC's recent strategy and focus.

"I'd like to see investment dollars focused - to transition and evolve this sector into the next generation manufacturing in Canada. We're so well positioned to be the focal point of that."

City Councillor

The future automotive industry. Several interviewees raised the green economy (and its implications) and moving into sectors such as electric and autonomous vehicles.

Logistics and border-related businesses. This came up in the context of the link with Detroit, the new Gordie Howe International Bridge, and the airport. There was also reference made to new driver regulations creating an advantage for Windsor as a site for registering new trucking companies who could reach further into the US market under the rules (and new digital logs) governing maximum driving periods.¹⁷

"The border is a huge part of the Windsor fabric, it defines us... Looking at innovations that ensure that people and goods can move seamlessly across the border will be crucial."

City Official

Green economy and jobs. The environmental agenda and the ability of Windsor to pivot to take advantage of the green economy were mentioned by some interviewees. Many of these remarks were in the context of green energy projects, and the transition of the auto sector away from internal combustion engines to generate and keep jobs.

"The key thing we can do as a city is get an electric vehicle production mandate from a car company."

Academic

17 Federal Motor Carrier Safety Administration (2020) Summary of Hours of Service Regulations. Retrieved from: <https://www.fmcsa.dot.gov/regulations/hours-service/summary-hours-service-regulations>.

Department of Transportation (2015) Rules and Regulations, Federal Register, 80(241), pg 78357. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2015-12-16/pdf/2015-31336.pdf>

Theme 3 – attracting people and businesses to Windsor

Downtown and the city’s cultural infrastructure and amenities.

There was near consensus on the need to revitalize downtown Windsor (also referenced from tech sector representatives). The reason for the decline – and therefore what to do about it – was more varied: a need for ‘white collar jobs’ that would spur the restaurant industry; landlords who charged excessive rent and drove out businesses; and a decline in visitors from the U.S., were some of the reasons given. Linked to this was a desire from many to increase the general cultural infrastructure and amenities of the city.

“Why would an entrepreneur/small business owner want to relocate when half the store fronts are empty and where the rent is too high and there is not enough bustling activity of people commuting to and from this place.”

City Councillor

Skills and talent.

This was cited as an issue in several different ways. First, that too many people leave the region on graduating from local post-secondary institutions (‘brain drain’), and that Windsor needed to do more to keep them (this represents a cycle tied to cultural amenities and, of course, job opportunities); second, that there was an imperfect match between training and job demand; and third, that the training required may need to shift as the economy diversifies.

“50% of those [University of Windsor] foreign students stay in Canada, mostly going to Toronto. As a result, we lose a lot of talent from Windsor, as people think it’s a place you can’t develop a career.”

Academic

Business attraction.

A couple of interviewees suggested that Windsor had a reputation as a municipality that was heavy in red tape and unfriendly to business. The complexity of local permitting and licensing, as well as the bureaucracy involved in navigating development and new planning for projects, was cited as a barrier to growth and job creation. Some interviewees had had several experiences of city engagement which were negative, and referenced delays in permit approvals and complex grant schemes as two areas to improve upon.

“They need to start listening to manufacturing associations and cutting red tape.”

Business Leader

Theme 4 – who decides?

Higher levels of government.

As one councillor succinctly put it, “we are at the whim of higher levels of government”. More positively, there was a recognition from many that finding priorities that the provincial and national government might be inclined to fund was key, because the city could not solve every problem within its own resources.

“Windsor City Council really has nothing to do with making that happen. All they can do is lay the infrastructure that gets you from point A to point B. They can take our message to the right people. This is a model that requires provincial and federal intervention.”

Business Leader

The need for big city thinking.

Some interviewees lamented ‘small town thinking’, often with reference to what cannot be done here, compared to in a big city like Toronto, or in respect of limited ambitions and a lack of willingness to invest in long-term strategies. The elements of small city-living that delivered a strong community and good quality of life was seen to have drawbacks by some in terms of narrower horizons, and a view that Windsor was not in control of its own destiny.

Dominant positive narratives

Detroit is an opportunity that has yet to be fully exploited.

People are more likely to move to Windsor if they realize that Windsor is already part of a bigger city-region, with great restaurants, and sporting events.

It should be possible to attract more businesses from Detroit to set up in Windsor so they can expand into Canada.

The flow of people between Michigan and Canada has slowed since 9/11 – and this has had a knock-on effect on tourism and retail – and once the borders reopen there should be a focus on its recovery.¹⁸

Dominant negative narratives

Windsor's downtown and amenities are lacking.

There was consistent concern that Windsor did not have a downtown that was sufficiently attractive, with low foot traffic, too many vacant premises and a homelessness challenge.

In turn, the fear was this would stunt attempts to attract in new companies.

There is civic pride in a city which is wonderful for families, affordable, and has enormous potential. Windsor's residents clearly have pride and affection for their city. They are conscious (as our next section discusses) that there is a gulf between external perception and reality.

Workforce – there is a thread of concern about whether the Windsor workforce has the skills, and also the expectations around pay and work, that set them up for future success, including:

- The links between College and University courses and the future skills needs of industries;
- The general level of skills and education of the population;
- Whether graduates are willing to stay in the area.

Windsor is fundamentally good at making things. Many interviewees were keen not to downplay the strengths and skills of Windsor's manufacturing workforce, and its importance through COVID-19 and to Windsor's future.

Powerlessness – many of our interviewees stressed that many of the things that matter most to Windsor are not in Windsor's full control (in particular, they rely on higher forms of government, although also on the ability of the large manufacturers to succeed).

18 Annual Michigan-Canada border crossings in 2019 was 31% lower than it was in 2000 (540M people annually in 2000 vs. 370M people annually in 2019). Source: Department of Transportation (2020) *Border Crossing Entry Data: Annual Data*. Retrieved from: <https://explore.dot.gov/views/BorderCrossingData/Annual?isGuestRedirectFromVizportal=y&embed=y>

What views do other Canadians have of Windsor?

To help inform the analysis, a public attitudes survey was commissioned¹⁹ to explore how Ontarians view Windsor and where the city's perceived strengths might reside. The survey confirmed that some of Windsor's innate strengths – such as its affordability – were understood and priced in, but that others – like Windsor's proximity to big city amenities in Detroit, or its rich local heritage and civic history – were not. And while the survey showed that Windsor was seen in a positive light by many, there were, on balance, more negative views expressed about the city than neutral or positive ones.

The survey therefore exposed some of the challenges around the city's identity that – while it may not be news to the political leadership in Windsor – is nonetheless a reminder that perceptions matter and the goal of driving Windsor forward cannot ignore how the city is seen today, and therefore what might be done to overcome certain negative impressions among outsiders. This is especially true for a city that wants to attract more working families and graduates to relocate to Windsor as part of a diversification strategy to strengthen its economic outlook.

Headline Results

- **Windsor was perceived as the most affordable city in the list.** 28% of the sample believed Windsor would have an inexpensive cost of living.
- **Well-paid work increases people's willingness to move to Windsor.** For a job in Windsor which pays 20% better than one in Toronto, the sample is split on which option they would take.
- **Windsor was one of the least popular destinations for people to move to,** with 42% of the sample ranking it lowest on a list of 5 Southern Ontario cities.
- **Windsor was the worst performing city on strength of the local economy, and on local culture and heritage attractions.**

19

Public First ran a poll of 1,000 working age adults in Ontario between the 22nd and 25th of September 2020. Results were weighted to be representative of population proportions on the basis of interlocked age & gender, and education.

Windsor is perceived as affordable

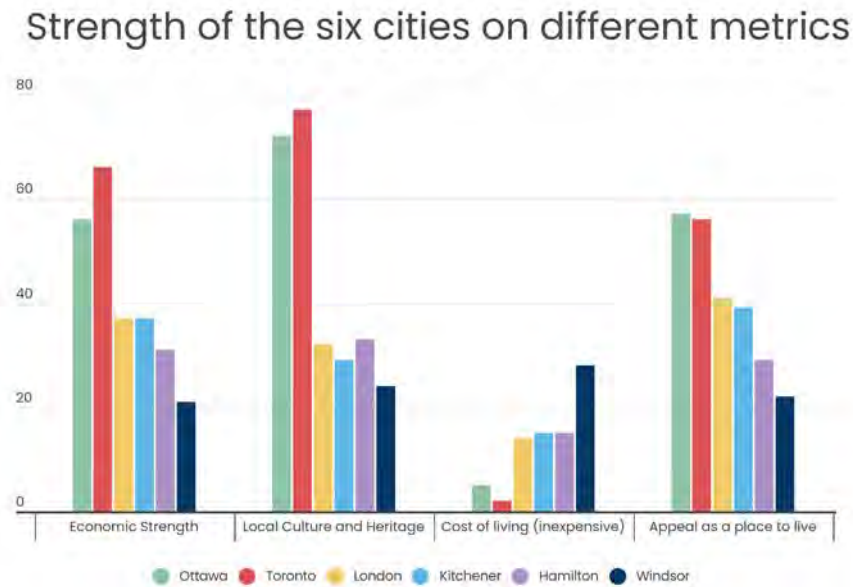
The area where Windsor excels is in the cost of living, with 28% viewing it as inexpensive, making it the only city in the list where more people viewed it as inexpensive than expensive. As might be expected, 92% viewed Toronto as expensive, including 81% describing it as “very expensive”.

Windsor was seen as having the cheapest cost of living



The takeaway from these questions is that people are willing to overlook the cost of living in order to live in areas with strong cultural appeals and a strong local economy. When people’s assessments of the cities’ economic and cultural appeals are correlated with their general appeal as a place to live, it is shown that these are relatively strong predictors (correlation coefficients average around 0.5 across the cities). However, the correlation between perceived cost of living and desirability as a place to live averaged only around 0.18, with no significant correlation in the case of Toronto. Effectively, being affordable is not enough to drive interest (**Figure 1**).

Figure 1: Strength of the six cities on different metrics



Windsor is perceived less favourably than other cities in Ontario

We asked for a straightforward ranking of 5 cities in Ontario as destinations people would move to for work. The cities provided were Toronto, London, Kitchener, Hamilton and Windsor. Ultimately, Toronto came out on top, with 47% of the sample selecting it as the destination to which they would be most prepared to move. Windsor came out on the bottom, with 42% of the sample placing it in last.

However, beneath this top line, the figure is more complicated. For one, the sample included a large number of people who already lived in Toronto, and of them 75% selected Toronto as the city they would be most willing to move to.

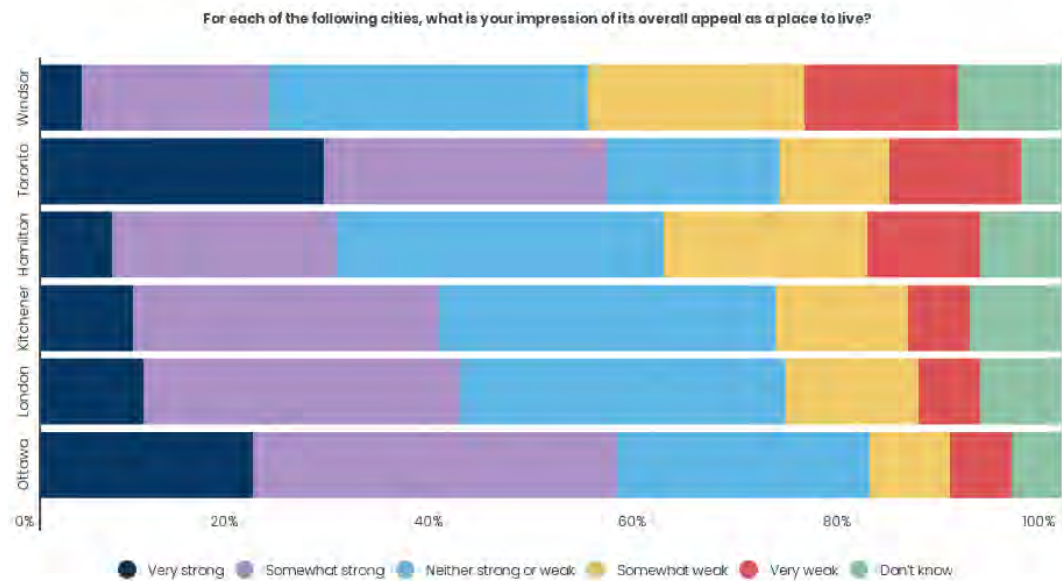
If those who already live in Toronto are deducted from the sample, and just responses from those who live in the other cities mentioned, or in no city at all, are considered, the story is quite different. Toronto has 27% of this group selecting it but also 35% placing it in the bottom position (5th rank). Among just those who do not live in any of the cities asked about, Toronto represented a more divisive city, featuring heavily at the top and bottom of people's lists, and Kitchener and London were more consistently popular.

Unfortunately, Windsor remains unpopular among this group, with 37% placing it lowest on the list. In demographic breakdowns, Windsor is consistently rated lowest, although the city performs slightly better among those who currently live in rural areas (30% of whom put it in their top two), and notably worse among those with a bachelor's degree as their highest level of formal education (49% of whom put Windsor in the bottom position). In fact, a quarter (25%) of those who put Windsor in their top two are living currently in a rural area or small town (compared to 14% of those who placed it in their bottom two). This presents a challenge for Windsor insofar as the skilled graduates that are needed to join the influx of modern industries that the city wants to attract, have generally more negative perceptions of Windsor than other Ontario cities.

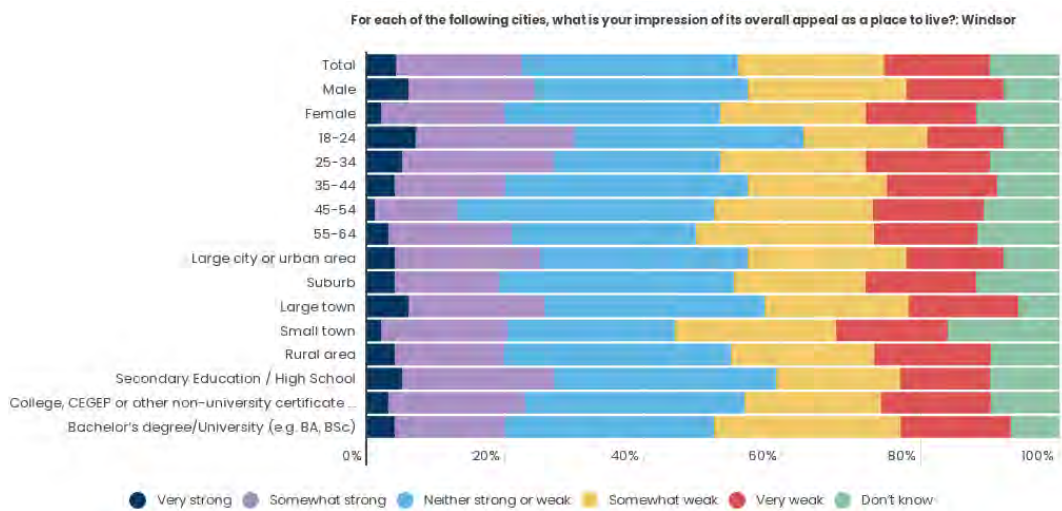
Respondents question the economic and cultural appeal of Windsor

We asked about whether people perceived the cities to have strong or weak economies, and Windsor comes out at the bottom with 31% saying they felt the local economy was weak, compared to 21% who felt it was strong. Again, the formal education level of respondents appears to play a role with 38% of those with bachelor's degrees saying the economy is weak compared to 26% of those with only secondary education (among whom about as many thought of the local economy as strong). A similar story emerges with the local and cultural heritage attractions, where 26% view Windsor as having weak local culture and heritage attractions. On both these measures Toronto comes out top: 66% saying it has a strong economy and 77% that it has strong local culture and heritage attractions.

However, as a place to live, Windsor had the lowest appeal of the five cities we tested



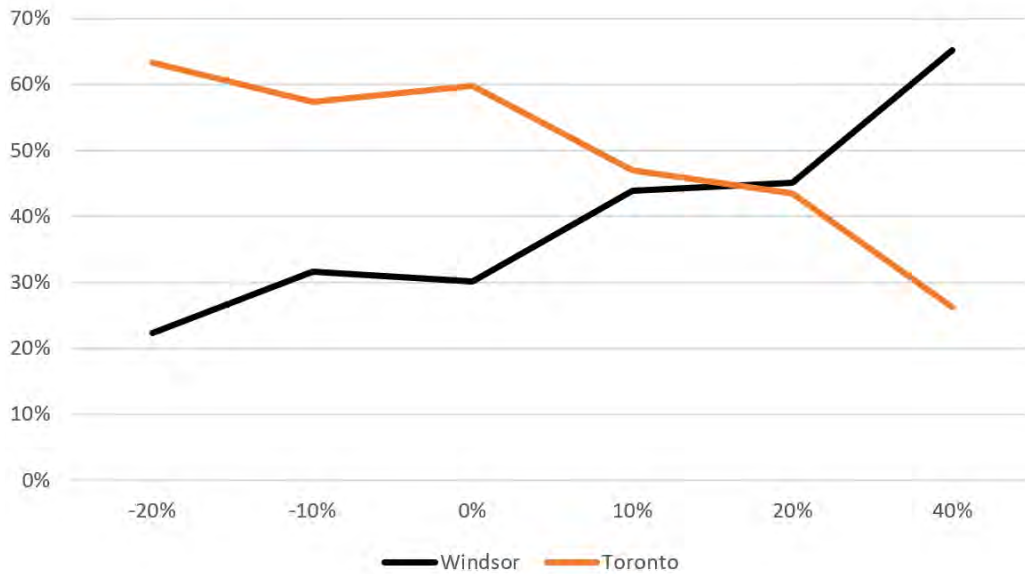
This was true across different demographics



The impact of better paid employment on movement to Windsor

We asked respondents whether they would choose to move to Toronto or Windsor if offered jobs in each but with different pay rates. Due to the relative popularity of Toronto, they were about neck-and-neck when the Windsor job payed 20% more a year, and when the two jobs paid the same people chose the Toronto job over the Windsor job twice as often (**Figure 2**).

Figure 2: Willingness to move to Windsor over Toronto if the Windsor job pays X% more



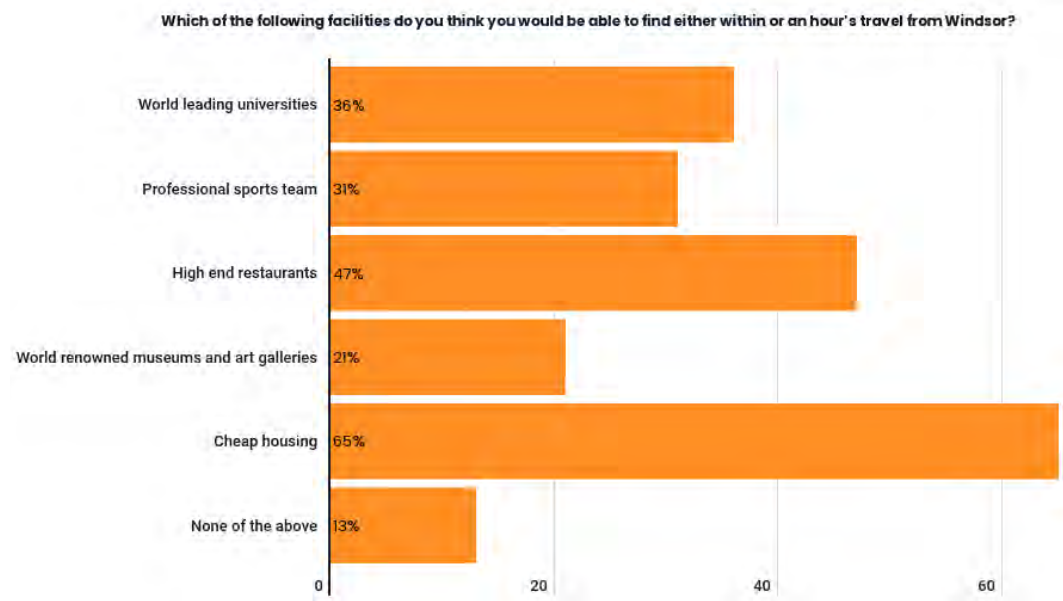
Windsor was ranked as the least preferred city people would wish to relocate to for work

Imagine that you were being asked to move to a city for work. Your new employer will cover all the costs of the relocation, and assume the salary and type of work be the same in each city. Which of the following cities would you be most prepared to move to? Please rank 3 of the following, with the city you are prepared to move to at the top.



This is unsurprising given the results of our conjoint analysis, which indicated that the salary level was a key motivator for relocation, easily exceeding the importance of culture, housing, and social motivators.

We saw only limited recognition of Windsor's close proximity to the facilities within Detroit



What people say about Windsor

'In your own words, what is your leading impression of the city of Windsor?'

"Beautiful parks and waterfront parks and walkways. Has many hiking and bike trails, small museums and an art gallery. Many playgrounds for children and youth activities. Cost of living is average and there is affordable housing."

Windsor resident, 31

"Too close to the U.S. for my comfort and too distant from Toronto. I don't know any people there and do not find it in any way a desirable place to live or visit."

Toronto, 58

"A quiet city with a casino for vacationing."

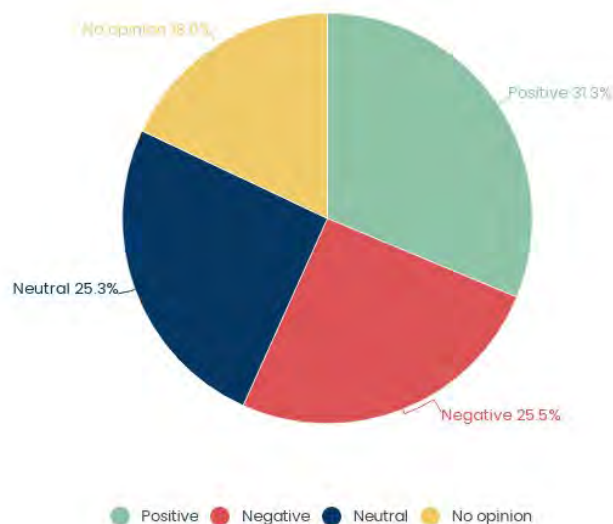
Kitchener, 28

"Blue collar but becoming more innovative and progressive."

Ottawa, 46

We saw a reasonable balance of sentiment - although the strength of negative responses was often greater than positive ones

Based on Public First analysis of answers to the question: 'In your own words, what is your leading impression of the city of Windsor?'



Examples of Positive Responses

"It is a very student-based city, and a sweet combination between a city life and a small town feeling."

Toronto, 18

"A great city with entertainment, affordable housing, blue collar jobs and a small town vibe."

Ottawa, 34

"It's a tech hub and a University town."

Toronto, 63

Examples of Neutral Responses

"More affordable housing but not many things to do in terms of entertainment."

Toronto, 38

"I think that it is a nice city, but that it is more for retired individuals."

Hamilton, 24

"Nice city, unfortunately gets linked to Detroit."

Toronto, 60

"My only real knowledge of Windsor is it is a border town which is nice and it has a casino. Other than that not much."

Kitchener, 52

Examples of Negative Responses

"Like the Canadian Detroit? Only been there once but it isn't lively and more of a blue collar city."

Toronto, 35

"I think that Windsor is a town that is down on its luck. The manufacturing industry has moved away and there are a lot of people out of work. The largest employers are across the border. There isn't a lot to attract me to the area."

Ottawa, 33

"Too close to the US, leading to high crime and disease crossing the border."

Toronto, 50

"It is not exactly a place I would want to be. It seems like a very unsafe area and there really isn't anything that is drawing me to the area. My family and friends are located in the southwestern Ontario area and Windsor is a little out of the way for me."

Hamilton, 21

What do these survey results mean for Windsor?

These findings present challenges for Windsor. There are some clear negative associations with the city, and in this regard the survey confirms some of the observations made by local interviewees about how the city was perceived by outsiders. Acknowledging these negative associations, and who they apply to, should allow for targeted strategies that combat these perceptions and move public opinion, over time, in Windsor's favour.

As expected, given its relative economic fundamentals, the survey found that Windsor scored relatively poorly compared to other cities in Ontario. Affordable housing is an asset and perceived as such. Low residential property prices will need to be maintained as Windsor's population grows (by encouraging new housing development) – it is an advantage that Windsor could promote to people outside the city.

It is hard to avoid the conclusion that Canadians living in Ontario do not have positive associations with Detroit, and to some extent these rub off on Windsor. They clearly do not think of Windsor as 'close to amenities,' which could mean they don't know that Detroit has these amenities, that they are available and easy to access if you live in Windsor, or they discount them because their negative views of Detroit are such that they would not choose to go there.

While the city wants to be communicating to those in Ontario that Windsor is a great place to live, and near great amenities, in the nearer term, attracting people living in Michigan – and other immigrants to Canada – may be easier.

Throughout this project, similar themes kept emerging that are supported by the public attitudes research. Many of Windsor's strongest advantages are unknown to people who do not live in Windsor or know the city from direct experience. Often the experience of visiting is a positive one and many people who grow up in Windsor and leave as young adults gravitate back in order to enjoy these advantages. The city must accept this challenge and work to overcome it. In other words, do more to sell what Windsor already is – and the comparative advantages it already enjoys – so that more people come to recognize them. Such people will be future investors, residents and consumers.

Edison Financial

Edison Financial is a Windsor-based digital mortgage start-up that will serve the needs of consumers across Canada in partnership with Canada's leading broker channel lenders. The company was founded by Hash Aboulhosn in 2017 with the goal of giving Canadian homebuyers a friendly, transparent and convenient mortgage experience. Edison is currently operating in Ontario and British Columbia with plans to expand to other provinces in the near future.

3. How Cities Like Windsor Grow and Thrive

Over recent decades, governments around the world have looked to catalyze urban development and economic diversification as globalization has hollowed out formally industrialized urban centres. The history of these efforts provide valuable insights for Windsor Works.

In the Economic Regeneration Toolkit (see [Appendix 1](#)) prepared for this project, an overview is provided of different strategies that cities have taken to drive local economic growth, jobs, and regeneration – and what is known about what has or has not worked, considering:

- The most up to date theory behind why some cities thrive more than others;
- The academic evidence on which policy tools are more effective; and
- Ten case studies of the different strategies that cities have employed.

Our core finding is that there is no silver bullet. The relative success of policies is highly dependent on the context of each city and exactly how they are implemented. It is impossible for policymakers to perfectly predict or control the future of their city – but policies can help make success much more likely.

What is the evidence around urban development?

There are four main explanations for why some cities grow richer than others:

Sectors & Clusters

Historically, cities would grow on the back of rare natural resources, as the centre of political power or as convenient trading crossroads. In the modern world, many cities develop an economic specialism by taking advantage of a first-mover advantage or gaining a critical mass in a new industry: Silicon Valley for IT, Hollywood for films, or Detroit for cars. When that sector declines, the city either needs to find a new specialism, or it will suffer eventual decline itself.

People & Culture

Under this view, cities thrive when they are attractive places for highly talented or creative people to move to – and they in turn create new businesses and jobs for the rest of the local economy. This might be because the city hosts a world-leading University, features an attractive climate, or is home to appealing cultural and sporting amenities.

Scale

There is overwhelming evidence that cities themselves enjoy economies of scale: the larger they are, the more connections workers and businesses can make, and the greater their productivity. Many cities are centuries old, long outliving the rise and fall of any one industry.

Competitiveness

Just as a national government works to improve the underlying supply side fundamentals of its economy, cities compete to provide efficient infrastructure, competitive taxes and support for basic research and innovation.

There remains a significant debate in the literature over which of these factors is most important, or drives the others. Do highly productive cities tend to have great amenities because of high disposable income from thriving local industries – or can the amenities themselves attract new start-ups to locate there? Is it better to specialize in a particular industry and seek to become a world leader, or does this invite vulnerability when economic fundamentals change?

In the following areas, there were common approaches that cities adopted, with varying degrees of success:

Sectors & Clusters

- Targeting research spending or tax credits at specific industries
- Offering generous tax breaks or incentives to encourage large companies to relocate
- Building new facilities and working with companies in an industry to increase collaboration

People & Culture

- Investing in cultural amenities and new sports facilities
- Brownfield regeneration and land redevelopment
- Seeking to increase graduate retention
- Investing in the local University

Scale

- Building new transport links with other larger metropolitan areas
- Liberalising planning laws or building more housing stock
- Encouraging inward migration (from other regions or from overseas)
- Relocating public sector staff to relatively deprived areas

Competitiveness

- Investing in local infrastructure: roads, public transport, broadband/fibre, etc.
- Offering liberalized planning rules, regulations, taxation in specific special enterprise zones or free ports
- Lower cost labor or tax incentives

Given that cities, especially in different regional and national contexts, are complex places and with varied histories, it is hard to definitively state what 'works' and what does not. As a general rule, however, the evidence suggests that:

- 'Downstream' investments (housing, public transport, new cultural amenities) based on the assumption that they will attract a higher population are less likely to succeed than policies that support developing economic strengths and broader competitiveness. In other words, *build it, and often they do not come*. There are very few examples of new sports stadiums or art galleries that, by themselves, have turned their part of the city around, and all too many examples of major civic infrastructure projects becoming white elephants.
- That does not mean new transport infrastructure or housing are always the wrong thing to do. When a city or a particular urban region is already at full capacity, they can help unlock growth. If there is a deprived area in the middle of a more successful neighbouring area, redeveloping it is likely to be highly effective.
- It is hard to force a city to become a world leader in a completely new sector from the top down. Worldwide, many, for example, have tried and failed to become leaders in renewable energy.
- Cities can, however, do a lot to help nascent sectors that have emerged organically to grow faster – and remove regulatory or other barriers that are in the way. If a city has a 'minimum viable industry', then a lot can be done to help it scale.
- While incentives for companies might encourage them to choose one city over a neighbouring rival, they are rarely enough on their own. Amazon chose Virginia for their second HQ because of skills, not taxes. The pay-off from incentives is often unclear – and when they go, the company sometimes goes too.
- Increasingly, cities that are thriving have 'innovation' strength – they have ideas and very advanced skills. Cities in advanced economies are unlikely to compete on lower costs alone. These strengths can be in manufacturing, but the higher up the value chain a city goes, then the better protected it is, and diversity helps.
- Cultural investments are unlikely to be sufficient for economic regeneration, but they might be necessary. It is hard to know what minimum level of 'niceness' a city needs to achieve to attract today's skilled young professionals – but almost every case study incorporates some element of this. It is worth checking whether outsiders think the city is a good place to live and therefore what future relocation demands might look like.

University of Windsor

The University of Windsor is the largest post-secondary institution in the city and was established in 1963. It offers 190 undergraduate programs, 65 graduate programs and six professional programs, including in law, business, engineering, science, education, nursing, human kinetics, social work, art, humanities and social sciences.²⁰ The University has 16,321 full and part time students, 23% of which are international students. The student body collectively represents nearly 100 countries around the world.²¹

The University has strong links to the United States; they participate in a U.S. federal loan program²² and for the last seven years they have offered a discounted U.S. 'Neighbour Rate' – currently \$9,765/semester for full time U.S. students and \$1,953/semester for part-time U.S. students – a 50% discount on the international student rate.²³ One of the University's unique curriculum offers is a dual Canadian and American law program, from which graduates receive both a Canadian J.D. and an American J.D.²⁴

In 2018, the University of Windsor was ranked among the most beautiful Universities in Canada by Best Choice Schools. The University was recognized for its environmental status and landscaping, significant useable student space, mix of historic and modern architecture, location near an international border, and temperate climate compared to other Universities in Canada.²⁵ In 2019, the University was also ranked among the greenest post-secondary schools in North America by the Princeton Review for its commitment to green practices and programmes.²⁶

The University's strength is in teaching, where it has a student/faculty ratio of 26:1, giving students close access to their professors and high quality educational and research opportunities. Further, the Faculty of Science specifically has a student/faculty ratio of 16:1 – the best in Ontario and one of the best in Canada.²⁷

The University also produces high quality research in areas fundamentally important to the future of the region. The University's strategic research plan identifies four key challenges underpinning the University's research agenda:²⁸

1. The health of the Great Lakes;
2. The challenges of borders and how people and goods move across them;
3. Sustainable industry, including auto manufacturing;
4. Creating viable, healthy and safe communities.

Recently, the University has received \$4.3 million in federal and industry funding to support research into next generation electric vehicle production. Researchers at the University are working on this project with industry partners, including Ford, D&V Electronics and NemaK.²⁹ The University has also established the Cross-Border Institute (CBI) to examine policy challenges around borders in the modern world which serves as a centre of excellence in border management and security.³⁰

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- 22 The University of Windsor (2020) *Admissions Information for U.S. Students*. Retrieved from: <https://www.uwindsor.ca/studentrecruitment/415/admissions-information-us-students>
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- 24 The University of Windsor (2020) *Canadian & American Dual J.D. Program*. Retrieved from: <https://www.uwindsor.ca/law/370/canadian-american-dual-jd-program>
- 25 The University of Windsor (2018) *UWindsor named among most beautiful universities in Canada*. Retrieved from: <https://www.uwindsor.ca/dailynews/2018-03-07/uwindsor-named-among-most-beautiful-universities-canada>
- 26 The University of Windsor (2019) *UWindsor once again ranked among greenest schools*. Retrieved from: <https://www.uwindsor.ca/dailynews/2019-11-04/uwindsor-once-again-ranked-among-greenest-schools>
- 27 Ontario Universities' Info (2020) *University of Windsor*. Retrieved from: <https://www.ontariouniversitiesinfo.ca/universities/windsor>
- 28 Government of Ontario (2018) *2017-2020 Strategic Mandate Agreement: University of Windsor*. Retrieved from: <https://www.ontario.ca/page/2017-20-strategic-mandate-agreement-university-windsor#section-11>
- 29 The University of Windsor (2020) *Investment by industry and NSERC to spur UWindsor research into electric vehicles*. Retrieved from: <https://www.uwindsor.ca/dailynews/2020-08-09/investment-industry-and-nserc-spur-uwindsor-research-electric-vehicles>
- 30 The Cross-Border Institute (2020). Retrieved from: <https://www.cbinate.com/>

4. How Windsor Scores

The following summarizes our assessment of how the city of Windsor today scores when set against the four key factors for successful city growth (sectors, people, scale, competitiveness):

Windsor's Economic Strengths and Weaknesses	
Sectors & Clusters	<ul style="list-style-type: none"> + Windsor remains one of Canada's most important manufacturing centres for cars, and the city is working to become a centre for automotibility. Leading manufacturers in other fields (like Jamieson) have made their home in Windsor. + The City and surrounding area have strong tourism assets, with diverse attractions including gaming, food and drink, outdoors and culture. - Over the last twenty years, auto production in Ontario has been shifting to lower cost locations in Mexico and the Southern United States. - The automobile industry looks set to suffer significant disruption in the coming decades with the rise of electric and self-driving vehicles. It is not clear how well Windsor is currently set up culturally or in its research and skills base to take advantage of these trends. - Unionized labor with high costs; and other higher costs (such as electricity) can deter investment. - There is no global, non-automotive R&D strength in or near Windsor.
People & Culture	<ul style="list-style-type: none"> + Windsor's population continues to climb, suggesting the area has appeal to local and international migrants. + The University of Windsor is academically strong - albeit with significant competition in the rest of Ontario. + The area has a history of high skilled manufacturers in the tool and die industry. - The share of graduates in the Windsor labor market (25.2%), remains below the national average (28.5%). By urban area, Windsor has the 15th highest population, but only the 41st highest share of graduates. The city continues to see a net loss of graduate talent. - The University of Windsor is stronger in teaching than research, and it has not built up sufficient strength in automotive research. - Many of our interviewees complained about a lack of amenities for young graduates, millennials (and younger generation), with Detroit seen as significantly more culturally appealing. In fact, the region has experienced an anecdotal "thirtysomething" population boom, as talented individuals return to the region, after having studied or worked in larger urban settings.

Windsor's Economic Strengths and Weaknesses

Scale	<ul style="list-style-type: none"> + The city is located next to one of the most important manufacturing centres in the US: Detroit. There is already significant collaboration between companies on both sides of the border, and potential for further economies of scale between the two cities. + Affordability of housing is often mentioned as a key strength (though presumably if Windsor began to grow faster economically, and did not keep pace with housing supply, this would change). + The new bridge will allow more rapid access into Detroit and the rest of Michigan. - Windsor is too distant to form an effective economic region with other major cities in Ontario, and public transport links between them are weak. Windsor is a very car-centred city. - This means that Windsor is dependent on Detroit for scale - a reviving city, but one with major risks, and with border issues. - While rental prices in Windsor are among the lowest in Ontario, the absolute level of vacancies remains low.
Competitiveness	<ul style="list-style-type: none"> + Windsor remains a cost competitive location for businesses. In 2016, KPMG estimated a cost index of 84.3 for Windsor-Essex, compared to a benchmark average of 100 for the US. + Internationally, Windsor benefits from Canada's fundamentals. While it has been moderately sliding in recent years, Canada remains highly competitive both for business taxes and more broadly. - While it has been catching up in recent years, GDP per capita remains at around three quarters of the national average, suggesting relatively low productivity. - Local government in Windsor doesn't have the ability to match US economic incentives. - Some interviewees have suggested that Windsor lacks a strong entrepreneurial base and culture (but we have not yet put numbers on this).

Instead of following the same playbook for every city, decision-makers must utilize a city's unique historical and geographical advantages, while staying open to new opportunities that might emerge. Windsor enjoys several fundamental economic advantages: a location on the border, a strong manufacturing legacy, and a growing population. This puts it in a better position than many cities in the US rust belt. While its GDP per capita remains significantly below the national average, the data suggests that it has been catching up – which is certainly not true for every post-industrial city.

St. Clair College

St. Clair College has been a quiet success story in Windsor. Its growth has implications for the local population and for the future of Windsor's economy. The post-secondary institution, founded in 1967, has a total full-time student complement of 12,800 as of 2019³¹ and has expanded both its student body and its courses due to growing demand from the international market over the last decade.³² Unlike many Colleges in Ontario, St. Clair took a decision in 2015 when the current President took over, to focus on growth by catering to the rising demand from international students and their desire to study in Canada.

The College operates across three campuses in Ontario and in 2015 there were approximately 250 foreign students enrolled in Toronto, and 450 locally in Windsor. By 2020, enrolment had increased more than 10 times to 2,700 in Toronto and to 3,700 locally. Of these international students, approximately 70% live in the City of Windsor, which has necessitated a large expansion of the College's accommodation provision, with them almost doubling their downtown presence. This expansion will include the \$23m 'GEM' residence which will provide accommodation for over 500 students on the main south campus when it opens next year.³³ In total, the College estimates that they will soon add another 1,000 spaces for students living downtown and will need other faculty premises too.

St. Clair is able to set their own fees for international students and they remain competitive – placed in the bottom quartile for fee rates among 24 public Colleges in Ontario – making them an attractive choice for Indian, Chinese and other nationalities who are seeking affordable, high quality study options abroad. Another element of this demand is that many also seek residency in Canada after the completion of their studies in Windsor, and international students now make up 37% of the student population, up from 6% in 2015.

Despite the COVID-19 pandemic, the College has been able to maintain enrollment as a licensed education institution³⁴ and has worked to incentivize travel and other online teaching measures to ensure new arrivals can begin their courses without being inconvenienced.³⁵ The extraordinary growth in international students has driven the expansion of St. Clair and will continue to be part of the College's growth strategy for future years. It has also driven a financial turnaround with the College going from a \$5m deficit in 2015, to a \$41m surplus in 2019.

Given the size of Windsor, the College has an outsized impact on the local area and a significant downtown presence, with its staff and students supporting local economic activity and also impacting the housing rental market. St. Clair College has become an outsized contributor to local prosperity. Its ability to attract students should be coupled with a new talent retention strategy to locally leverage the enhanced skills and support local economic activity.

31 The College of St. Clair (2019) News, 19 September, Retrieved from: <https://www.stclaircollege.ca/news/2019/st-clair-college-enrolment-stays-strong>

32 The College of St. Clair (2020) *Why St. Clair?*. Retrieved from: <https://www.stclaircollege.ca/international/why-stclair>

33 The College of St. Clair (2020) *News, 13 November*. Retrieved from: <https://www.stclaircollege.ca/news/2020/new-residence-begins-take-shape-using-z-modular-units>

34 The College of St. Clair (2020) *News, 18 November*. Retrieved from: <https://www.stclaircollege.ca/news/2020/international-students-begin-arriving-december>

35 The College of St. Clair (2020) *Covid-19 FAQ*. Retrieved from: <https://www.stclaircollege.ca/health-centre/coronavirus/faq>

How does Windsor compare with similar cities?

There is limited published research on the relative position of mid-sized cities in Canada, with most comparative studies focusing on much larger global cities. Therefore, we used available information to devise a bespoke comparison that showed Windsor's relative position. To our knowledge, this is the first time that Windsor's economy has been scored against that of other cities that are chosen because they are similar to Windsor (rather than as part of a nationwide ranking of cities of all sizes).

Key data was compiled for cities across comparable jurisdictions to judge Windsor's current position. In order to better understand Windsor's relative strengths and weaknesses, a database was built including cities across Canada, the US, the UK and continental Europe. Each city was analysed not just to see how well it has done in recent years, but also what were its relative strengths in the three horizontal drivers of growth:

- **People:** Attracting people to live there
- **Scale:** Taking advantage of size and economies of scale
- **Competitiveness:** How attractive is it to businesses?

We compared Windsor with 29 similar post-industrial cities to better understand the city's relative strengths and weaknesses. For each pillar, some key metrics were identified, bringing together comparable data from the OECD, national statistical agencies and third-party data.

In general, our findings show that Windsor's main strengths are:

- High quality of life;
- Growing population and proximity to a large labor market in Detroit;
- Relatively low cost of doing business.

The city's main weaknesses are:

- The relatively weak University ranking;
- Relatively high unemployment rate;
- The city's lack of appeal to outsiders.

Overall Economic Performance

To get a current picture of overall economic performance a comparison was made of each of the cities on their recent economic output and growth. Windsor ranks 4th in recent GDP growth per capita (between 2009–2016), at a rate of 16.9%. This shows that Windsor had among the fastest growth of any rust belt or other post-industrial city in our sample, a very promising trend that the city must work to maintain.

However, Windsor did not perform as well on other output metrics; its worst performance was in the metric “GDP per capita compared to the national average”. In Windsor, GDP per capita is only 64% of the national average, ranking it 28th in our sample and the lowest amongst its Canadian peer cities of Hamilton, Kitchener and London.

The final metric in this category is Gross Domestic Product (GDP) per worker, which is used as an indicator of labor productivity. Windsor ranks below average (17th) amongst the sample with a GDP per work of \$82,836. Detroit has the highest GDP per worker, at \$123,203, and London has the lowest at \$59,411. Amongst Windsor’s Canadian peers, however, the city ranks the highest, with Kitchener a close second (\$80,430), followed by Hamilton (\$71,534) and lastly, London (\$59,412).

After setting the scene with big picture economic metrics, analysis was undertaken of each city’s performance across three horizontal drivers of growth:

- **People: is the city attracting people to live there?** To understand this, the size of the graduate population, quality of life, and the external appeal of the city were factors.
- **Scale: is the city taking advantage of size and economies of scale?** To understand this, population growth, average house prices, and the size of the nearby population were factors.
- **Competitiveness: how attractive is the city to businesses?** To understand this, business costs, University rankings, and unemployment rates were factors.

Overall, Windsor’s performance across these metrics is average, ranking on average 17th across the People pillar, 13th across Scale, and 15th across Competitiveness. Within these pillars, however, there is significant variation in Windsor’s performance.

	Area	Pillar	Based On	Period	Windsor Ranking
1	Growth	Output	% in GDP per capita, 2009 to 2016	2009–2016	4
2	Absolute Labor Productivity	Output	GDP per worker	2016	17
3	Relative Labor Productivity	Output	GDP per capita as a % of national average	Latest	28
4	Graduate Population	People	% of workforce with a graduate education	Latest	18
5	Quality of Living	People	Proxy index based on crime rates and air pollution	Latest	13
6	Appeal	People	% of survey respondents who said they wanted to move here	2020–09–01	20
7	Population Growth	Scale	% of growth in population	2008–2016	12
8	House Prices	Scale	Average house prices in CAD	Latest	22
9	Nearby Population	Scale	Populations of cities within an hour's radius	Latest	6
10	Business Costs	Competitiveness	Merged index based on office costs and KPMG data	Latest	4
11	Research	Competitiveness	Global ranking of largest University	Latest	20
12	Labor Market	Competitiveness	Proxied by pre-COVID-19 unemployment rate	2018	22

36 Windsor's relative ranking compared to 29 other post-industrial cities, with the best performing city as 1.

Pillar I: People

Windsor performs slightly below average across metrics within the People pillar. Its main strength in this pillar is the quality of life it can offer residents, and its weakness is its lack of appeal to outsiders. Windsor's "quality of life" ranking provides a glimpse of one of the most attractive aspects the City of Windsor has to market. Windsor scores better than studied North American cities and on-par with Canadian peers. Therefore, actions that can leverage and market the City as a destination for individuals and families can further help attract high-skilled labor

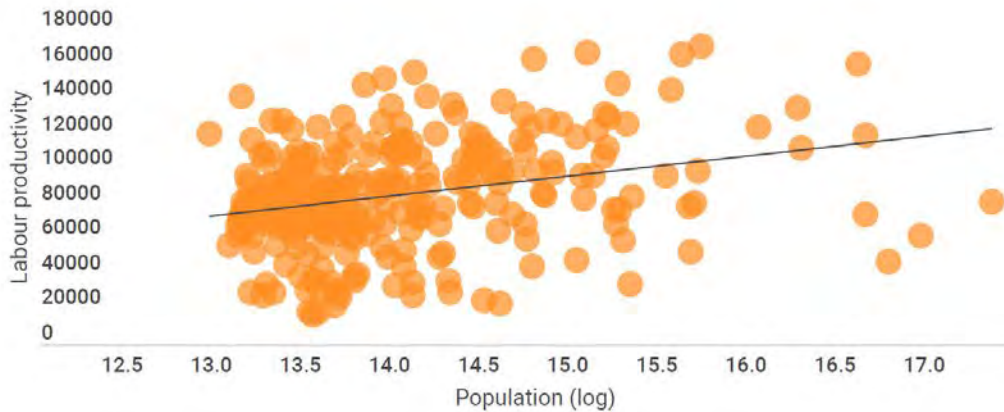
Windsor performs below average on the graduate population metric, which measures the percentage of the population with a University-level education. Among the 25 peer cities with available data, Windsor ranks 18th with a graduate population of 21.3%. The highest performing city in this metric is Madison, Wisconsin with 49.49%, and the lowest is Detroit with 13.3%. This metric shows that although Windsor and Detroit have a relatively large population between them, this population has a relatively low educational attainment.

Windsor's worst performance in this pillar is in the appeal to mobile workers metric, which measures how prepared outsiders would be to move to a city. Windsor ranks 20th out of 22 cities in this metric, highlighting the city's weakness in appealing to outsiders.



Pillar II: Scale

Relationship between productivity and population in OECD cities



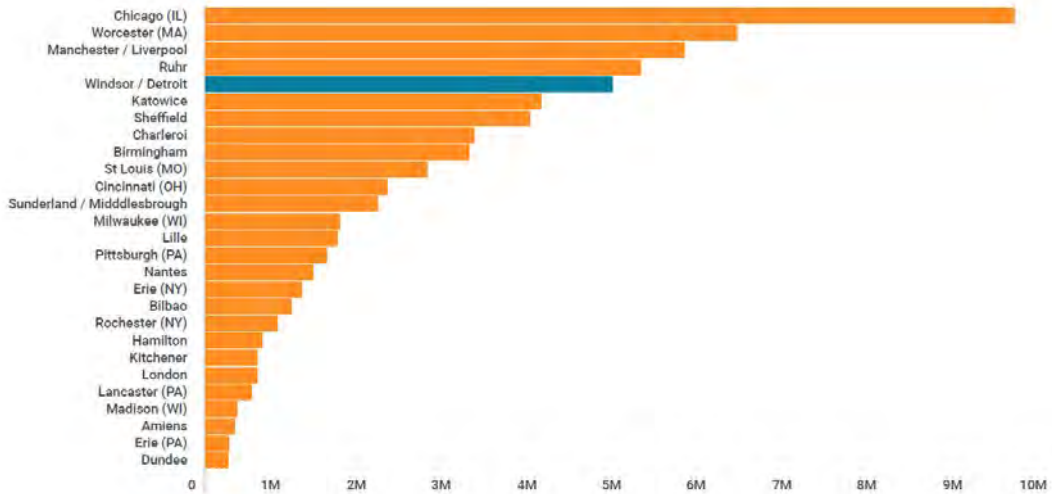
Econometric studies find on average that the doubling of a city's population size increases the productivity of its workforce by 2-5%.³⁷ The largest variation in Windsor's performance is found within the Scale pillar, where the city had both its highest and lowest total ranking. Windsor's highest ranking is in the "nearby population" metric, which compares the populations of cities within an hour's radius. Windsor ranks 6th in this category among all 30 cities, and 1st amongst its Canadian peer cities. This metric highlights Windsor's unique strength over other post-industrial cities and specifically its competitors in Canada: its proximity to Detroit, and the labor and investment opportunities that come with that location.

Windsor's worst ranking is in the "house prices" metric, which compares average residential property prices across the sample. Windsor has the 6th highest residential property prices out of the 28 cities with available data. It is worth noting, however, that Canadian cities in general seem to have the high residential property prices compared to other countries. In fact, compared to its Canadian peer cities, Windsor has the lowest residential property prices. Therefore, this finding may not be such an issue for Windsor within its regional and national context.

³⁷ "According to the OECD, doubling a city's population size increases the productivity of its workforce between 2%-5% on average" Source: Ahrend, R, Farchy, E, Kaplanis, I, & Lembcke, A. (2014) What Makes Cities More Productive? Evidence on the Role of Urban Governance from Five OECD Countries, *OECD Regional Development Working Papers 2014/15*. <https://doi.org/10.1787/5jz432cf2d8p-en>

Windsor also performed relatively well in the “recent population growth” metric, ranking 12th out of 31 cities in the sample. The city had a population growth of 4.9% between 2008 and 2016, outperforming most U.S. cities but underperforming Canadian cities, such as Kitchener (13.7%), London (9.8%) and Hamilton (7.8%). Canadian cities generally saw faster population growth compared to other countries in our sample, a trend largely driven by recent immigration. As such, Windsor is doing well in this metric on an international level, but not necessarily among its Canadian peers.

Population within an hour’s drive



Pillar III: Competitiveness

Windsor's ranking in the Competitiveness pillar was average, with its main strength being low business costs and main weakness, its relatively high unemployment rate. Windsor has relatively low business costs amongst the cities in our sample, which was determined by comparing the average cost of leasing an office by square foot. The city ranks 4th out of 24 cities globally. Business costs in Windsor are nearly identical to those in Hamilton, Kitchener, and London³⁸. Therefore, our findings suggest that Windsor has a relatively good offer for businesses compared to peer cities across North America.

Windsor did not perform particularly well, however, on its University ranking. The city ranks 20th out of the 30 cities in our sample, and 12th out of the 16 North American cities. The top 3 cities in North America by University ranking are Chicago, Illinois; Madison, Wisconsin; and Hamilton, Ontario. The only Canadian city in our sample that Windsor outperformed is Kitchener.

Finally, Windsor has experienced higher than average levels of unemployment, when compared to other North American cities in the study (Windsor ranked 22nd out of 32 cities). All Canadian cities have higher unemployment levels than U.S. companions, and Windsor's was among the highest across Canadian jurisdictions. All of this data relates to the period immediately prior to the COVID-19 pandemic, and aligns with a decade of economic dislocation in Windsor, associated with the automotive recession of 2008-09. By the end of 2019, Windsor had recovered to pre-2008 unemployment measures, underscoring the need to embrace a wider cluster of local economic drivers.

Full details of this analysis can be found in [Appendix I](#).

38 KPMG (2016). Competitive Alternatives: KPMG's guide to international business locations costs. Retrieved from: <https://assets.kpmg/content/dam/kpmg/pdf/2016/03/ca-competitive-alternatives-2016-canada.pdf>

What does this mean for Windsor?

In terms of the fundamentals – basic office costs, graduate share, quality of living and so on – Windsor scored in the middle of the pack of the rust belt sample. That does not mean that Windsor cannot improve its fundamentals, but in aggregate there are neither outsized weaknesses nor strengths.

Pillar	Windsor's average rank (out of 30)
Output	16
People	17
Scale	13
Competitiveness	15

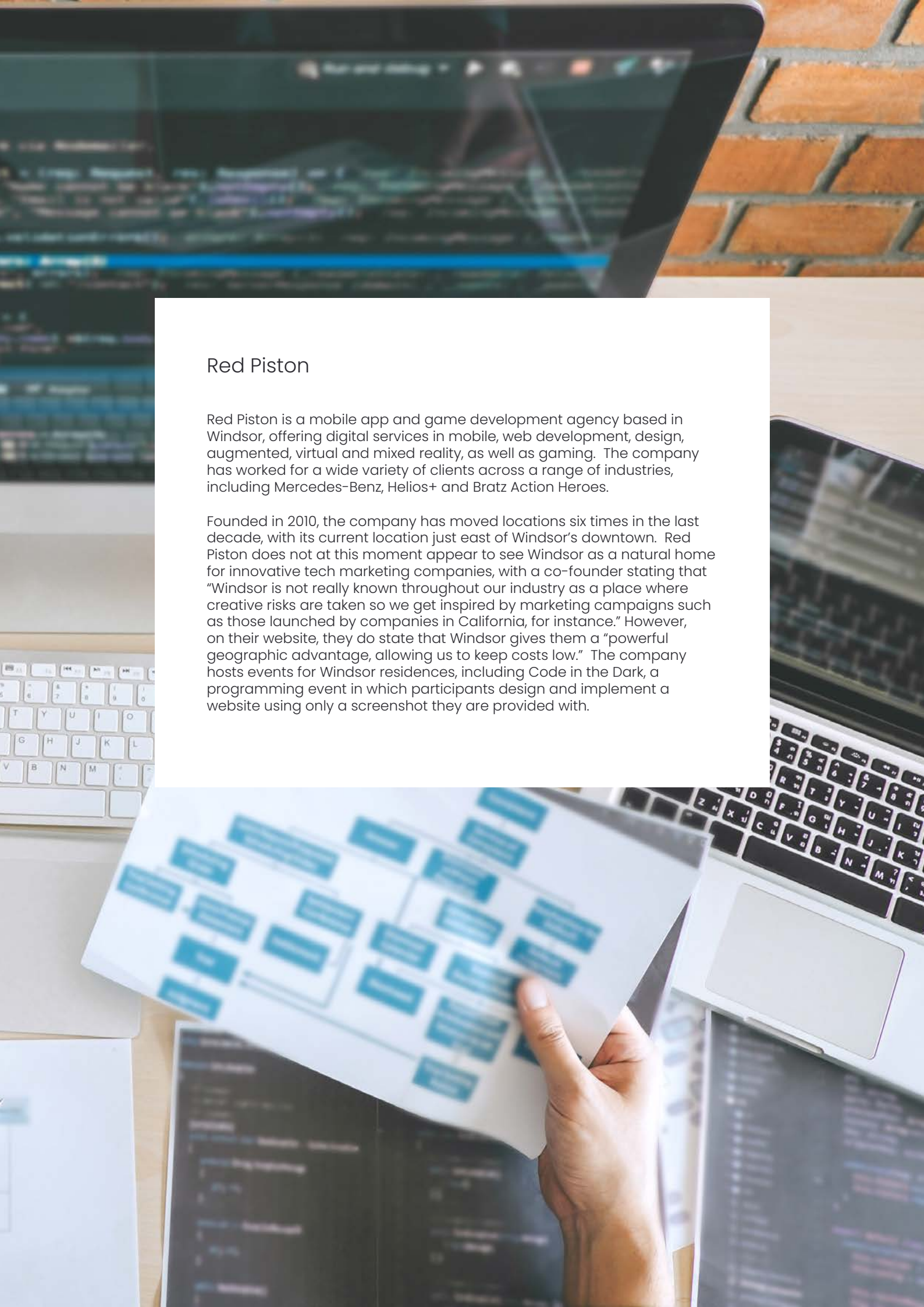
Windsor's most significant weakness in driving growth is the city's R&D potential. Cities that have experienced the most dramatic turn-around growth have had world class Universities (like Carnegie Mellon in Pittsburgh or the University of Manchester in Manchester) and companies which have done fundamental R&D (like Microsoft in St. Louis). Neither are true, currently, for Windsor. While it sounds like the University of Windsor is pursuing a sensible strategy in terms of automotive research (and attempting to recover a lead it had in this area some decades ago), this is not equivalent. The University's strength remains teaching, rather than research.

Windsor's biggest output weakness is labor productivity – GDP is growing but GDP per capita is not. But this is, in our view, not a cause but a symptom of the city's industrial mix.

Politically, Windsor has been much more successful than Detroit. It has avoided the bankruptcy, urban decay and the social unrest that has characterized that city, and Windsor has always been much safer than Detroit. In population terms, too, Windsor and Detroit have been on divergent paths. Windsor's population is growing steadily and has been for almost a decade after a period where the population fell slightly between 2007-11. The constant population decline over four decades in Detroit is a marked contrast.

However, in economic terms, Windsor is near-identical to Detroit. As an economic region, it should think of itself as part of Michigan more than part of Ontario. It has declined very slightly less, and later on grown very slightly less, but these are small effects compared with other cities. Analysing data from the Detroit economic agency and WEEDC, suggests some divergence over the last three years in Detroit's favour. As some of the interviewees said, Detroit's revival has been substantially driven by philanthropy, which is not automatically available to Windsor. But the data does suggest that if Windsor is able to tie itself more tightly to Detroit, then it will be following the place with greater momentum.

Windsor's GDP has been growing. But this is substantially fuelled by population growth. There are definite advantages to population growth, but it is worth noting that on a GDP per capita level Windsor is below its pre-2005 peak. It lags very substantially behind the rest of Canada.

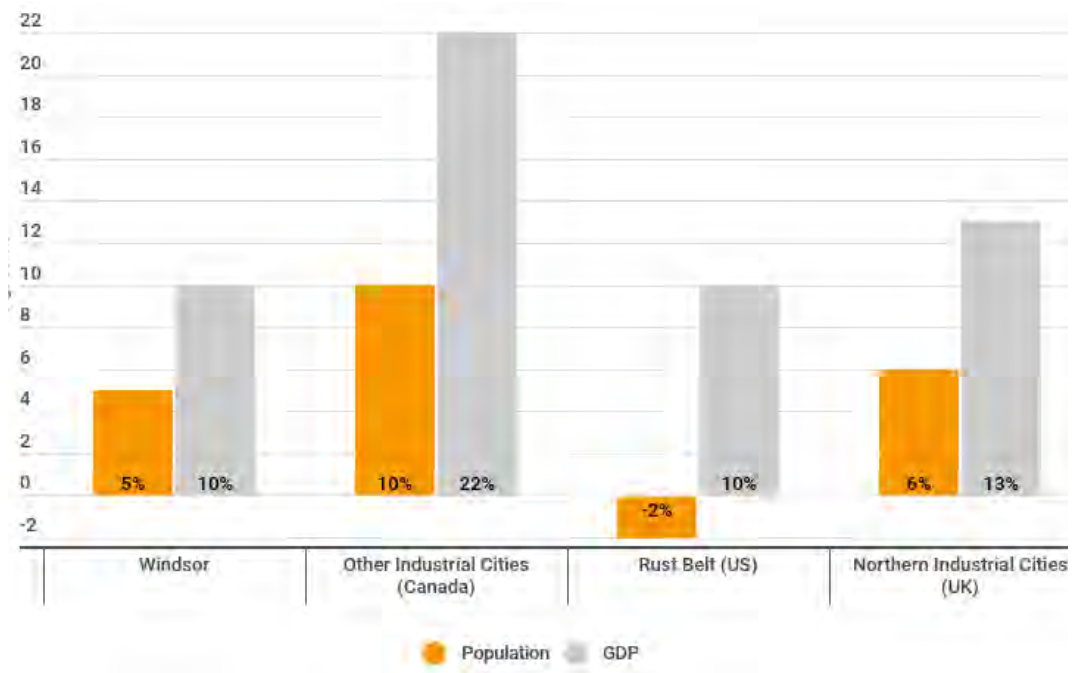
A hand is holding a white document with a blue flowchart. The flowchart consists of several rectangular boxes connected by lines, arranged in a hierarchical or process-like structure. In the background, there is a laptop with a black keyboard and a silver trackpad, and a tablet displaying a blurred image of a person. The scene is set on a wooden desk with a brick wall visible in the upper right corner.

Red Piston

Red Piston is a mobile app and game development agency based in Windsor, offering digital services in mobile, web development, design, augmented, virtual and mixed reality, as well as gaming. The company has worked for a wide variety of clients across a range of industries, including Mercedes-Benz, Helios+ and Bratz Action Heroes.

Founded in 2010, the company has moved locations six times in the last decade, with its current location just east of Windsor's downtown. Red Piston does not at this moment appear to see Windsor as a natural home for innovative tech marketing companies, with a co-founder stating that "Windsor is not really known throughout our industry as a place where creative risks are taken so we get inspired by marketing campaigns such as those launched by companies in California, for instance." However, on their website, they do state that Windsor gives them a "powerful geographic advantage, allowing us to keep costs low." The company hosts events for Windsor residences, including Code in the Dark, a programming event in which participants design and implement a website using only a screenshot they are provided with.

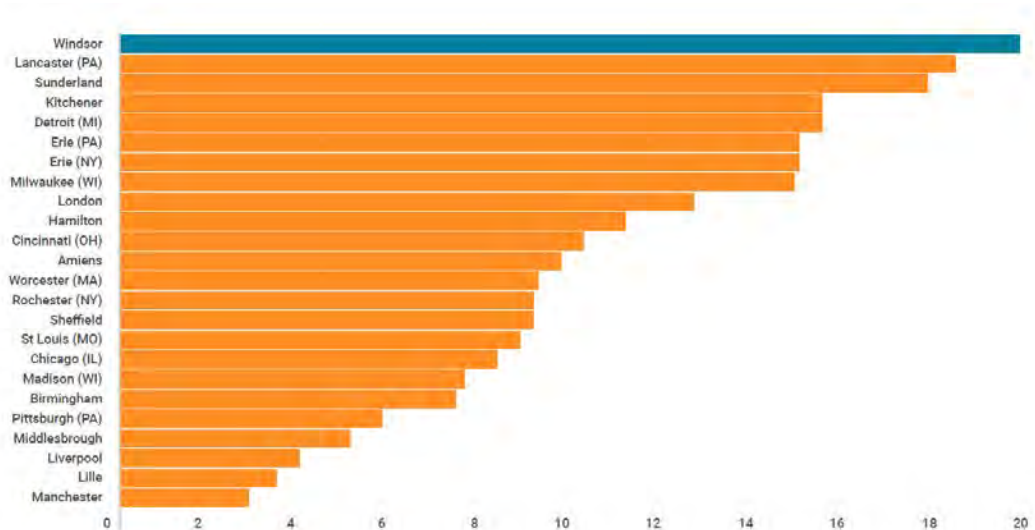
Ten Year Performance (2008-2018)



Despite falling by a third over the last twenty years, Windsor had the highest share of manufacturing employment of any of the rust belt cities examined in this process. Given the shift away from manufacturing experienced internationally – short of a very radical shift to onshoring – the central projection has to be that this is unlikely to rise again and may well fall.

Unsurprisingly, on a median hourly wage, Windsor’s highest paid people are either in the public sector or engineers.³⁹ It is also noteworthy that a recent Workforce Windsor Essex survey shows a high number of employers reporting education qualifications and technical skills as a challenge in terms of filling vacancies.⁴⁰

Manufacturing share of employment (%)



39 Based on median hourly wage data provided by the city
 40 Workforce WindsorEssex (2018) Community Labor Market Plan Windsor-Essex. Retrieved from: <https://www.workforcewindsor.essex.com/wp-content/uploads/2018/04/Community-Labor-Market-Plan-EN.pdf>

Support for new businesses in Windsor

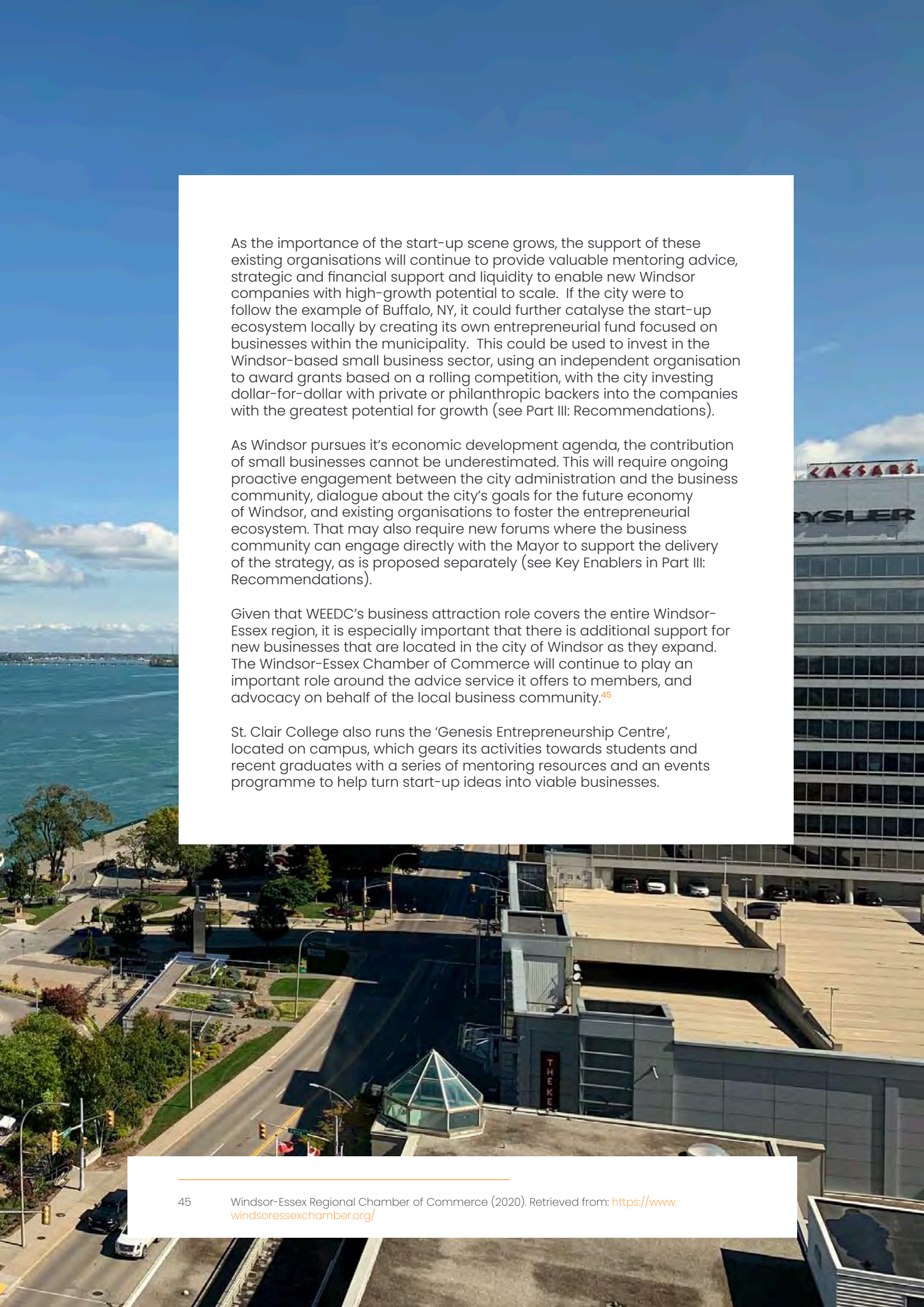
Windsor's small businesses and new start-ups will be vital contributors of the city's future economic growth. Rather than betting on the pursuit of large corporations in order to entice them to make one major relocation decision, the city administration is favouring an approach of 'building on small wins', so that future employment growth increasingly comes from attracting multiple smaller companies with less than 50 employees.

Existing small businesses in Windsor can already access a vibrant network of support to expand and to help grow their product offerings, and in the technology sector, the WE-Tech Alliance provides a regional offer for businesses in Windsor-Essex and Chatham-Kent to help them collaborate, innovate and scale. WE-Tech is funded by the province, via the Ontario Network of Entrepreneurs and is one of seventeen Regional Innovation Centres.

There are also existing venture capital organisations that offer investment to Windsor start-ups and the existing WE Capital Angel Network (WE-CAN) offers direct support from angel investors to companies in a range of sectors. WE-CAN, located on Howard Avenue in Windsor, has recently partnered with other angel investor groups in Ontario to form a larger network – Equation Angels – to provide even more avenues for investment.⁴¹

Windsor already has a small business accelerator, established in 2011, which has directly helped to create 120 companies in the local area (of which 80 are still operating) and has set a goal of creating 320 firms.⁴² The University of Windsor continues to support local entrepreneurs through its Entrepreneur, Practice and Innovation Centre (EPICentre), which serves as a hub for current and recent graduates pursuing entrepreneurial ventures, as well as those in the community who can access the competitions and grants that the EPICentre oversees.⁴³ In 2019-20 the centre spent \$107,500 to assist seventeen start-up ventures.⁴⁴

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- 41 WE-Tech Alliance (2020). News release, 24 September 2020. Retrieved from: <https://www.wetech-alliance.com/2020/09/24/game-changer-for-local-entrepreneurs-as-angels-enter-the-equation/>
- 42 Windsor Downtown Accelerator (2020). News release, 17 October 2020. Retrieved from: <https://www.downtownaccelerator.com/newsroom/windsor-business-accelerator-hails-milestone-with-donor-wall/>
- 43 University of Windsor (2020) EPICentre 'About Us'. Retrieved from: <https://www.epicentreuwindsor.ca/about-us/>
- 44 University of Windsor (2020) EPICentre Impact Report 2019-20. Retrieved from: <https://www.epicentreuwindsor.ca/wp-content/uploads/2020/06/EPICentre-AnnualReport19-20.pdf>



As the importance of the start-up scene grows, the support of these existing organisations will continue to provide valuable mentoring advice, strategic and financial support and liquidity to enable new Windsor companies with high-growth potential to scale. If the city were to follow the example of Buffalo, NY, it could further catalyse the start-up ecosystem locally by creating its own entrepreneurial fund focused on businesses within the municipality. This could be used to invest in the Windsor-based small business sector, using an independent organisation to award grants based on a rolling competition, with the city investing dollar-for-dollar with private or philanthropic backers into the companies with the greatest potential for growth (see Part III: Recommendations).

As Windsor pursues its economic development agenda, the contribution of small businesses cannot be underestimated. This will require ongoing proactive engagement between the city administration and the business community, dialogue about the city's goals for the future economy of Windsor, and existing organisations to foster the entrepreneurial ecosystem. That may also require new forums where the business community can engage directly with the Mayor to support the delivery of the strategy, as is proposed separately (see Key Enablers in Part III: Recommendations).

Given that WEEDC's business attraction role covers the entire Windsor-Essex region, it is especially important that there is additional support for new businesses that are located in the city of Windsor as they expand. The Windsor-Essex Chamber of Commerce will continue to play an important role around the advice service it offers to members, and advocacy on behalf of the local business community.⁴⁵

St. Clair College also runs the 'Genesis Entrepreneurship Centre', located on campus, which gears its activities towards students and recent graduates with a series of mentoring resources and an events programme to help turn start-up ideas into viable businesses.

5. Summary

It is testament to the work of the people of Windsor, and the culture of the city, that despite some difficult economic challenges, it has remained such a safe, pleasant, and optimistic place to live. Our research shows this is far from a universal experience.

Windsor is in a much healthier state than many rust belt cities. But it is vulnerable because it is specialized, and it is specialized because it is small. This means that the city's original desire to diversify is the right one, and one key route to achieving this is to seek some greater scale (so-called 'agglomeration').

There are other catalysts which depend crucially upon meeting growth (with modern infrastructure and making the city more liveable, so quality of life is maintained and improved) and people (attracting the companies of the future and the talent). Fortunately, Windsor is already on this path, because unlike many post-industrial cities that have seen key industries downsize or depart, Windsor continues to grow its population and attract new investments. However, what the city of Windsor requires is a coherent strategy to deliver a larger, more diverse economy as part of a multi-decade development plan that is able to leverage infrastructure investments, exploit new economic trends, and attract more of the skilled people that will drive future growth.



Part II: Strategy

Part II: Strategy

Successful strategies are driven by clear goals and objectives. From these markers emerge implicit and explicit choices that have been made. Strategies that admit to no trade-offs or choices are not really strategies at all – they are simply vision statements.

In devising an economic development strategy for Windsor, the experience of comparable jurisdictions have informed our thinking, but it has also confirmed what is or is not likely to work given Windsor's starting point. Even the largest cities cannot excel at everything. Choices – sometimes difficult ones – must be made.

The following section establishes the relevant context and unanswered questions that impact our choices and our recommended strategy. The proposed core strategy is outlined, applying across the four-pillar framework. Recommendations for practical application of this core strategy follows in Part III.



1. Key Lessons For Windsor

1. **Scales and clusters are still the best driver of diversification and long-term growth.**

In other words, Windsor must be a bigger city. It is possible to be a large, specialized city, or a large, diverse city. It is much harder to be a *small* economically diverse city – so if the goal is to be diverse, it is prudent to seek ways to get larger, and to catalyze the population growth already happening. Bigger cities can:

- a. Hedge their bets. In the end, while steps can be taken to make it less likely that an industry is innovated out of existence (or moves elsewhere). So, building up alternatives is sensible.
- b. Support attractive amenities, which help retain people. Just spending a lot on amenities does not create growth – but if it is a depressing or boring place to live or if the city's amenities are run-down or underserving the population, more people will make the decision to leave.
- c. Help nascent sectors that have emerged organically to grow faster – and remove regulatory or other barriers in the way. If a city has a 'minimum viable industry', then steps can be taken to help that industry grow.

2. **Cities also need to meet growth.** There is a big difference between building things because it will make people move to a city and building things because the city is growing and it needs to remain pleasant, easy to move around, and affordable. The latter is essential if a city wants to maintain economic growth.

3. **The most effective rust belt 'turnarounds' relied on world-class R&D and strength in innovation.** That is true for Pittsburgh and Coventry, UK. It is also true for other major successful cities. If Windsor does not build a better intellectual capital base, it will remain vulnerable. This is Windsor's biggest weakness. The cities that are thriving have 'innovation' strength – i.e. they have ideas and very advanced skills. These strengths can be in manufacturing, but the higher up the value chain a city goes, the better protected it is.

- a. The University of Windsor is planning on achieving greater strength in the automotive sector. That approach is very sensible, and the more that can be done to ask for governmental support to strengthen that, the better;
- b. More broadly, Windsor will need to use a strategy to forge stronger links with Universities that have greater fundamental R&D strength. Windsor has many in the greater region – both in Canada and especially in Michigan.

4. **Amenity and retail-development driven strategies for regeneration are the most prone to failure.** There are a handful of high-profile examples of where this approach has taken off successfully, but this has the weakest evidence base, and the lowest success rate. Very expensive investments that assume “if you build it, they will come” almost never work (as opposed to more iterative policies that are designed to, for example, attract nearby visitors from the US).
5. **Incentives have a mixed impact.** It is difficult for a city’s leadership to force a city to become a world leader in a completely new sector from the top down. Worldwide, many local areas have tried and failed to become leaders in renewable energy. At the margin, incentives for companies might encourage them to choose Windsor over a near rival, but they are rarely enough on their own. Amazon chose Virginia because of skills, not taxes. The pay-off from incentives is often unclear – and when they go, the company sometimes goes too. It is important to make sure incentives are well-targeted and will work for the long-term and the type of businesses that a city is trying to attract.
6. **Human capital driven strategies, which focus on the attractiveness of a city to newcomers, do matter.** If Windsor wants to improve its R&D position and the number of start-ups it attracts, then the city does need to be a place young professionals want to live. Windsor’s attractiveness to more established people (who have families and are attracted by lower housing costs) is helpful, but it’s not sufficient: fast growing companies are fuelled by graduate talent so young professionals in their twenties need to find Windsor appealing too.
7. **Windsor’s pre-existing strength is undoubtedly manufacturing, and in two areas.**
 - a. **The car industry.** This is the essence of the WEEDC’s automobility strategy. It seeks to identify the parts of the future vehicle industry where Windsor may be most competitive. It builds on Windsor’s pre-existing car strength.
 - b. **The health industry** (well behind, but still substantial). This could be developed after COVID-19. It leverages the new hospital, the healthcare workers in Windsor’s resident population, and the city’s pre-existing manufacturing strength.

Our view is these bets cannot substitute for scale. Forty years from now, Windsor needs to be less dependent on only a couple of industries, because disruption is a constant. This is even more true because of the city’s relatively weak R&D base.

Jurisdictional scans and case studies do not provide full insight into the local political commitment that enabled economic development strategies to take root and bear fruit. For example, each regeneration story is bound up in local political decisions and it matters where national governments want to spend money, and why – and here Windsor’s best bet is definitely manufacturing (as discussed later).

2. Horizon-Scanning

Strategies for regional economic development must also consider external or global factors that could have future impact, even if the city is less exposed to risks, by virtue of its location and industrial history. But as a border community dependent on trade and on traditional manufacturing (with the auto sector integrated so much with Michigan), Windsor is unusually exposed to external or global factors – particularly in trade policy and economic developments.

In the following section, we have established five key dimensions that will externally influence the strategy Windsor should pursue. These dimensions are set outside of sectoral specific considerations, such as how well the car industry will adapt to change or whether there continues to be growing demand for healthcare and ‘wellness’ products and services).

The proposed core strategy makes certain bets about the future based on known unknowns we will consider, but they remain contested concepts and may prove to be less significant.

What bets about the future does this strategy adopt?

The most important external or global factors that will impact any economic development strategy for Windsor in 2021 and beyond include:

Global

- a. Impact of COVID-19;** including but not limited to, business investment, working patterns and longer-term corporate restructuring and remote working routines, and the impact on the public finances and municipal budgets.
- b. Future of borders and trade policy;** including lifting current restrictions and restoration of personal travel and regular land commerce across the border; and the United States' commitment to CUSMA and free trade.

National

- c. How much Canada and the United States undertake strategic reshoring;** especially relating to the auto sector and healthcare manufacturing (for pandemic resilience) and the impact CUSMA has on domestic supply chains;
- d. Canada's progress towards a green economy;** including the incentives and legal framework for carbon reduction to stimulate the transition to new technologies like electric vehicles and hydrogen.

Regional

- e. Detroit's future trajectory;** including how the Michigan economy recovers from COVID-19 and the regeneration of its largest city.

Future scenarios that will impact Windsor

a. Impact of COVID-19

There are four major theories about what the pandemic will do for global economies:

- It will accelerate protectionism. That means food security and medical supply security. That might be good for the agricultural industry of Windsor-Essex and be an argument in favour of more permanent pivots from the tool and die industry towards PPE supply and wider pandemic resilience.
- It will keep borders closed. It will continue to be hard to move from the USA to Canada and back again and any moves to relax border controls will be at the mercy of infection rates and local quarantine rules. This would be very bad for Windsor-Detroit.
- It will encourage people to move to other cities. People will increasingly move to working remotely. That means they may live in Windsor and work in the Greater Toronto Area. If that is true *en masse*, it makes Windsor-Detroit less relevant because big cities are no longer the goal. It makes persuading people to move from other parts of Ontario to Windsor a much better bet.
- It will accelerate digital adoption and therefore change not only working patterns, but the products people use and how.

What would significantly change working patterns in the long-term:

- The way the world is feeling now turns out to be permanent, not temporary
- Discovering there were not major permanent productivity losses from remote working

What would change this for Windsor:

- Remote working still means Canadian companies hire Canadians
- When people do decide where they want to live, they choose Windsor

How this impacts Windsor strategy:

- Investment in the right kind of 'professional' development of urban centres (space, beauty, cultural infrastructure)
- Links with Detroit are no longer a driver of productivity

Our view is that most of these forces will prove temporary. Agglomeration (the large and measurable economic benefits of being in big cities, in physical proximity) exists because of i) the human evolutionary desire for proximity ii) the fact that humans interact more productively and imaginatively in person; iii) the fact that only large populations can support big amenities like large sporting venues, exclusive restaurants, museums and theatres. It seems unlikely that on a 20-30-year time horizon, that will change. There might be a more modest correction to established working patterns, where certain groups change how they work and that could open up cities like Windsor as a place to be based. For example, if some working families feel willing to commute long distances because they are only working two days a week in the office in, say, the Greater Toronto Area. Such a scenario would represent an optimal outcome for Windsor – the city still gets the benefit of being next to Detroit, but also attracts part-time Toronto

commuters. However until a clearer direction emerges, Windsor cannot bank on this development, and there is a good chance that the distance and state of public transport mean even this level of commuting is considered unsustainable.

In other ways, the impact of COVID-19 on the public finances and therefore on the subsidies and grants available to lower tiers of government is still uncertain. Many countries will devote the next few years to economic recovery in the context of higher debt. Cities like Windsor may receive support by way of fiscal stimulus from the federal government but the size and shape of that is yet unclear.

b. Borders and trade policy

Global trade tensions have heightened in recent years. Canada and the US, under the Biden administration, have become less tightly integrated. This is an area of high global and national uncertainty. In the short term, it depends on the new direction set by the next administration; and what the US's response to China looks like (which could include closer partnership with Canada). It also depends on whether the Canadian and US governments have shared environmental standards, which will affect border trade. Border security post-9/11 has been an area of demonstrable collaboration, where both Canada and the US have worked closely on new security protocols, joint investments, and co-locating border staff. The new Gordie Howe International Bridge is another example of the Canadian investment in border infrastructure on the US side, and these relationships can be further leveraged.

Factors that will impact future trade relations and border policies include:

Making borders more porous:

- A North American continent 'near shoring' of goods as a counter to China
- New policies that (a) rapidly get the Covid-19 infection rate under control (b) remove travel restrictions and (c) lift trade barriers affecting Canada
- Moves to shared environmental policies (and green manufacturing standards) between Canada and the USA.

Making borders less porous:

- An 'America first' strategy on manufacturing
- Continued standoffs between the Canadian and American governments over tariffs
- Canadian post-COVID-19 restrictions on food and medical supply chains
- The after effect of the pandemic (infection rates and longer-term health related restrictions at the border)
- The imposition of border adjustments on emissions
- New security concerns

Uncertainties:

- The trade and foreign policy priorities of a new President (and whether campaign proposals are delivered)
- Canada's response and a federal election in the next two years
- The prevalence of COVID-19 over the next five years
- Whether the legacy of the pandemic permanently depresses individuals' appetite to travel, or to cross the border for work or leisure

c. North American continental reshoring

Many governments found the COVID-19 experience sobering in terms of their domestic supply chain resilience for basic necessities, most notably PPE for healthcare and other frontline workers. As in the United States, it triggered a debate about Canada's reliance on imports and the country's ability to utilize its own manufacturing base to supply such items in the future. Firms across Canada – including some in Windsor – were able to adapt their production lines to support the pandemic response, at least temporarily.⁴⁶

Manufacturing and food production have globalized for a good reason – it leads to cheaper consumer goods. To change that, governments have to be willing consistently – over years and decades – to impose or bear higher costs. That takes long-term political will that is hard to rely on. At the moment, it is most plausible in a) food; and b) medical supplies. In turn, it seems more plausible across the North American continent – given the different political priorities of administrations and underpinned by the new CUSMA treaty – than within Canada itself. There is some commentary that has suggested that Canada and Mexico may be in a good position to take advantage of the need to produce medical supplies on the continent (and therefore for the US market).

A sustained move towards reshoring over the next decade would disproportionately benefit communities like Windsor that have an established manufacturing heritage and retain a substantial factory workforce which could expand to meet new domestic and regional demand.

WEEDC's 5-YEAR STRATEGY

Windsor enjoys support from an established regional development agency – the Windsor–Essex Economic Development Corporation (WEEDC), albeit one that is inevitably focused on both the County of Essex and the City of Windsor. As part of this work, Windsor's future development is considered alongside what is being pursued as part of WEEDC's current plan – which is mostly focused on automobility and its four strands (Connected; Autonomous; Cyber; and Electric); followed by generally supporting inward investment in the region, including in agricultural and 'life sciences'. They have had some substantial successes – with interest in developing an electric ramp-up factory; and a new relocation for a cybersecurity start-up.

WEEDC's current approach is a smart 'sectoral' strategy, but there are two important aspects for the City to consider:

1. The success of this strategy depends to a large extent on getting higher levels of government to support these initiatives. If that does not happen, the very sensible moves of the region are unlikely to be enough to make this a globally competitive place for inward investment.

2. WEEDC's plan is less of a diversification strategy and more of a retention strategy, through innovation within your existing sector. In the short to medium term this is entirely sensible – nothing the City can do will negate the need to keep automotive manufacturing jobs in the region in the next 15 years. But long-term, Windsor should continue its efforts to diversify.

46

Barker, J. (2020) The pandemic pivot: a check-in with companies that shifted to help during COVID-19. CBC News. Retrieved from: <https://www.cbc.ca/news/canada/windsor/business-pandemic-pivot-look-back-1.5718658>

d. Canada's progress towards a green economy

Many other G7 countries – including the UK, Germany and France – have already legislated for the phasing out of internal combustion engine (ICE) vehicles.⁴⁷ The UK is likely to ban hybrid vehicles and in November 2020 brought forward its ICE sales ban to 2030.⁴⁸ Canada has set a less ambitious phase-out date of 2040⁴⁹ although Quebec has set a date of 2035 for this ban on new sales of ICE vehicles.⁵⁰ Canada is behind not only in consumption of ICE vehicles but in EV production. Despite being seen as a global leader in carbon taxation, Canada's status as an electric vehicle manufacturer is internationally lagging.⁵¹

If current or future Canadian governments commit to much more ambitious carbon reduction policies that will impact on industry and manufacturing, or they commit to a more aggressive timetable for the adoption of zero emission vehicles, Windsor should aim to be sufficiently adaptable to seize this opportunity and win federal support for local manufacturing initiatives. Ontario has in the past provided customer incentives for the purchase of low-emission vehicles and if those were to return in some form, it would support the economic strategy this report recommends, encouraging more domestic demand for electric vehicles. A national (or provincial) scrappage scheme for the most polluting cars and trucks aged 12 years or older would have an even bigger impact in supporting domestic car production in Canada.

The decisions by major vehicle firms such as Ford to commit to the production of electric vehicles in Canada could presage a more general move by other North American car manufacturers to commit to build new EV models in Ontario. With federal and provincial government support, Ford's recent Oakville announcement supports the argument that a global transition is gathering momentum and Canadian cities with major auto sectors need to be part of the new vehicle economy.⁵² Recent reports that FCA have concluded a labor agreement for their major Windsor facility which includes the production of new models (including electric and hybrid versions) after 2024 is another sign that the shift to a green economy can and should benefit Windsor.⁵³

e. Detroit's future trajectory

The city of Detroit has momentum and growth. As a large, diverse and dynamic neighbour to Windsor, Detroit is becoming a more attractive place and beginning to challenge the "declinist" narrative so long associated with the city (see [Appendix](#)). It is not yet clear if Canadians (and the wider world) yet see Detroit more positively, with the city coming out of a period of entrenched decline, marked by political scandals and very high crime rates. If renewal is sustained over the next decade and beyond, then over time, proximity to Detroit becomes a key marketing advantage, especially for younger urban professional classes who are not yet resident in Windsor. For most Windsor residents, the advantages (and some disadvantages) of being so close to Detroit are already understood.

However, Detroit's economy remains disproportionately dependent on the car industry and its recovery is still fragile. If Detroit's recovery stalls, and it ends up in a downward spiral, then linking to it is likely to become a reputational millstone. For now, though, it is a good bet. Detroit is making its own investments in PR to recover the city's brand along with seeking to leverage major philanthropic initiatives to revive the downtown.

47 Wappelhorst, S. (2020) The end of the road? An overview of combustion-engine care phase-out announcements across Europe. The International Council on Clean Transportation. Retrieved from: <https://theicct.org/sites/default/files/publications/Combustion-engine-phase-out-briefing-may11.2020.pdf>

48 UK Government (2020) Government takes historic step towards net-zero with end of sale of new petrol and diesel cars by 2030. Retrieved from: <https://www.gov.uk/government/news/government-takes-historic-step-towards-net-zero-with-end-of-sale-of-new-petrol-and-diesel-cars-by-2030>

49 <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/reduce-emissions.html>

50 Lampert, A. (2020) Quebec to ban sale of new gasoline-powered cars from 2035. Reuters. Retrieved from: <https://www.reuters.com/article/us-autos-canada-emissions/quebec-to-ban-sale-of-new-gasoline-powered-cars-from-2035-idUSKBN27W289>

51 Lutsey, N., Grant, M., Wappelhorst, S., & Zhou, H. (2018) Power play: How governments are spurring the electric vehicle industry. The International Council on Clean Transportation. Retrieved from: <https://theicct.org/publications/global-electric-vehicle-industry>

52 CBC News (2020) Governments unveil details of \$590M investment to help Ford Oakville plant make electric cars. CBC News. Retrieved from: <https://www.cbc.ca/news/business/ford-oakville-government-1.5754974>

53 Waddell, D. (2020) Unifor workers overwhelmingly ratify new FCA contract. Windsor Star. Retrieved from: <https://windsorstar.com/news/unifor-workers-overwhelmingly-ratify-new-fca-contract>

What does the policy landscape tell us?

Windsor's strategy must consider the same broader policy landscape that any municipality must navigate, and where appropriate, seek to exploit. The COVID-19 pandemic makes the current policy landscape look unsettled and certain domestic political events, and funding commitments associated with them, have been postponed as a consequence.

Therefore Windsor, like all Canadian municipalities, is operating in a challenging political environment. Neither the provincial nor the federal government have a clear and compelling policy agenda, with sufficient money, to propel Windsor in the right direction. However, the federal government's broad priorities are clear, and Windsor should seek to exploit them because it is likely to be a post-COVID-19 political window of opportunity to do so.

The **Ontario provincial government** has a strong predilection towards industrial and manufacturing jobs. Manufacturing costs have been a major rhetorical focus – notably through the carbon tax debate and the price of electricity – and new economic grant schemes set up for PPE manufacturers⁵⁴ along with the 'Ontario Made' agenda.⁵⁵

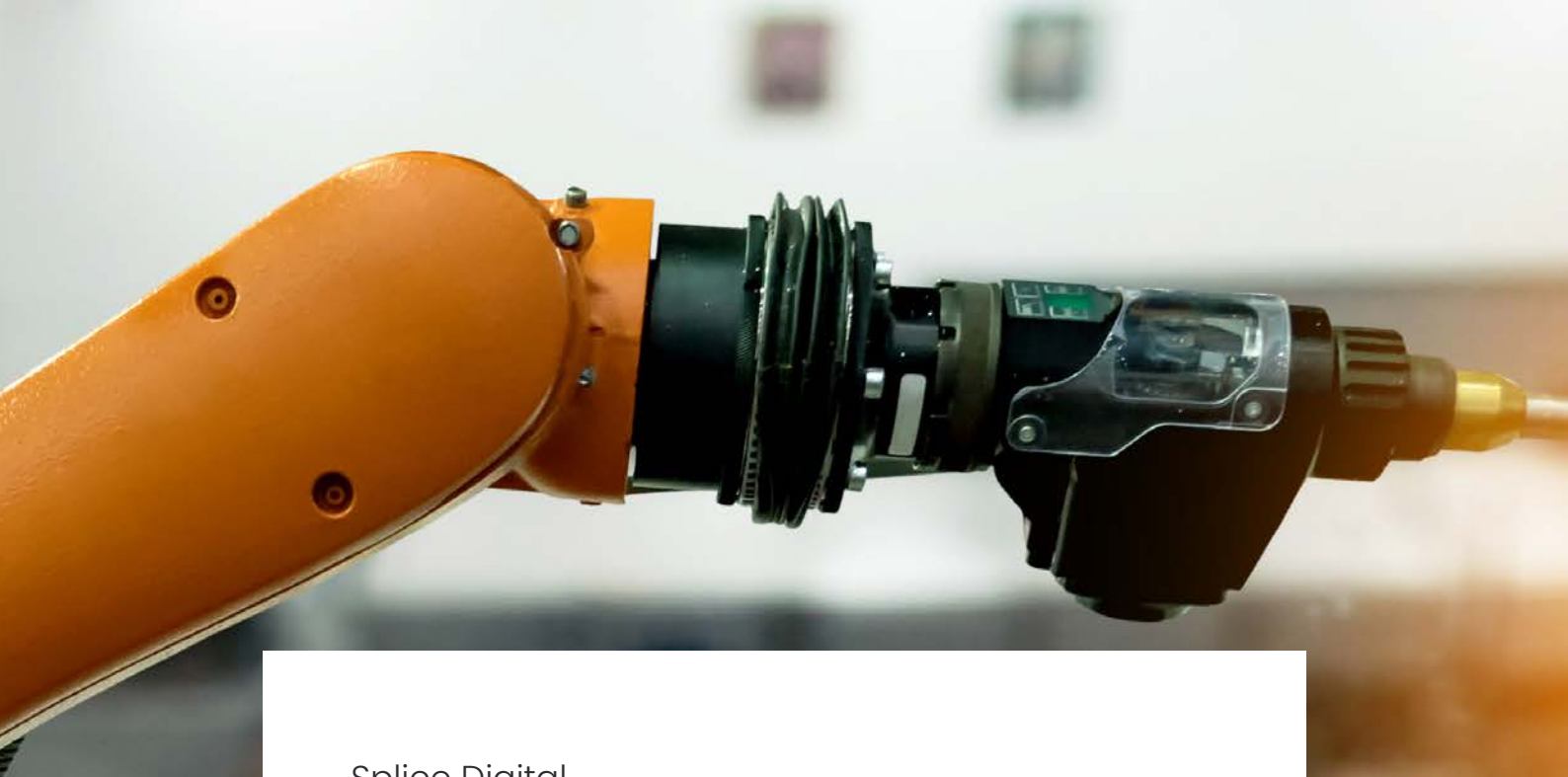
The current **Canadian federal government** will continue to commit to additional public spending, on their chosen priorities, despite a rising deficit. The recent Fall Economic Statement confirmed that the federal government is planning for the deficit to increase as further stimulus measures are adopted, including new grants schemes tied to economic recovery and helping support businesses to remain viable into summer 2021.⁵⁶ As a minority government with an election potentially less than a year away, further stimulus and an openness to additional spending on key sectors and regions can be expected. Areas where the federal government has a stake include:

- **The green jobs agenda** – in terms of Windsor, that is most relevant to a) electric vehicles; and possibly b) hydrogen transport (which is often seen as the best solution for heavy duty vehicles). There is also c) the potential for carbon capture technologies for manufacturing more generally.
- **Trade and the border.** Trade friction has become a dominant theme in recent years, but the Liberal government is committed to free trade as a route to prosperity and will want to ease border controls as soon as possible following roll-out of a COVID-19 vaccine. Further reducing friction – within the confines of US politics – is likely to be desirable. On the border, the opportunities flow from initiatives of the Customs and Border Services Agency (CBSA), Public Safety Canada and Transport Canada who may see Windsor as a place for 21st century border innovation, to support faster trade and logistics flow – particularly as the new international bridge is constructed – combined with novel approaches to data that facilitate innovation, whilst ensuring security and privacy.

54 Government of Ontario (2020) News release: Ontario Helps Manufacturers Ramp Up Production of Personal Protective Equipment. Retrieved from: <https://news.ontario.ca/en/release/57091/ontario-helps-manufacturers-ramp-up-production-of-personal-protective-equipment>

55 Government of Ontario (2020) Province Proudly Promoting Ontario-Made Products to Spur Economic Recovery. Retrieved from: <https://news.ontario.ca/en/release/58995/province-proudly-promoting-ontario-made-products-to-spur-economic-recovery>

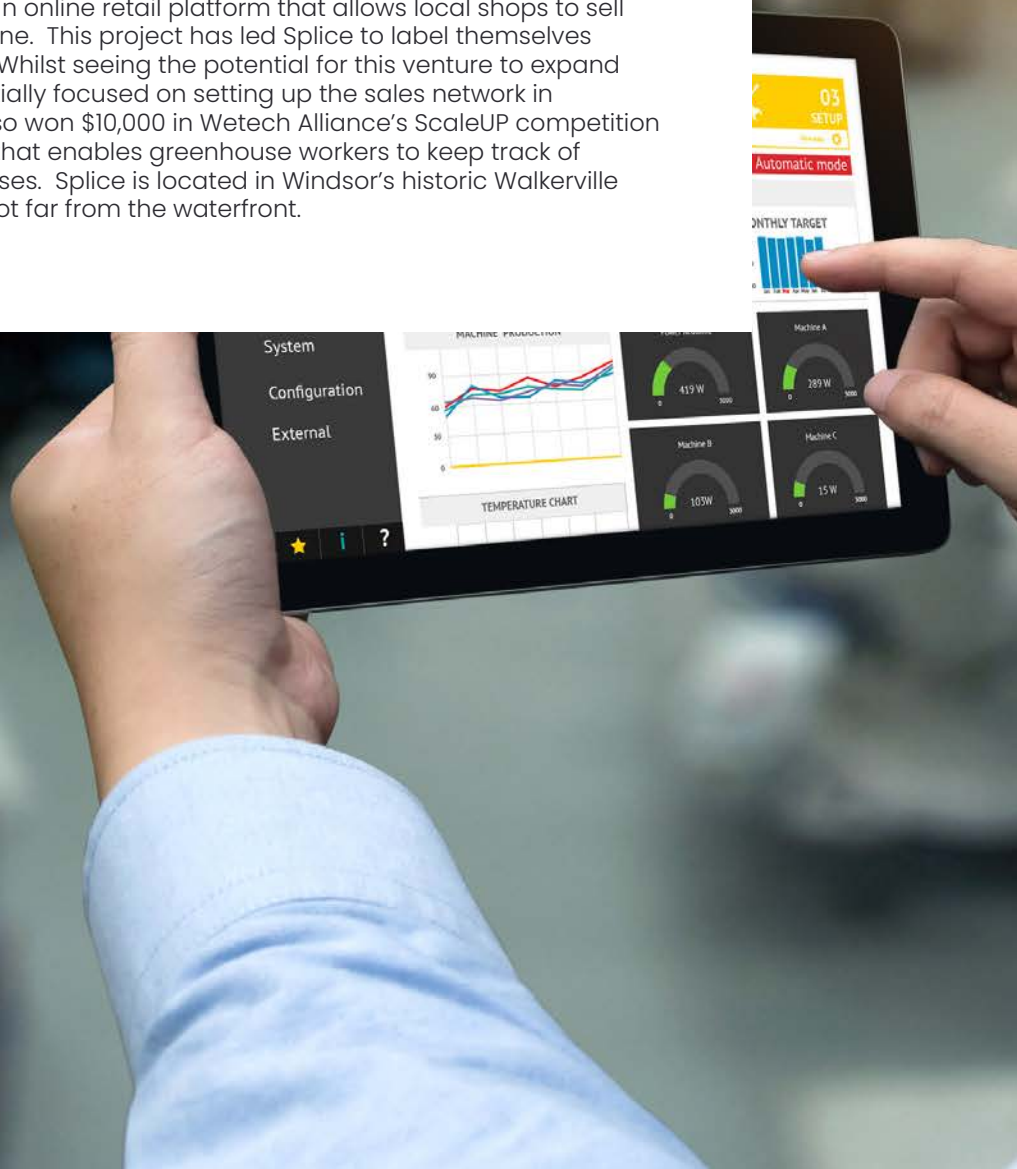
56 Government of Canada (2020) Fall Economic Statement. Retrieved from: <https://www.canada.ca/en/department-finance/news/2020/11/government-of-canada-releases-supporting-canadians-and-fighting-covid-19-fall-economic-statement-2020.html>



Splice Digital

Splice Digital is a strategy, design and development agency in the technology sector, offering services in AI, machine learning, e-commerce, websites, applications and SAAS products. Splice has been highly successful, working for clients including Microsoft, Philips, Atari and Volkswagen.

Splice Digital has been active during the COVID-19 lockdown, setting up shopmytown.ca, an online retail platform that allows local shops to sell their products online. This project has led Splice to label themselves "a local Amazon". Whilst seeing the potential for this venture to expand globally, Splice initially focused on setting up the sales network in Windsor. Splice also won \$10,000 in Wetech Alliance's ScaleUP competition for their software that enables greenhouse workers to keep track of pests in greenhouses. Splice is located in Windsor's historic Walkerville neighbourhood, not far from the waterfront.



3. Proposed Strategy

Drawing upon the analysis for this project and understanding the relative position of Windsor's current economy, plus underlying factors like geography and demography, a strategy for future economic development was devised. This strategy was developed after further consultation with key stakeholders and key elements were explored with council members and others during the second phase of this project.

The strategy identified four key pillars necessary for Windsor to grow and prosper, with two representing a fundamental strength or opportunity of the city's context or position, and the remaining two representing a relative weakness to address, or a challenge to overcome. Strengths and opportunities are reflected in the first two pillars: **Location** and **Infrastructure**, and relative weaknesses or future challenges in the second two pillars: **Future economy** and **Talent**.

L.I.F.T. Strategy for Windsor

Securing our future and making Windsor Canada's best place for working families.

After COVID-19, Windsor must build back better: attracting new workers and jobs, building tomorrow's businesses, and strengthening trade and civic links across our open border with our American neighbours. The fundamentals are strong: Windsor is beautiful, safe and affordable – a wonderful place for working families. The L.I.F.T. strategy is designed to build on that.

Location: Our prime position close to the USA is our major strength – Windsor-Detroit is our future. Windsor Works will forge deeper connections, attract Michigan residents, and sell Windsor-Detroit. New civic events will improve the quality of life in our city and showcase our rich heritage.

Infrastructure: We must continue to invest in infrastructure as our population grows. Windsor Works will revive districts, improve mobility, increase housing supply to meet modern demands, and pursue development that seizes the opportunities from the new bridge and hospital.

Future Economy: Our manufacturing strength and skilled workforce means we can become a hub for innovation, new tech enterprises, and the auto sector of the future. Windsor Works will spearhead this transition and win new investment.

Talent: We must attract and retain more national and global talent. Windsor Works will support new start-ups, and reward entrepreneurs who locate here; so the city becomes a place where smart people want to move to study, work and be trained.

Location

Geography and proximity to Detroit has shaped the city of Windsor. This will not change. Embrace the opportunities here and pursue scales and clusters. Experiment with innovative new ways to facilitate exchange of people and joint initiatives that thin the border divide and become better at selling Windsor-Detroit to the outside world.

One of the most startling facts about Windsor is how closely economically tied it is to Detroit. This strategy is recommending becoming closer still. It does not mean Windsor should become Detroit, and this strategy does not assume the city needs to copy Detroit's policies (given the difference in context and that Windsor does not have the same municipal levers or philanthropic reserves to draw on). But Windsor does want to *utilize* Detroit so the City can:

- **Help the entire region grow.** Despite the international border, Windsor is part of the economic region that is growing, and Windsor has the skills and immigration benefits as a Canadian city that Detroit does not have. Windsor's growth will help Detroit as well, which in turn will help Windsor;
- **Attract people to Windsor from Canada.** Detroit has amenities that Windsor does not and cannot have, because it is bigger. It should be a draw because when people move to Windsor, they are really moving to Windsor-Detroit, and can access big city amenities easily, without sacrificing the benefits of small city living.
- **Attract people as visitors to Windsor from Michigan.** Students at, for example, Ann Arbor should be crossing the border frequently. They are the best graduate pool available to Windsor, and they should be spending time in the city and coming to know it. The more they form links, the more likely that some will choose to locate or start a business in Windsor and there will be permanent upsides.
- **Attract existing companies from Detroit to Windsor.** When companies do well in Detroit, they should be setting up a Canadian base in Windsor. This is particularly true for smaller but fast-growing start-ups in industries outside manufacturing.
- **Attracting companies from outside Michigan/Ontario to Windsor-Detroit.** The Amazon bid was a 'go big or go home' pitch. But there are plenty of other joint bid opportunities that will emerge, and Windsor should pursue these in collaboration with its US partner city – Windsor-Detroit before Windsor-Essex in such scenarios.

Tighter links with Detroit are the most likely approach to put Windsor on a growth path closer to the rest of Canada in the long run. It also has the great advantage of being much more in Windsor's control than specific manufacturing subsectors, which depend on a whole host of federal, provincial, and company actions to really succeed. Achieving this requires 1,000 actions all heading in the same direction, not one big policy. There is a good level of collaboration already happening ad hoc, and many examples were provided to show that cross-border relationships existed and joint initiatives were happening or had happened once in the past. Our proposition is that these links are not strong enough and they are not driven by a clear focus and corporate strategy by the city and government.

For this to be successful, the strategy does not presume a series of single, overt actions or major policy moves. Instead the interconnectedness between Windsor and Detroit must be nurtured with a thousand separate actions, all happening in the same direction but led by a varied group of actors, from municipal politicians and officials, to private businesses, civic organisations, and non-profit groups.

Art Gallery of Windsor

The Art Gallery of Windsor is a good example of institutions that have fostered stronger Windsor-Detroit relationships. In fact it has it in its mission statement that the gallery should be “distinct from yet complementary to our largest art museum neighbour, the Detroit Institute of the Arts (DIA),” and should serve “the southwestern Ontario region and the international border community of Windsor, Ontario, Canada and Detroit, Michigan, USA.” In addition to a 2020 exhibition entitled ‘Detroit, we love you’, the gallery has done four exhibitions focusing on Detroit since 1999. In the Detroit Institute of the Arts, General Motors sponsors the centre for African American art.

Windsor must be an attractive location to site a new business. A suite of policies designed to achieve this result are proposed, and most involve steps that will allow better marketing of the advantages of doing business in Windsor, and also concrete incentives that will encourage more businesses to choose Windsor.

The city would benefit from a dedicated Business Attraction Centre, serving as a one-stop-shop for all business grants, planning and development information and advice. This would streamline the process of relocation and make it easier for businesses to move to Windsor and benefit from the grants that they may be eligible for.

In addition to new incentives for locating in the downtown, Windsor could also support quality of life in the downtown core by attracting new businesses through a popup shop grant program, which would allow external retail businesses to set up a subsidized temporary store in downtown Windsor as a way of testing the local market. These popup shops could help fill vacant retail spaces in the downtown area, boosting the attractiveness of the area to tourists and residents. The program would also open a path for these businesses to set up more permanent presences in the city, contributing to long-term economic growth.

Infrastructure

The City is on track to be the beneficiary of several major infrastructure investments that can be utilized to its advantage and that will support this strategy. New infrastructure is needed to support a growing population and enhanced quality of life for Windsor residents. New residential expansion will maintain affordability and support the regeneration of the downtown districts.

Improving the quality of life for residents in Windsor – in other words making the city more liveable – is an important goal that will power the broad appeal that Windsor wants to make to investors and new residents. The quality of life in some urban areas is diminished by poor or ageing infrastructure. With the exception of an ageing sewer system, Windsor is not a municipality whose economy is undermined by inadequate infrastructure. However, it will be important to continue to invest in infrastructure to support the city as it grows and to ensure that certain districts are successfully regenerated. In this regard, this pillar of the strategy encompasses both the hard infrastructure required to sustain a dynamic economy and growing population (transport, housing etc.), and also the wider civic infrastructure needed to make Windsor's downtown more attractive, and with new amenities and attractions that make the city more liveable.

In addition, some recent investments have shown the benefits of infrastructure. For a city of its size, Windsor has recently benefited from significant provincial highway upgrades⁵⁷ (in preparation for the interchange with the new international border crossing) and it has a profitable airport with room to expand that has moved from being a debt burden to providing (prior to COVID-19) an annual dividend payment to the city.⁵⁸ As air travel and air freight volumes recover the city should review how the airport can play a larger role in the economic development strategy proposed, including the ability to access federal grants for capital works and other upgrades to allow expansion and modernisation of the terminal.

Two forthcoming major infrastructure investments should also not be underestimated in terms of their ability to catalyse future growth and diversification. Even though they have been conceived as national or regional assets, both of the two major inbound investments should allow the city to take much better advantage of the potential size of the Windsor-Detroit region:

- **a new international bridge across to Michigan in 2024**, currently under construction, which will expand capacity and provide new connections such as a pedestrian and cycle path;
- **a new major acute care hospital serving the whole region** with a location now agreed on by the City and County and planned to arrive later in the decade.

These should be a key focus for the city administration and although both the bridge and the hospital are sponsored, funded or controlled by either the federal or provincial governments, necessary engagements should begin early with local and regional partners for how the city of Windsor can derive the maximum benefit from their construction.

57 The Canadian Press (2008) \$1.6B highway to link 401 with new international bridge at Windsor. CBC News. Retrieved from: <https://www.cbc.ca/news/canada/toronto/i-6b-highway-to-link-401-with-new-international-bridge-at-windsor-1.748276>

58 KPMG (2019) Consolidated Financial Statements: The Corporation of the City of Windsor. Retrieved from: <https://www.citywindsor.ca/cityhall/-/Financial-Documents/Documents/2019%20CCW%20Consolidated%20Trust%20Fund%20Financial%20Statements%20-%20To%20City%20Website.pdf>

Windsor is also fortunate in terms of civic infrastructure with forthcoming plans for a main library attracting interest and ongoing work to develop the waterfront and improve the public space in the downtown core. Windsor will need to continue to encourage development downtown so the City centre can be rejuvenated and densified. This will stimulate the local service economy with a larger residential population sustaining higher foot traffic and leisure demand for restaurants, cafes and retail.

Efforts underway to revitalize the downtown core are having an impact and these initiatives should be accelerated where possible. The arrival of as many as nine developers with active schemes proposed or in progress for downtown Windsor, including the major redevelopment of the Grace Hospital site and new apartment tower construction is a strong signal that rising land values and improved market conditions have triggered a long overdue flurry of development activity where it is highly needed.

The social issues associated with homelessness and drug addiction were outside the remit of an economic development project, however it will be necessary to improve the response to these complex social problems in parallel with efforts to improve the downtown core. The city has a plan to address these challenges and they are ones shared by many cities across the country and the continent. Improving downtown will go hand in hand with tackling the perception that exists that the homelessness and drug addiction make this neighbourhood undesirable.



Future Economy

Windsor should turn its history – as a trading hub and car city – to its advantage. By preparing for a future economy defined by high tech green industries and free trade across modernized borders, Windsor should pursue diversification in modern technology sectors. This will support good salaries, a high-skill supply chain, and provide wider local economic benefits.

Protect and pivot to the future auto sector

The car industry is undergoing a once-in-a-century transition, with the rise of electric, hydrogen-powered and autonomous vehicles. While this shift will not take place overnight, independent forecasts⁵⁹ predict that it will be decades before electric cars make up a majority of global new car sales. If Windsor cannot transition to this new model, it will lose a key driver of its economy. Car production in Ontario is responsible for **more than 100,000 highly productive jobs.**⁶⁰

With the exception of Tesla, there has been no major new non-Chinese manufacturer of cars in over fifty years. While the ongoing structural changes do create new opportunities, the safest assumption is that the rise of a new Canadian car producer is a long shot. As Windsor's own history demonstrates, the Canadian car industry can continue to thrive by being an attractive location for foreign investment and supporting a wider supply chain that feeds into the industry.

These changes are likely to significantly alter the value structure and supply chain for car production: with significantly fewer parts, greater reliance on software, and the costs of batteries a crucial factor. However, this shift also creates an opportunity for Windsor – reversing the trend that has seen car production and investment in the last few decades move to areas with lower labor costs. The region will never win from a race to the bottom in wages, but Windsor, and Canada as a whole, can be competitive in pushing forward the state-of-the-art.

Canada currently has more obvious strengths and underlying advantages in autonomy, than electric vehicles. The future market for autonomous, non-electric vehicles is likely to be relatively small – and electric vehicles are likely to take a significant share of the consumer market sooner. One danger is that Canada ends up failing to take advantage of its autonomous potential, because its industry fails to make the transition through traditional internal combustion engines to electric.

Simultaneously, Windsor should continue with its current drive to 'diversify within its current specialisation' – in other words, do what is possible to help the automotive industry adapt. This is WEEDC's automobility strategy. It has some near-term political mileage in its green (federal) and industrial (provincial) crossover, and it is the city's best retention strategy. Just as Windsor benefitted from the original rise of internal combustion engines and the spillover effects of the mass car production pioneers in Detroit, it should seek to do the same with the future auto sector. This also offers the chance to reverse the trend of the last few decades, where Windsor – in common with many North American industrial cities – has been losing out to countries with lower labor costs.

59 Bloomberg NEF (2020) – Electric Vehicle Outlook. Retrieved from: <https://about.bnef.com/electric-vehicle-outlook/>

60 Government of Ontario (2019). Driving Prosperity: The Future of Ontario's Automotive Sector. Retrieved from: <https://www.ontario.ca/page/driving-prosperity-future-ontarios-automotive-sector>

Transitioning to autonomous and electric vehicle design and production makes the industry more focussed on high-end manufacturing, but to do that the city needs to make sure it has the underlying infrastructure and skills mix it needs. One part of that is tech and software, and a world-class ramp-up factory facility that can support a wider EV ecosystem in the region. However, it also seems likely that having a battery factory in the province will be crucial – across the globe, governments are investing time and resources in trying to make this happen, including in Germany and the UK. While Windsor already has access to a battery plant in Michigan, having one in Canada would provide significant extra capacity and it is likely that if one is located in Canada it will come to either Quebec or Ontario. Windsor already has some tax incentives that can help attract car manufacturers – but more needs to be done to make the case both to federal government and directly with the private sector that Windsor is a competitive place to make this happen.

Investments from the federal and provincial governments – which have occurred elsewhere in Ontario – will be required to support a pivot to advanced manufacturing and EV cluster industries. Southern Ontario has historically been the site of significant automotive manufacturing. It would be wise and appropriate for upper orders of Government to include Windsor-Detroit when crafting national automotive strategies and programs. Sustained and coordinated action across all levels of Government should be encouraged.

With the right investment by federal, provincial and local government, Windsor can secure the long-term future of the Canadian car industry. As the gateway to Detroit and the heart of the American car industry, the analysis suggests Windsor can play a vital role in pulling together Canada's own strengths with those of the USA.

Vehiqilla

Vehiqilla Inc. is a cybersecurity company specializing in automotive cybersecurity, enabling cyber risk mitigation for connected & autonomous vehicles (CAVs). Vehiqilla has positioned itself at the forefront of automotive cybersecurity by offering services such as Automotive Cyber Governance, V2X Security, Threat & Risk Assessment, ISO 21434, Cyber Monitoring and Fleet Incident Management. Vehiqilla was founded in early 2020 by AJ Khan who recognized the need to fill the gap in attention paid to cybersecurity in vehicles. The focus on transformation towards Automobility in Windsor beckoned and in September 2020, Vehiqilla moved its Headquarters to Windsor.

Vehiqilla is working with many strong partners such as Windsor's Institute of Border Logistics and Security (IBLS), St. Clair College and University of Windsor to develop the core knowledge base for automotive cybersecurity. Vehiqilla's location in Windsor is a strong selling point for Vehiqilla as it is now part of a growing auto-tech cluster in Southern Ontario. Vehiqilla definitely benefits from the region's vibrant automotive and logistics sectors, access to talent from higher education facilities and the Virtual Reality CAVE, as all these are major pull factors that can make Windsor "the Silicon Valley of Automobility".

Canada and car production

Windsor has a long and important history as Canada's automotive capital. It was the site of Canada's first large-scale automobile production and, in the 1920s, Windsor's automotive industry was the engine behind Canada becoming the second largest producer of automobiles in the world. The automotive industry continues to be a key economic driver for the region with car production in Ontario responsible for over 100,000 highly productive jobs.⁶¹

However, the future of the automotive sector both globally and locally is changing with the rise of electric, hydrogen-powered and autonomous vehicles. Forecasts show that over the coming decades, electric vehicles will begin to overtake internal combustion engine (ICE) vehicles as the majority of global new car sales.⁶² Further, countries around the world have started setting dates to phase out the production and sale of ICE vehicles.

The global and local trends suggest that the automotive industry is changing. Further, the federal and provincial governments' October 2020 \$590 million investment in Ford's new EV-producing Oakville plant has shown that the government is prepared to directly support this transition.⁶³ Given this environment, Windsor should seek to protect its automotive industry and pivot towards the new models of operation (i.e. EVs and autonomous vehicles) to prepare the industry for the future and maintain the City's reputation as the epicentre of Canada's automotive industry.

Canada is significantly behind other countries in electric cars, responsible for just 0.4% of global production.⁶⁴ Since 2009, only 6% of wider industry investment has been in Ontario, despite the region making up 13% of North American vehicle production.⁶⁵ Of the \$300bn in publicly announced investment in electric vehicles, none is explicitly earmarked for Canada.⁶⁶ In order to turn this around, and ensure the industry remains globally competitive, more investment in underlying infrastructure and skills is needed. If designed right, this can help ensure that Windsor, and the wider Ontario region, take advantage of the economies of scale that come from being located close to Detroit, and the investments in electric and automobility being made by manufacturers there.

In future decades, cars are likely to follow the trend already seen in many other industries – with an increasing share of the value of car production captured by software. In cars, this software will both help create increasingly autonomous vehicles, but also run the factories that produce them. There are over 200 companies already developing connected and autonomous vehicles in Ontario⁶⁷, while Canada is home to many of the world's leading researchers in AI and machine learning. To really take advantage of this, however, more links are needed between this expertise and the on-the-ground manufacturing that takes place in Windsor.

Car production remains highly national compared to other manufacturers, with the majority globally serving the local or nearby markets: 80% of electric vehicles produced are sold in their home region.⁶⁸ Ensuring a strong domestic market is an important element of securing Canada's pre-eminence in electric vehicles more generally – but Canada is lagging behind other economies in the incentives it has put into place moving to electric vehicles.

61 The Government of Ontario (2020) Driving Prosperity: The Future of Ontario's Automotive Sector. Retrieved from: <https://www.ontario.ca/page/driving-prosperity-future-ontarios-automotive-sector>

62 BloombergNEF (2020) Electric Vehicle Outlook 2020. Retrieved from: <https://about.bnef.com/electric-vehicle-outlook/>

63 CBC News (2020) Governments unveil details of \$590M investment to help Ford Oakville plant make electric cars. CBC News. Retrieved from: <https://www.cbc.ca/news/business/ford-oakville-government-1.5754974>

64 Sharpe, B., Lutsey, N., Smith, C., & Kim, C. (2020) White Paper: Power Plant: Canada's Role in the Electric Vehicle Transition. International Council on Clean Transportation. Retrieved from: <https://www.pembina.org/reports/canada-power-play-zev-04012020.pdf>

65 The Government of Ontario (2020) Driving Prosperity: The Future of Ontario's Automotive Sector. Retrieved from: <https://www.ontario.ca/page/driving-prosperity-future-ontarios-automotive-sector>

66 Sharpe, B., et al. (2020) White Paper. International Council on Clean Transportation.

67 KPMG (2020) Canada's Automotive Future. Retrieved from: <https://assets.kpmg/content/dam/kpmg/ca/pdf/2020/02/canadas-automotive-future-2020.pdf>

68 Sharpe, B., et al. (2020) White Paper. International Council on Clean Transportation.

Advanced manufacturing

Tied to the development of the auto industry will be the ecosystem of technology and engineering disciplines that arise from progress in advanced manufacturing.

In Ontario specifically, advanced manufacturing has played a special role in creating high-quality jobs and economic growth throughout the region. Representatives from across the regional government have acknowledged its importance and reaffirmed their commitment to supporting the sector.

Windsor-Essex is an important region in advanced manufacturing both within Ontario and the wider North American region. It is home to more than 1,000 manufacturers that contribute \$3.5bn annually to the region's GDP across the automotive, aerospace, food processing, pharmaceutical, nutraceutical and medical devices industries.⁶⁹

Local government has supported the growth of the sector through substantial investments, such as the recent \$5.2m investment in a program delivered by Canadian Manufacturers & Exporters (CME) to support small to medium sized manufacturers in southern Ontario.⁷⁰ Windsor is also home to Automate Canada, a national association that leads and advocates for the Canadian automation industry by offering business support to SME's in the industry and acting as the voice of the industry to all levels of government, amongst other activities.⁷¹ The large majority of the association's members are located in Windsor, highlighting the city's role as a key region for the sector.

Agri10x

Agri10x claims to be the world's first Artificial Intelligence and blockchain-enabled global e-marketplace connecting farming with traders. Agri10x uses AI, blockchain and the internet of things to provide real-time synchronisation of supply and demand. The company also identifies supply side issues such as soil health so that these problems can be resolved, with the aim of increasing yields and boosting profits. Using data from their platform, Agri10x provides farmers with best practice advice, for example when to sell certain crops, to help farmers boost their profits.

Before setting up the Agri10x trading platform in 2019, the company carried out three years of research into the farming community and markets, digitizing their warehouses and quality assaying centres in preparation for the platform's launch. In only a few years, Agri10x has experienced rapid growth, with over 73,000 farmers and 3,000 traders signed up, using over 10 logistics centres, 75 warehouses and 50 quality centers. It currently employs 265 people across five countries, with headquarters in India and Windsor, Canada. This year, Agri10x was one of 25 winners of the global Scale Challenge competition for disruption of supply chains and logistics, winning eight months of mentorship and support from Walmart.

69 WindsorEssex Economic Development (2020) Advanced Manufacturing. Retrieved from: <http://choosewindsorsex.com/manufacturing>

70 Government of Canada (2020) Equipping southern Ontario manufacturers to increase productivity and competitiveness. Retrieved from: <https://www.canada.ca/en/economic-development-southern-ontario/news/2020/03/equipping-southern-ontario-manufacturers-to-increase-productivity-and-competitiveness.html>

71 Automate Canada (2020) About Automate Canada. Retrieved from: <https://www.automatecanada.ca/about/>

The business of borders

One part of the future economy of Windsor will comprise logistics, freight and other similar sub-sectors that exist because of trade flowing into the huge US market. Windsor's prime location on the US-Canada border will become even more strategically important for Canada once the new international bridge opens in 2024, significantly increasing the capacity for goods and people to move across the border. The border itself could become a focal point for advanced technologies and new innovation. With some additional city support, existing local voices (the Institute for Borders, Logistics and Security (IBLS), now part of WEEDC, and the Cross-Border Institute at the University of Windsor), should continue to inform national policy.

For Windsor, which benefited from the first fixed crossing to Detroit when the Ambassador Bridge opened more than 90 years ago, having a modern bridge and 21st century border crossing is essential. Further federal and provincial government investments are necessary to make the main 401 highway investments pay off, including modern interchange and point of entry plazas, that allow for efficient and rapid screening of traffic, all of which will help drive regional economic growth.

Planning should get underway soon for how the bridge can accommodate new developments such as autonomous vehicles. As autonomous fleets are developed and licensed, the city should future-proof the region and allow for driverless trucks to cross the border. As a first step, the city – which co-owns the Detroit-Windsor Tunnel – should use its ownership position to design and trial innovative technologies and cross-border autonomous transit solutions, and prepare for how such technologies could be utilized for the new bridge. The city should also be engaging with the Windsor Detroit Bridge Authority (WDBA) to plan for how it can capture the maximum benefits of the Gordie Howe bridge, before it opens in four years. There is no reason why Windsor should not seek to become the leading national test site for innovative border technologies, and showcase these at a dedicated annual 'Future Borders Conference' in partnership with federal government agencies.

Talent

Windsor should pursue a three-part talent strategy: i) training for skills in current and future high demand; ii) retention of skilled graduates of the College, the University and the Michigan/Windsor-Essex regions; iii) attracting more skilled people from the rest of Canada and abroad.

Doing this successfully will, in turn, make it easier to attract new businesses into Windsor that can be supported through talent incentives and with a dedicated tech incubator and accelerator. The talent strategy is inextricably linked to proposals on infrastructure: without a thriving downtown and amenities, Windsor will find it more challenging to attract and retain new talent.

This strategy must be underpinned by joint leadership from the educational and political institutions of Windsor through a 'Windsor Talent' steering committee, with a clear remit and 'joint accountability framework' with educational institutions and the private sector.

Windsor's skills needs

Through the Workforce Windsor Essex Development Board, Windsor has real-time, highly granular data on current occupations in demand and has conducted analysis of the longer-term trends into the labor force.⁷² This analysis suggests that:

- Workers are attracted to come to and stay in Windsor by wider factors than employers – the top scoring answers are around cost of living and housing, and a family friendly environment, as well as by commuting proximity to Detroit
- When asked about the type of companies that Windsor residents want to work for, 'traditional' metrics such as security and benefits were rated evenly with 'softer' metrics such as company culture and a work life balance
- In terms of things which would make Windsor more attractive to workers, specific job opportunities were rated highly, but so were wider areas about the quality of living in Windsor
- There is a particular issue of 'brain drain' among young, graduate educated people. Windsor was relatively strong in attracting workers with skilled trades and College credentials, but weaker in attracting and retaining University-educated workers between 2011 and 2016. For every two workers who moved to Windsor-Essex from another part of Canada with a University education, three left.

On the back of this analysis, Windsor published a major strategy into talent management in early 2020 – just before Covid-19 understandably made this agenda take a back seat. This analysis showed that the occupational sectors most projected to be in demand were a mixture of graduate roles and highly skilled trade roles.

72

<https://www.workforcewindsor-essex.com/startyqg-survey-results/>

Rank	Occupation
1	Registered nurses and registered psychiatric nurses
2	Other instructors
3	Mechanical engineers
4	Engineering managers
5	Information systems analysts and consultants
6	Industrial engineering and manufacturing technologists and technicians
7	Retail sales supervisors
8	Social and community service workers
9	Electricians (except industrial and power systems electricians)
10	Early childhood educators and assistants

This is somewhat different to the overall picture for Canada. Analysis of annual employment data by sector (statistics from StatCan⁷³) and annual growth rates for specific industries between 2015–2019, show that Canada’s big growth areas are in highly skilled occupational roles, particularly in public services, and then in relatively low-skill roles particularly in the service industries. This is a pattern seen across the OECD.

Windsor, therefore, unsurprisingly given its manufacturing base, has a higher demand for skilled manufacturing jobs than much of the rest of the country. While the Windsor Works strategy is designed to support diversification into other sectors, including tech, this means that a successful talent strategy must support intermediate, non-graduate skilled jobs as well as public and private sector professionals and tech workers (please see Appendix for more details). It is also crucial that Windsor education institutions be prepared for the switch to electric vehicle manufacturing, and the new roles required for autonomous vehicles.

This means that there are two clear training focuses required for Windsor:

- Reversing the ‘brain drain’ of graduates so that by 2025, the inflows of graduates match the outflows of graduates, and an ambitious goal that by 2035, Windsor is a net importer of graduate labor.
- Upskilling non-graduate workers into skilled trades with a particular focus on those occupations which are forecast to be high growth in the Windsor Essex region, such that by 2030, none of the high growth areas currently identified in WEEDC analysis in skilled trades are reporting labor market shortages.

This should sit alongside the third priority for Windsor on talent – attracting the best internationally. Canada is an attractive second location for American businesses partly because of its immigration policies, which makes the attraction of talent in areas of global shortage, including tech, easier. Windsor should take advantage of this potential comparative advantage to strengthen the Detroit–Windsor region, and help attract businesses.

73 Statistics Canada. Table 14-10-0202-01 Employment by industry, annual. Retrieved from: <https://doi.org/10.25318/1410020201-eng>. Canadian wide statistics highlight growth areas in Professional, scientific and technical services; Educational services; Health care and social assistance; Accommodation and food services; and Public Administration.

Windsor Talent committee

Both of Windsor's post-secondary institutions – St. Clair College and the University of Windsor – have a key role in developing talent in the local economy and also stimulating growth through spin-off innovations their own faculty and graduates generate. Both institutions have engaged with local initiatives designed to benefit the broader Windsor community, but there is scope to go further.

Windsor should therefore prioritize the creation of a specific action plan with both the University and the College, under a 'joint accountability framework', with a goal of making significant progress against two, equally important, targets: increasing the graduate retention into Windsor and building on the demand for skilled trade (non-graduate) roles in high growth jobs and industries. It should set clear high-level goals and take forward a number of actions to make progress towards them.

This 'joint accountability framework' should take the form of a high level 'Windsor Talent' steering group, chaired by the Mayor and with permanent representation from the University President and the College President, as well as representatives from K-12 school board chairs, WEEDC and major employers in the region. It should have a small budget to be able to commission independent analysis and research and should be chaired by the Mayor in order to convene senior leaders who would be able to decide on changes to local educational course portfolios, admissions arrangements, or anything else that might be required such that they attract, train, and retain the citizens who pass through their institutions.

We understand that senior leadership at both the University and College are keen to contribute more to the economic development of Windsor, recognising the considerable benefits they enjoy from being based in Windsor, and the institutional advantages they have received, including in terms of physical real estate in the downtown area.

The funding and accountability for both post-secondary institutions flow from the province, rather than the municipality, and is structured around five-year strategic plans tied to mandate agreements signed with the Ontario Ministry of Education. Updated agreements for 2020-25⁷⁴ have a reformed funding formula that introduced an outcome-based performance framework, of which one core element is community impact and economic-impact (institution specific). Closer alignment with the city will help both institutions demonstrate their delivery against these two strategic outcomes.

With more focus from the city, the goal will be for both post-secondary institutions to be more engaged in shaping city initiatives designed to support economic growth and community prosperity. In practice this will mean both post-secondary institutions being closely tethered to the city and council and all entities committing more time, corporate focus, and financial resources to align their work on teaching, attraction, graduate retention, research and others with the economic growth and civic agenda of their home city.

74 Government of Ontario (2020) Strategic Mandate Agreement 2020-25, College of St. Clair. Retrieved from: <https://www.ontario.ca/page/2020-2025-strategic-mandate-agreement-st-clair-college-applied-arts-and-technology>

Government of Ontario (2020) Strategic Mandate Agreement 2020-25, University of Windsor. Retrieved from: <https://www.ontario.ca/page/2020-2025-strategic-mandate-agreement-university-windsor>

Both of Windsor's post-secondary institutions will have their own ideas for ways that they can help drive forward the local economy, whether that is in relation to schooling, skills, graduate retention, or entrepreneurship. There are a number of specific areas which Windsor, through this new talent steering group, could make progress on – including actions that should be taken by the College and University:

- **Strengthen the training offer in the automotive sector.** The existing collaboration between the University and College should be expanded and deepened to develop the talent base required to sustain an innovative cluster in both technology as well as the future of automotive industry – which will continue to require skilled tradespeople but also increasingly graduate labor and those trained in advanced software and engineering involved in modern automotive manufacture. The University of Windsor has had a quarter century of formal industry partnership on automotive research⁷⁵, via the FCA-backed Automotive Research and Development Centre (ARDC)⁷⁶, and this has been augmented by the more recent 'CHARGE' Lab focused on electric and autonomous vehicle R&D which has had support from Ford and other industry partners and recently won federal grants to expand its programming.
- **A mapping of the course offerings from St. Clair College in particular and a comparison to labor market needs.** It is important to strike a balance between student demand for courses in tertiary education, and the wider needs of the economy and the labor market. Analysis as to whether shortage areas and high growth areas of the economy are being met by course offerings, particularly in the College, should be a priority – and the steering committee should discuss how to change course portfolio if needed to meet employer demand. This exercise is made more important by the expected growth in student enrolment at the College projecting a further 18% increase in the number of international full-time headcount across their campuses in Windsor by 2025, with a 10% increase in domestic full-time students over the same period (albeit this is not a trend that the university is projecting). St. Clair has already begun the process of seeking out R&D and potential program development in areas that reflect local economic demand, including autonomous vehicle design, components, etc.; EV design and maintenance; cybersecurity for automobility and Supply Chain Management; green technology with a focus on reuse of vehicle batteries; smart manufacturing, and greenhouse technology.
- **Focus on the talent pipeline created by the 'R&D arc'.** As discussed above, an "R&D Arc" should be established between University of Windsor, Western, Michigan State, Ann Arbor, and Wayne State. This will increase the amount that students in Michigan hear about Windsor and therefore improve the chances they might move there after graduation. Branding Windsor within the "R&D Arc" could make it more likely for STEM graduates to seek job opportunities there. It will also increase the visibility of Windsor as a base for new spin off companies emerging from this group of Universities.
- **Incentivize skilled immigrants from key regions in the United States to move to the City.** The U.S., and Michigan specifically, should be a priority for obvious reasons: physical proximity, a large number of highly skilled and highly educated workers, and a political relationship through CUSMA that makes immigration relatively easy. Subsidising visa fees for skilled workers and their families would make Windsor companies more competitive with U.S. companies in attracting local talent. This policy would be particularly useful for attracting graduates from top tier Universities in Michigan, such as the University of Michigan Ann Arbor, for whom the financial cost of immigration may be a barrier.

75 University of Windsor (2020). Retrieved from: <https://www.uwindsor.ca/engineering/388/university-windsor-fiat-chrysler-canada-automotive-research-and-development-centre-ardc>

76 Fiat-Chrysler Automotives (2016) ARDC 20th Anniversary Press Kit. Retrieved from: <https://media.fcanorthamerica.com/newsrelease.do?id=12558&mid=>

- Focus on attracting international migration, for example from Hong Kong.**

Clearly, the global environment for immigration will continue to shift. But Windsor should be on the lookout for opportunities. For example, the current situation in Hong Kong provides a significant opportunity for attracting skilled immigrants. As China tightens its grip on the region, more and more residents are seeking to emigrate – according to a recent poll 43.9% of Hong Kong residents would emigrate if given the chance.⁷⁷ Canada has always been a popular choice for immigrants from Hong Kong, it has the second largest Hong Kong diaspora after the U.S.,⁷⁸ and between 2015 and 2019 the number of annual immigrants from Hong Kong increased from 900 to 1,500.⁷⁹ Windsor should capitalize off this trend by selling itself as the best city in Canada for Hong Kong immigrants to settle in. The City should try to reach residents of Hong Kong before they have moved through online advertising and by working with immigration services and Universities in Hong Kong. Windsor should also work with immigration services throughout Canada to reach immigrants that have already moved but have not decided on a location to permanently settle.

Attracting talent

Alongside this, as we have discussed, the City should continue to focus on providing incentives to businesses to relocate and grow within Windsor and continue to improve the amenities and leisure facilities in the city, which is important to many employees in deciding where to work and settle (especially younger ones).

Our interviews with tech companies in Windsor highlighted the importance of those amenities, but also the lack of specific incentives for the tech sector. Given the growth of tech in Detroit and Ontario, and the likely continued diffusion of software and AI into all sectors, this should be a priority.

As well as the traditional financial incentives, such as relief from property taxes or grants for relocating employees, the city should explore talent-related incentives. This includes:

- Infrastructure – there is a need for a larger scale business catalyst hub. Although Windsor already has several initiatives (‘The Accelerator’, the University’s ‘EPICentre’, and the ‘Genesis Centre’ tied to St. Clair College), these are outside the downtown core and consideration should be given to combining these so, together, the critical mass enables a larger entrepreneurial hub to be created that attracts more start-ups and serves as a vehicle to drive downtown regeneration – especially if combined with a co-working space;
- Specific incentives to support the identification and costs of finding international talent.

77 The Hong Kong Institute of Asia-Pacific Studies (2020) *Press release: Survey Findings on Views about Emigration from Hong Kong*. Communications and Public Relations Office, The Chinese University of Hong Kong. Retrieved from: https://www.cpr.cuhk.edu.hk/en/press_detail.php?id=3379&t=survey-findings-on-views-about-emigration-from-hong-kong-released-by-the-hong-kong-institute-of-asia-pacific-studies-at-cuhk

78 Nair, R. (2020) Hong Kong residents eye immigrating to Canada as new security law comes into effect. *CBC News*. Retrieved from: <https://www.cbc.ca/news/canada/british-columbia/hong-kong-canadian-immigration-1.5661164>

79 CIC News (2020) Canada eyeing more immigrants from Hong Kong. *CIC News*. Retrieved from: <https://www.cicnews.com/2020/07/canada-eyeing-more-immigrants-from-hong-kong-0714942.html#gs.lvo6q>

Other areas to support wider development

- **Culture/amenities/leisure** – Windsor’s future potential does not hinge on a major cultural investment or another retail-led regeneration effort. However in order to reward inward migration and to attract new residents, the city needs to continue to offer residents, and especially working families, good amenities and new leisure/arts and active transportation infrastructure. Recent waterfront developments are an example of projects that will improve Windsor’s quality of life and create new focal points for residents and visitors to enjoy. A new central location for a library will fulfil the same purpose and should be prioritized, along with steps to make cycling and walking more attractive.
- **Fleet and logistics.** The regulatory changes applied to the trucking industry operating (with digital driver logs limiting journey times to 11 hour shifts)⁸⁰ have increased the attractiveness of Windsor as a base for firms transporting goods by road into the US. In response, there has already been an increase in Ontario trucking operators registering their businesses in Windsor (and relocating from London and Hamilton and other cities). This shift should be encouraged, with the city exploring ways to support these logistics companies to expand in the city so they can grow their fleets and serve even more of the US market. Tech businesses may emerge that seek to service the security/data/customs needs that link to the border in the coming decade, and the city and the University should use existing organisations (the IBLIS and CBI) to pursue opportunities that come their way. More national attention on Windsor’s prime trading position as the new bridge nears completion should be expected.

80 Federal Motor Carrier Safety Administration (2020) *Summary of Hours of Service Regulations*. Retrieved from: <https://www.fmcsa.dot.gov/regulations/hours-service/summary-hours-service-regulations>.



Part III: Recommendations

Part III:

Recommendations

This strategy is long-term and it will take a sustained and concerted effort not only by the city but by the institutions, businesses, and people within Windsor. Therefore, the report recommends a new team within the City to oversee delivery, but also metrics and partnerships for administrators, councillors and all organizations in Windsor – such as the University and College – which have an outsized impact on its success and reputation.

Strategy documents should set out a clear direction and demonstrate that choices have been made and priorities have been set. Often the recommendations in such strategies are vague and lack specific examples of how certain goals might be realized (or have been exemplified elsewhere, as an inspiration). To aid the city of Windsor as it deliberates on the future course for the city, this report outlines some practical steps that can be taken to realize the vision. These are outlined in accordance with the proposed strategy across the four pillars (L.I.F.T.), in part II.

The policies that would support this strategy and the actions that Windsor may choose to take are varied, but also constrained by the limits set on municipal authorities in law. The recommendations in this report acknowledge that many policies or initiatives are co-dependent on other actors, including higher levels of government. Where actions are proposed for Windsor that are dependent on external funding or in some way decided elsewhere, Windsor's political leadership should become advocates for those changes and seek to persuade Provincial and Federal decision-makers of their merits.

The policies are designed to be implementable, although given the project duration, they are high-level ideas at this stage still requiring legal, financial and administrative input. Further detail on practical ideas that Windsor could adopt to realize this strategy are listed in [Appendix \(5. Policy Proposals\)](#).

Location

Attract Michigan

Goal: Attract more Michigan businesses, workers, students and tourists into Windsor

Policy 1: Become a better place to site Michigan businesses.

Promote Windsor as the perfect location for US firms to open their Canadian offices and offer direct support for them to do so.

ACTIONS:

- o Form a city-backed venture capital fund to act as an accelerator for high-growth start-ups with its own governance (arms-length from city administration);
- o Improve the relocation support package through a new 'Business Attraction Centre' – a "one-stop-shop" for development and planning, and new business grants;
- o Create a new Community Incentive Plan CIP for Michigan SMEs with tax/planning incentives, giving the programme broader applicability to the tech / SME sector.

Policy 2: Become a hotspot for highly skilled USA workers and their families.

Exploit the ways that Canada offers a better immigration system; good healthcare for working families; and highly skilled potential employees.

ACTIONS:

- o Fund employee incentives (a 'Welcome grant') to enable Windsor-based businesses to improve their offer to top US tech talent;
- o Subsidize US passport cards for Michigan residents to encourage more flow of students and young professionals across the border;

Policy 3: Establish better underlying links between Windsor and Detroit/Michigan.

Invest more time to strengthen existing relationships and to forge new networks for collaboration between political leaders and civil society in Detroit and Windsor

ACTIONS:

- o Promote academic partnerships and seek to establish a post-secondary "R&D Arc" between University of Western Ontario, Windsor, and Michigan State; University of Michigan; and Wayne State;
- o Set a target for number of successful 'trade missions' into Michigan and set KPIs for councillors and administration (and a pairing scheme), for Windsor-Detroit to encourage more underlying connections
- o Strengthen relationships between Windsor and the Detroit entrepreneur cluster to foster partnerships over time and host more joint conferences with Detroit on themes of shared interest (healthcare, trade, automobility)

Sell Windsor–Detroit

Goal: Attract businesses, students, and residents from the rest of Canada, to the Windsor–Detroit region

Policy 1: Attracting businesses from outside into Windsor–Detroit

Partnering with Detroit and selling the city internationally as one region will attract more attention.

ACTIONS:

- o Work with Detroit and the Canada-US Business Association to establish a new Windsor–Detroit Board of Trade and use this as vehicle to promote the region internationally;
- o Target more joint bids between the cities and development authorities.

Policy 2: Selling Windsor–Detroit through targeted cultural events

Windsor has an under-appreciated history that could be used more effectively to build a civic brand, with new or expanded public events used as a way of telling the story of the region and its rich history.

ACTIONS:

- o Launch 'Prohibition Week' to showcase the shared history of the two cities, and a "Celebrate Windsor and Detroit" theme to an expanded Windsor International Film festival – i.e. local directors, films about Motown, etc.;
- o Develop an expanded 'Freedom Festival' over the July holiday weekend annually, and new joint sporting events with Detroit;
- o Work with the Tourism Board to seek access to Belle Isle Park and other cross-border tourism projects.

Infrastructure

Improve infrastructure and revive downtown

Goal: Improve Windsor's quality of life and make it more liveable for young working families as the city grows

Policy 1: Build the housing stock that meets incoming demand

Windsor has an ageing housing stock and current models assume 7,000 units across the whole city are needed over a 20-year timeframe, but more diversity of housing type is needed too.

ACTIONS:

- o To retain Windsor's comparative advantage of affordable housing, the city must continue to increase housing supply, including homes that appeal to the people that the city wants to attract – graduates, professionals, younger working families – while also providing a greater variety of housing supply (walk-ups, townhomes, larger 3-bedroom condominiums);
- o Windsor should create a new residential housing strategy for the downtown and set a goal of significantly increasing the residential population in the downtown core (a target of 3,000 new units within a decade would be ambitious but achievable);
- o Continue to work to secure these developers and promote and approve schemes that will drive downtown regeneration, as well as in other parts of the city (including the nine Business Improvement Areas⁸¹) to increase population density.

81 Business Improvement Areas in Windsor. Retrieved from: <https://www.citywindsor.ca/business/business-improvement-areas/Pages/Business-Improvement-Areas.aspx>

Policy 2: Complete riverfront revitalisation

Windsor must do more to attract people to its best physical asset – the clean and developed waterfront. As a draw for people in Windsor, but also in Detroit, steps should be considered for how to make the riverfront a destination, and how to use it to keep people downtown.

ACTIONS:

- o Complete the Riverfront Implementation Plan goals through the establishment and construction of all the destination beacons on the waterfront that attract regular visits by both residents and tourists;
- o Schedule more pop-up events on the waterfront, including an annual Christmas Market, local Community Theatre (Shakespeare in the Park), craft markets, international cultural celebration events and historical (ghost) tours.

Policy 3: Improve urban mobility

Windsor remains a very car-centric city but that is changing. This is being addressed through an 'Active Transportation Master Plan'⁸² and the city should continue to offer new transport options for residents, including trialling innovations that make getting around the downtown core and into Detroit without a car much easier.

ACTIONS:

- o Windsor has a large student population and a flat topography, but limited public transit. An e-scooter scheme with an established provider (Bird, Tier, Lime) would allow more people without access to private cars to get around and demonstrate that Windsor is open to new low emission transport solutions;
- o Ongoing investment in roads to address congestion and tackle air pollution, as well as in public transport with a modernized bus fleet, and continue plans to support 'active transportation' and make cycling and walking more attractive;
- o Explore the feasibility of an autonomous bus link through the Detroit-Windsor Tunnel, which the city co-owns.

82 City of Windsor (2019) *The Active Transportation Master Plan* Action 3A1 (p79). Retrieved from: <https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Documents/Active%20Transportation%20Master%20Plan%20Final%20Report.pdf>

Future Economy

Become the site of Canada's future auto sector

Goal: Protect and pivot - maintain Windsor's current strength in cars and adapt alongside the industry's global transition to electric vehicles

Policy 1: Invest in future auto manufacturing infrastructure and skills

Take forward a series of actions to increase the likelihood that Windsor will secure its position as the site of the future auto sector in Canada.

ACTIONS:

- o Establish Canada's first ramp-up factory for EV/autonomous vehicles;
- o Work with Universities in Ontario and Michigan to develop a common skills plan and curriculum for future auto workers, in close partnership with Windsor's post-secondary institutions;
- o Invest in new business parks, employment lands and supportive infrastructure.

Policy 2: Build up expertise in software and cyber-security

The Windsor auto industry must increasingly comprise both advanced manufacturing and software engineering that can leverage Canada's comparative advantage.

ACTIONS:

- o Launch a public-private investment fund for companies that would include a focus on electric/smart vehicles innovation;
- o Create a second campus for the Automotive and Surface Transportation Research Centre in Windsor;
- o Explore the creation of a regulatory sandbox for self-driving vehicle research and trials.

Policy 3: Commit to the future auto industry and advocate for a stronger government lead around electric, hybrid, hydrogen and autonomous vehicles

Windsor's voice in the debate about the future of the auto industry will be important.

ACTIONS:

- o Advocate for a national EV innovation and manufacturing mandate;
- o Make new investments in EV charging infrastructure locally;
- o Seek partnership with local and national union leaders to support the transition to EV manufacturing.

Diversify via building up adjacent sectors

Goal: Lean into pre-existing strengths – education, borders, healthcare – so they comprise more of Windsor’s economy in the future

Policy 1: Develop Windsor’s health sector strengths

Given Windsor’s healthcare workforce, the Jamieson plant, and the impending construction of a major new acute care hospital, the city should seek to leverage these investments to grow the health and nutraceuticals sector locally and facilitate health tech and wellness company spin-offs.

ACTIONS:

- o Explore how to upgrade the University of Windsor’s offering to ensure an enhanced pipeline of local medical training and healthcare research that can integrate with the demands of the future healthcare economy, including for when the new regional hospital opens.
- o Create an outline masterplan for a health R&D site to adjoin the new hospital.

Policy 2: Explore border and trade strengths and put Windsor on the map as a border innovation zone

Build on the city’s geographic advantage to promote the Free Trade Zone, attract more logistics firms and solidify Windsor’s reputation as a modern border city that exploits innovative cross-border technology.

ACTIONS:

- o Develop the IBLS and the CBI and host a major showcase conference on 21st century borders to promote innovative technology, policies and procedures;
- o Promote the Free Trade Zone and encourage more firms to locate in Windsor to take advantage of its custom and tax benefits;
- o Work with WDBA to create a plan to exploit the data value from the new Gordie Howe International Bridge

Talent

Attract and retain more national and global talent

Policy 1: Establish a Windsor Talent committee focused on training and retaining highly educated people.

A joint accountability framework and partnership among educational institutions, the city and the private sector can support training for current and future skills needs.

ACTIONS:

- o Analysis of labor market shortages and new business skills requirements and courses at the College and University;
- o Support the creation of a new incubator, accelerator, and training hub downtown;
- o Develop a strategy to encourage international students studying in Windsor to stay in Windsor.

Policy 2: Leverage Windsor's post-secondary educational institutions.

Both the University and the College should play a greater role in the future of Windsor's economy and work closely with the city and other private sector partners to contribute to economic development.

ACTIONS:

- o Work with the University and College to improve links with employers, and upskill the local workforce, ensuring their course offerings meet market demand;
- o Pursue the University's proposal for a computer science and technology hub downtown that could also have an incubator role for tech start-ups and a coworking space;
- o Nudge better University and College collaboration through programmes that link professional students with tech-minded entrepreneurs.

Policy 3: Attract highly skilled workers from across Canada and abroad.

Take steps to ensure that talent chooses Windsor as a place to study or settle, and combine proactive marketing with targeted incentives to increase the appeal of Windsor.

ACTIONS:

- o Subsidize the visa fees for skilled immigrants coming to work in Windsor;
- o Direct marketing of Windsor to skilled immigrants abroad (e.g. the United States, Hong Kong, India)

Key Enablers

The strategy proposed in this report is intended to be more than a conceptual framework. Because it is evidence-led and informed by the political and policy context, it is designed as the foundation for a series of coordinated actions. Local public administration officials and stakeholders will need to be further consulted regarding some of the specific recommendations, including legal and fiscal frameworks. Nevertheless, there are certain key enablers that – were they to be absent – would likely undermine the strategy and its chances of success. The three most important enablers are:



Enabler 1: Senior municipal leadership, with a city hall team focused on delivery of the strategy

Visible, sustained leadership from the Mayor and Council will be necessary to maintain focus and momentum beyond the next election. Chances of success will increase if this goes alongside a **special delivery unit** with a clear remit. This would be an in-house team reporting to the Mayor and Council who are dedicated to economic development focused only on the municipality (not the broader Essex region). They would be empowered to create project-specific working groups across various municipal departments (planning, legal, engineering, permitting) to support economic development objectives, track KPIs and manage ongoing reporting to Mayor and Council.

Next step: Seek endorsement from City Council for the L.I.F.T. Strategy to be developed and overseen by a new delivery unit to be setup within City Hall.

Enabler 2: Recruit key external players to the mission

Alongside the clear narrative and sustained leadership of the Mayor and Council, this L.I.F.T. agenda needs support from external parties – some of whom (like the post-secondary institutions) have not been deeply engaged on economic development before. Use the city's convening power and leadership to establish new groups that can support the strategy, including a **'Windsor Works Taskforce'** – a new 8-10-member group of important decision-makers in Windsor's local community. This would bring together those with the most at stake from this strategy succeeding and would have a majority of members from the private sector. In addition, consider setting up a new **Economic Development Committee of City Council** to involve council members earlier in key issues.

Next step: establish a new 'Windsor Works' taskforce to advise on and shape the development of initiative within the L.I.F.T. Strategy, which would be regularly convened by the Mayor's Office.

Enabler 3: Define, update and report key metrics regularly

Within or alongside this strategy report, the city should set out the key metrics that will measure progress against the goals. Some of these metrics will be new and will need collecting/calculating for the first time. Consult, and develop, these metrics internally and share them publicly regularly – at least annually – and consider committing to a transparent **Online Scorecard** for the benefit of Windsor's businesses and residents.

Next step: Agree a suite of metrics to measure progress and report regularly for the benefit of partners and the public.

Key Success Metrics

Measuring progress is essential to the realisation of any strategy. The city should determine how it wants to be judged for the actions it decides to take. The L.I.F.T. strategy has sufficient focus that a set of outputs and outcome metrics could be developed that would align with each of the four pillars, and then would serve as a ten-year goal. As an illustration, a picture of what success looks like by 2030 might include:

By 2030, as a result of Windsor's L.I.F.T. Strategy, the city should have...

- Increased its population by more than the Ontario average;
- Graduates comprising a larger share of the Windsor-Essex workforce;
- US citizens comprising a larger share of (a) visitors; (b) business owners (c) students;
- Increased workforce productivity (even if automation means the local auto sector employs fewer people);
- Highly skilled manufacturing comprising a larger share of Windsor's economy than it does today;
- Higher volumes of cross-border movements (people and goods) than 2020;
- The productivity gap with rest of Canada closing;
- Citations and patents in the area rising;
- Greater interaction between the council, officials the and economic development agency and their counterparts in Detroit/Michigan, and similar metrics adopted by the University and College, including around academic partnerships.

There is also specific data that Windsor currently does not routinely collect that it should be capturing and monitoring as part of this strategy. These include the following:

- Data on attitudes to Windsor – for example among University leavers and why they stay or go, and incoming residents;
- Windsor's workforce demographics (especially nationality/education) by sector;
- Views of Windsor from a) Ontario; and b) Michigan (with an emphasis on the latter)
- Survey tourists/visitors/students in Windsor on a regular basis;
- A dataset for cross-border activity that Windsor can utilize;

Next step: Identify the missing metrics needed to begin baselining performance and collaborate with partner institutions to collect data to inform the city's economic development agenda.



Conclusion

Conclusion

The opportunities available to Windsor's people will not materialize on their own. The purpose of a strategic plan for economic development is to catalyze growth and position Windsor to leverage underlying strengths. New and emerging opportunities must be seized. They cannot be missed.

For that to happen in Windsor, it requires a clear strategy – and one that is possible to communicate. Local stakeholders must be brought onboard. Citizens must be inspired. Businesses must see action. But, to maintain momentum as circumstances change, a strategy of this kind must be owned and directed by the political and civic leaders of the city.

This project has attempted to capture the essential elements of the city of Windsor that represent strengths and opportunities, as well as potential challenges. The proposed L.I.F.T. strategy outlined in this report is evidence-led and designed to be easy to communicate and politically achievable. If adopted, it would present a positive agenda for Windsor that could galvanize the community towards shared goals. It may also provide the focus and direction that many stakeholders have urged, and the means of bringing local businesses, civil society and the city itself closer together.

Our research leads to one key conclusion: that Windsor is economically tied to Detroit and they can do more to help each other grow and prosper so that Detroit's recovery is a wave that Windsor can ride to become a bigger and better place to live as a result – principally by attracting more people, jobs and investment from the USA and from other parts of Canada. As the world emerges from COVID-19 and with expectations that the international border will reopen in 2021, Windsor needs to do more than just return to normal. The city needs to make the most of its proximity to Detroit and grow the business, academic and cultural links with its US neighbour at every level. Windsor will always be a Canadian city, not a suburb of Detroit, but if Windsor expands and the connections deepen across the Detroit river, so that more people come to see it as one dynamic region, then Windsor will become a more diverse and resilient economy and a more successful city in its own right.

Thankfully that goal does not mean reinvention. In fact, many of Windsor's strengths – the assets that make it attractive as a place to study, invest and settle – are either not widely known or are just under-appreciated. In this regard, the city could achieve some important parts of the strategy simply by more effective and sustained efforts at civic marketing, in an alliance with existing agencies and local partners. It is in this respect that the city may not have done enough in recent years: proactively communicating what makes Windsor special – both to the rest of Canada and beyond.

Not enough people outside the city recognize a fundamental truth about Windsor: that uniquely, and due to history and to the border, the city represents the best of both worlds. It is a small city of a quarter of a million residents that is close enough to a metro area of almost 4 million people to give Windsor residents the advantages of those big city amenities without the downsides. The L.I.F.T. strategy is therefore broad and ambitious, but crucially it is also rooted in Windsor's existing strengths. By taking an approach that builds on the best of Windsor, the L.I.F.T. strategy should be both deliverable and effective, securing the city's future as a great place to live, work and play, as it prepares for the next chapter in its history.

Next steps

Throughout the fieldwork and analysis, the legal, political and regulatory limitations on small municipalities have been at the forefront of the thinking. Unlike cities in the United States, Windsor does not have all the levers it might want in order to control its own destiny, and any plan for the future of the city is dependent not just on other agencies and tiers of government, but on the sustained political leadership of the Mayor and the Council themselves. The purpose of this project was to advise and to offer an outline of the right strategic course for Windsor to take. The political leadership of the City must decide whether it supports the analysis and agrees with the proposed strategy.

The specific recommendations are not all within the grasp of the City of Windsor, and even the ones that are, have been designed more to stimulate discussion and provide direction on appropriate next steps. Significantly, this report outlines dozens of broad policy actions, some of which are easier to implement than others. Taken together, these recommendations, and their natural successors, would easily represent 3-5 years of implementation activity. The authors hope they serve as a catalyst for ideas that might achieve the stated objectives, even if the exact recommendation is not followed to the letter. They reflect the authors' judgment of what would turn this strategy into a practical plan of action, but they are not the only way of achieving the desired objectives.

The policy actions vary in their complexity and novelty and also in their likely cost. It was not required as part of this project to undertake a detailed costing exercise for the proposals contained in this report. For such proposals to be fully considered by Council, the City administration would need to undertake full modelling and cost estimates based on data accessible to them or supplied by partner agencies.

The City can take immediate steps to begin down the path identified in the L.I.F.T. Strategy and as a first step, should seek endorsement from Council for the direction of travel outlined in this report. However, it will then be for the city to commission the necessary reviews, modelling and implementation studies to ensure that elements contained in this strategy can be costed before being implemented.

Appendix

01. Economic Regeneration

02. Economic Incentives in Ontario cities

03. Border Cities Comparison

04. Deep Dive: Detroit


05. Policy Proposals

06. Municipal Affairs

Bibliography

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Economic Regeneration Toolkit

Economic Regeneration Toolkit

December 2020

Introduction and Summary

What do we know about city growth?

In this paper, we provide an overview of the different strategies cities have taken to drive local economic growth, jobs, and regeneration - and what we know about what has or has not worked.

We look at:

- The most up to date theory behind why some cities thrive more than others
- The academic evidence on which policy tools are more effective
- Ten case studies of the different strategies cities have employed for regeneration

There is no one single silver bullet. The relative success of policies is highly dependent on the context of each city and exactly how they are implemented. It is impossible for policy makers to perfectly predict or control the future of their city - but policies can help make success much more likely.

The Strengths of Cities

There are four main explanations for why some cities grow richer than others:

- **Sectors.** Historically, cities would grow on the back of rare natural resources, as the centre of political power or as convenient trading crossroads. In the modern world, many cities develop an economic specialism by building off a first-mover advantage or gaining a critical mass in a new industry: Silicon Valley for IT, Hollywood for films, or Detroit for cars. When that sector declines, the city either needs to find a new specialism, or it will suffer eventual decline itself.
- **People.** Under this view, cities thrive when they are attractive places for highly talented or created people to move to or live in – and they in turn create new businesses and jobs for the rest of the local economy. This might be because the city hosts a world leading university, features an attractive climate – or is home to appealing cultural and sporting amenities.
- **Agglomeration.** There is overwhelming evidence that cities themselves enjoy economies of scale: the larger they are, the more connections workers and businesses can make, and the greater their productivity. Many cities are centuries or even millennia old – long outliving the rise and fall of any one industry.
- **Competitiveness.** Just as a national government works to improve the underlying supply side fundamentals of its economy, cities compete to provide efficient infrastructure, competitive taxes and support for basic research and innovation.

There remains a significant debate in the literature over which of these factors is most important, or drives the others. Do highly productive cities tend to have great amenities because of high disposable income from thriving local industries – or can the amenities themselves attract new start-ups to locate there? Is it better to specialise in a particular industry where you can be a world leader, or does this leave you vulnerable when economic fundamentals change?¹

¹ For a wider discussion of this debate, see *The Rise of the Creative Class*, Richard Florida, 2002; *The Triumph of the City*, Edward Glaeser, 2011; *The New Geography of Jobs*, Enrico Moretti, 2012

Sectors

- Targeting research spending or tax credits at particular industries
- Offering generous tax breaks or incentives to encourage large companies to relocate
- Building new facilities and working with companies in an industry to increase collaboration

People

- Investing in cultural amenities and new sports facilities
- Brownfield regeneration and land redevelopment
- Seeking to increase graduate retention
- Investing in the local university

Agglomeration

- Building new transport links with other larger metropolitan areas
- Liberalising planning law or building more housing stock
- Encouraging immigration
- Relocating public sector staff to relatively deprived areas

Competitiveness

- Investing in local infrastructure: roads, public transport, broadband etc
- Offering liberalised planning rules, regulation or taxation in specific special enterprise zones or free ports
- Lower cost labour or tax incentives

It is incredibly difficult to settle these debates because cities are complex and variable. As we will explore later on, every single one of these has succeeded - except where it hasn't. (Or failed except for a few shining successes, depending on your point of view).

As a general rule of thumb, however, the evidence suggests that:

1. 'Downstream' investments (housing, public transport, new cultural amenities) that assume a higher population are less likely to succeed than policies that support developing economic strengths and broader competitiveness. Build it, and they often do not come. There are very few examples of new sports stadiums or art galleries that, by themselves, have turned their city around.
2. That doesn't mean new transport infrastructure or housing are always the wrong thing to do. When your city or a particular is already at full capacity, they can help unlock growth. If you have a deprived area right in the midst of a more successful neighbour, redeveloping it is likely to be highly effective.
3. It is hard to force your city to become a world leader in a completely new sector from the top down. Worldwide, many local areas have tried and failed to become leaders in renewable energy.

4. Cities can, however, do a lot to help nascent sectors have emerged organically to grow faster - and remove regulatory or other barriers in the way. If you find your city has a 'minimum viable industry', you can do a lot to help it scale.
5. While incentives for companies might encourage them to choose you over a near rival, they are rarely enough on their own. Amazon chose Virginia because of skills, not taxes. The pay-off from incentives is often unclear - and when they go, the company sometimes goes too.
6. Increasingly, cities that are thriving have 'innovation' strength - they have ideas and very advanced skills. Cities in advanced economies are unlikely to compete on lower costs alone. These strengths can be in manufacturing, but the higher up the value chain you go the better protected you are. As you know, diversity helps.
7. Culture is unlikely to be sufficient for economic generation, but it might be necessary. It is hard to know what minimum level of 'niceness' your city needs to achieve to attract skilled professionals - but almost every case study you look at includes some element of this. While you should be wary of big moonshot investments, it is worth checking whether outsiders think your area is a good place to live in.

Windsor's Economic Strengths and Weaknesses	
Sectors & Clusters	<ul style="list-style-type: none"> + Windsor remains one of Canada's most important manufacturing centres for cars, and the city is working to become a centre for automotibility. Leading manufacturers in other fields (like Jamieson) have made their home in Windsor. + The city and surroundings has strong tourism assets, with diverse attractions including gaming, food and drink, outdoors and culture - Over the last twenty years, auto production in Ontario has been shifting to lower cost locations in Mexico and the US South. - The automobile industry looks set to suffer significant disruption in the next decades with the rise of electric and self-driving vehicles. It is not clear how well Windsor is currently set up culturally or in its research and skills base to take advantage of these trends. - Unionised labour with high costs; and other higher costs (such as electricity) can deter investment. - There is no global R&D strength in or near Windsor
People & Culture	<ul style="list-style-type: none"> + Windsor's population continues to climb, suggesting the area has appeal to local and international migrants. + The University of Windsor is academically strong - albeit with significant competition in the rest of Ontario. + The area has a history of high skilled manufacturers in the tool and die industry. - The share of graduates in the Windsor labour market (25.2%), remains below the national average (28.5%). By urban area, Windsor has the 15th highest population,

	<p>but only the 41st highest share of graduates. The city continues to see a net loss of graduate talent.</p> <ul style="list-style-type: none"> - The University of Windsor is stronger in teaching than research, and it has not built up sufficient strength in automotive research. - Many of our interviews complained about a lack of amenities for young graduates, with Detroit seen as significantly more culturally appealing.
<p>Agglomeration</p>	<ul style="list-style-type: none"> + The city is located next to one of the most important manufacturing centres in the US in Detroit. There is already significant collaboration between companies on both sides of the border, and potential for further economies of scale between the two cities. + Affordability of housing is often mentioned as a key strength (though presumably if Windsor began to grow faster economically, and did not keep pace with housing supply, this would change). + The new bridge will allow more rapid access into Detroit and the rest of Michigan - Windsor is too distant to form an effective economic agglomeration with other major cities in Ontario, and public transport links between them are weak. Windsor is a very car-centred city. - This means that Windsor is dependent on Detroit for agglomeration - a reviving city, but one with major risks, and with border issues. - While rental prices in Windsor are among the lowest in Ontario, the absolute level of vacancies remains low.
<p>Competitiveness</p>	<ul style="list-style-type: none"> + Windsor remains a cost competitive location for businesses. In 2016, KPMG estimated a cost index of 84.3 for Windsor-Essex, compared to a benchmark average of 100 for the US. + Internationally, Windsor benefits from Canada's fundamentals. While it has been moderately sliding in recent years, Canada remains highly competitive both for business taxes and more broadly. - While it has been catching up in recent years, GDP per capita remains around at around three quarters of the national average, suggesting relatively low productivity. - Local government in Windsor doesn't have the ability to match US economic incentives. - Some interviews have suggested that Windsor lacks a strong entrepreneurial base and culture (but we have not yet put numbers on this).

Regenerating Industrial Cities

Many of the most famous industrial cities - Manchester, Detroit, Lille - only first grew as major cities on the back of a specific industry. On the eve of the Industrial Revolution in 1700, London was already a metropolis containing 10% of England's population - whereas Birmingham was still a small town of 15,000 (0.3%) and Manchester just 10,000 (0.2%). Before the arrival of the car industry at the beginning of the twentieth century, Windsor itself was a small town with a population in 1901 of just 12,000.

Their reliance on a specific sector left many industry cities very vulnerable to any long term downturn in that industry, whether from technological change, changed consumer tastes or increased global competition. From the 1970s on, industrial cities began to fall behind their global peers with more diverse sector mixes.

In response, national and local governments have experimented with many policies aimed at improving the competitiveness of struggling areas, and helping them develop new specialisms.

The success of these policies has been, at best, mixed. There is no obvious policy silver bullet that is guaranteed to turn an area around, regardless of context or other fundamentals. For almost any given regeneration policy, it is possible to find many examples of it failing to produce any positive economic effect. Some urban economists have gone so far as to argue that "traditional policies aimed at narrowing spatial disparities by turning around declining places have largely proved to be depressingly ineffective."²

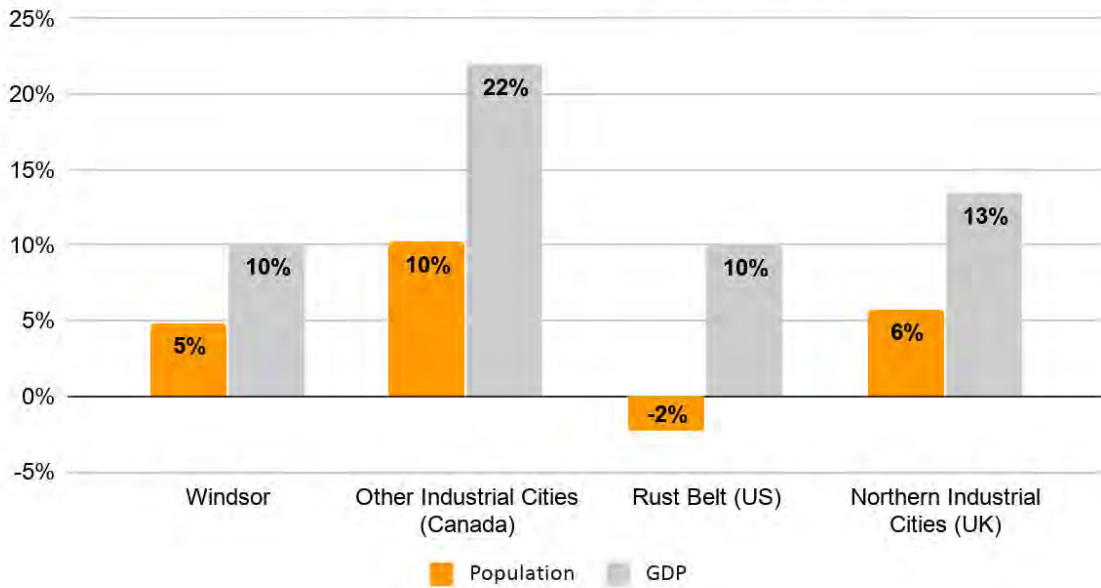
This is too pessimistic. It is true that the reasons for cities specialising in one industry is often near random, and impossible for policy makers to predict. A not insignificant reason why Silicon Valley is located in California is that William Shockley, the inventor of the transistor, moved there to be close to a sick mother. It is unclear whether Seattle would now be a thriving software hub, home town to Microsoft and Amazon, if Bill Gates' great-grandfather had not moved to the cities in the 1880s, long before the invention of the computer.

While policy makers cannot perfectly predict the future, they can lay the groundwork and make policy bets to put their cities in a good position to thrive in future. Instead of following the same playbook for every city, this requires thinking how to utilise a city's unique historical and geographical advantages, while staying open to new opportunities that might emerge.

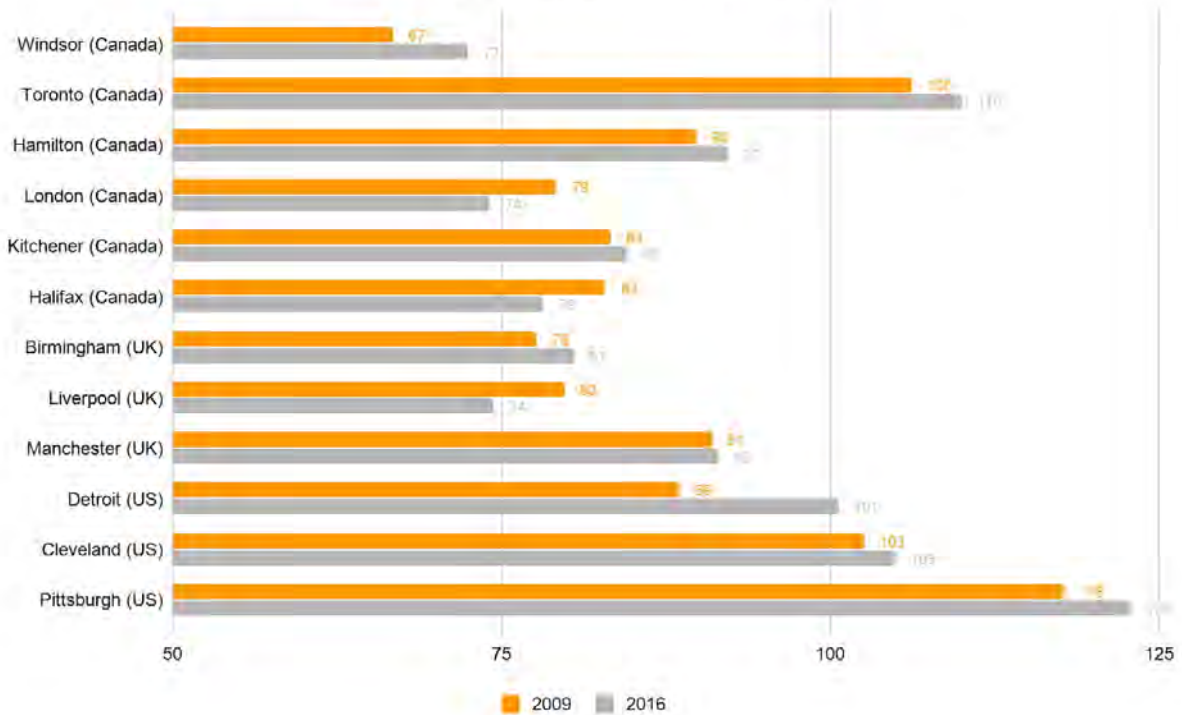
Windsor enjoys several fundamental economic advantages: a location on the border, a strong manufacturing legacy, and a growing population. This puts it in a better position than many cities in the US rust belt. While its GDP per capita remains significantly below the national average, the data suggests that it had been catching up - which is not true for every post industrial city.

² *Urban Economics and Urban Policy*, Paul C. Cheshire, Max Nathan and Henry G. Overman, 2014

Ten Year Performance (2008-2018)



GDP per capita (% national average)



In the second half of this report, we look at multiple examples of cities that have managed to use a combination of the tools we explore here to successfully regenerate their city, such as:

- Pittsburgh built off an emerging robotics cluster with long term investments in R&D, cleaning up their waterfront and new business initiatives.
- Bilbao combined a flagship cultural investment in the new Guggenheim Museum, with large-scale transport investment, brownfield revitalisation and new technology parks.
- Coventry has helped future proof its car industry through public-private partnerships in research, and the opening of a new dedicated UK Battery Industrialisation Centre.

Toolkit

Strategy	Summary	Potential Impact	Reliability	Quality of Evidence
Sectors				
Target particular sectors or clusters	Many post-industrial cities have sought to develop new industries. The most successful examples often have built on organic developments in their local market, rather than trying to change the structure of their economy from the top down.	HIGH	MODERATE	MODERATE
Support Innovation	There is empirical evidence that support for innovation can boost R&D at a local level, and many case studies of public research demonstrate it providing an important complement to corporate research in the development of new sectors.	MODERATE	HIGH	MODERATE
Utilise Retail-Led Regeneration	In principle, retail-led regeneration can both encourage greater inbound spending and improve local amenity value - but there is little systematic evidence on their overall impact.	MODERATE	MODERATE	LOW
People & Culture				
Improve Cultural Infrastructure	Improving cultural amenities can be a powerful tool in revitalising the image of a city, but there is less clear evidence that it is sufficient on its own to turn around a declining city.	HIGH	LOW	HIGH
Revitalise Brownfields & Urban Spaces	Brownfield regeneration is often effective at improving local property prices. There is less clear evidence about its long term impact on productivity or jobs.	LOW	HIGH	HIGH
Invest in Higher Education	Cities with a higher share of university educated workers see higher wages for all residents - not just graduates - while the spillover effects from university research can help seed external companies and industries	MODERATE	LOW	HIGH

Agglomeration				
Invest in transport links	Without sustained transport investment, modern cities would have found it impossible to grow. That said, many transport investments do not end up proving good value for money.	HIGH	MODERATE	HIGH
Encourage Businesses to Relocate with Enterprise and Special Economic Zones	While enterprise zones can be highly powerful, they are most likely to be effective when they can help accelerate pre-existing geographic or other economic advantages.	HIGH	MODERATE	HIGH
Encourage High Skilled Immigration	Many of the most successful cities worldwide depend on high skilled immigrants, who are disproportionately likely to start new companies and create jobs.	HIGH	MODERATE	MODERATE
Competitiveness				
Provide Access to Finance	Improving access to finance and other forms of business support can help credit-constrained small businesses - but there is much less evidence of wider spillover effects.	LOW	HIGH	MODERATE
Support Training and Employment	Many post-industrial cities have attempted to revitalise their economies by growing alternative sectors and diversifying their economies. This allows residents to have a variety of employment opportunities.	MODERATE	MODERATE	MODERATE

Sectors & Clusters



1: Target particular sectors or clusters

Many post-industrial cities have sought to develop new industries. The most successful examples often have built on organic developments in their local market, rather than trying to change the structure of their economy from the top down.

Why? By diversifying their economies, sectors can transition away from declining industries and become less vulnerable to sector specific shocks.

Potential Impact: **HIGH.** Developing new industries has historically transformed cities such as Seattle, Pittsburgh or Manchester.

Reliability: **MODERATE.** Many attempts to ‘pick winners’ have failed. Economists continue to debate whether diversification or specialisation is a more powerful strategy, with diversification generally achieved more by improving cross cutting competitiveness than targeting particular sectors.

Quality of Evidence: **MODERATE.** The academic evidence is unclear on the extent to which new sectors can be targeted by policy.

When does it work best? Sector specific policies are most effective when used to support and scale up emerging specialisms, rather than than develop entirely new industries.

Key Sources:

Title	Author(s)	Year	Summary
Capturing the next economy: Pittsburgh's rise as a global innovation city	Andes, S., Horowitz, M., Helwig, R., Katz, B	2017	This paper discusses Pittsburgh's transition from an economy driven by the steel industry to one diversified, with developments in education, manufacturing, technology, and health care. The paper makes investment recommendations for the government of Pittsburgh to enable the city's future economic growth.
Agglomeration, Clusters and Industrial Policy	Nathan, M., Overman, H.	2013	This literature review considers the strengths and weaknesses of arguments for policies to focus on particular places and target clusters of firms vs. arguments for policies to not discriminate or favor different areas or sectors. The authors conclude that clustering is a generally ineffective intervention.
Deconstructing Clusters: Chaotic Concept or Policy Panacea?	Martin, R., Sunley, P.	2001	This paper reviews the literature on 'cluster theory' as a tool for promoting national, regional and local competitiveness, innovation and growth. The authors conclude that policymakers should be more cautious when promoting clusters, as they do not always achieve the desired outcomes

Where it worked

Pittsburgh, USA

Pittsburgh was a city once dominated by the steel industry. In the 1980s, the city's steel industry collapsed as manufacturing moved overseas, resulting in the loss of over a hundred thousand jobs and the unemployment rate peaking at 18%.

Pittsburgh invested heavily in education and research and development (R&D) in an attempt to build human capital and diversify the economy after the fall of manufacturing. These investments in education and R&D were driven by the presence of a number of world-leading universities in the city, including Carnegie Mellon and University of Pittsburgh; in 2016, the region's per capita spending on R&D was 2.5x the national average. A number of companies, such as Google, Uber, Bayer and Duolingo, have moved to Pittsburgh to capitalise on these investments in innovation and human capital.

As a result of investments in education and R&D, three advanced industry clusters have emerged in manufacturing, technology and health care. According to Bloomberg's inaugural "Economic Diversity Index", Pennsylvania has the nation's most diverse state economy, driven in part by Pittsburgh's efforts to diversify.

Where it didn't

Italy

In Italy, Industrial Districts (ID) - clusters of small and medium-sized enterprises - make up a substantial part of the economy, especially in the northern and central parts of the country. Approximately 22% of Italian residents live within an industrial district and manufacturing employment within IDs accounts for over one-third of overall Italian employment. The government has encouraged and supported the growth of IDs through national policy actions, including legge 317/1991, which provided support schemes for IDs to be supplied through regional governments. There have also been a number of regional and local government policy initiatives, such as implementing 'centres' which offer technical assistance, innovation support, and provide a space for technology transfer between firms in IDs.

To assess the overall usefulness of these policies, one study analysed the impact of IDs on wages, employment probabilities, and vertical and horizontal worker mobility. The results of the analysis show that IDs improved the probability of being employed, however they did not lead to higher wages for workers compared to non-IDs. Secondly, they found negative return-to-education differentials - suggesting that clusters actually provide a disincentive to higher education for workers. Therefore, while there remain some clear benefits to IDs, there are also potential downsides and, as such, they should be implemented with caution. This evidence suggests that the growth of IDs does not automatically translate to better outcomes for workers.



2: Support Innovation

There is reasonable empirical evidence that support for innovation can boost R&D at a local level, and many case studies of public research demonstrate it providing an important complement to corporate research in the development of new sectors.

Why? Given its spillover effects, innovation and research are important public goods, and unlikely to be provided by the market on its own.

Potential Impact: **MODERATE.** Policy tools targeted at innovation – such as grants and subsidised loans for R&D, tax credits, and encouraging collaboration and networking – can help generate employment, improve productivity and support economic growth, but are unlikely to be transformative on their own.

Reliability: **HIGH.** While there is some danger of crowding-out effects, these tools have a relatively strong record for effectiveness.

Quality of Evidence: **MODERATE.** There is a strong evidence base showing innovation policy can support research spending at the national level, but much less evidence over the long term effect at a local level, or to what extent this feeds through into innovation.

When does it work best? There is little strong evidence on how to best design these policies to benefit the local rather than national area. However, it is likely that will be more effective in areas with pre-existing research strengths.

Key sources:

Title	Author(s)	Year	Summary
Evidence Review 9: Innovation: grants loans and subsidies	What Works Centre for Local Economic Growth	2015	This paper analyses 42 impact evaluations on the outcomes of innovation subsidies, grants and loans on R&D expenditure, innovation and economic outcomes. The authors found that half of the evaluations reviewed found positive effects.
How Innovation Agencies Work: International lessons to inspire and inform national strategies	Glennie, A., Bound, K.	2016	This paper investigates what best practice looks like in terms of designing and running an innovation agency and what mix of policies and programmes are most effective in a given national context. To do this, the authors reviewed ten different innovation agencies across Austria, Brazil, Chile, Finland, Israel, Sweden, Switzerland, Taiwan, the UK, and the US.
Innovation Centres Impact Case Study	PriceWaterhouseCooper	2008	This report was prepared for the UK's Economic and Social Research Council (ESRC) investigating the impacts of the Council's £13 million long-term investments in three Innovation Centres. The authors found that the Centres enhanced students' skill base through education and training, and students have been able to realise the value of these skills through higher earnings in the labour market. Further, they found that the Centres had a wider contribution to both the public and private sectors through their research.

Where it worked

Emilia-Romagna, Italy

In 2003, the government of Emilia-Romagna introduced the "Regional Program for Industrial Research, Innovation and Technological Transfer." The program aims to support industrial research and innovation by local firms in an attempt to help improve their competitiveness. The program was designed to subsidise innovation projects through grants, which covered up to 50% of the cost of the project. Several different types of projects were eligible for the subsidy, including costs for purchasing machinery, software, patents and licenses, hiring researchers and consultants, using laboratories, and conducting feasibility studies. Overall, the government gave out €93 million in grants through the programme (or .1% of the regional GDP).

An assessment of the program found that although the program did not have a significant impact on large firms, it was effective at triggering substantial investment in innovation in small firms. The authors theorise that this result could be due to smaller firms facing having more difficulty in accessing capital than larger firms. Ultimately, they conclude that the

program was effective in generating investment in innovation, thereby achieving the policy goals.

Where it didn't

Piedmont region, Italy

Between 2000–2006 the regional government of Piedmont, Italy implemented the DOCUP programme (*Documento Unico di Programmazione*). Two important features of the programme were: 1. providing subsidized loans for firms investing in innovative equipment, machinery and plants, and; 2. Providing grants to firms investing in R&D or high tech projects. The programme aimed to drive innovation in small and medium-sized enterprises in targeted areas. One goal of the program was that investments in innovation would make the subsidised firms more efficient and profitable, thus driving economic growth in the region.

An analysis of the programme found that participation in the programme led to higher levels of fixed assets within the firms, however there was no evidence of any long-term impact on firm profitability. This suggests that the subsidised innovation did not actually led to improved firm performance or wider economic outcomes.



3: Utilise Retail-Led Regeneration

In principle, retail-led regeneration can both encourage greater inbound spending and improve local amenity value - but there is little systematic evidence on their overall impact.

Why? By attracting retail investment in their city centres through planning policies, retail-led regeneration can be an important factor in revitalising communities by providing jobs, promoting economic growth and creating attractive places to increase traffic in an area.

Potential Impact: **MODERATE.** While these policies can contribute to regeneration and support economic growth, unless the number of inward visitors can be increased, they risk redistributing rather than increase spending.

Reliability: **MODERATE.** There is mixed evidence on these schemes' effectiveness.

Quality of Evidence: **LOW.** While there is a decent number of case studies on this topic, larger scale literature reviews and meta analyses are missing.

When does it work best? Retail-led regeneration works best for smaller urban areas in close proximity to larger agglomerations - giving them a large target market to attract.

Key sources:

Title	Author(s)	Year	Summary
Retail-led regeneration: Why it matters to our communities	Claxton, R, Siora, G.	2008	This study evaluates the community and social impacts of retail-led regeneration projects to draw lessons for future developments. The authors analyse five case studies and find that retail-led regeneration is contributing substantially and distinctively to improving communities by providing jobs, promoting economic growth and creating attractive places to draw visitors into an area.
Progress in retail led regeneration: Implications for decision-makers	Instone, P., Roberts, G.	2006	This article analyses retail trends over time and describes how the location and characteristics of retail provision have created disadvantages for certain sections of society. The authors provide a critique of retail-led regeneration schemes and assess whether the schemes exacerbate the problems in weak local markets.
Lessons from good and bad practices in retail-led urban regeneration projects in the Republic of Korea	Kim, H., Jang, Y.	2017	This study compares both successful and unsuccessful case studies of retail-led regeneration projects in order to draw out lessons for the future.

Where it worked

Seaham and Murton, England

Seaham and Murton was historically a coal-mining region, which in recent decades has suffered economic decline along with the closure of mines in the region. The region suffered from long-term illnesses, low levels of economic activity, and a declining population. In 1991 the East Durham Programme for Action was created and tasked with leading the regeneration of the area.

In 2000, Dalton Park was approved for construction as it was in line with the Government's policies for regeneration of the area. It was the first major retail investment in the area. Dalton Park attracted retailers who had not been introduced to the area yet, including Adidas, Nike Factory, and Levi's. Some of the key impacts of the development have been: reducing unemployment through employing 600-800 people annually, 85% of which are locals; providing skills training to students through work experience opportunities; transforming a blighted industrial landscape into a cleaner and safer environment; and improving the

neighbourhoods sense of pride and place. It is worth noting that while Dalton Park has driven employment gains in the area, they have been mostly low-skill retail jobs.

Where it didn't

Lisbon, Portugal

The government introduced the Baixa Pombalina Procom project in an attempt to re-centralise the Baixa neighbourhood of Lisbon as the main retail destination of the city and revitalise the neighbourhood. The project supported 73 establishments in the area through financial investments and incentives. More than €6 million was invested in total aimed at modernising these retail establishments. However, according to a study interviewing business owners in the area, the majority of modernisation interventions were already in place and this money ended up simply being a substitution of private investment for public without any visible advantage.

The study also found that only 37 establishments of the original 73 that took part in the program remained in business at the end of 2013, less than two decades since the inception of the program. Further, they found that the program did not increase the retail viability in the area, and the number of vacant stores was actually higher after the project than before. Ultimately, the authors could not find any evidence of the area experiencing a positive evolution: it did not increase the population levels in the area and it did not increase the number of retail establishments in the long-run.

People & Culture



4: Improve Cultural Infrastructure

Improving cultural amenities can be a powerful tool in revitalising the image of a city, but there is less clear evidence that it is sufficient on its own to turn around a declining city.

Why? Building new cultural assets can make cities more attractive locations for skilled mobile workers, encourage tourism and boost civic pride.

Potential Impact: **HIGH.** There are multiple case studies of cities using culture to help revitalise their image

Reliability: **LOW.** Systematic reviews often find small or zero impact from new sports or cultural amenities.

Quality of Evidence: **HIGH.** Following Florida (2002), there has been a significant amount of research on this topic.

When does it work best? By its very nature, the success of any flagship cultural initiative is very hard to predict ahead of time. Smaller projects to improve quality of life are easier, but work best as a complement to other policies.

Key Sources:

Title	Author(s)	Year	Summary
Culture-led neighbourhood transformations beyond the revitalisation/gentrification dichotomy	Gainza, X.	2017	This study explores the changes that have occurred in San Francisco, a working-class neighbourhood of Bilbao, where the attraction of cultural industries has been used to revitalise the area and change the city image.
The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life.	Florida, R.L.	2002	This study provides an economic argument for investments in culture, as it attracts creative people into the city. The author suggests that increasingly economies are built on "creativity" and around the "creative class." Therefore, attracting this class of residents may have powerful economic consequences for the city.
Evidence Review 3: Sports and Culture	What Works Centre for Local Economic Growth	2016	This paper analyses 36 impact evaluations of sport and culture projects from across the UK and other OECD countries. Overall, the evidence suggests that the overall economic effects on local economies are insignificant and often zero. The results do show that these projects can, however, have a small positive impact on property prices.

Where it worked

Bilbao, Spain

Bilbao was historically a working-class industrial city specialising in steel and shipbuilding. In the 1980's, the city saw economic and social decline as many important industries closed due to their inability to compete on a global level.

The local government began investing in 'cultural clusters' in the 1990's, starting with building a rock concert hall and an art school. In subsequent years the government provided direct support for cultural entrepreneurs and subsidies to firms in the leisure, art, culture, fashion and technological industries. A further flagship project was building the Guggenheim Bilbao Museum, which helped to attract creative professionals to the city. As a result of these investments, the physical conditions of the city have been improved, the neighbourhood image has been changed and an influx of tourists have been attracted to visit the city. Further,

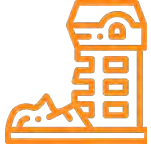
there has not been any evidence of increasing housing costs, which indicates that these policies have not increased inequality by driving lower-income residents out of the city.

Where it didn't

USA

College football is among the most popular spectator sports in the U.S., with total live attendance more than doubling that of the National Football League, the National Basketball Association or the National Hockey League. The popularity of these games has caused some state and local governments to invest large sums of money in stadiums - for example, 55% of the University of Minnesota's \$288 million new football stadium was paid for by public funds. The rationale behind policies supporting college football is that large crowds attending the game will spend money in the local economy and drive economic growth in the community.

An empirical study looking at the economic impact of college football on local economies finds no evidence that the games contribute positively to the local economy. The study looks at 63 metropolitan areas that hosted big-time college football programs between 1970-2004 and found that these programs had no discernable impact on either employment or personal income in the cities where teams play. It suggests that while the games may provide positive impacts for the university (in terms of revenue streams and boosting the image), these benefits do not seem to spill out into the wider community.



5: Revitalise Brownfields & Urban Spaces

Brownfield regeneration is often effective at improving local property prices. There is less clear evidence about its long term impact on productivity or jobs.

Why? Many post-industrialised areas have vacant land previously used for commercial or industrial purposes, contaminated with hazardous materials, making them unattractive to developers.

Potential Impact: **LOW.** Brownfield revitalisation can have significant impacts on local property prices, but there is much less evidence of long term effects – and concerns that it can often lead to gentrification, with the original residents driven out.

Reliability: **HIGH.** Brownfield revitalisation has a relatively consistent positive impact on property prices.

Quality of Evidence: **HIGH.** There is a significant body of research on the impact of brownfield development programs, including multiple meta-analyses.

When does it work best? Brownfield regeneration works best as a complement to other policies that are targeting underlying competitiveness or developing sector strengths.

Key Sources:

Title	Author(s)	Year	Summary
Evidence Review 5: Estate Renewal	What Works Centre for Local Economic Growth	2015	This report reviews 21 impact evaluations of estate renewal projects on local economic growth. The report finds that while the projects tend to have a positive impact on property prices, their wider impact on local economies (in terms of employment, wages or deprivation) tend to be small or even non-existent.
Employment Effects of Brownfield Redevelopment: What Do We Know From the Literature?	Howland, M.	2007	This literature review analysed the employment effects of brownfield redevelopment. The literature is clear: site cleanup alone is typically not enough to stimulate neighbourhood regeneration in the most distressed neighbourhoods. There are tradeoffs between financial feasibility and tackling the most contaminated sites in the most distressed neighbourhoods, and the redevelopment in these neighbourhoods generally required large government subsidies. Apparent successes involve large scale plans that integrate site cleanup with wider community plans, the growing tendency to link jobs on brownfield sites to local residents, increasingly sophisticated subsidies and incentives, and the importance of design that integrates redevelopment with the existing neighbourhood.
Brownfield Redevelopment: Performance Evaluation.	Council for Urban Economic Development [Gilliland, E]	1999	This comprehensive study of brownfield revitalisation projects examined 107 projects completed through 1999. The study found that median public costs per job created were \$14,003 (well below the median salary of jobs created), and every public sector dollar invested leveraged an additional \$2.48 in private dollars. In short, brownfields provided good investment opportunities for governments.

Where it worked

Oklahoma's Brownfields Program

Around twenty years ago, the Department for Environmental Quality in Oklahoma introduced the Brownfields Program, which provides a path for private or government entities to investigate and clean up properties that may be contaminated with hazardous wastes. The program is funded federally with the goal of increasing local tax bases, facilitating job growth, preserving historic structures and improving public health.

As a result of the program, a number of high-value properties have been returned to productive use in both high-traffic metropolitan areas and rural zones. Analysis of the program shows that economic activity, employment, property values and taxes for the remediated properties and surrounding areas have increased. Further, by addressing the liability associated with actual or perceived contamination in the brownfield sites, the program reduced uncertainty for investors and attracted private investors and businesses to the area. The federal return on investment has been significant - for every \$1 the federal government spent, an estimated \$17.87 was returned in the form of federal income taxes.

Where it didn't

England's New Deal for Communities Program

Between 1998-2008 the New Deal for Communities (NDC) programme was implemented in 39 deprived areas across England in an attempt to regenerate deprived urban localities. The program amounted to £2 billion for the full 10 years, which allowed each area to receive approximately £50 million throughout the project. The 10-year strategies were aimed at reducing disadvantage across education, unemployment, health, crime, housing and the physical environment. A significant proportion of the money was therefore spent on renewing and rebuilding old infrastructure.

A baseline survey was deployed across all 39 localities at the beginning of the program and again in 2008. This makes it possible to assess the impact of the program within each locality and to compare the general trends across NDC localities with non-NDC localities. The results show that the investments in the NDC localities did not lead to better outcomes for residents compared to non-NDC localities for most variables. Specifically, the program seems to have had no impact on employment, sense of community, or education/skill level of the population.



6: Invest in Higher Education

Cities with a higher share of university educated workers see higher wages for all residents – not just graduates – while the spillover effects from university research can help seed external companies and industries.

Why? High skilled service, research and innovations jobs depend on a strong supply of graduates. Academic research can help encourage private sector investment, both through direct spinouts and by building a community of researchers.

Potential Impact: MODERATE. There is a strong correlation between local productivity and the number of university educated workers. Public research is an important complement for industry R&D in many sectors.

Reliability: LOW. Many cities with strong universities see the majority of students move away after graduation.

Quality of Evidence: HIGH. There is extensive qualitative and quantitative evidence on the importance of a highly skilled workforce.

When does it work best? Focussing on specific niches where a university has a pre-established specialism can help develop spillover firms – and create the jobs that attract graduates to stay. Expanding funding on research areas where a higher education institution is competent, but not world class, is less likely to have an impact.

Key Sources:

Title	Author(s)	Year	Summary
Study on Higher Education Institutions and Local Development	Bonaccorsi, A., Biancardi, D., Sanchez-Barrionuengo, M., Biagi, F.	2019	This report surveys the relevant literature for analysing the regional impact of higher education institutions. It considers a number of factors that impact the effectiveness of higher education institutions, including graduate retention, matching the competences of graduates and the demand of firms, quality of research, quality of education-work transition.
Knowledge spillovers, human capital and productivity	Chang, C.F., Wang, P., Liu, J.T.	2016	This article quantifies the impact of human capital spillovers on productivity gains in the manufacturing industry in Taiwan. They find that a 1 percent increase in the proportion of higher-educated employees will increase the productivity of plants in that city by approximately 0.93–1.15 percent. Further, the productivity increases are found to be greater for high-tech plants and for those located in cities with science parks. This indicates that human capital spillovers are not only present, but stronger under greater technology intensities
The Widening Local and Regional Development Impacts of the Modern Universities – A Tale of Two Cities (and North-South Perspectives)	Glasson, J.	2003	This article explores the role of UK modern universities (formerly known as the new universities, and previously polytechnics) in local and regional development. The article analyses direct and indirect employment and expenditure impacts, to effects on the local knowledge economy, and towards a wider contribution to sustainable development. This holistic view shows that the modern universities are making major contributions to the local and regional development agendas, with interesting regional variations resulting from their institutional and locational contexts.

Where it worked

Lancaster University, UK

In 2005, Lancaster University expanded its management school in order to increase its teaching and research activities, as well as increase engagements with the local business community. The cost of the expansion was £9.5 million, £5 million of which was paid for by Lancaster University and £4.5 million paid for by the regional government. This expansion allowed for an additional 300 postgraduate students to be taught each year and 56 additional staff members to be employed at the university. The rationale behind the government investment in the expansion was the possibility of stimulating productivity growth and improving the region's competitiveness both on a national and global level.

The expansion of Lancaster University Management School has had a significant impact on the development of the local economy, both through backward linkages (from local purchases by staff and students) and forward linkages (from the university's impact on the competitiveness of regional businesses). An impact evaluation suggests that the expansion increases the regional income by around £3.6 million per year, approximately one third of which is generated through increased engagement with local SMEs. The study concludes that the expansion is beneficial to regional economic development because it creates multiplier effects in the local economy through purchases from local suppliers and the increase in highly educated graduates and research activities increases the competitiveness of surrounding businesses.

Agglomeration



7: Invest in transport links

Without sustained transport investment, modern cities would have found it impossible to grow. That said, many transport investments do not end up proving good value for money.

Why? Improved transport links attract businesses, save time for workers, improve the quality of living and make it possible for a city to grow larger, boosting agglomeration effects.

Potential Impact: **HIGH.** Improved transport links are often essential for allowing a city to grow, while size and agglomeration effects have a well established positive correlation with productivity.

Reliability: **MODERATE.** While there is a strong theoretical case for investment in transport, the evidence base is more mixed, with many examples of white elephants or 'roads to nowhere.' There is stronger evidence for the economic impact of road projects than public transport.

Quality of evidence: **HIGH.** There is a vast amount of research on this topic, including case studies, literature reviews and meta-analyses.

When does it work best? Transport investment is most effective when used to ease constraints in areas with a visibly growing population, high congestion or rising property prices – rather than that done speculatively ahead of time. Small scale transport investment to unlock choke points can often be as or more effective than flagship, major projects.

Key sources:

Title	Author(s)	Year	Summary
The productivity of transport infrastructure investment: a meta-analysis of empirical evidence	Melo, P., Graham, D., Brage-Ardão, R.	2013	This meta-analysis of 33 studies found that the productivity effect of transport infrastructure is higher for roads compared to other types of transport (including airports, railways and ports) and productivity effects tend to be higher for the US than for European countries. They also found that there are lower impacts on the service industries compared to manufacturing and construction industries. Further, the effect of transport infrastructure on economic output appears stronger in the long term than the short and medium term.
Evidence Review 7: Transport	What works centre for local economic growth	2015	This meta-review of 29 transport impact evaluations from across the OECD shows mixed evidence on the effectiveness of using investment in transport to stimulate new economic activity. They concluded that transport can have a positive impact on the local economy, but its role in stimulating growth is not as clear-cut as assumed by many decision makers
Impacts of Transport Infrastructure on Productivity and Economic Growth: Recent Advances and Research Challenges	Deng, T.	2013	This study attributed the controversial results across different empirical studies looking at the effects of transport infrastructure on productivity and economic growth to ten causes (categorised in 3 groups): 1. Related to different contexts: research period, geographical scales, and a country's capability in enabling economic development, 2. Related to different phenomena being measured: different economic sectors, different modes of transport, different levels of quality infrastructure; and 3. Related to distinct ways of measuring a similar phenomenon: measures used to describe the dependent and explanatory variables, functional specification, and estimation method of the econometric model

Where it worked

Oregon, USA

Over the past two decades, Eugene, Oregon has been experiencing population growth, but the city lacks rail transit to easily connect residents with businesses, retailers, and shops in the city. The local government, in an attempt to improve the economic performance of the region and improve mobility in the city, introduced a Bus Rapid Transit (BRT) system, which began

operating in 2007. The aim of the bus system was to contain urban sprawl, encourage new business growth in the city centre, and reduce traffic congestion in the city.

Between 2004 and 2010, jobs located within a quarter mile of a station increased by approximately 10%, while jobs between a quarter and half mile away from a station stayed stagnant, and jobs further than a half mile away from a station fell by 5%. This suggests that the BRT system led to employment clusters around easy to access station locations. The employment effects also seem to differ by sector, with jobs in information, real estate, management, administration, education, and lodging/food increasing most significantly in the immediate radius of stations. Whereas arts, entertainment and recreation jobs decreased in these areas. This may be an indication that some sectors were able to outbid others for space close to BRT stations.

Where it didn't

Minnesota, USA

In the 1990s and early 2000s the state government in Minnesota invested \$120 million in major highway expansions, including Minnesota Trunk Highway 371, US Highway 71 and Trunk Highway 23. The purpose of the project was to improve access between towns and cities, reduce congestion and improve economic growth in the area.

An analysis of these road investments found that they did not lead to improvements in local employment and had no impact on private sector earnings in the area. Although a relationship was found between population growth and road network growth, causality ran in both directions, therefore indicating that investments in road infrastructure does not necessarily lead to an influx of new residents. The authors suggest that their findings weaken the argument that transport investment leads to economic development.



8: Encourage Businesses to Relocate with Enterprise and Special Economic Zones

While enterprise zones can be highly powerful, they are most likely to be effective when they can help accelerate pre-existing geographic or other economic advantages.

Why? By providing special zones with regulatory and tax relief, governments can encourage start-ups and new businesses to locate in an area, catalysing future growth.

Potential Impact: HIGH. In some noted cases - Shenzhen, Dubai, Canary Wharf - economic zones have proved transformative.

Reliability: MODERATE. The impact of special economic zones appears to be context dependent, with many appearing only to displace businesses from elsewhere..

Quality of Evidence: HIGH. There are several large scale literature reviews and empirical reviews.

When does it work best? Enterprise zones are most effective when used in areas with a promising economic geography - within or close to other agglomerations, or at a convenient trading crossroads.

Key sources:

Title	Author(s)	Year	Summary
Do Enterprise Zones have a Role to Play in Delivering a Place Based Industrial Strategy?	Hooton, C., Tyler, P.	2019	This literature review looks at the US and UK experiences with enterprise zones, and the extent to which these zones have generated additional economic activity. They find that zones can accelerate growth or mitigate decline, but not fundamentally alter an area's economic trajectory on their own. They also find the zone's performance is closely linked to the characteristics and trends of the area.
Evidence Review 10. Area Based Initiatives: Enterprise Zones	What Works Centre for Local Economic Growth	2016	This report presents findings from a systematic review of 58 impact evaluations of EU growth and cohesion policies, Enterprise Zones and other economic area based initiatives. They found that a little over half of the reviews found positive impacts on employment, half of the studies that consider the impact on poverty report positive effects, and half of the evaluations that consider wages report positive effects.
State Enterprise Zone Programs: Have They Worked?	Peters, A. H., Fisher, P. S.	2002	In this book, the authors evaluate 75 EZs located in 13 states to gain an understanding of the overall effectiveness of state enterprise zones. Their overall assessment of enterprise zones is negative: The incentives tend to favor capital rather than labor and appear to constitute a chaotic and unplanned industrial policy; incentives usually cause losses to the public purse; Zone incentives have only a minimal impact on new investment; enterprise zones do not improve the accessibility of employment to the disadvantaged.

Where it worked

Federal Empowerment Zone, US

The federal Empowerment Zone (EZ) program was implemented in 1993 as a series of tax incentives and block grants to encourage economic and social investment in the neediest urban and rural areas in the US. For example, for up to 10 years firms were eligible for a tax credit of up to 20% of the first \$15,000 in wages earned in that year by each employee who lived and worked in the community. Further, each EZ was eligible for \$100 million in grant funds that could be used on business assistance, infrastructure investment, training programs, youth services, and more. Local governments were invited to apply for an EZ, and they were ultimately awarded to six cities: Atlanta, Baltimore, Chicago, Detroit, New York City, and Philadelphia.

The EZs were found to generate employment (an increase of 4%) and reduce poverty (a decrease of 4.9%) in targeted communities. The evidence also suggests that much of these impacts were felt by lower residents in socioeconomic classes, and as a result the EZ areas avoided large-scale gentrification. These findings suggest that the EZ combination of tax credits and grants can effectively stimulate labour demand in areas with low participation rates.

Where it didn't

Enterprise Zones, UK

In 2012, the UK implemented a second round of Enterprise Zones, consisting of 24 zones introduced in areas of economic weakness and decaying infrastructure. The aim of the program was to encourage economic growth and revitalise these declining regions. There were two important aspects to the program designed to incentivise businesses: 1. Direct tax incentives and easier planning permissions, and 2. Local Enterprise Partnerships (LEPs), which allowed the zones to borrow against future business rate growth to afford upfront investments in infrastructure.

An impact assessment of the Enterprise Zones found that the number of jobs created in the first five years underperformed expectations: by 2017, they had only produced one-quarter of the jobs originally estimated by the Treasury. Further, at least one-third of the jobs created came from businesses relocating rather than new businesses. In addition, the nature of the jobs created were overwhelmingly low-skilled, which indicates that the zones have not been able to attract the high-skilled economic activity that could help to change the economic landscape of the areas in which they were placed.



9: Encourage High Skilled Immigration

Many of the most successful cities worldwide depend on high skilled immigrants, who are disproportionately likely to start new companies and create jobs.

Why? High skilled immigrants can help boost the human capital in an area, boosting the wages and productivity of native workers – and are disproportionately likely to start their own businesses.

Potential Impact: **HIGH.** The research shows that in terms of stabilising population growth and encouraging local business growth, immigration reform is a key regeneration policy. In cities across the Rust Belt, immigrants make up a disproportionate number of entrepreneurs – in Detroit, they represent 8% of the population but 17% of all business owners.

Reliability: **MODERATE.** Many cities only have a moderate ability to control their own immigration policy.

Quality of Evidence: **MODERATE.** There is a good amount of research on this topic, however it almost entirely focuses on the US, which may not be relevant for other places.

When does it work best? High-skilled immigration appears to be economically effective in most contexts. Ensuring adequate housing supply can help reduce political backlash.

Key sources:

Title	Author(s)	Year	Summary
New Americans and a New Direction: the Role of Immigrants in Reviving the Great Lakes Region	New American Economy	2017	The authors analyse the impact of immigrants on the Rust Belt region. They use data from seven states in the Great Lakes region to show that immigration has been, and will continue to be, key to regional recovery as immigrants bring talent, labour, entrepreneurial spirit and spending power to the region.
A Tale of Two Cities (and a Town): Immigrants in the Rust Belt.	Wainer, A.	2013	This article looks at the role of immigrants in revitalising Rust Belt communities. The authors show that immigration has slowed, and in some cases reversed, decades of population loss. Further, immigration reform has been a powerful tool for generating jobs and economic growth in these areas.
Cities Welcoming Immigrants: Local Strategies to Attract and Retain Immigrants in U.S. Metropolitan Areas	International Organization for Migration	2015	This paper outlines major immigration flows to U.S. cities since 1990 and addresses the various layers of governance that may impact the role of immigrants on urban growth and development. It also highlights lessons learned from U.S. gateway cities in attracting and retaining immigrants.

Where it worked

Rust Belt, USA

The Rust Belt in the Great Lakes region of the US was once home to a booming economy underpinned by a successful automobile industry. Since 2000, these areas have faced serious economic hardship as a significant number of jobs were lost due to automation and globalisation. Over the past two decades, these cities have fought to combat the population decline, job loss and economic decline caused by the loss of these industries in part by introducing immigration reform.

Research shows that in many of the Great Lakes regions following the economic decline of the early 2000s, immigrants have helped offset population decline, grow the local economy by opening new businesses, and increase the tax base and consumer spending. Immigrants accounted for half of the regional population growth between 2000 and 2015 and offset population decline in a number of cities – for example, Detroit would have otherwise shrunk by

200,000 people in that period. Immigrants also outperform the regional average in educational attainment – 29.2% of U.S.-born Great Lakes residents over 25 have at least a bachelor’s degree, vs. 35.3% of immigrants. Further, in 2015, immigrants made up 10% of entrepreneurs and 20% of the region’s Main Street business owners, employing 239,000 people between 2000–2015, even though they made up just 7.3% of the region’s population.

Competitiveness



10: Provide Access to Finance

Improving access to finance and other forms of business support can help credit-constrained small businesses – but there is much less evidence of wider spillover effects.

Why? Public loans, credit guarantees, and government subsidised loans can help credit constrained SMEs and start-ups grow.

Potential Impact: **LOW.** A review of 27 impact evaluations found that improving access to finance did not necessarily lead to improved firm performance or any wider economic outcomes.

Reliability: **HIGH.** Access to finance schemes tend to be effective at improving access to credit.

Quality of Evidence: **MODERATE.** While there is a significant amount of research on the financial theory that access to finance is a constraint to growth, there are few impact evaluations assessing individual case studies.

When does it work best? Business support, advice and signposting to other government services often shows as large an impact as access to finance – and is likely to be more cost effective.

Key sources:

Title	Author(s)	Year	Summary
Small and medium-size enterprises: Access to finance as a growth constraint	Beck, T., Demirgüç-Kunt, A.	2006	These authors find that small firms are disproportionately impacted by financing obstacles. Their results show that small firms' financing obstacles have almost twice the impact on annual growth than large firm's financing obstacles. They also find that financial and institutional development benefits small firms most and helps to overcome various constraints they face.
SMEs' growth under financing constraints and banking markets integration in the euro area	Moscalu, M., Girardone, C. & Calabrese, R.	2019	This article finds that financing constraints hamper SME growth, and further the effect is stronger for perceived, rather than actual, financing constraints. They also found that increased banking markets integration in the euro area fosters SMEs' growth.
Evidence Review 4: Access to Finance	What works centre for local economic growth	2016	This study considers 27 impact evaluations of policies improving access to finance. The authors find that 17 evaluations found positive impacts on at least one firm outcome (e.g. credit, employment, sales). Seven evaluations found mixed results (at best providing only weak evidence of positive effects, at worst a mix of positive and negative effects). Two evaluations found that the programme didn't work (had no effect) and one found that the programme might be harmful.

Where it worked

Korea

The Asian financial crisis from 1997–1998 had a drastic impact on SMEs in Korea. In 1998, 22,800 SMEs declared bankruptcy – more than double the yearly amount before the crisis. In the years following, SMEs struggled to regain their position in the economy due to decreased productivity and profitability, a slow down in demand, and difficulty obtaining credit. The proportion of SMEs making a loss continued to rise, reaching 21.3% in 2003.

As a result, the Korean government introduced credit guarantees as a policy instrument to support SMEs. The policy gave assurance to private banks and other financial institutions that any loans to SMEs would be paid back, thereby eliminating the risk and opening up credit options for SMEs.

An impact analysis compared the performance of SMEs who did not take advantage of the credit guarantee policy with those that did and found that the policy positively affected the growth of sales, employment, wage levels and the survival rate of firms.

Where it didn't

Italy

In 2008, a large Italian region introduced a partial credit guarantee created to improve SME's access to credit. The program was endowed with €20 million per year from a regional fund and guaranteed up to 80% of a bank's losses if a firm defaulted on its loan.

A study looking at the impact of this policy found that there were some positive effects for SMEs included in the program, for example, it was successful in getting SMEs access to long-term debt compared to those who did not participate. However, the study also found that participating SMEs had a higher probability of default one or two years after accessing the credit relative to other firms. Further, they did not find any evidence of "real outcomes", i.e. investments were only higher in the first year after the policy was introduced (no long-term impact) and there was no impact on trade debts, which was used as a proxy for the amount of business a firm is doing.

Therefore, it seems that while the policy did have some positive impacts, such as leading to a more balanced debt structure, it did not lead to significant improvements in firm performance and increased the likelihood of default.



II: Support Training and Employment

Many post-industrial cities have attempted to revitalise their economies by growing alternative sectors and diversifying their economies. This allows residents to have a variety of employment opportunities.

Why? Following the decline of major industries, post-industrial regions often face a number of labour market issues leading to high levels of unemployment.

Potential Impact: **MODERATE.** Training and employment programs often create a modest, positive impact on earning and employment. Successful programs often use a partnership-based approach with collaboration across the private sector, public sector, and universities.

Reliability: **MODERATE.** While these programs can help individual workers, they seem unlikely to transform the structure of a local labour market.

Quality of Evidence: **MODERATE.** There are a number of individual case studies in the literature, however it is lacking quality meta analyses and literature reviews.

When does it work best? These programs work best when targeting pockets of deprivation in wider areas where jobs and successful industries are within commuting range. They are less effective if the area is completely cut off from new tradable industries,

Key Sources:

Title	Author(s)	Year	Summary
Interventions to tackle the economic needs of deprived areas: Analysis of six policy case studies.	North, D., Syrett, S. Etherington, D. & Vickers, I.	2007	This study looks at 6 schemes to promote employment across the UK. They find that the success of regional policies to tackle unemployment levels in deprived areas is largely dependent on two factors: 1. Their ability to integrate economic and social objectives, and 2. Their ability to get key agencies to work effectively together to deliver common objectives and outputs.
Vocational education and the revitalisation of manufacturing in the United States.	Snell, D.	2017	This article considers the popular view that a strong manufacturing industry relies on an equally strong vocational, education and training system to provide necessary skills and training. The author analyses data from 3 U.S. cities and finds that “micro-skill ecosystems” – local networks involving secondary schools, community colleagues and key employers – are better suited to train people and meet the needs of local manufacturers than a national system.
Vocational Education, Manufacturing, and Income Distribution: International Evidence and Case Studies.	Aizenman, J. Jinjark, Y., Ngo, N., Noy, I.	2017	These authors use cross-country evidence to show that well-resourced and well-targeted vocational training are good long-term investments for up-skilling the workforce and helping employ workers whose jobs are disappearing and who have few future prospects.

Where it worked

Birmingham

In April 2005, 6,300 jobs were lost when MG Rover (MGR) closed down in Birmingham, UK. When the plant closed down there was an immediate government policy response worth £176 million – £50 million for retraining, £40 million for redundancy payments, a £24 million loan fund to help local businesses and a £41.6 million to prevent ex-MGE suppliers from going out of business. The goal of the policy was to help workers find new jobs, facilitate diversification in the supply chain and provide assistance to the wider community. Further, the Birmingham City Council set up a hotline and a website for ex-MGR workers to access advice and information, provided travel subsidies and free training for partners of ex-MGR workers.

The retraining program did not entirely eliminate the labour market struggle – 8 months after the closure 29% of ex-MGR employees were still unemployed; but by 2008, nearly 90% were in

some form of employment. This suggests that in the medium to long term, it was effective in getting people back to work.

Where it didn't

Janesville, USA

In 2008, General Motors' Janesville Assembly Plant shut down, causing its nearly 3,000 employees to lose their jobs. The plant was a major contributor to the local economy - it spawned several local supplier companies and the wages paid to its thousands of workers were spent, at least in part, supporting local businesses. Therefore, the plant closure had far reaching effects for the local economy beyond simply the loss of income for its ex-employees.

Many ex-Janesville workers attended job retraining classes at the local Blackhawk Technical College. However, an analysis of these classes suggests they seemed to have no impact on increasing graduates' chance of employment. For ex-Janesville workers, the retraining classes actually made many people worse off in their job search compared to those who had not participated in retraining programs. There were two main reasons that this was the case: 1. It delayed the job search in an environment where jobs were scarce, and 2. It provided people with a very narrow set of skills for jobs that were often unavailable by the time they graduated the program.

City Case Studies



Pittsburgh, US

Pittsburgh is one of the most high-profile examples of rust belt regeneration. While some of its experience is hard to replicate, there are still important lessons to draw from its long-term approach and combination of different approaches.

Context

Throughout the 19th and 20th centuries, Pittsburgh had a thriving economy built on the iron and steel industry. Industrialists such as Andrew Carnegie and Charles Schwab ran some of the largest manufacturing plants and kept the city on the cutting edge of technology. By 1970, Pittsburgh produced approximately one-third of all US steel.³

The rise of globalisation in the 1980s led to a shift in global steel manufacturing from places like the US to less developed countries like China and India. By 1982 US steel production had dropped by more than half, severely impacting the steel mills on which Pittsburgh's economy was predicated.⁴ As workers lost their jobs, people fled the city by the thousands. Between 1970

³ Haller W (2005) Industrial restructuring and urban change in the pittsburgh region: developmental, ecological, and socioeconomic tradeoffs. *Ecol Soc* 10(1):13–42

⁴ Ghosh, S., Byahut, S. & Masilela, C. (2019) Metropolitan Regional Scale: Smart City Approaches in a Shrinking City in the America Rust Belt. Case of Pittsburgh Pennsylvania. In: *Smart Metropolitan Regional Development*, T.M. Vinod Kumar (ed.).

and 2000, the city lost 40% of its population and by 1983, unemployment reached 17.1%.⁵ The population loss and declining industry also led to a number of brownfield sites and derelict properties.⁶

Policy Initiatives

Investing in R&D/higher education

- One of the most impactful strategies that the government utilised when revitalising Pittsburgh was prioritising higher education and R&D. The city is home to over a dozen colleges and universities, including University of Pittsburgh and Carnegie Mellon which are world-class universities with strong medical, engineering and computer science programs. The universities have significant widespread economic impacts, and Carnegie Mellon alone produces a \$2.7 billion annual impact for the state.⁷ The presence of high-quality universities has attracted private sector businesses to the area, improving employment opportunities and overall economic growth.
- Prioritising R&D has continued into recent years; in 2016, Pittsburgh's per capita university R&D spending was nearly two and half times the national average. Thanks to years of prioritisation and investment, Pittsburgh's competitive advantage is now its high-skilled workers, world-class research institutions and technology-intense advanced manufacturing.⁸

Providing a good environment for businesses (especially in tech)

- Pittsburgh has attracted hundreds of new businesses to the city through targeted policies and initiatives. An example of such an initiative is Innovation Works, a technology centre offering a 20-week business development program for entrepreneurs. Innovation Works has successfully supported the development of a number of businesses, and in 2014 was ranked the sixth best accelerator in the country.⁹
- Another factor in the city's success was the collaboration between government, universities and the private sector. One example of this is the PGH Lab program, which connects local start-ups with municipal authorities and private sector organisations. Further, several universities have partnerships with private sector businesses and local incubators in the area. For example, Carnegie Mellon has more than 350 corporate partners, including Amazon, Apple, Disney, Facebook's Oculus, General Electric and

⁵ Rainwater, B. (2018) Here They Come: A Look At The Future Of Cities In The Internet Age. *Internet Association*. Available at: <https://internetassociation.org/publications/look-future-cities-internet-age/>

⁶ Perkins N (2007) A tale of two brownfield sites in Western Pennsylvania: making the best of times from the worst of times in Western Pennsylvania's steel valley. *Urban Aff* 34(3):503–532

⁷ Econsult Solutions (2017) Impact from Innovation: Carnegie Mellon University's Role as a Local and Global Economic Engine. Available at: <https://www.cmu.edu/news/stories/archives/2017/august/images/cmu-eis-report-2017.pdf>

⁸ Andres, S., Horowitz, M., Helwig, R., Katz, B. (2017) Capturing the next economy: Pittsburgh's rise as a global innovation city. Available at: https://www.brookings.edu/wp-content/uploads/2017/09/pittsburgh_full.pdf

⁹ Deloit, B. (2018) Pittsburgh is a glimmer of hope for cities managing industrial decline. *CityMetric*. Available at: <https://citymonitor.ai/economy/pittsburgh-glimmer-hope-cities-managing-industrial-decline-4290>

Google. According to representatives at Duolingo, the firm chooses to keep its headquarters in Pittsburgh rather than Silicon Valley, because of the “strong university pipelines, affordable living costs, great quality of life, and collaborative tech ecosystems.”¹⁰

Investing in culture

- The Pittsburgh Cultural Trust (PCT) was created in 1984 as a non-profit organisation with the goal of promoting economic and cultural development throughout the city. Since its creation, the PCT has restored and renovated a number of theatres and art galleries, as well as commissioned public art projects to be displayed throughout the city. Unlike other cities who have created single cultural centres (like the Lincoln Center in NYC or Kennedy Center in D.C.), Pittsburgh created an entire cultural district downtown.¹¹
- These investments have paid off both in terms of making the city a more beautiful place to live and visit, but also in adding monetary value to the properties in the area. Further, the investments in the cultural district have caused the downtown population to triple over the past decade.¹²

Revitalisation of Brownfields

- During the process of deindustrialisation, once productive and successful steel mills had become large vacant, decaying, and sometimes hazardous buildings littered throughout the city. Over the course of the 1990s and 2000s, the city aimed to transform these buildings into new office spaces, research centers, housing developments and more.
- The state government offered a number of financing programs to incentivise developers to target Brownfields including low interest loans, grants, and tax credits for jobs created.¹³ According to the Urban Redevelopment Authority, the Brownfield investments have created thousands of employment opportunities, raised the property values of buildings in the vicinity, and increased the amount of private investment in the area.¹⁴

Partnerships with community-based organisations

- At the beginning stages of Pittsburgh’s regeneration, the government took a “top-down” approach to planning and development, with the state and municipal government dictating the process to developers and local actors. However, around the

¹⁰ Doyle, P. (2015) An Innovation Case Study: Pittsburgh. *MIT Technology Review*. Available at: <https://www.technologyreview.com/2015/11/23/164978/an-innovation-case-study-pittsburgh/>

¹¹ Tierney, J. (2014) How the Arts Drove Pittsburgh’s Revitalization: the role of the Pittsburgh Cultural Trust, founded by a wealthy band of visionaries 30 years ago, is central - but hard to replicate. *The Atlantic*. Available at: <https://www.theatlantic.com/business/archive/2014/12/how-the-cultural-arts-drove-pittsburghs-revitalization/383627/>

¹² Ibid.

¹³ Bartsch, C. (2016) Analysis of Pennsylvania’s Brownfields Program. *The Brookings Institution Center on Urban and Metropolitan Policy*. Available at: <https://www.brookings.edu/wp-content/uploads/2016/07/Bartsch.pdf>

¹⁴ Urban Redevelopment Authority of Pittsburgh. Brownfield Projects. Available at: <https://www.ura.org/pages/brownfield-projects>

turn of the 21st century they altered their strategy to a “bottom-up” approach, relying on collaboration with community-based organisations and non-profits.¹⁵ This collaborative approach to planning recognised that including local actors in the process may lead to increased levels of community ownership and pride over the changes.¹⁶

Cleaning up & developing the waterfront

- In 1991, the Mayor of Pittsburgh mandated that all riverfront development be set back from the river to allow for a hike and bike trail to be constructed. In later years, the mayor delegated waterfront planning and development to a public-private partnership called the Riverlife Task Force. In the past two decades, Riverlife has redeveloped more than 80% of the 13-mile Three Rivers Park loop, bringing recreation, ecological restoration and economic opportunity back to the area.¹⁷
- An economic impact analysis found that since 2000, every dollar spent by Riverlife on the development (totaling \$12.5 million) of the waterfront leveraged \$11 additional dollars in private investment in riverfront projects (totaling \$130 million). This private sector investment has been a crucial piece of Pittsburgh’s growth, adding to the tax base, creating new jobs, boosting consumer spending, and increasing property values.¹⁸

Remaining Challenges

Although the city has made significant progress and has largely avoided the fate of other post-industrial areas like Detroit, there are still a number of challenges the city must overcome going forward.

Firstly, there is a stark difference between the economic performance of different neighbourhoods and lasting inequality between different demographics. The wealthy main tech and innovation neighbourhood, Oakland, is surrounded by neighbourhoods with some of the highest rates of poverty and long-term unemployment in the city. Further, between 2010-2015, black workers in Pittsburgh saw their median wages drop by 19.6% while white workers median wages grew by 8.1%.¹⁹ This has led to concerns that the city’s research and technical strengths only fuel a small portion of the region’s economy and leave many workers behind.

Secondly, although there has been progress in translating research and innovation into employment, significant gaps still remain. For example, Pittsburgh performs 225% above the national average in computer science research, but has 36% fewer jobs in software and 59%

¹⁵ Detrick, S. (1999) The post industrial revitalization of Pittsburgh: myths and evidence. *Community Development Journal*, 34(1), 4-12.

¹⁶ Beauregard, R., Lawless, P., Deitrick, S. (1992) Collaborative Strategies for Reindustrialization: Sheffield and Pittsburgh. *Economic Development Quarterly*.

¹⁷ ICIC (n.d) What Works: Revitalizing Pittsburgh Through the Riverfronts that Once Made the City Great. Available at: <https://icic.org/waterfronts/works-revitalizing-pittsburgh-riverfronts-made-city-great/>

¹⁸ Ibid.

¹⁹ Brookings (2017) Metro Monitor 2017 Dashboard. Available at: <https://www.brookings.edu/interactives/metro-monitor-2017-dashboard/>

fewer jobs in data processing. Therefore, more needs to be done to ensure that innovation inputs lead to actual economic outputs, such as employment and GDP.²⁰

Lessons

There are some parts of the Pittsburgh experience that are unique to the city and cannot be easily replicated, for example the legacy foundations from the Heinz, Mellon and Benedum philanthropies, which have funded much of the regeneration process.

Further, some factors that led to the growth of the technology sector were unplanned. For example, the Three Mile Island power plant accident sparked researchers to create a robot that could enter and explore a radioactive area unsafe for humans. The context required the robot to be built on wheels so it could travel and explore the location alone, this was an innovative technique in robotics which at the time were typically built to operate from a fixed position. As a result, more robotics companies flocked to Pittsburgh to build on the technology and innovation occurring there.²¹

However, it is possible to draw some lessons from Pittsburgh's journey, such as:

1. Large scale redevelopment projects take a long time & require long-term commitments and strong leadership. Pittsburgh's regeneration began in the 1980s and is still an ongoing journey to this day.
2. Investing in culture and art are key to reviving the city image, improving its livability, and attracting tourists.
3. Regeneration requires collaboration and partnerships between multiple actors, including government, private sector, and universities. These collaborations allow different sectors to learn from one another and share resources, talent and ideas.
4. Investing in educating and training the workforce can attract clusters of businesses to the city and drive economic growth.

²⁰ Andes, S., et al. (2017) Capturing the next economy: Pittsburgh's rise as a global innovation city.

²¹ Lovering, D. (2009) Radioactive Robot: The Machines that Cleaned up Three Mile Island. *Scientific American*. Available at: <https://www.scientificamerican.com/article/three-mile-island-robots/>



Dayton, US

Dayton is a classic midwestern Rustbelt city which, while it has shown recent signs of growth, has so far failed to transform itself into a high-innovation economy.

Context

Dayton is a classic Midwestern Rustbelt city. It lost almost half its population from the 1960s to 2010 and around a third of its residents live in poverty.²² In the 1920s, Dayton was a highly diverse economy with over 50 commodity types produced; however, it later consolidated substantially (including under General Motors) which made its economy more vulnerable. It suffered from general manufacturing decline and racial tensions that led to a declining population from the 1960s. Another factor in the city's decline was a lack of human capital – the city had very low educational attainment, with 49% percent of adults lacking a high school degree.²³

Many other Ohio cities experienced population decline at the same time: as an in-depth report finds, “[Cleveland, Cincinnati, Toledo and Akron] all had large manufacturing sectors, experienced extensive southern in-migration, and were bisected by interstate highways.”²⁴ Although the population was declining, Dayton's per capita expenditure was rising, in part due to the government's early acceptance of public-sector collective bargaining. A declining

²² U.S.Census Bureau (2019) *QuickFacts: Dayton city, Ohio*. Retrieved from: <https://www.census.gov/quickfacts/daytoncityohio>

²³ Millsap, A. (2018) A case study of Dayton Ohio, *George Mason University*. Retrieved from: <https://www.mercatus.org/system/files/millsap-dayton-ohio-case-study-mr-mercatus-v4.pdf>

²⁴ *Ibid.*

population and increasing costs left the government in a precarious fiscal situation.²⁵ In recent years, Dayton continues to struggle with employment – in 2008, a nearby GM plant closed, eliminating 5,000 jobs with it.²⁶

Dayton now – in contrast to its performance in the early 20th century – is a low innovation economy. However, there are some early but encouraging signs that Dayton is changing its strategy.

Policy Initiatives

Traditional initiatives

- Dayton pursued a classic ‘sports driven’ strategy in the late 1990s. These are generally unsuccessful, and it seems that is also true in Dayton. It has driven some development near the stadium, but not led to any major increase in broader company investment or reversed the decline in population growth.²⁷
- The city did find new manufacturing – the GM plant that closed in 2008 was replaced by a Chinese-owned auto glass company. It provides more than 1,500 jobs, but at relatively low wages.²⁸

New approach

- Dayton has become famous for its urban spaces and parks and has been dubbed the ‘midwest outdoor adventure capital’.²⁹ The city’s public park system has an outdoor entertainment venue called RiverScape MetroPark which attracts more than 400,000 visitors each year. In 2018, the total economic impact of tourism in Dayton and Montgomery County reached \$1.94bn.³⁰
- More recently, Dayton has shown an impressive focus of development initiatives building off their existing aerospace strength.³¹ Their ‘tech town’³² development initially attracted aerospace and defence companies but has pivoted into healthcare, which is

²⁵ Ibid.

²⁶ CNN (2008) *GM plant’s closing like death knell in Dayton*. Retrieved from: <https://edition.cnn.com/2008/US/11/19/ohio.plant.closing/index.html>

²⁷ A range of studies, as we discuss elsewhere, have found no effect – or even a negative effect – from sports investments. An exception to this rule is Indianapolis. (e.g. Baade and Dye “The Impact of Stadium and Professional Sports on Metropolitan Area Development,”; Siegfried and Zimbalist, “The Economics of Sports Facilities and Their Communities,” *Journal of Economic Perspectives* 14, no. 3 (2000); Dennis Coates, “Growth Effects of Sports Franchises, Stadiums, and Arenas: 15 Years Later” Mercatus Center at George Mason University, Arlington, VA, September 2015).

²⁸ Scheiber, N., Bradsher, K. (2017) Culture Clash at a Chinese-Owned Plant in Ohio. *The New York Times*. Retrieved from: <https://www.nytimes.com/2017/06/10/business/economy/ohio-factory-jobs-china.html>

²⁹ Starr, S. (n.y.) Visit America’s newest adventure capital. *National Geographic*. Retrieved from: <https://www.nationalgeographic.com/travel/destinations/north-america/united-states/ohio/dayton-rust-belt-revitalization-new-mecca-urban-parks/>

³⁰ Visit Montgomery (2020) *Fiscal year 2019: Community report on tourism*. Retrieved from: <https://visitmontgomery.com/wp-content/uploads/2020/02/Community-Report-On-Tourism-FY2019-Web.pdf>

³¹ Dayton Ohio (2020) *Aerospace R&D*. Retrieved from: <https://www.daytonohio.gov/737/Aerospace-RD>

³² Tech Town (2020) *This is Tech Town*. Retrieved from: <https://daytontechtown.com/about-tech-town/>

a regional strength; their university engineering program is now ranked within the top 50 in the nation.³³ It has also worked to make itself attractive to migrants.³⁴

- Dayton has pursued downtown regeneration very heavily and is using state tax credits and other incentives to encourage new businesses (both of which, we should flag, are quite a risky strategy)
- Downtown Dayton's largest building, Stratacache Tower, is set to have multiple redevelopments in 2020 and is being driven by a successful local tech entrepreneur.³⁵ Another downtown area, the Fire Blocks District, is being redeveloped for \$100m.³⁶ The Arcade - a well-known block of shops - is being taken over by the university.³⁷
- Importantly, the city seems to be diversifying. Two local major health care networks - Premier Health Partners and Kettering Medical Network - employ 15,300 people.³⁸ It has also seen very substantial growth in technology jobs, with 29 percent growth in tech sector employment over the past five years.³⁹
- All of this is anchored by a "Greater Downtown Dayton Plan."⁴⁰ The plan was generated very significantly by the community, and central to the plan is creating aerospace strength off the existing air base. This is also central to Dayton's big push to become the hub for the new U.S space force.

Lessons

- Dayton is still an underperforming city. It has major issues with poverty and addiction. As a city, collectively, it is telling an impressive story to the outside world, and is working hard to regenerate - but it is very early to say whether it will succeed.
- Dayton's park strategy is interesting - in that it has created something noteworthy and a regional, if not national, draw. That seems to have generated substantial tourism revenue.
- Their strategy has focused on their strengths, and where they can diversify. This has possibly been made easier by the total destruction of their unionised jobs.

³³ U.S. News (2020) University of Dayton. Retrieved from: <https://www.usnews.com/best-graduate-schools/top-engineering-schools/university-of-dayton-02143>

³⁴ Welcome Dayton (2020) About. Retrieved from: <http://www.welcomedayton.org/about/>

³⁵ Bush, J. (2020) Downtown Dayton's largest office tower sees upgrades, interest from high-profile organization. *Dayton Business Journal*. Retrieved from: <https://www.bizjournals.com/dayton/news/2020/06/22/downtown-dayton-revitalization-stratacache-tower.html>

³⁶ Fire Blocks District (2017) *Exclusive: The team with the \$100M plan for fire blocks district*. Retrieved from: <https://fireblocksdistrict.com/blog/2017/4/10/exclusive-the-team-with-the-100m-plan-for-fire-blocks-district>

³⁷ McCarty, M. (2019) Rebirth of the Arcade. *University of Dayton Magazine*. Retrieved from: <https://udayton.edu/magazine/2019/05/rebirth-of-the-arcade.php>

³⁸ Staley, S. (2008) Dayton, Ohio: The Rise and Fall of a Former Industrial Juggernaut. *Reason Foundation*. Retrieved from: <https://reason.org/commentary/dayton-ohio-the-rise-and-fall/>

³⁹ CBRE (2020) 2020 Scoring Tech Talent. Retrieved from: <https://www.cbre.us/research-and-reports/Scoring-Tech-Talent-in-North-America-2020>

⁴⁰ Dayton Ohio (n.y.) *The Greater Downtown Dayton Plan: Priority Recommendations*. Retrieved from: <https://www.daytonohio.gov/DocumentCenter/View/301/Greater-Downtown-Plan-Priority-Recommendations-Citi-Plan-Downtown-Component-PDF?bidId=>



Birmingham and Coventry, UK

After becoming an industrial monoculture in the twentieth century, Birmingham and Coventry declined in parallel with the British car industry. The region is currently investing significantly in transitioning to an electric and smart future, and building up its services sector - with a mixed record so far.

Context

Birmingham has been a centre of industry for centuries. Historically, its lack of a royal charter, a document defining the privileges and purpose of corporations including towns and cities, prevented guilds from monopolising local trades, allowing it to attract skilled artisans from across the country.⁴¹ This diverse skillset and its location at the heart of a local canal network, allowed it to prosper on the back of the Industrial Revolution. By the end of the nineteenth century, it was known as the 'the city of a thousand trades.'⁴²

The nearby city of Coventry reinvented itself multiple times: first a centre of weaving and dying wool in medieval times, by the seventeenth century it had become known for its silk. After

⁴¹ Dupont, J. (2018) Powering the Midlands Engine: How to build a local Industrial Strategy. *Policy Exchange*. Retrieved from: <https://policyexchange.org.uk/wp-content/uploads/2018/12/Powering-the-Midlands-Engine-Jonathan-Dupont-Policy-Exchange-December-2018.pdf>

⁴² Clayton, N. (2012) What happened to the 'City of a Thousand Trades?' Birmingham from 1901 to today. *Centre for Cities*. Retrieved from: <https://www.centreforcities.org/blog/what-happened-to-the-city-of-a-thousand-trades-birmingham-from-1901-to-today/>

losing out to cheaper foreign competition in the nineteenth century it transitioned to new specialisms in clock making and bicycles. This, in turn, lay the groundwork for Coventry to become Britain's first centre of car manufacturing, and by the mid twentieth century it was known as the 'British Detroit.'⁴³

In the twentieth century, both cities became increasingly dependent on the car industry alone. In the short term, this did not matter very much - with the industry largely successful and household incomes exceeding those even in London for a time. With Birmingham booming, postwar policy deliberately sought to limit the growth of the city, and forbade other industries from opening or expanding.⁴⁴

The combination of poor management, trade union disputes and global competition saw the British car industry struggle from the 1970s on, leading to a resulting downturn in both cities. Unemployment rose in Birmingham from 5.5 percent in 1979 to 13.7 percent in 1981.⁴⁵

While much of the traditional manufacturing industry shut down, the area remains a hub for British based car companies such as Aston Martin, Jaguar Land Rover and Tata Motors. In recent years, Government policy has devolved significant power to local government, and significant investment is being made into helping the local industry transition to an electric and smart future.⁴⁶

Policy Initiatives

Redevelopment and Retail

- Over the last few decades, significant investment has been made in redeveloping Birmingham city centre for retail and business conference events, with initiatives including the construction of the National Exhibition Centre, the redevelopment of the Bull Ring and Brindley Place.⁴⁷
- The city has sought to attract corporates looking for cheaper office space than London. It has achieved some success in encouraging financial and professional services to open an office - although almost all companies retain their head office in the capital.

Public and Private Industry Investment

- The area has sought to build on its research base and proximity to Oxford / Cambridge / Milton Keynes to support the transition of its car industry to electric and smart vehicles, with the creation of joint public-private institutions including the Warwick

⁴³ Dupont, J. (2018) Powering the Midlands Engine: How to build a local Industrial Strategy. *Policy Exchange*.

⁴⁴ The Economist (2013) *Birmingham: How to Kill a City*. Retrieved from: <https://www.economist.com/blighty/2013/05/31/how-to-kill-a-city>

⁴⁵ Clayton, N., Mandai, R. (2014) Cities Outlook 1901. *Centre for Cities*. Retrieved from: <https://www.centreforcities.org/wp-content/uploads/2014/08/12-07-11-Cities-Outlook-1901.pdf>

⁴⁶ Birmingham (2020) *Electric Vehicles*. Retrieved from:

https://www.birmingham.gov.uk/info/20013/roads_travel_and_parking/566/electric_vehicles;

Coventry City Council (2020) *Coventry & Warwickshire ready for electric vehicle revolution*. Retrieved from:

https://www.coventry.gov.uk/news/article/3588/coventry_and_warwickshire_ready_for_electric_vehicle_revolution

⁴⁷ Dee, J. (2020) Britain After Coronavirus: Birmingham and how we recovered and rebalanced 'last time'. *Catapult*.

Manufacturing Group,⁴⁸ the National Automotive Innovation Centre⁴⁹ and the UK Battery Industrialisation Centre.⁵⁰

- In recent years, central Government has devolved significant power to a new mayor for the West Midlands Combined Authority, covering the urban area around both cities. The area is also part of a wider political grouping aimed at economic development – the Midlands Engine – although it is less clear whether this group makes up a coherent economic area.

Transport Infrastructure

- Birmingham’s main railway station has recently been extensively redeveloped,⁵¹ and Coventry’s own railway station overhaul is set to be completed by 2021.⁵² In the medium term, Birmingham is set to be better connected to London through Britain’s largest infrastructure project, with a new railway line High Speed 2.⁵³

Remaining Challenges

At a high level, Birmingham and Coventry have sought a strategy of building on their advanced manufacturing base, while diversifying their sectoral mix with the development of new strengths in services.

This strategy has had mixed success. While both areas have seen some catch up growth in recent years, unemployment remains higher than the national average, and productivity lower. Restrictive planning laws have kept office and house prices relatively high.⁵⁴ While there has been significant investment in links with other cities, many commentators complain that its internal public transit remains weak.⁵⁵

While the area has developed some services strengths – and Birmingham itself has almost entirely transitioned – it is not clear to how resilient this shift really is. In the post-Covid world, retail in Birmingham has been struggling, and looks highly vulnerable. Despite hosting two of Britain’s leading universities in Birmingham and Warwick, student retention is relatively low, with many students heading to London post-graduation.⁵⁶ The area has yet to incubate many notable new start-ups or nationally significant companies.

⁴⁸ University of Warwick (2020) *About WMG*. Retrieved from: <https://warwick.ac.uk/fac/sci/wmg/about/>

⁴⁹ Tata Motors European Technical Centre (2020) National Automotive Innovation Centre. Retrieved from: <https://www.tmetc.com/about-us/naic.aspx>

⁵⁰ UK Battery Industrialisation Centre (2020) *About: Who we are*. Retrieved from: <https://www.ukbic.co.uk/about/background/>

⁵¹ Moore, K. (2019) The history of Birmingham New Street station. *Birmingham Updates*. Retrieved from: <https://www.birminghamupdates.com/the-history-of-birmingham-new-street-station/>

⁵² Coventry City Council (2020) Another milestone for Coventry station work. Retrieved from: <https://www.coventry.gov.uk/news/article/3577/another-milestone-for-coventry-station-work>

⁵³ HS2 (2020) *What is HS2?* Retrieved from: <https://www.hs2.org.uk/what-is-hs2/>

⁵⁴ Dupont, J. (2018) Powering the Midlands Engine: How to build a local Industrial Strategy. *Policy Exchange*.

⁵⁵ Forth, T. (2019) “Birmingham isn’t a big city at peak times”: How poor public transport explains the UK’s productivity puzzle. *CityMonitor*. Retrieved from: <https://citymonitor.ai/transport/birmingham-isn-t-big-city-peak-times-how-poor-public-transport-explains-uk-s-productivity>

⁵⁶ Dupont, J. (2018) Powering the Midlands Engine: How to build a local Industrial Strategy. *Policy Exchange*

Equally, despite extensive investment, it is not really clear how secure the future of the local car sector is without its own battery production facility or a tradition of tech companies to draw on.

Lessons

While not a perfect mirror, there are obvious parallels between Detroit & Windsor and Birmingham & Coventry. While it is too early to completely judge the success of its regeneration effects, some key lessons are already clear:

1. In the long run, industrial monocultures are highly vulnerable to structural shifts - and it is in a city's interest to encourage a diverse sectoral mix.
2. Significant investment from both public and private sectors in order to support any transition to a different model for car production.
3. Even with some of the world's best universities relatively close - Oxford to Coventry is a one hour drive - joining together research and industry is far from straightforward.
4. It can be very hard to increase graduate retention when competing against large global metropolises.
5. Even after decades of investment and hundreds of million spent, it is not clear how much retail regeneration has changed the fundamentals of the city.



Manchester, UK

Investing in flagship infrastructure projects and expanding external and internal transport links helped attract a number of businesses, residents and visitors to revitalise Manchester.

Context

Manchester had a thriving economy based on textile manufacturing during the 18th century Industrial Revolution. The city was known for technological innovation and cutting-edge manufacturing techniques, making it an important economic hub for the country.⁵⁷

However, the city's industry began to decline during the Great Depression and continued as increased globalisation shifted manufacturing overseas. The de-industrialisation of the city had a number of negative impacts, including high rates of unemployment, high rates of crime, population decline and decrepit physical infrastructure.⁵⁸ Between 1951 and 1981, overall jobs

⁵⁷ Forjan, S. & Shakespeare, T. (2009) Can Localism Deliver? Lessons from Manchester. *Localis*. Available at: http://www.localis.org.uk/wp-content/uploads/2009/10/can-localism-deliver_localis-policy-exchange.compressed.pdf

⁵⁸ Manchester City Council (2020) *Regeneration Statement*. Retrieved from: https://secure.manchester.gov.uk/info/200079/regeneration/3383/regeneration_statement

declined by 22%, including nearly a 50% decline in engineering and electrical goods and an 86% decline in textiles.⁵⁹

The government began implementing regeneration strategies in the 1980s with the goal of creating employment opportunities, modernising the skills base of the population, and reversing the trend of economic decline.⁶⁰

Policy Initiatives

In 1988, the city created the Central Manchester Development Corporation, with the goal of redeveloping the city centre, revitalising neglected buildings for productive use, and improving public spaces. Some of the specific strategies implemented to drive regeneration were:

- Investments in physical infrastructure/ flagship projects
- City centre regeneration
- Investments in transport links
- Partnerships with the private sector

Investments in physical infrastructure/ flagship projects

- Manchester has invested heavily in revitalising decaying areas through large scale infrastructure projects for commercial or residential use. Since 1997, the city has added 5.38 million square feet of office space, equating to approximately 50,000 new workspaces.⁶¹
- One of the city's most significant infrastructure projects was Spinningfields, a £1.5 billion project designed to become Manchester's "central business district." The project consisted of constructing 20 buildings and 20,000 square meters; it has been successful at attracting high profile firms, including PWC, Deloitte, HSBC and Barclays.⁶²

A focus on city centre regeneration

- A cornerstone of Manchester's regeneration strategy has been revitalising the city centre's image as an attractive place to work, live, shop and explore. According to the council, the city centre is seen as the primary engine of economic growth and opportunity in the region. As such, the majority projects in the city's strategic plan focus on investments in the city centre - including residential housing projects, commercial buildings, and art and culture investments.⁶³
- As a result of these investments, the city centre's population doubled from 8,000 in 2003 to 19,000 in 2009. Further, through investments in art and culture - such as the

⁵⁹ Swinney, P, Thomas, E. (2015) A century of cities. *Centre for Cities*. Retrieved from: <https://www.centreforcities.org/reader/a-century-of-cities/3-are-cities-bound-by-these-pathways/1-a-century-of-change-in-manchester/>

⁶⁰ Ibid.

⁶¹ LSE (2017) *Manchester's transformation over the past 25 years: why we need a reset of city region policy*. Available at: <https://blogs.lse.ac.uk/politicsandpolicy/manchester-transformed/>

⁶² DBF Law (2020) *5 of Manchester's biggest regeneration schemes*. Retrieved from: <https://www.dbf-law.co.uk/5-of-manchesters-biggest-regeneration-schemes/#:~:text=1,Manchester's%20E2%80%9Ccentral%20business%20district%E2%80%9D>

⁶³ Manchester City Council. *A strategic plan for Manchester city centre 2009-2012*. Available at: http://www.manchester.gov.uk/download/downloads/id/27366/city_centre_strategic_plan_2009-12.pdf

Manchester Arena and the Manchester International Festival – Manchester has become the third most popular visitor destination in Britain. By 2009, tourism (mainly in the city centre) contributed over £5 billion to the region’s economy.⁶⁴

Investments in transport links

- Investing in transport links was a key strategy for connecting the labour market living in boroughs outside the city with jobs condensed in the city centre. The government invested in expanding tram, rail, and bus routes throughout the 1990s. One of the most significant projects was a light rail project – the Manchester Metrolink – which had both economic and environmental benefits. By 1999, the Metrolink had more than 14 million journeys per year and replaced approximately 20% of car journeys annually, reducing air pollution and congestion while improving access to the city centre.⁶⁵
- The government also sought to improve external transport links, most notably through expansions of Manchester Airport. The purpose of the expansions was to generate employment and income, attract high-tech industries to the city, and strengthen the city’s image as a leading European city.⁶⁶ Throughout the 1990s, extensions to the airport included adding a second terminal, adding a railway station that provided direct links to many surrounding areas, and adding a second full-length runway.⁶⁷ As a result of these investments, the airport went from having 10.4 million passengers annually in 1990 to 22.4 million in 2005, highlighting the growth in visitors for tourism and business purposes.⁶⁸

Partnerships with private firms

- Since the beginning, the city’s approach to regeneration has been one of partnerships between the council, private developers and other key stakeholders. One early initiative was the Phoenix Initiative, a UK-wide initiative established in 1986 to encourage private sector and government collaboration. The goal of the initiative was to promote public and private enterprise in urban renewal and is based on the premise that all sectors of the community must work together to achieve economic regeneration. The first Phoenix project in Manchester was launched in 1987 to revitalise the Whitworth Street area of the city and was run jointly by the council and local business community.⁶⁹
- Another large-scale collaboration with the private sector took place during the 2008 financial crisis when the developer of Spinningfields was on the verge of quitting the project due to an inability to access credit. As a result, the council bought £15.9 million

⁶⁴ Ibid.

⁶⁵ While, A., Joans, A., Gibbs, D. (2004) The Environment and the Entrepreneurial City: Searching for the Urban ‘Sustainability Fix’ in Manchester and Leeds. *International Journal of Urban and Regional Research*, 28(3), 549–569.

⁶⁶ Ibid.

⁶⁷ Manchester Airport. Our history: the history of Manchester Airport and aviation in Manchester. Available at: <https://www.manchesterairport.co.uk/about-us/manchester-airport-and-mag/history/>

⁶⁸ UK Civil Aviation Authority (2020) Airport data 1990 onwards. Retrieved from: <https://www.caa.co.uk/Data-and-analysis/UK-aviation-market/Airports/Datasets/UK-Airport-data/Airport-data-1990-onwards/>

⁶⁹ Chapter 4: Urban Renewal Partnerships in America and Britain. Available at: <http://www.psi.org.uk/publications/archivepdfs/Housing/JV4.pdf>

freeholds and leased the property back to the developer to allow the project to continue as scheduled.⁷⁰

- More recently, in 2014 the Council entered into a joint venture called Manchester Life with the Abu Dhabi Investment Group to redevelop six sites in East Manchester. The joint venture plans to provide more than 900 new homes in the area to revitalise the residential housing market and contribute to economic growth. The venture expects investment of up to £10 billion over the next ten years and is overseen by a board consisting of representatives of both the Abu Dhabi Investment Group and Manchester council.⁷¹

Remaining Challenges

Manchester has made an impressive turn-around from a declining post-industrial city to one of the fastest growing cities in the UK. However, the city council has identified a number of challenges that must be addressed to ensure the city continues its upward trajectory.⁷²

Firstly, the city must develop its high-skilled workforce to take advantage of the growing number of digital businesses based in the city. In recent years, a major digital skills gap has inhibited the growth of the creative and digital sector. In 2019, the region's average Attainment 8 scores and number of students achieving a GCSE in Mathematics and English were lower than the national average, indicating that many graduates are not entering the labour force with the skills required to succeed in these growing sectors of the economy. Further, the number of apprenticeships have fallen in recent years, making it more difficult to upskill the workforce. Together these factors have created a barrier to matching workers with new high-skilled employment opportunities.

Secondly, significant income disparities remain across different areas of the city and there are still areas of intense deprivation. A manifestation of this growing inequality is the increase in homelessness and a recent increase in the number of children living in poverty. Targeted and inclusive policies to combat poverty and inequality must be implemented to ensure that all residents benefit from Manchester's growth.

Lessons

There is no 'silver bullet' to be found from Manchester's experience, and many of its successful interventions may be difficult to replicate outside of the wider context of Manchester's regeneration process. Nonetheless, it is helpful to consider what policies worked in this context to draw out lessons for other post-industrial cities, including:

1. Investments in physical infrastructure can help transform a city and attract private investment, new residents, and tourism.

⁷⁰ Folkman, P., Froud, J., Johal, S., Tomaey, J., Williams, K. (2016) Manchester Transformed: why we need a reset of city region policy. CRESC Public Interest Report. Retrieved from: <http://hummedia.manchester.ac.uk/institutes/cresc/research/ManchesterTransformed.pdf>

⁷¹ Manchester City Council (2015) *Manchester Life project update, Ancoats and Islington*. Retrieved from: <https://www.manchester.gov.uk/news/article/7125/manchester-life-project-update-ancoats-and-islington>

⁷² Manchester City Council. State of the city Report 2019. Available at: https://www.manchester.gov.uk/downloads/download/7121/state_of_the_city_report_2019_whole_document

2. A focus on the city centre can be a powerful catalyst to growth, however this must be coupled with improving accessibility to ensure other parts of the city also benefit
3. A collaborative approach to planning and development between the public and private sector can help secure investment and drive growth.



Dundee, UK

By investing in creative industries that were naturally on the rise, Dundee has created a growing niche economy in computer games and technology. However more needs to be done to ensure revitalisation is inclusive and reaches all parts of the city.

Context

Throughout the 19th century, Dundee was an important east coast trading port in Scotland. The city was built on fishing – with the country’s largest whaling fleet – and textile manufacturing.⁷³ In the early 20th century, the textile manufacturing industry, which employed 50,000 people at its height, failed to compete with foreign manufacturers. As a result, unemployment rose drastically and the local economy suffered.⁷⁴

By the end of the 1980s, the city was facing a serious post-industrial decline. As a result, the government partnered with the private sector and academia in an attempt to revitalise the city into a service economy. Throughout the 1990s and 2000s, the city grew its technology and biotechnology R&D sectors and became a prominent centre for education and research.⁷⁵

⁷³ The Heritage Fund (2019) 25 years: the cultural renaissance of Dundee, City of Discovery. Retrieved from: <https://www.heritagefund.org.uk/stories/25-years-cultural-renaissance-dundee-city-discovery>

⁷⁴ BBC (2014) Victorian Dundee: Jute, Jam & Journalism. Retrieved from: http://www.bbc.co.uk/history/scottishhistory/victorian/trails_victorian_dundee.shtml

⁷⁵ Bio-dundee (2020) *Science in the City*. Retrieved from: <https://www.biodundee.co.uk/science-city>

Policy Initiatives

Investing in culture and creative industries

- In partnership with the private sector and academia, the government helped channel investments into the media industry, computer gaming and other creative and cultural industries. One of the biggest investments was the visual arts centre, the Dundee Contemporary Arts, opened in 1999. The creative industries now provide 3,000 jobs in the city and produce an annual turnover of £190 million.⁷⁶
- In the 1980s and 90s, computer game production emerged as a new industry. Popular games were quickly developed in the city, including Grand Theft Auto.⁷⁷
- Other industries, such as digital media and journalism also grew as the city's reputation as vibrant and creative was solidified. Since the 90s, the implementation of the V&A museum, coupled with its elite UNESCO City of Design status, has led Dundee to being recognised as a leader in the design industry.⁷⁸
- Dundee's investment in creative industries and culture led it to be named the 'Coolest Little City in Britain' in GQ magazine in 2015.⁷⁹ The city also came fifth in The Wall Street Journal's 'Worldwide Hot Destinations' list for 2018.⁸⁰

Encouraging the growth of targeted sectors

- The city's games industry grew naturally following the investments in culture and creative industries. To build on this opportunity, the University of Abertay launched the world's first computer games degree programme, which now attracts students worldwide.⁸¹
- The government has launched a number of industry business support programmes through its Business Development Team, which have helped to attract and retain talent, as well as lead to further public and private sector investment.⁸²
- The growth of the biological sciences sector - which has led to the city's nickname 'BioDundee' - grew out of the University of Dundee's world-renowned drug discovery and medical advancements. The city now hosts a number of world-class science businesses.⁸³

⁷⁶ Harris, P. (2018) Post-industrial Dundee is reinventing itself as a hub of creativity. CityMonitor. Retrieved from: <https://citymonitor.ai/economy/business/post-industrial-dundee-reinventing-itself-hub-creativity-348>

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ Johnston, R. (2015) Why Dundee is becoming Britain's coolest little city. GQ Magazine. Retrieved from: <https://www.gq-magazine.co.uk/article/why-dundee-is-the-coolest-little-city-in-britain>

⁸⁰ Write, C.L. (2017) Where to Travel in 2018, From Shanghai to Scotland's Coolest City. The Wall Street Journal. Retrieved from: <https://www.wsj.com/articles/where-to-travel-in-2018-from-madagascar-to-scotlands-coolest-city-1508859864>

⁸¹ Abertay University (2020) Computer Games Courses. Retrieved from: <https://www.abertay.ac.uk/schools/school-of-design-and-informatics/computer-games-courses/>

⁸² Invest in Dundee (2020) Business Support. Retrieved from: <https://www.investindundee.co.uk/business>

⁸³ Bio-Dundee (2020) BioDundee. Retrieved from: <https://www.biodundee.co.uk/>

Revitalising the waterfront

- In 2001, the city began a 30-year £1 billion revitalisation plan reconnecting the waterfront to the city centre. Part of the plan included welcoming the new Victoria and Albert building, which is the first V&A outside of London.⁸⁴ The museum has helped to kick start tourism and new investment in the area.⁸⁵

Remaining Challenges

A number of criticisms over Dundee's £1 billion waterfront development project have emerged, including concerns that the planned large residential and commercial developments are eye sores for residents. These concerns have been echoed by a number of celebrities, including the lead singer of the Pretenders, Chrissie Hynde, TV star Lorraine Kelly, and Hollywood actor Brian Cox.⁸⁶

Further, there are limits to effects of cultural regeneration. Dundee is one of the most creative cities in the country and has one of the highest levels of PhDs per capita, however, it also has high inequality. For example, the city has a 65% employment rate – the second lowest in the UK; the second lowest rate of business start-ups, and the lowest weekly earnings of any of Scotland's four biggest cities.⁸⁷ The majority of the regeneration programs have been concentrated in one side of the city, leaving stark differences between residents living in different areas.

Lessons

There are a several lessons to be learned from Dundee's experience of regeneration:

1. Public sector policies incentivising business growth are most successful when they are targeted at naturally occurring rising industries, rather than attempting to artificially create an entirely new industry.
2. Regeneration programmes and policies must be spread throughout the city to avoid adding to levels of inequality between different neighbourhoods.
3. Investing in cultural and creative industries can be an important driver of new growth, however these strategies are not sufficient on their own to create long-term inclusive economic growth.

⁸⁴ Discover Dundee Waterfront (2020) *About the Waterfront*. Retrieved from: <https://www.dundeewaterfront.com/about>

⁸⁵ V&A Dundee (2019) *830,000 visitors welcomed in first year*. Retrieved from: <https://www.vam.ac.uk/dundee/info/830000-visitors-welcomed-in-first-year/>

⁸⁶ Alexander, M. (2018) *Rebirth of a city: What next for Dundee's £1 billion waterfront development? – part I*. *The Courier*. Retrieved from: <https://www.thecourier.co.uk/fp/news/local/dundee/734291/rebirth-of-a-city-what-next-for-dundees-1-billion-waterfront-development-part-i/>

⁸⁷ Centre for Cities (2019) *Cities Outlook 2019*. Retrieved from: <https://www.centreforcities.org/reader/cities-outlook-2019/city-monitor-the-latest-data/>

Centre for Cities (2019) *Average Weekly Workplace Earnings 2019*. Retrieved from: <https://www.centreforcities.org/data-tool/#graph=map&city=show-all&indicator=average-weekly-workplace-earnings\\single\\2019>



Bilbao, Spain

The building of the iconic Guggenheim Museum in 1997 helped kickstart a wider revitalisation in the city – but other policy initiatives, including brownfield regeneration, transport investment and the creation of technology parks were important too.

Context

Bilbao was an industrial city in Basque Country, Spain. It's economy was based on mining, metallurgy and shipbuilding. In the early 1900s, Bilbao had one of the strongest economies in Spain, fast population growth and the largest railway system in the country.

Bilbao's economy suffered from the consequences of industrial decline. Between 1975 and 1996, the city lost 47% of its manufacturing jobs, mostly in steel, shipbuilding, machinery and electrical engineering. The share of industrial employment in the city had been cut in half, from 46% in 1975 to 23% in 1996.⁸⁸

The decline of manufacturing hit some parts of the city more than others. The municipalities on the left bank of the river, where the mines, ports, and manufacturing plants were once located, suffered the highest rates of unemployment and poverty. The municipalities on the right bank, however, fared slightly better, benefiting from the rise of the services industry as a replacement to manufacturing. This caused a widening per capita income gap between the different municipalities in the city.⁸⁹

⁸⁸ Gomez, M. (1998) *Reflective Images: The Case of Urban Regeneration in Glasgow and Bilbao*. Blackwell Publishers, Oxford.

⁸⁹ *Ibid.*

In the early 1990s, after two decades of continuing economic decline, the government identified 158 derelict industrial sites across the city, largely situated on the left river bank. In the wake of this reality, the urban regeneration came to the forefront of the government's strategy, starting with Bilbao's Master Plan with the objective of reversing urban decline and reestablishing the city as a dynamic financial and service centre for the country.

Policy Initiatives

Investments in Cultural Infrastructure

- The city prioritised investing in cultural infrastructure as a way of transforming its image as a declining industrial centre and making the city more attractive to residents and tourists alike. The biggest and most impactful investment in cultural infrastructure in Bilbao was the Guggenheim Museum, built in the early 1990s. The Guggenheim was strategically built on the site of a failed shipbuilding facility as a way of revitalising brownfield locations while simultaneously investing in culture.
- City leaders hoped the Guggenheim would attract 400,000 tourists per year, in reality it attracted millions of visitors in its first year and every year since. Therefore, the cost of building the museum was repaid in 5 years and became a major contributor of GDP to the city – adding \$33.5 million per year to public funds.⁹⁰ The city also invested in other cultural infrastructure, including concert halls and theatres.
- Further, the city provided financial support for cultural and creative industries through programs like BCreative!, which provided public support to the creative economy in hopes it would create jobs and wealth in the future. The city also earmarked 10% of the annual municipal budget to support cultural industries and provided direct support for cultural entrepreneurs and subsidies to firms in the leisure, art, culture, fashion and technological industries.⁹¹
- As a result of these cultural investments Bilbao witnessed an influx of tourists, and tourism now represents 5.5% of the city's GDP.⁹²

Revitalising Brownfield Sites

- At the heart of Bilbao's Master Plan was the revival of derelict brownfield sites left behind by plant closures and obsolete infrastructure, such as old railway and port facilities. The plan identified four main opportunity areas of old industrial facilities and mining sites to be transformed for residential and business use.⁹³

⁹⁰ Franklin, A. (2016) Journeys to the Guggenheim Museum Bilbao: Towards a revised Bilbao Effect. *Annals of Tourism Research*, 59, 79–92.

⁹¹ Culture 21 (n.d.) Culture as the Engine of Bilbao's Economic and Social Transformation. Available at: http://www.agenda21culture.net/sites/default/files/files/cities/content/bilbao-eng_def.pdf

⁹² Ibid.

⁹³ Ploger, J. (n.y.) Bilbao City Report. Centre for Analysis of Social Exclusion. Retrieved from: [http://eprints.lse.ac.uk/3624/1/Bilbao_city_report_\(final\).pdf](http://eprints.lse.ac.uk/3624/1/Bilbao_city_report_(final).pdf)

Large-scale Transport Investments

- Investments were made in key transport infrastructure, including building the Metro and reorganising the railway system; expanding the port and its connected railway operations; and renovating the airport. In total, the city spent more than €660 million on these projects, which improved mobility internally throughout the city as well as strengthened links and improved accessibility with external cities.⁹⁴

Development of alternative sectors

- The transformation of Bilbao from a declining industrial city to a thriving economy in the 21st century largely relied on their ability to establish new industries to drive employment and economic growth. One initiative by the government was technology parks. In 1985, the government established four technology parks intended to diversify industry and encourage research, innovation and business development. More than 220 companies from various sectors (aerospace, automotive, electronics, energy, medical, IT, engineering, etc.) currently operate out of the technology parks.⁹⁵
- These technology parks, and the businesses developed within them, contributed to lowering of the unemployment rate, which fell from 25% in the 1980s to 11% by 2004, and slowing population loss.⁹⁶

Remaining Challenges

Significant strides have been made in improving Bilbao's economy, however there are still a number of challenges remaining, including a recent trend of a declining population, an ageing population, and concerns of future economic programs leading to gentrification and harming the most vulnerable populations.⁹⁷

⁹⁴ Rodriguez, A., Martinez, E. (2005) Chapter 10. Restructuring Cities: Miracles and Mirages in Urban Revitalization in Bilbao. In: *The Globalized City: Economic Restructuring and Social Polarization in European Cities*, Oxford University Press Inc., New York.

⁹⁵ Bizkaia talent website, available at: <https://www.bizkaialalent.eus/en/pais-vasco-te-espera/apuesta-de-futuro/cientifico-tecnologico-territorio/>

⁹⁶ Power, A. (2016) Bilbao City Story. *LSE Housing and Communities*. Available at: <http://eprints.lse.ac.uk/67843/1/casereport101.pdf>

⁹⁷ Vicario, L., Monje, P. M. M. (2003) Another 'Guggenheim Effect'? The Generation of a Potentially Gentrifiable Neighbourhood in Bilbao. *Urban Studies*, 40(12), 2383-2400.

Lessons

There are several lessons to be learned from Bilbao's experience, however it is important to caveat these recommendations with the fact that each strategy was not implemented in a vacuum. It would be impossible to isolate one part of Bilbao's economic regeneration journey and suggest it could have the same impact elsewhere outside of the broader economic and political context in which it was implemented in Bilbao:

1. The "Guggenheim effect" shows that investment in culture and the arts can have a positive and significant impact on a city's image and economy.
2. Improving accessibility/mobility through transport infrastructure is a vital component of any regeneration strategy.
3. Creating an environment for business growth - in Bilbao's case through technology parks - can help an economy diversify and develop desirable sectors and industries going forward.



Roubaix, France

Decades of attempts at regeneration have failed to significantly turn around the performance of former textiles town Roubaix.

Context

Roubaix's population first grew significantly in the Industrial Revolution, where it and its nearby larger neighbour, Lille, became important centres for textiles – second at one point only to Manchester. The city survived the World Wars and Great Depression, but was ultimately unable to compete with foreign competition from the 1970s on. Over the course of the twentieth century, the city has lost over a quarter of its population.⁹⁸

While Lille has managed to transition to a services economy – albeit with still lower levels of productivity than the national average – Roubaix is now one of the most deprived towns in France, with high levels of unemployment and household poverty.⁹⁹ In the 1990s, it had been called 'the worst town in France.' Residential, commercial and industrial property markets all declined sharply, while far right political parties gained significant vote share.¹⁰⁰

In response, politicians have attempted multiple radical policy experiments in an attempt to turn the fate of the city around. So far, it is not clear that these have had a significant long term effect.

⁹⁸ Colomb, C (2007) Making Connections – case study of Roubaix, Lille. York: Joseph Rowntree Foundation. Retrieved from: <http://urbed.coop/sites/default/files/Case%20Study%20of%20Roubaix%20Lille.pdf>

⁹⁹ EUROCITIES – NLAO (2011) *Social Economy in Cities: Lille-Roubaix*. Retrieved from: http://nws.eurocities.eu/MediaShell/media/LAO%20Lille-Roubaix_Social_Economy.pdf

¹⁰⁰ Cadell, C., Falk, N., King, F. (2008) Regeneration in European Cities: Making Connection. Joseph Rowntree Foundation. Retrieved from: <https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/2177-regeneration-urban-environment.pdf>

Policy Initiatives

- In 1997, the whole of the town centre was declared a tax-free zone, with significant discounts on Business Tax, Corporation Tax and Property Tax for companies who employ at least a third of their workers from the local area.¹⁰¹
- There has been significant investment in redevelopment, with key projects including restoration of the high street, increased policing, upgraded social housing stock and new flagship cultural projects, including the La Piscine art museum and La Condition Publique exhibition space.¹⁰²
- There has been significant investment in transport. The Lille Métropole Communauté Urbaine (LMCU), invested in an integrated public transport system linking the main centres of Lille and Roubaix together, while Lille itself is well connected to other major European cities (including London, Paris and Brussels) through high speed rail link.¹⁰³

Lessons

The regeneration initiative has seen some successes. Founded by a Polish immigrant, IT infrastructure company OVH has been growing fast – one of France’s only unicorns – taking advantage of cheap warehouse space to build its data centres in. Other of the city’s businesses, such as La Redoute, are now investing in cutting edge automation and logistics to fulfill orders for e-commerce.

Nevertheless, on the whole, poverty in the city remains very high. In 2018, 40% of the city’s population lived below the poverty line, and the unemployment rate was 30%.¹⁰⁴ Unlike cities such as Windsor, Detroit or Coventry, Roubaix didn’t just see its leading industry relatively decline, but nearly disappear entirely – and this has proved very difficult to recover from.

Some of the pessimistic conclusions we can draw from that are:

1. As we have discussed throughout the doc, regeneration policies are not a silver bullet. Even when combined, and alongside substantial public investment, they cannot always turn around the fundamentals of an area.
2. Forming a conurbation with another relatively struggling city like Lille does not seem to be powerful enough to significantly increase productivity.
3. Deprivation causes a vicious cycle – encouraging wider cultural decay and political extremism.
4. It is important to develop new industries while your old industries are still competitive – if you wait until they disappear entirely, it can be disastrous for the city.

¹⁰¹ Colomb, C (2007) Making Connections – case study of Roubaix, Lille. York: Joseph Rowntree Foundation.

¹⁰² Ibid.

¹⁰³ LSE (2015) *Lille City Story*. Retrieved from: <http://eprints.lse.ac.uk/67846/1/casereport104.pdf>

¹⁰⁴ <https://www.ft.com/content/c1d59836-fda7-11e8-aebf-99e208d3e521>



Nantes, France

Nantes has revitalised its post-industrial economy and rebuilt a strong city image through investing in local art and culture, as well as encouraging the growth of key target sectors.

Context

Throughout the 18th and 19th centuries, Nantes was an important contributor to France's economy. The city was home to one of France's largest harbours and became a major industrial city specialising in shipbuilding and sugar processing.¹⁰⁵

The first major hardship for the city's modern economy occurred during World War II; Allied bombs dropped on industrial targets caused significant levels of civilian casualties and widespread physical destruction throughout the city.¹⁰⁶ The city relied heavily on its two major industries to rebuild its economy after the war.

However, shortly after regaining its economic position, the 1970s global recession and era of deindustrialisation crippled the main pillars of its economy. Throughout the 1970s and 80s, a

¹⁰⁵ Calder, D. (2019) Chapter 4: Resurfacing: Continuous theatre for a creative city. Retrieved from https://www.researchgate.net/publication/334399662_Resurfacing

¹⁰⁶ University of Exeter (n.y.) The Bombing of France 1940-1945 Exhibition. Retrieved from: https://humanities.exeter.ac.uk/media/universityofexeter/collegeofhumanities/history/researchcentres/centreforthestudyofwarstateandsociety/bombing/THE_BOMBING_OF_FRANCE.pdf

number of major manufacturing plants and shipyards closed down,¹⁰⁷ which were concentrated in the area of the city known as Île de Nantes. This left Île de Nantes's 337 hectares riddled with abandoned buildings and empty lots.¹⁰⁸

In the mid-1980s the government implemented a number of policies in an attempt to revitalise the city, including building a new image of the city centred around creativity and culture, moving to a service-oriented economy, and boosting the tech and tourism sectors.

Policy Initiatives

Diversifying the economy

- The government launched a new business district in 2000 called Euronantes. The district includes 400,000 square meters of office space and 4,000 jobs.¹⁰⁹ Many companies took up residence in the district, including management consulting Capgemini, rail network SNCF and Bouygues Telecom, as well as several smaller companies.
- SAMOA, the French agency responsible for urban development, is investing in transforming a 337-hectare industrial area into the Quartier de la Création (the Creative District).¹¹⁰ The District aims to bring together a mix of cultural activities (museums and art installations), research and training institutions (universities and schools), and economic development programs (business support for the creative industries).¹¹¹ One of the key initiatives in the Creative District is the Creative Factory, a business support centre for entrepreneurs and start-ups in the creative industry.¹¹²
- In recent years, the government has continued investing in new sectors of the economy, including healthcare. They have announced funding for the new University Hospital, which obtained planning permission in 2019, and the development of the new Health District. The Health District is set to combine businesses, education institutions and research centres for medical schools in order to support the city's transition into healthcare and biotechnology.¹¹³
- The Globalization and World Cities Research Network ranked Nantes as a 'Gamma world city' - a city that links smaller economic regions with the global economy¹¹⁴.

¹⁰⁷ JRF (n.y.) International cities: Case studies - Nantes. Retrieved from: https://www.jrf.org.uk/sites/default/files/jrf/files-research/international_cities_nantes.pdf

¹⁰⁸ Manifesto (2020) Île de Nantes: Nantes 2020-2021. Retrieved from: <http://manifesto.paris/en/projet/ile-de-nantes/>

¹⁰⁹ Invest Nantes (2020) Commercial and Industrial Site Map. Retrieved from: <https://invest.nantes-saintnazaire.fr/en/commercial-real-estate/commercial-and-industrial-sites>

¹¹⁰ Darchen, S, Simon, G. (2018) France's unique approach to regenerating inner cities. *The Independent*. Retrieved from: <https://www.independent.co.uk/news/france-city-innovation-urban-paris-gentrification-urban-planning-a8255981.html>

¹¹¹ Nantes Tourism (2020) Creation District: Structure and Coordinate the network of creative companies. Retrieved from: <https://www.nantes-tourisme.com/fr/patrimoine/quartier-de-la-creation>

¹¹² Global Cultural Districts Network (2020) Quartier de la Creation (SAMOA). Retrieved from: <https://gcdn.net/member/quartier-de-la-creation-nantes/>

¹¹³ Nantes Metropole (2019) *Annual Report*, pg. 65. Retrieved from: https://metropole.nantes.fr/files/pdf/vie-institutions/finances/rapport-annuel-NM/2019/rap_actions_territoriales-an-NM2019.pdf

¹¹⁴ GaWC (2020) The World According to GaWC 2020. Retrieved from: <https://www.lboro.ac.uk/gawc/world2020t.html>

Nantes is also now the third largest financial centre in France, behind only Paris and Lyon.¹¹⁵

Investing in culture

- Nantes is home to a multi-faceted artistic, cultural and tourist project, entitled “Les Machines de l’île”. The art blends the mechanical universe of Leonardo da Vinci, with the “Invented Worlds” of Jules Verne, and the industrial history of Nantes.¹¹⁶ Some of the mechanical interactive art pieces include a 25m high carousel, the Great Elephant which can “walk” with 49 passengers aboard, and the Machine Gallery which houses a laboratory and an array of other machines.¹¹⁷
- The mayor encouraged the spread of culture throughout the municipality by organising free events in public spaces, including free public art exhibitions and hosting an international festival for artists called Les Allumées.¹¹⁸
- In 2000, a former industrial facility was renovated into a cultural centre, Le Lieu Unique, situated on the river. This was followed by the launch of a contemporary biennial modern art journey in 2007, and later by Le Voyage a Nantes, a two-month long summer street festival. Voyage à Nantes spends an average €3m on the annual festival, but the economic returns are more than €48.8 million. In 2015, it attracted 615,000 visitors, of which 15% came from abroad.¹¹⁹
- Since the early 2000s, Nantes has developed an image as a trendy, tech and creative city. It has quite successfully built a new economy on an inviting corporate environment and growing tourism, with unemployment levels consistently below the national average. Between 6,000 and 9,000 people move to the city every year, making Nantes one of the fastest growing cities in France.¹²⁰

Remaining Challenges

Nantes has struggled to identify and convey what makes it unique from other cultural cities, such as Bilbao. This is particularly difficult given the city does not have any flagship projects to point to (such as the Guggenheim in Bilbao).

Further, the speed at which the city has developed over the past 40 years has meant that residents live with constant construction noise and disturbances. The city will have to work to find the balance between development/construction and making the city a comfortable place to live.

¹¹⁵ Fraisse, L., & Zafinikamia, M.L.B. (n.y.) City Report: Nantes. *WILCO Publication no. 25*. Retrieved from: http://wilcoproject.eu/wordpress/wp-content/uploads/WILCO_WP3_Reports_Nantes_25_ML.pdf

¹¹⁶ Les Machines de Lile Nantes (2020) The Artistic Project. Retrieved from: <https://www.lesmachines-nantes.fr/en/the-project/the-artistic-project/>

¹¹⁷ France Tourism Development Agency (2020). The Machines de L'île in Nantes. Retrieved from: <http://ee.france.fr/en/discover/machines-ile-nantes>

¹¹⁸ Nantes Patrimonia (2020) Les Allumees. Retrieved from: <https://patrimonia.nantes.fr/home/decouvrir/themes-et-quartiers/allumees.html>

¹¹⁹ Dunmall, G. (2016) The resurrection of Nantes: how free public art brought the city back to life. The Guardian. Retrieved from: <https://www.theguardian.com/cities/2016/jul/12/resurrection-nantes-france-how-free-public-art-brought-city-back-to-life>

¹²⁰ Ibid.

Lessons

Nantes took a number of lessons from Bilbao in revitalising its economy, including using culture to build a new image of the city, drive social cohesion and attract tourists. However, its process has not been identical to Bilbao's and there are a number of lessons to be learned specifically from Nantes:

1. Investments in small scale, local art & culture may not drive the same levels of international tourism as larger iconic monuments, such as the Guggenheim, but they can help to foster social cohesion and create a city's identity.
2. Creating a welcoming landscape for private sector businesses (including strong networks and good infrastructure) can help diversify the economy and drive long-term growth.

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PUBLICFIRST 

Annex 02

Economic Incentives in Ontario cities

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December 2020

PUBLICFIRST 

London, Ontario

Background

London, Ontario has a population of 494,069 according to the 2016 census.¹ The unemployment rate has been slowly declining since a peak of 9.8% in 2009 to 5.3% in 2019 (despite a slight rise in 2016),² and the median household income has been rising in line with the general trend across Canada, reaching nearly \$84k in 2017.³

The city is located halfway between Toronto and Detroit, making it a strategic location for businesses seeking to exploit both markets. The city's main strategic sectors are health and life sciences, education, agri-food, digital creative, manufacturing, and research and innovation.⁴

Initiatives

Support entrepreneurs through accelerators and a business support centre

Support for entrepreneurship in the City of London is available through the London Economic Development Corporation's (LEDC) scale-up support, which offers support and resources for entrepreneurs, as well as develops and funds several initiatives including:⁵

- London Founders Network: an informal networking opportunity for business founders in London.
- 100In5: an initiative to support 100 local growth companies with scale-up advice.
- RH Accelerator: a private tech and agriculture-focused accelerator supported by LEDC.
- The Grove: an agri-business incubator supported by LEDC.
- Recipe to Reality: A training program specially designed for local food and beverage entrepreneurs.

The Small Business Centre is a not-for-profit organisation created in partnership between the City of London and the Ontario government's Ministry of Economic Development, Job Creation and Trade (MEDJCT). Its mission is to "stimulate, promote and support the entrepreneurial spirit, start-up and early growth of small business to actively contribute to the economic

¹ Statistics Canada (2020) *Census Profile: 2016 Census*. Retrieved from: <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CMACA&Code1=555&Geo2=PR&Code2=35&Data=Count&SearchText=london&SearchType=Begins&SearchPR=01&BI=All&TABID=1>

² Statistics Canada (2020) *Labour force characteristics by province, territory and economic region, annual*. Retrieved from: <https://www150.statcan.gc.ca/t1/tbl/en/tv.action?pid=1410009001&pickMembers%5B0%5D=2.8&cubeTimeFrame.startYear=2008&cubeTimeFrame.endYear=2019&referencePeriods=20080101%2C20190101>

³ London Economic Development Corporation (2020) *Economic Indicators*. Retrieved from: <https://www.ledc.com/economic-indicators>

⁴ Start London Canada (2020) *Why London, Canada*. Retrieved from: <http://www.startlondoncanada.com/#london-canada-1>

⁵ London Economic Development Corporation (2020) *Scale-Up Support*. Retrieved from: <https://www.ledc.com/scale-support>

development of London.” The Centre offers several programmes and services to small businesses at every stage of development, including:⁶

- Providing access to resources and information;
- Facilitating consultations with advisors;
- Assisting with business plan preparation and market research;
- Hosting seminars, workshops, and networking events.

There are 17 Regional Innovation Centres across Ontario,⁷ which are connected through the Ontario Network of Entrepreneurs (ONE), and are designed to help encourage entrepreneurship and build innovative businesses across the region. TechAlliance⁸ is the Regional Innovation Centre for London, which aims to launch new tech start-ups and accelerate growth for established tech companies by facilitating advice, events and workshops, and access to capital. TechAlliance established the GROW Accelerator,⁹ which helps scale-up tech start-ups in the city.

Make the most of federal initiatives and funding

The City of London has also taken advantage of national initiatives, including the Women Entrepreneurship Strategy (WES), which is a \$2 billion investment aimed at doubling the number of women-owned businesses by 2025. The city has capitalised on this national strategy in two ways: firstly, two women-led companies in London are receiving up to \$100,000 in national funding through the Women Entrepreneurship Fund to help grow their business.¹⁰

Secondly, through this strategy, the London-based Pillar Nonprofit Network will receive over \$3.5 million in funding from the national government to deliver the Women of Ontario Social Enterprise Network, a project aimed at supporting women-led start-ups. The funding will support 150 new women-led social enterprises and expand 75 existing ones, offer women-centred innovation training sessions, and provide access to \$3.5 million in new capital.

¹¹

⁶ Small Business Centre (2020) *The London Small Business Centre: Developing Entrepreneurial Success*. Retrieved from: <https://www.sbcentre.ca/page.php?About-the-London-Small-Business-Centre-3>

⁷ Ontario Centre of Excellence (2020) *List of Regional Innovation Centres (RICs)*. Retrieved from: <https://www.oce-ontario.org/docs/default-source/default-document-library/list-of-rics.pdf?sfvrsn=8>

⁸ <https://techalliance.ca/>

⁹ Techalliance (2020) *Grow*. Retrieved from: <https://techalliance.ca/grow/>

¹⁰ Government of Canada (2019) News release: Government of Canada investing over \$4.2 million to support women entrepreneurs in southwestern Ontario. Retrieved from: <https://www.canada.ca/en/innovation-science-economic-development/news/2019/08/minister-ng-announces-women-entrepreneurship-strategy-investments0.html>

¹¹ Ibid.

Build a strong online presence

Service London Business is a division of the City of London, and is an online tool for individuals seeking to launch or grow a business in London.¹² The website helps business owners navigate the stages of planning, launching and growing their enterprises by creating a personalised checklist of necessary steps for each stage and helpful resources for how to complete them (i.e. writing a business plan, registering the business name, relevant grants, loans and funding options, etc.).

The City of London has attempted to brand itself as an ideal location for entrepreneurs through its Start London Canada website.¹³ The website provides information and resources for both local and foreign entrepreneurs, including information about workforce demographics, the city's strategic geographic location, local entrepreneurial support organisations, and information on the Start-Up Visa for foreign entrepreneurs.

Host networking events and campaigns to connect entrepreneurs

The city also hosts a number of networking events to help promote business activity in the area and encourage collaboration. The London Chamber of Commerce hosts a monthly "Business After 4" event for Chamber members across London to meet and network.¹⁴

The #LondonCAN campaign is a collaborative campaign launched by several of London's entrepreneur support organisations (including Leap Junction, LEDC, Propel, Pillar nonprofit, Small Business Centre, TechAlliance, and more) that promotes the city of London as a great place to start and grow a business, and connects entrepreneurs with local resources and services.

Collaborate with post-secondary institutions

Post-secondary institutions in the area also support entrepreneurship by running accelerators and incubators, offering seed funding, and linking student and alumni entrepreneurs with key resources and stakeholders across the city. Western University's Propel Entrepreneurship Centre is one prominent example.¹⁵ Propel offers free coworking space for entrepreneurs, mentoring services, seed funding opportunities, and access to events & workshops. Western University also has an Accelerator for students, staff or alumni further along in their business development, which offers a four-month long programme of mentorship, education and \$12,000 in funding.¹⁶

Fanshawe College's LEAP Junction is a similar entrepreneurship centre for students and faculty with start-up ideas. Fanshawe also offers the LeapIN summer incubator, which provides seed funding, mentorship, workspace and other support for a selected cohort of entrepreneurs.¹⁷

¹² Service London Business (2020) *Welcome to Service London Business*. Retrieved from: <https://www.servicelondonbusiness.ca/>

¹³ Start London Canada (2020) *Why London, Canada*. Retrieved from: <http://www.startlondoncanada.com/#london-canada-1>

¹⁴ London Chamber of Commerce (2020) *Business After Four*. Retrieved from: <https://www.londonchamber.com/business-after-five>

¹⁵ Western University (2020) *Propel*. Retrieved from: <https://propel.uwo.ca/>

¹⁶ Western University (2020) *Western Accelerator*. Retrieved from: <https://www.uwo.ca/accelerator/>

¹⁷ Fanshawe (2020) *LEAP Junction (Entrepreneurial Services)*. Retrieved from: <https://www.fanshawec.ca/student-life/campus-services/employment/london-campus/career-services/be-your-own-boss>

Results

London's economy has been historically reliant on large-scale employers employing thousands of people in insurance, manufacturing and other traditional industries. In recent years, however, the city's economic framework has shifted and it now relies on smaller, more entrepreneur-driven businesses across several industries, most notably tech and digital media.¹⁸ According to analysis by CBRE, the technology sector in London has seen more than a 40% spike in jobs from 2013 to 2018.¹⁹ The city's digital creative sector is also growing rapidly and now has over 350 companies employing over 9,000 people.²⁰

¹⁸ Perspective (2018) London Entrepreneurs Start-Up with TechAlliance. *Perspective*. Retrieved from:

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¹⁹ De Bono, N. (2019) Analysis: London tech sector surging with big job growth, rising wages. *The London Free Press*.

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²⁰ London Economic Development Corporation (2020) *Digital Media & Tech*. Retrieved from:

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Waterloo Region

Background

The Waterloo Region is made up of the cities of Waterloo, Kitchener and Cambridge, and several smaller townships. It is home to 583,500 residents and is one of the fastest growing Regions in Ontario. The Region's population is younger than the Canadian average, due to a large number of students and young families attracted to the low cost of living and relatively high quality of life.²¹ The Region consistently reports over 2% annual GDP growth²² and high household income levels²³ compared to other regions in the country

The Region's proximity to Toronto is one of its strongest assets, as it provides access to a large pool of high-skilled workers, top universities, and growing businesses. The 2017 Global Startup Ecosystem report ranked the Toronto-Waterloo Region corridor as the 16th best start-up ecosystem in the world.²⁴

Initiatives

City-led support for entrepreneurs

The Waterloo Region Small Business Centre is the main resource for entrepreneurs, it has three locations and offers business registration assistance; one-to-one business consultation and advice; seminars, events and networking opportunities; entrepreneurship programs and incentives.²⁵

The Small Business Centre also provides funding opportunities for small businesses through the Rise Individual Lending Program. This program provides low interest business loans for small businesses in the Region looking to launch or scale.²⁶

²¹ Region of Waterloo (2020) *Demographics*. Retrieved from: <https://www.Regionofwaterloo.ca/en/doing-business/demographics.aspx>

²² Region of Waterloo (2020) *Key Economic Indicators*. Retrieved from: <https://www.Regionofwaterloo.ca/en/doing-business/key-economic-indicators.aspx>

²³ Region of Waterloo (2016) *Census: Income*. Retrieved from: https://www.regionofwaterloo.ca/en/resources/Census/120817_Census_Bulletin_5_Income.indd_FINALaccess.pdf

²⁴ Startup Genome (2017) *Global Startup Ecosystem Report 2017*. Retrieved from: <https://startupgenome.com/reports/global-startup-ecosystem-report-2017>

²⁵ Waterloo Region Small Business Centre (2020) *About*. Retrieved from: <https://www.waterlooregionsmallbusiness.com/About.htm>

²⁶ Waterloo Region Small Business Centre (2020) *Low-Interest Business and Event Loans*. Retrieved from: https://www.waterlooRegionsmallbusiness.com/Rise-Asset-Development.htm?bPreview=1&ww_pageContentID=D808A196-B9FE-69FD-F709-5DDC8D015F38&ww_pageID=D808A195-9E78-3678-1365-332233032E12

Private sector-led support for entrepreneurs

Communitech is one of the Region's leading organisations supporting innovation and entrepreneurship in the tech sector. Communitech offers coaching and advisory services; training and skills development programs; and help accessing talent, investors, customers and partners through its networks around the world. Communitech also acts as an advocacy body for the tech sector, lobbying for policies that would help create a strong business environment for tech companies.²⁷

Communitech also has two collaborative spaces in the Waterloo Region: the Communitech Hub in downtown Kitchener - the Region's innovation centre - which offers space for collaborative working and events for tech companies; and the Communitech Data Hub in Waterloo - a collaborative workspace for data-driven tech companies.²⁸ Between these two spaces, Communitech supports more than 1,400 companies in the Region.

There are also accelerators for entrepreneurs outside the tech sector, most notably the Accelerator Centre. The Accelerator Centre was launched in 2017 and is open to all companies aligned with the achievement of the 17 UN Sustainable Development Goals. It was ranked the #1 private business accelerator in Canada and in the top 5 globally by UBI Global. The Accelerator Program is the organisation's flagship program - a four-phased 24-month program that guides entrepreneurs through from the idea phase all the way to launching and scaling up their business. The Centre also runs the AC Jumpstart program, which offers \$30,000 in seed funding from FedDev Ontario, professional one-to-one mentorship and access to market insight reports, researchers, and local investor networks.²⁹

Another resource for entrepreneurs in the Region is the Canadian Innovation Centre (CIC), a not-for-profit organisation that helps innovators and entrepreneurs move from the idea phase to market implementation and success. It was founded 35 years ago within the University of Waterloo and has since provided expertise to over 20,000 innovators. The CIC mainly provides training, guidance and market insight to innovative entrepreneurs.³⁰

²⁷ Communitech (2020) *Communitech Outputs*. Retrieved from: <https://www.communitech.ca/how-we-help/outposts.html>

²⁸ Communitech (2020) *Properties & facilities*. Retrieved from: <https://www.communitech.ca/about-us/our-operation/our-spaces.html>

²⁹ The Accelerator Centre (2020) *Innovation Doesn't Stop Neither Do We*. Retrieved from: <https://www.acceleratorcentre.com/>

³⁰ The Accelerator Centre (2020) *About Us*. Retrieved from: <https://innovationcentre.ca/about-us/>

Collaborate with post-secondary institutions

The Accelerator Centre works with several local universities in the Waterloo Region, including the University of Waterloo, Wilfrid Laurier University, University of Guelph, and Conestoga College. Students and alumni participating in any entrepreneurship programs within these universities and colleges can apply to the AC Jumpstart program at the Accelerator Centre with a recommendation.³¹ Entrepreneurs from the University of Waterloo are eligible to have their seed funding matched by the university.³²

The University of Waterloo is known for its successful entrepreneurship ecosystem. In fact, 19% of tech founders in Canada have graduated from the University of Waterloo. Some of the University's most notable programs are:³³

- Velocity Incubator.³⁴ This incubator supports early-stage technology companies looking to scale up their businesses and product development. Velocity also has a pre-incubator program for students at the University of Waterloo in the early idea-stage of developing their business.
- Conrad School of Entrepreneurship and Business.³⁵ The Conrad School offers entrepreneurial programs for undergraduate and graduate students at the University of Waterloo within the Faculty of Engineering. These programs add an entrepreneurial component to students' degrees, helping them to commercialise their technical innovations.
- St Paul's University College GreenHouse incubator.³⁶ GreenHouse provides a community for student innovators seeking to create social or environmental change.
- EPP Peace Incubator.³⁷ The Peace Incubator supports new ventures using tech to create a more peaceful and just world.

The University of Waterloo also recently announced plans to launch a \$35 million "Innovation Arena" that will focus on health innovation and medical technology start-ups. The Innovation Arena will be 90,000 square feet, equipped with a wet lab for chemical science, four biosafety labs, and product development space. It will be constructed in the Innovation District, and the city of Kitchener will provide \$8.5 million in funds to support the development.³⁸

Wilfrid Laurier University provides support to entrepreneurial students through its LaunchPad incubator.³⁹ LaunchPad is open to students and alumni with a clear business concept, and offers workspace, mentorship, networking opportunities, and access to special funding opportunities. One of the funding opportunities is the RBC Venture Accelerator Program, which

³¹ Accelerator Centre (2020) *AC JumpStart*. Retrieved from:

<https://www.acceleratorcentre.com/programs/ac-jumpstart>

³² University of Waterloo (2020) *AC JumpStart – University of Waterloo*. Retrieved from:

<https://uwaterloo.ca/research/ac-jumpstart-university-waterloo>

³³ The University of Waterloo (2020) *Entrepreneurship*. Retrieved from: <https://uwaterloo.ca/entrepreneurship/>

³⁴ <https://velocityincubator.com/>

³⁵ Conrad School of Entrepreneurship and Business (2020) *The Academic Engine for Entrepreneurs*. *University of Waterloo*. Retrieved from: <https://uwaterloo.ca/conrad-school-entrepreneurship-business/>

³⁶ St. Paul's University College (2020) *About GreenHouse*. *University of Waterloo*. Retrieved from:

<https://uwaterloo.ca/stpauls/greenhouse/about-greenhouse>

³⁷ Kindred Credit Union Centre for Peace Advancement (2020) *EPP Peace Incubator*. *University of Waterloo*. Retrieved

from: <https://uwaterloo.ca/centre-peace-advancement/epp-peace-incubator>

³⁸ Waterloo EDC (2020) *UWaterloo to launch new \$35 million medtech innovation centre*. *Waterloo EDC Blog*. Retrieved from: <https://blog.waterlooredc.ca/uwaterloo-launch-medtech-innovation-centre>

³⁹ Wilfrid Laurier University (2020) *LaunchPad Incubator*. Retrieved

from: <https://students.wlu.ca/work-leadership-and-volunteering/entrepreneurship/launchpad/index.html>

provides a \$30,000 grant for students to work on their own venture or work for at an established start-up.⁴⁰

Conestoga College offers several programs for student and alumni entrepreneurs to develop their businesses. Conestoga's Venture Lab is a business incubator designed to support early-stage start-ups through a four-month program including access to mentoring, workshops, networking and the breadth of the college's new venture development resources.⁴¹ Conestoga is also home to the Gig Lab, a business incubator for freelancers. The Gig Lab offers 15 weeks of one-on-one coaching, weekly workshops, and networking opportunities.⁴²

Results

The Waterloo Region has a strong entrepreneurial ecosystem that combines academia (i.e. the University of Waterloo), local government (i.e. the Small Business Centre) and the private sector (i.e. the Accelerator Centre and Communitech). As a result of this ecosystem, the Waterloo Region now has one of the world's fastest growing tech sectors and the world's second highest start-up density, second only to Silicon Valley.⁴³ The resources in the Region have helped support thousands of start-ups grow and scale; the Accelerator Centre alone has supported 650 start-ups, raised over \$1bn in funds and created over 4,000 jobs.⁴⁴

The Region's focus on innovation and entrepreneurship has attracted a number of tech leaders, including Google, OpenText, BlackBerry and Shopify.⁴⁵ Google recently announced plans to expand their offices in the Innovation District to accommodate up to 5,000 employees (more than triple its current amount) and open Canada's first Google for Start-ups Accelerator.⁴⁶

The Region has also attracted international attention through the success of local start-ups, the most prominent example is the Waterloo-based retail innovator, Faire, which has doubled its valuation to \$2.5 billion in 2020 and opened a second office in Silicon Valley.⁴⁷

⁴⁰ Wilfrid Laurier University (2020) *Funding Opportunities*. Retrieved from: <https://students.wlu.ca/work-leadership-and-volunteering/entrepreneurship/funding-opportunities.html>

⁴¹ Conestoga (2020) *Venture Lab*. Retrieved from: <https://www.conestogac.on.ca/research/applied-research/centres/entrepreneurship-collective/labs/venture-lab>

⁴² Conestoga (2020) *Gig Lab*. Retrieved from: <https://www.conestogac.on.ca/research/applied-research/centres/entrepreneurship-collective/labs/gig-lab>

⁴³ Region of Waterloo (2020) *Innovation Culture*. Retrieved from: <https://www.regionofwaterloo.ca/en/doing-business/innovation-culture.aspx>

⁴⁴ The Accelerator Centre (2020) *Our Programs*. Retrieved from: <https://www.acceleratorcentre.com/>

⁴⁵ Waterloo EDC (2020) Google announces big expansion of its Canadian operations. *Waterloo EDC Blog*. Retrieved from: <https://blog.waterloeedc.ca/google-announces-expansion-canadian-operations>

⁴⁶ Link2Build (2020) Kitchener Innovation District welcomes first Canadian Google for Startups. *Link2Build Ontario*. Retrieved from: <https://www.link2build.ca/news/articles/2020/february/kitchener-innovation-district-welcomes-first-canadian-google-for-startups/>

⁴⁷ Waterloo EDC (2020) Waterloo-based unicorn Faire doubles valuation to \$2.5 billion. *Waterloo EDC Blog*. Retrieved from: <https://blog.waterloeedc.ca/waterloo-faire-valuation-2020>

Niagara

Background

Niagara is a regional municipality, with a population roughly double that of Windsor, standing at 447,888 in 2016.⁴⁸ Niagara is made up of 12 municipalities, including Niagara Falls and St. Catharines, its largest urban centre, with a population of 133,113.⁴⁹ Like Windsor, Niagara is strategically located on the US border, with only a small river separating the region and the U.S. city of Buffalo.⁵⁰

Niagara has an accessible labour market of 229,000 people, with over a million workers within a 50km commuting distance.⁵¹ 59% of residents between 25-64 have post-secondary education, with Niagara hosting Brock University and Niagara college as higher education institutions.⁵² Niagara's key economic strengths are tourism, manufacturing, agri-business and emerging sectors, such as computer systems design.

Initiatives

Make the most of federal initiatives and funding

Niagara has implemented a wide range of incentives to encourage companies to invest and locate in their region. Niagara was designated as Ontario's first Foreign Trade Zone Point, giving companies working in the region significant incentives, such as:⁵³

- Incentive programs including duty relief and customs bonded warehouse
- Mentoring services from experienced exporters
- Global networking opportunities
- Streamlined access and advice on locating in all Niagara municipalities
- Streamlined access to other government agencies

⁴⁸ Statistics Canada (2020). *Census Profile, 2016 Census*. Retrieved from:

<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CD&Code1=3526&Geo2=PR&Code2=01&Data=Count&SearchText=3526&SearchType=Begins&SearchPR=01&BI=All&Custom=&TABID=3>

⁴⁹ Statistics Canada (2020) *Census Profile 2016, Census*. Retrieved from:

<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3526053&Geo2=PR&Code2=01&Data=Count&SearchText=3526053&SearchType=Begins&SearchPR=01&BI=All&Custom=&TABID=3>

⁵⁰ Niagara Canada (2020). *Strategic Location*. Retrieved from:

<https://niagaracanada.com/niagara-advantage/strategic-location/>

⁵¹ Niagara Canada (2020). *Workforce*. Retrieved from: <https://niagaracanada.com/niagara-advantage/workforce/>

⁵² Ibid.

⁵³ Niagara Canada (2020). *Niagara Foreign Trade Zone*. Retrieved from:

<https://niagaracanada.com/incentives-and-programs/niagara-foreign-trade-zone/>

Incentivise new development through municipal incentives

Niagara offers municipal incentive programs outside of the FTZ, which are:

- Development charges reduction program:⁵⁴ reduces development charges up to 50% for most projects, and a refund on municipal property taxes for up to 10 years.
- Gateway CIP (set up in 2012):⁵⁵ provides property tax reductions of 40-100% for 5-10 years of the property tax increment, depending on their score against criteria
- Brownfield Incentives:⁵⁶ Reimburses up to 100% of the property tax increment for up to 10 years
- Downtown development:⁵⁷ A variety of grants and loans for the development and improvement of properties in the downtown
- Signposting for federal and provincial funding opportunities

Improve ease of business and entry for prospective and existing businesses

A visible part of Niagara's offering to prospective businesses is ease of access, with the region's economic development team offering a number of services:⁵⁸

- Site selection: The team helps businesses with site selection, including tax modelling, and inventory of available commercial and industrial buildings
- Research: The team also offers streamlined access to regional information such as demographics and labour force statistics
- Investor support: The team offers introductions to local stakeholders, and expedited services including assistance with financial incentive applications
- Business support: This team make sure that businesses are aware of the support programs offered by the regional and federal government.
- Niagara offers a summary of useful resources and organizations in key sectors, such as agri-business and manufacturing.
- Niagara Ambassador program: engages local business leaders, community leaders and general cheerleaders for Niagara to promote Niagara as a great place to do business.

⁵⁴ Niagara Canada (2020). *Development Charge Incentives*. Retrieved from:

<https://niagaracanada.com/incentives-and-programs/development-charge-incentives/>

⁵⁵ Niagara Canada (2020). *Gateway CIP*. Retrieved from:

<https://niagaracanada.com/incentives-and-programs/gateway-cip/>

⁵⁶ Niagara Canada (2020). *Brownfield Incentives*. Retrieved from:

<https://niagaracanada.com/incentives-and-programs/brownfield-incentives/>

⁵⁷ Niagara Canada (2020). *Other Incentives*. Retrieved from:

<https://niagaracanada.com/incentives-and-programs/other-incentives/>

⁵⁸ Niagara Canada (2020). *Services*. Retrieved from: <https://niagaracanada.com/services/>

Support entrepreneurs through business incubators and innovation centres

Finally, Niagara also offers significant support to start-ups and entrepreneurs, through their Regional Innovation Centre, Innovate Niagara.⁵⁹ Innovate offers a wide range of support to entrepreneurs, including advice and mentorship, workshops, market intelligence, networking and access to service providers. Innovate also offers three separate business incubators:⁶⁰

- The Generator at One: Opened in 2010, this supports interactive digital media and tech companies. Since its creation, it has achieved modest growth, it has 13 companies on its portfolio, 5 graduate companies and 104 generator-driven jobs.
- The Goodman School of Business BioLinc: Opened in 2013, it is located in a \$114.4 million building, which hosts multiple companies, projects, researchers and students. Since its creation, it has 6 resident companies, with 60 active youth entrepreneurs.
- ihub: Opened in 2014, the Education Research and Innovation hub (ihub) provides support for entrepreneurs in the education sector. It fosters collaboration amongst educators, parents, researchers and industry leaders. Since opening, it has gained 26 portfolio companies.

Results

Niagara's efforts resulted in them being rated Ontario's second most competitive centre in KPMG's 2016 cost.⁶¹ Its strategic location has allowed it to become a trade hub, with one in six trucks crossing between the US and Canada going through Niagara's borders, carrying nearly \$100 billion in trade through the region.⁶²

In the last five years, over \$4 billion was invested in Niagara.⁶³ Niagara is experiencing a period of sustained growth, with a 10% increase in the number of jobs in Niagara from 2013–2018, a 362% increase in industrial building construction and a 19% increase in commercial building construction from 2015–2017.⁶⁴ Niagara's support for entrepreneurs has also seen results, with over 1,000 clients helped, \$8.3 million of market intelligence delivered and help provided to secure over \$50 million worth of funding. Innovate Niagara (2020). *Innovate Niagara*. Retrieved from: <https://innovateniagara.com/>

Niagara has also seen growth in all of the key sectors identified in their five-year plan. Niagara advertise that their lower utility costs and other advantages allow a typical manufacturing facility to achieve cost savings of 19–28% over Ontario competitors.⁶⁵ Growth in the tech sector has been particularly impressive, since 2011, jobs have grown by 47.5% in the computer systems design and related services and 81% in information and technology.⁶⁶

⁵⁹ Innovate Niagara (2020). *Innovate Niagara*. Retrieved from: <https://innovateniagara.com/>

⁶⁰ Innovate Niagara (2020). *The Incubators*. Retrieved from: <https://innovateniagara.com/incubators/>

⁶¹ KPMG (2020). *Competitive Alternatives: KPMG's guide to international business locations costs*. Retrieved from: <https://assets.kpmg/content/dam/kpmg/pdf/2016/03/ca-competitive-alternatives-2016-canada.pdf>


⁶² Niagara Canada (2020). *Economic Trade Corridor*. Retrieved from: <https://niagaracanada.com/niagara-advantage/economic-trade-corridor/>

⁶³ Niagara Canada (2020). *Cost of Doing Business*. Retrieved from: <https://niagaracanada.com/niagara-advantage/cost-of-doing-business/>

⁶⁴ Niagara Canada (2020). *Niagara Economic Development, 5 Year Strategy: 2019–2024*. Retrieved from: <https://niagaracanadaadmin.com/investment/wp-content/uploads/sites/7/2019/11/NED-5-Year-Strategy-Summary.pdf>

⁶⁵ Niagara Canada (2020). *Manufacturing*. Retrieved from: <https://niagaracanada.com/key-sectors/manufacturing/>

⁶⁶ Niagara Canada (2020) *Emerging Sectors*. Retrieved from: <https://niagaracanada.com/key-sectors/emerging-sectors/>

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Annex 03

Border Cities Comparison

Annex 03

Border Cities Comparison

December 2020

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Border Cities Comparison

Executive Summary

In this brief, the experience of 5 different border cities is examined:

Border region	Cities
U.S. - Canada	Sault Ste. Marie, Michigan & Sault Ste. Marie, Ontario
U.S. - Canada	Stanstead, Quebec & Derby Line, Vermont
U.S. - Mexico:	San Diego & Tijuana
Malaysia - Singapore	Johor Bahru & Singapore
Denmark - Sweden	Copenhagen & Malmö

All of these border cities have different approaches to collaboration with their international neighbours. Some, such as Copenhagen & Malmö, have formal partnerships, joint committees and a shared future development plan for the region. Others, such as Stanstead & Derby Line, have a more informal, bottom-up approach to integration, led by members of each community creating and maintaining relationships across the border.

We summarise the broad approaches below:

- 1. Formal Political Collaboration.** In this approach, the municipal governments agree to create formal political ties with their international neighbour. One example of this is the creation of joint committees, in which representatives from both sides of the border are required to regularly meet to discuss development plans and policies for the region.
 - a. Examples:
 - i. Copenhagen & Malmö: the Øresund Committee, every government department has contacts in the neighbouring government department, annual financial committee meetings, and joint regional plan to 2025.
 - ii. San Diego & Tijuana - the Smart Border Coalition, the Committee on Regional Binational Opportunities, and joint future cluster development plans.
- 2. Formal Economic Collaboration.** In this approach, the municipal governments work together to create formal economic ties with one another. This is often introduced as special economic zones or free trade zones that reduce costs for businesses operating across the two cities. This can also take the form of joint economic development organisations, such as joint business accelerators and incubators.
 - a. Examples:

- i. Sault Ste. Marie & Sault Ste. Marie: Foreign Trade Zone, Joint International Relations and Economic Growth Committee, Sault Ste. Marie Economic Development Corporation, and Innovation Centre.
 - ii. San Diego & Tijuana: Foreign Trade Zone.
 - iii. Johor Bahru & Singapore: Iskander Malaysia special economic zone.
- 3. **Informal Economic Collaboration.** This approach refers to economic collaboration between the border cities that is not due to any formal policies or initiatives introduced by the municipal governments, but rather because the two cities' different economic conditions create differences in employment and investment opportunities that incentivise residents to work or invest in the neighbouring city.
 - a. Examples:
 - i. Johor Bahru & Singapore: Malaysian workers seeking high-paid employment opportunities in Singapore, and Singaporean residents consuming goods in Malaysia to take advantage of their stronger currency.
 - ii. San Diego & Tijuana: Businesses in San Diego setting up factories in Tijuana to capitalise on cheaper labour, and American citizens living and consuming goods in Tijuana while working in San Diego to take advantage of the cheaper living costs.
- 4. **Informal Community-led Collaboration.** In this approach, the collaboration between the two cities is led by the residents rather than the government. It is a bottom-up approach to integration rather than a top-down one. This type of collaboration is found when residents attend churches, sporting events, or schools across the border without any formal government initiative incentivising them to do so. This integration is also driven by personal and familial connections between residents on both sides of the border.
 - a. Example:
 - i. Stanstead & Derby Line: Joint church congregation, shared sporting events, common to attend schools on the other side of the border, and family and friends span both sides of the border.

Canada – U.S.

Sault Ste. Marie, Ontario – Sault Ste. Marie, Michigan



Why they were chosen & why they are relevant for Windsor: Sault Ste. Marie, Ontario and Sault Ste. Marie, Michigan have several similarities to Windsor and Detroit: the cities are located on the U.S.-Canada border, one is much smaller than the other, and they are connected by a bridge, which makes travel between them very easy. The two cities have very similar offers to each other in terms of lifestyle, work opportunities, education, and tourism. Rather than trying to develop complementary economies and carve out their own separate niches, these two cities have aimed to essentially operate as a single city that spans two countries. This may be a useful strategy for Windsor to follow if the city wants to define itself as an extension of Detroit.

Level of cooperation: High

Background: The twin cities of Sault Ste. Marie (“the Twin Saults”) are located on the northeastern tip of Michigan and Ontario, Canada, separated by the St. Mary’s River. They were originally founded and settled as a single city hundreds of years ago, but have since been separated by the US-Canadian border in modern times. Despite being separated by international borders, they remain closely tied to one another today.¹

¹ Invest Sault Ste. Marie (2020) *Advantages*. Retrieved from: <https://investsaultstearie.com/why-sault-ste.-marie/advantages/>

The cities differ in terms of size, the Ontario side has a population of 78,159,² whereas the Michigan side is only home to 13,420 people.³ The two cities are connected by the International Bridge,⁴ which serves as a transportation link for industries such as steel, paper, and tourism, as well as the general public for work and leisure.⁵

The two cities formally became sister cities in 2012, the first of any such agreement across border towns in North America.⁶ This agreement formalised their collaboration under the slogan “Two Nations, One City”, and formally committed both cities to increase joint economic development initiatives, educational and cultural exchanges, and other collaborative ventures.

Binational collaborative policies: The Twin Saults have recognised that they have more to offer when they work together, which is why they submitted a joint bid to host Amazon’s HQ2. They exploited their strategic location as an entryway into both the U.S. and Canadian markets, skilled graduates from universities in both cities, low business operating costs and affordable real estate.⁷ The Twin Saults were ultimately unsuccessful in attracting Amazon’s HQ2, however the initiative shows that they recognise their strengths are greater when working together.

In 2014, the Twin Saults signed an economic development agreement, which formally established a framework for collaborative economic development projects. The cities also established the Joint International Relations and Economic Growth Committee, responsible for heading collaborative initiatives to grow the strategic sectors of trade, manufacturing, IT, education, health, and transportation.⁸

The sister cities also have a number of joint initiatives working together to encourage business development in the region. The Sault Ste. Marie Economic Development Corporation (SSMEDC) offers support and resources for entrepreneurs starting a business and for owners growing their existing business in either of the Twin Saults.⁹ For example, the SSMEDC founded the Millworks Centre for Entrepreneurship, located in the Ontario Sault, which provides access to tools, education, mentorship and networking opportunities for business owners.¹⁰ The Sault Ste. Marie Innovation Centre is another joint initiative that aims to drive business growth, and facilitate research and innovation specifically in the science and technology sectors.¹¹

The sister cities also collaborate in the education sector. Three universities across the region – Lake Superior State University (LSSU) in Michigan, Algoma University in Ontario, and the Sault

² Statistics Canada (2020) *Census Profile, 2016 Census*. Retrieved from:

<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CMACA&Code1=590&Geo2=PR&Code2=35&SearchText=Sault%20Ste.%20Marie&SearchType=Begins&SearchPR=01&B1=All&TABID=1&type=0>

³ United States Census Bureau (2020) *Population estimates, July 1 2019*. Retrieved from:

<https://www.census.gov/quickfacts/saultstemariacitymichigan>

⁴ Michigan Department of Transport (2020) *about the bridge*. Retrieved from:

https://www.michigan.gov/mdot/0,4616,7-151-87728_48384-22039--,00.html

⁵ Invest Sault Ste Marie (2020) *Key Sectors*. Retrieved from: <https://investsaultstemarie.com/key-sectors/>

⁶ <https://www.secondwavemedia.com/upper-peninsula/innovationnews/saultsisters082212.aspx>

⁷ Invest Sault Ste Marie (n.y.) *Why Sault Ste Marie*. Retrieved from: https://amazonnorth.ca/img/invest_sault_ste_marie_why_ssm.pdf

⁸ Northern Ontario Business Staff (2014) Twin Saults sign economic development agreement. *Northern Ontario Business*. Retrieved from:

<https://www.northernontariobusiness.com/regional-news/sault-ste-marie/twin-saults-sign-economic-development-agreement-370578>

⁹ Sault Ste Marie Economic Development Corporation (2020) *What is an EDC*. Retrieved from: <https://www.saultedc.com/what-is-an-edc>

¹⁰ The Mill Works (2020) *Who We Are*. Retrieved from: <https://themillworks.ca/en/who-we-are/>

¹¹ Sault Ste Marie Innovation Centre (2020) *Who We Are*. Retrieved from: <https://www.ssmic.com/who-we-are>

College of Applied Arts and Technology in Ontario - have reciprocal tuition agreements that allow students from across the border to pay resident fees.¹²

The Twin Saults are situated in a strategic location within the Great Lakes Economy, a highly integrated trading zone made up of 10 U.S. states and two Canadian provinces, which accounts for more than half of all U.S./Canadian trade. In an effort to define Sault Ste. Marie as a trade hub between the two nations within the Great Lakes Economy, the municipal government implemented a Foreign Trade Zone (FTZ) in 2019. This has reduced trade costs further between the two areas and supports even further integration of the two cities and their respective nations.¹³

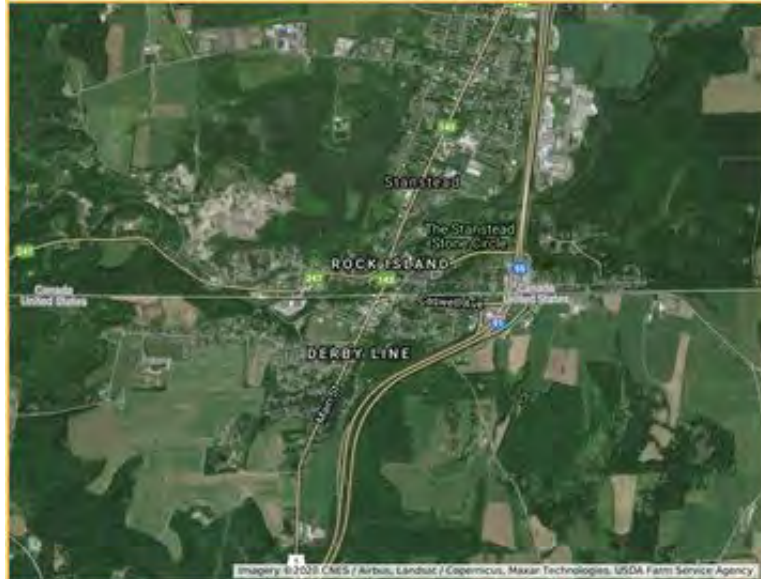
¹² Michigan State University (2012) *A Global Review of Innovative Practices in Regional SME Exporting Strategies & Foreign Direct Investment Attraction*. Retrieved from: https://reicenter.org/upload/documents/colearning/snyder2012_report.pdf

¹³ Federal Register (2019) *Reorganization of Foreign-Trade Zone 16 Under Alternative Site Framework Sault Ste Marie, Michigan*. Retrieved from:

<https://www.federalregister.gov/documents/2019/06/21/2019-13124/reorganization-of-foreign-trade-zone-16-under-alternative-site-framework-rk-sault-ste-marie-michigan>

Canada – U.S

Stanstead, Quebec and Derby Line, Vermont



Why they were chosen & why they are relevant for Windsor: Stanstead and Derby Line are highly integrated, both economically and socially. Residents of both towns regularly travel to the other for work, school, and leisure. This travel is particularly easy because they have a land border, which – up until 9/11 – was only minimally monitored and could be driven or walked through without even realising you were entering another country.¹⁴ Much of the integration across these towns is community-based, i.e. residents crossing the border for schools, attending church or sporting events, or for work, rather than led by the municipal governments through formal partnerships.

Windsor could seek to follow a similar strategy to Stanstead and Derby Line by encouraging community-led integration rather than implementing more formal collaborative partnerships with the municipal government of Detroit.

Level of cooperation: Medium

Background: Stanstead, Quebec is a town of approximately 1,475¹⁵ people, which is located across from Derby Line, Vermont on the Canadian-U.S. border. Derby Line is an even smaller

¹⁴ Bidgood, J. (2018) Where the U.S.-Canadian Border is Marked by Petunias, Not a Wall, *The New York Times*. Retrieved from: <https://www.nytimes.com/2018/06/12/us/canada-usa-border.html>

¹⁵ Statistics Canada (2020) *Census Profile, 2016 Census*. Retrieved from: <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=POPC&Code1=1493&Geo2=PR&Code2=24&SearchText=Stanstead&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=1493&TABID=1&type=0>

town, with a population of just 758 people.¹⁶ Historically, these two towns existed essentially as one regardless of the international border running between them, with residents frequently attending hockey games in Canada and then filling their cars up with gas in the U.S.

After the September 11th attacks, U.S. border control became much stricter and new regulations made it more difficult for the two towns to coexist in the same way as they had historically.¹⁷ For example, in the following years a new regulation mandated that residents show their passport every time they crossed the border and new checkpoints and gates were built up around the area. These regulations were made even stricter after 2017, when criminals were caught taking advantage of the towns' lax border control to smuggle firearms from the U.S. into Canada.¹⁸ These events led to a higher presence of both U.S. and Canadian border control officials and closed circuit cameras in the area.¹⁹ The U.S. border patrol also implemented a policy of automatic detention for any unauthorised entry into the U.S., which caused many residents to be arrested for activities they had done all their lives, such as grocery shopping in the neighbouring town.

The new regulations had both social and economic impacts on the area; attending sports games, church services or other events across the border, which were commonplace before, became cumbersome or impossible for those without government-issued ID. Further, the Stanstead-Derby Line Port of Entry saw a significant decline of trucks crossing the border, negatively impacting the area's position as an avenue for trade.²⁰

¹⁶ Data USA (2020) *Derby Line, VT*. Retrieved from: <https://datausa.io/profile/geo/derby-line-vt>

¹⁷ Friedman, K. (2010) The border after 9/11 – security trumps all. *Policy Options*. Retrieved from: <https://policyoptions.irpp.org/magazines/after-copenhagen/the-border-after-911-security-trumps-all/>

¹⁸ The Associated Press (2017) Montreal man smuggled guns through library straddling Canada-U.S. border: prosecutors. *CBC News*. Retrieved from: <https://www.cbc.ca/news/canada/montreal/montreal-man-gun-smuggling-vermont-1.4170435>

¹⁹ NPR (2019) US-Canada Border Community Culture Changes As Security Tightens. Retrieved from: <https://www.npr.org/2019/11/21/781138076/u-s-canada-border-communitys-culture-changes-as-security-tightens?t=1606410644596>

²⁰ Hataley, T., Mason, S. J. (2018) Collective Efficacy Across Borders: The Case of Stanstead, Quebec and Derby Line, Vermont. *Journal of Borderlands Studies*, 33(3), 433-444.

Binational collaborative policies: Although the two towns have separate municipal governments, they share a number of collaborative policies and programs, including the management of joint utilities, shared public services and infrastructure, and joint community development programs. The towns even share an area code, allowing residents to make phone calls to people or offices on the other side of the border without paying international long-distance fees.²¹

Stanstead and Derby Line also share a water storage and treatment facility, the “International Water Company”, which was established in 1906.²² Water is pumped from wells in Canada, stored in American reservoirs, distributed to homes on both sides of the border, and the system is maintained by a Canadian firm.²³ This shared water source and distribution highlights the extent of the two towns’ collaboration.

The towns also share emergency public services, including ambulance services and fire departments. After stricter regulations were brought in regarding international movement, local officials from the two cities agreed to have special lanes at the border for emergency services that would allow them to pass through quickly and maintain fast service for both areas.

The Haskell Free Library and Opera House, built deliberately on the U.S.-Canadian border in 1904, is a symbol of the interconnectedness of the two towns. The library is run by a fixed number of Canadians and Americans to ensure it remains a genuine shared space for both communities. Inside the library, there is a strip of black tape that runs along the floor to mark the border between the U.S. and Canada. Whilst in the library, people travel to Canada to pick a book and then cross over to the U.S. to sit down at a table and read it. The upstairs Opera House was built with the same vision, patrons sit in seats in the U.S. and watch performers on stage in Canada.²⁴ Visitors to the library and opera house are not required to show their passports upon entering, however they must return to the country from which they entered upon leaving.

In recent years, the library has become a haven for immigrant families divided by the U.S. border. For example, Syrian families living in Toronto come to the library to meet with American relatives without the fear of deportation or arrest.²⁵

²¹ Ibid.

²² Forest, P. (2017) Inter-local Water Agreements: Law Geography and NAFTA. Retrieved from: <https://core.ac.uk/reader/59356520>

²³ Austen, I. (2017) Quebec and Vermont Towns Bond Over a Sleepy Border. *The New York Times*. Retrieved from: <https://www.nytimes.com/2007/07/18/world/americas/18border.html>

²⁴ Llana, S.M. (2020) Books before borders: Letter from a library on the US-Canada boundary. *The Christian Science Monitor*. Retrieved from: <https://www.csmonitor.com/USA/Society/2020/0127/Books-before-borders-Letter-from-a-library-on-the-US-Canada-boundary>

²⁵ Kassam, A. (2018) Gun-smuggling case puts spotlight on library straddling US-Canada border. *The Guardian*. Retrieved from: <https://www.theguardian.com/world/2018/jan/31/canada-border-library-gun-smuggling-case>

U.S. – Mexico

San Diego – Tijuana



Why they were chosen & why they are relevant for Windsor: San Diego/Tijuana are similar to Windsor/Detroit in that they are North American cities – one of which is in the U.S. – and they are a trade conduit for their respective countries. San Diego and Tijuana have built a complementary relationship, each specialising in different types of labour/skills, which benefits both regions.

The strategy of specialising in complementary skills/sectors/labour is one that Windsor could consider in its future relationship with Detroit.

Level of cooperation: High

Background: San Diego and Tijuana are the two largest cities in the California-Baja California binational region, which is home to more than 6.5 million people. The two cities have a complementary economy, San Diego specialises in engineering, design, and software functions, whereas Tijuana specialises in lower-skill low-cost labour.²⁶ To take advantage of their respective strengths, American businesses design products and utilise factories in Mexico to produce them. There are over 600 maquiladoras in Tijuana – factories in Mexico run by foreign companies that export their products back to their country (mostly the U.S.). There are

²⁶ Mendoza, J.E., Dupeyron, B. (2017) Economic Integration, Emerging Fields and Cross-border Governance: The Case of San Diego-Tijuana. *Journal of Borderlands Studies*, 25(5), 59-88. Retrieved from: <https://halshs.archives-ouvertes.fr/halshs-01588578/document>

maquiladoras across a number of sectors, including manufacturing, healthcare and software.²⁷

Tijuana is more densely populated than San Diego, with a population of 2.15 million people²⁸ compared to San Diego's population of 1.42 million people.²⁹ An average of 135,000 people travel between San Diego and Tijuana daily.³⁰ However, since the COVID-19 pandemic hit the border has been closed to all non-essential travel, which will last until at least October 21.³¹ This closure has caused a bottleneck at the border and led to wait times of more than 5 hours for the travellers crossing the border daily for work.³²

Binational collaborative policies: The municipal governments of San Diego and Tijuana coordinate across a number of binational projects and organisations. The Smart Border Coalition is a binational organisation that brings together public and private sector leaders from both cities to develop databases and policy positions, deliver joint events and programs, and encourage the growth of the region's joint economy.³³

The Committee on Binational Regional Opportunities (COBRO) is another binational organisation that works to facilitate better understanding of the needs of the California-Baja California region and makes recommendations regarding planning and development for the region.³⁴ Another collaborative initiative is the Binational Economic Development Forum, in which officials and members of the business community from both cities meet biannually to discuss proposals for joint economic development.

The two cities also share a common vision for future strategic sector development. They developed the Cluster Development Plan to promote the development of binational enterprises in strategic clusters of telecommunications, environmental sciences, electronics manufacturing and tourism.³⁵

The municipal government of San Diego also implemented a Foreign Trade Zone (FTZ) site in the city, which reduces trading costs. While within the FTZ, firms are not required to pay federal excise tax or the Customs and Border Protection Duty on their merchandise.³⁶ In 2016, 87 companies took advantage of the FTZ in San Diego, importing between \$100 million and \$250 million worth of products.³⁷

²⁷ Nettleton, C. (2018) Business Booming in the San Diego Tijuana Border Region. *3BL Association*. Retrieved from: <https://www.3blassociation.com/insights/business-booming-in-the-san-diego-tijuana-border-region>

²⁸ Population Stat (2020) *Tijuana, Mexico Population*. Retrieved from: <https://populationstat.com/mexico/tijuana>

²⁹ San Diego (2020) *Economic Development: Population*. Retrieved from: <https://www.sandiego.gov/economic-development/sandiego/population#:~:text=According%20to%20the%20U.S.%20Census,is%20age%2065%20and%20older.>

³⁰ San Diego Regional EDC (2015) *Tijuana Regional Profile*. Retrieved from: https://usmex.ucsd.edu/_files/events/frontera-fridays/tijuana-regional-profile-2017.pdf

³¹ U.S. Embassy & Consulates in Mexico (2020) *Travel Restrictions: Fact Sheet*. Retrieved from: <https://mx.usembassy.gov/travel-restrictions-fact-sheet/>

³² Spagat, E. (2020) US crackdown on nonessential border travel causes long waits. *ABC News*. Retrieved from: <https://abcnews.go.com/Business/wireStory/us-crackdown-nonessential-border-travel-long-waits-72606236>

³³ Mendoza Cota, J.E. (2017) Economic integration and cross-border economic organizations: the case of San Diego-Tijuana. Retrieved from: <https://www.redalyc.org/jatsRepo/530/53051786002/html/index.html#B3>

³⁴ San Diego Forward (2020) *Partners*. Retrieved from: <https://www.sdfoward.com/about-san-diego-forward/partners/>

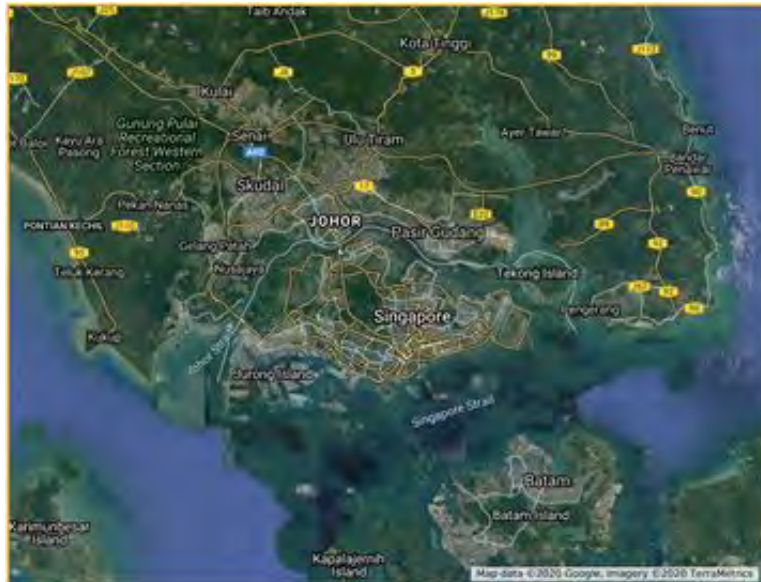
³⁵ San Diego (2020) *Economic Development: Binational Projects*. Retrieved from: <https://www.sandiego.gov/economic-development/sandiego/trade/mexico/binational>

³⁶ U.S. Customs and Border Protection (2020) *About Foreign-Trade Zones and Contact Info*. Retrieved from: <https://www.cbp.gov/border-security/ports-entry/cargo-security/cargo-control/foreign-trade-zones/about>

³⁷ San Diego (2020) *San Diego Foreign Trade Zone*. Retrieved from: <https://sandiego.maps.arcgis.com/apps/Cascade/index.html?appid=ebbd39240a5745a69fe339564e841280>

Malaysia – Singapore

Johor Bahru – Singapore



Why they were chosen & why they are relevant for Windsor: Johor Bahru and Singapore share many commonalities with Windsor and Detroit. One is much smaller and more affordable than the other, and it is common to live in one city and travel to the other for work or leisure.³⁸ Both economies are also very interlinked; they are reliant on one another for labour and investment, and generally experience economic growth and contraction simultaneously.³⁹

Windsor might consider a strategy similar to Johor Bahru and Singapore, in which it collaborates with Detroit to attract investors by selling the unique attributes of both cities.

Level of cooperation: Medium

Background: Johor Bahru is the capital city of the state of Johor, Malaysia; the metropolitan area has a population of just over 1 million residents.⁴⁰ It is separated by the Johor Strait from the much larger island-republic of Singapore, with a population of 5.69 million.⁴¹ The two cities are connected by a bridge, which is one of two physical links between Singapore and Malaysia.

³⁸ Channel News Asia (2020) *Allowing Malaysians to commute to Singapore will boost both countries' economies: Johor chief minister*. Retrieved from: <https://www.channelnewsasia.com/news/asia/malaysian-singapore-commute-johor-economy-12819754>

³⁹ The Star (2019) *A recession in Singapore likely to impact Johor as well*. Retrieved from: <https://www.thestar.com.my/news/nation/2019/08/20/a-recession-in-singapore-likely-to-impact-johor-as-well>

⁴⁰ World Population Review (2020) *Johor Bahru Population 2020*. Retrieved from: <https://worldpopulationreview.com/world-cities/johor-bahru-population>

⁴¹ Department of Statistics Singapore (2020) *Singapore Population*. Retrieved from: <https://www.singstat.gov.sg/modules/infographics/population>

The two regions have collaborated since the mid 1980's; the Malaysian Industrial Development Authority and Singapore's Economic Development Board first cooperated to foster tourism and cross-border production. They also collaborated on the provision of water, ferry services, and the sale of land to foreign investors. Over the coming years, Malaysia and Singapore quickly became important economic partners; they have been each other's second or third most important trading partners for decades (the first is China).⁴²

It is commonplace for workers to live in Johor Bahru, where living costs are relatively low, and commute to Singapore, where salaries are more than 3 times as high.⁴³ In 2015, Malaysia's Human Resource Ministry estimated there were approximately 350,000 Malaysians working in Singapore.⁴⁴ According to a Transport Economist at the Singapore, University of Social Science, many Singaporean manufacturers would not have a viable business model without the influx of Malaysian workers.⁴⁵

The flow of people, however, is not just one-directional. Singaporeans also cross the border into Johor Bahru to take advantage of the stronger Singaporean dollar for cheaper shopping and eating out. Singaporeans constitute Malaysia's largest source of visitors.⁴⁶ Further, the number of Singaporean's purchasing properties in Johor have been steadily growing as they have increasingly taken advantage of the affordable housing and ability to commute to work in Singapore.⁴⁷

Binational collaborative policies: Iskander Malaysia is a special economic zone in the Johor region launched in 2006 and expected to be fully implemented by 2025. The economic zone was proposed by the head of the Monetary Authority of Singapore, with the intent of combining Johor's land and low-cost commercial space and labour, with Singapore's high-quality production services as a way to attract foreign investors. According to the Malaysian Prime Minister, Iskander Malaysia would be "the New Jersey to Singapore's Manhattan".⁴⁸ Incentives for investors include exemption for Foreign Investment Committee Rules, ability to employ foreign employees freely, and exemption from corporate tax for a period of 10 years.⁴⁹

In recent years, a number of Singaporean companies have established operations in the zone, including across the sectors of education, healthcare, manufacturing and property

⁴² Hutchinson, F.E., Bhattacharya, P. (2019) Singapore-Malaysia Economic Relations: Deep Interdependence. *Yusof Ishak Institute*. Retrieved from: https://www.iseas.edu.sg/images/pdf/ISEAS_Perspective_2019_2.pdf

⁴³ HR Asia (2016) *Hike in Wages in Singapore Attracts More Malaysian Professionals*. Retrieved from:

<https://www.hrinasia.com/general/hike-in-wages-in-singapore-attracts-more-malaysian-professionals/>

⁴⁴ Today World (2018) *Malaysians in Singapore won't bother voting in GE14 says deputy home minister*. Retrieved from:

<https://www.todayonline.com/world/malaysians-singapore-wont-bother-voting-ge14-says-deputy-home-minister>

⁴⁵ See, S. (2020) JB-Singapore RTS will bring economic benefit, but may not ease weekend congestion. *Transport*. Retrieved from:

<https://www.businesstimes.com.sg/transport/jb-singapore-rts-will-bring-economic-benefit-but-may-not-ease-weekend-congestion>

⁴⁶ Hutchinson, F.E., Bhattacharya, P. (2019) Singapore-Malaysia Economic Relations: Deep Interdependence. *Yusof Ishak Institute*.

⁴⁷ The Economist (2012) *Relations between Singapore and Malaysia continue to thrive*. Retrieved from:

<http://country.eiu.com/article.aspx?articleid=319398016&Country=Malaysia&topic=Politics&oid=1752510159&aid=1>

⁴⁸ The Straits Times (2017) *Malaysia's Iskander economic zone to be three times the size of Singapore: report*. Retrieved from:

<https://www.straitstimes.com/asia/se-asia/malaysias-iskandar-economic-zone-to-be-three-times-the-size-of-singapore-report>

⁴⁹ Mohd Salleh, R. (2016) Iskandar Development Region – Malaysia's Guangdong? *AZMI & Associates*. Retrieved from:

https://www.inhousecommunity.com/wp-content/uploads/2016/07/v8i5_jurMalaysia.pdf

development.⁵⁰ Singapore has been one of the biggest investors in Johor since the 1980s, investing \$2.9 billion into the area between 1980-2012.⁵¹

In 2018, both governments signed a bilateral agreement to build the cross-border Johor Bahru - Singapore Rapid Transit System (RTS) with the goal of improving connectivity between the two cities. Both governments have agreed to fund, construct and maintain the RTS infrastructure within their territories, and have since appointed a joint venture of Malaysian and Singaporean companies to own, design, build, and maintain the RTS for a period of 30 years.⁵² Construction on the RTS began in 2019, but has since paused due to COVID-19 restrictions. Construction is set to resume in 2021 and the line is expected to open by the end of 2026 and will have the capacity to transport 10,000 passengers per hour between the two regions.⁵³

⁵⁰ The Economist (2012) *Relations between Singapore and Malaysia continue to thrive*.

⁵¹ Oxford Business Group (2016) *Wide range of investment opportunities await in Johor, Malaysia*. Retrieved from: <https://oxfordbusinessgroup.com/overview/state-readiness-wide-range-investment-opportunities-await>

⁵² Barrow, K. (2018) Singapore and Malaysia sign accord on cross-border metro line. *IRJ*. Retrieved from: <https://www.railjournal.com/regions/asia/singapore-and-malaysia-sign-accord-on-cross-border-metro-line/>

⁵³ Burroughs, D. (2020) Agreement for KL-Singapore high-speed line expected by year end. *IRJ*. Retrieved from: <https://www.railjournal.com/passenger/high-speed/agreement-for-kl-singapore-high-speed-line-expected-by-year-end/>

Denmark – Sweden

Copenhagen, Denmark and Malmö, Sweden



Why they were chosen & why they are relevant for Windsor: Copenhagen and Malmö, like Windsor and Detroit, are divided by a body of water, known as the Sound, one of the busiest sea lanes in the world. The cities are connected by a bridge-tunnel that provides both a road and a railway access. Like Windsor and Detroit, the two cities have dissimilar populations, with Malmö's population standing at 344,000 compared to Copenhagen's 632,000 (or 1.9 million, depending on where the city limits are measured).⁵⁴

The two cities have been regularly praised for their strong cooperation, and the close coordination of each city's officials could prove a useful example for Windsor and Detroit, especially given their close similarities in geography and comparative size.

Level of cooperation: High

Background: The region has historically been contested between Denmark and Sweden, with Malmö and its hinterland owned by Denmark during the Middle Ages. In the age of European cooperation, these past hostilities have been left far behind, with the EU proving a particularly important vehicle for advancing cross border collaboration. In fact, the EU has specifically funded projects that benefit cross border work and reduce border friction.⁵⁵ Cooperation between Malmö and Copenhagen is extensive and well established, with the first formal ideas

⁵⁴ Malmö (2020) Population. Retrieved from: <https://malmo.se/Fakta-och-statistik/Facts-and-statistics-in-english/Population.html>
City population (2020) Denmark: Copenhagen. Retrieved from: <https://www.citypopulation.de/en/denmark/copenhagen/>

⁵⁵ European Commission (n.y.) *Copenhagen-Malmö: a bridge for employment*. Retrieved from: https://ec.europa.eu/regional_policy/sl/projects/denmark/copenhagen-malmo-a-bridge-for-employment

to link the areas dating back to 1872, and the cooperative Øresund Council formed in 1964.⁵⁶ The decision was made to link the two cities with a bridge in 1991, with the bridge completed in 2005.

Binational collaborative policies: Copenhagen and Malmö have worked hard to foster a high level of cooperation, setting their own joint governmental cooperation structure, the Øresund Committee.⁵⁷ The Committee is unusual in that it functions at a regional scale, serving Greater Copenhagen and the Swedish Skåne region, rather than just each municipality.⁵⁸ The platform serves five main purposes:

- Supporting the joint marketing of Greater Copenhagen
- Supporting cooperation of investors, tourists, businesses and talents
- Work to create a strong international infrastructure
- Work for an integrated and sustainable growth region, influence legislation and border barriers to reduce barriers to growth
- Establish joint strategic business initiatives

Officials from each city work in close cooperation, with obligatory meetings between officials. Malmö and Copenhagen finance committee officials meet once a year for a forward looking meeting to discuss common priorities and problems for the future, whilst municipal leaders have regular meetings with their opposite numbers to coordinate policy on budgets and financial management. Each of Malmö's government departments have established contacts with corresponding officials in Copenhagen to ease communication between the cities, which particularly help their delivery of joint cooperation projects.⁵⁹

The EU has helped fund cooperation in this region, funding a number of cooperation projects, focused around the four priority areas work: green growth, regional metro system, city planning and growth without borders. Cooperation projects carried out so far include:⁶⁰

- School exchanges on sustainable development
- Collection of joint border regional statistics
- Methods for sustainable urban development
- Joint cycling infrastructure for the region

Cooperation between the cities runs throughout the economy, with the cities running a binational port since 2001.⁶¹ Rather than dividing the port into Swedish and Danish halves, the port is instead a single corporate entity that rents land from both cities. It is organized into segments based on the industries they serve; for example, one segment serves the cruise ship sector, whilst another serves the automotive sector. This system avoids questions of how

⁵⁶ De Langen, P., Nijdam, N. (2009) A best practice in cross-border cooperation: Copenhagen Malmö Port. https://www.researchgate.net/publication/241872583_A_best_practice_in_cross-border_cooperation_Copenhagen_Malmö_Port/link/5bad27fba6fdccd3cb77a52c/download

⁵⁷ Malmö (2017) *Greater Copenhagen and the Skåne Committee*. Retrieved from: <https://malmo.se/Nice-to-know-about-Malmö/EU-and-International-Cooperation-/Regional-work/Greater-Copenhagen-and-the-Skåne-Committee.html>

⁵⁸ The Mot (2020) *Copenhagen-Malmö: Overview*. Retrieved from: <http://www.espaces-transfrontaliers.org/en/resources/territories/territory-factsheets/territories/territory/show/copenhague-malmoe/>

⁵⁹ Malmö (2020) *MalmöCopenhagen*. Retrieved from: <https://malmo.se/Nice-to-know-about-Malmö/EU-and-International-Cooperation-/Regional-work/MalmöCopenhagen.html>

⁶⁰ Ibid.

⁶¹ De Langen, P., Nijdam, N. (2009) A best practice in cross-border cooperation: Copenhagen Malmö Port.

profits should be allocated between the cities, with investments being allocated between segments as the company sees fit.

The cities have also worked to develop strong academic links, aiming to form the Øresund Science Region.⁶² Unusually, local higher education institutions provided the leadership for closer cooperation, with 14 higher education institutions forming a consortium known as Øresund University. Øresund University seeks to make the region a centre of knowledge transfer and science education and application, and has provided a platform for the universities to collaborate with each other and their local communities. Each participating organisation in the University has agreed to open up all courses, libraries and other facilities to all students, teachers and researchers.

There are some imbalances in the economies of the two cities, most notably that the job market is better in Copenhagen, whilst house prices are cheaper in Malmö. This has resulted in a large number of people living in Malmö and commuting over to Copenhagen.⁶³ The cities have a cooperative and ambitious joint plan for the future, releasing a strategic overview of their aims to 2025.⁶⁴ These aims include:

- Formation of a joint regional database for available jobs
- A new wind farm in the Sound
- Common guidelines for sustainable buildings
- Testbed region for climate adaption
- A new transport link across the Sound
- High-speed train network combining the region with other major cities
- Cross-border digital travel planner
- Initiatives to provide information and support to international immigrants, local citizens and businesses


The next step of their economic cooperation will be based around a 'Jobs Pact', which will establish:

- Common employment service
- Common trainee programs
- Joint CSR in the procurement of major infrastructure projects
- Cooperation on vocational training for young people

⁶² Garlick, S., Kresl, P., Vaessen, P. (2006) The Oresund Science Region: A cross-border partnership between Denmark and Sweden. *OECD*. Retrieved from: <https://www.oecd.org/sweden/37006070.pdf>

⁶³ May, J. (2016) Twin cities: Here are four pairs of cities working together across borders/water/cultural differences. *City Monitor*. Retrieved from: <https://www.citymetric.com/horizons/twin-cities-here-are-four-pairs-cities-working-together-across-borderswatercultural>

⁶⁴ Malmö (n.y.) *Oresundsregionen*. Retrieved from: https://amenagement-territoire.public.lu/dam-assets/fr/eu-presidency/Events/Workshop-3/II_6-Lars-Silverberg---Cooperation-in-the-Oeresundsregionen-and-_Copenhagen-Malmoe-2025_.pdf

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Annex 04

Deep Dive: Detroit

Annex 04

Deep Dive: Detroit

December 2020

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Deep Dive: Detroit

Executive Summary

The Rise and Fall of Detroit

- Detroit, located in the heart of the American Rust Belt, was the centre of the global automotive industry for much of the 20th century. Automotive giants, such as General Motors, Ford and Chrysler all set up manufacturing plants in the city, bringing hundreds of thousands of well-paid jobs with them.
- However, throughout the late 20th century, increasing rates of outsourcing, automation and globalisation led automotive production facilities to be moved from the Rust Belt to lower-cost regions, often overseas.
- Between 1950 and 2016, Detroit lost more than half of its population¹ By 2010, Detroit's unemployment rate had risen to 24.8%,² whilst from 2003–2009 Michigan alone accounted for 40% of net job losses in the U.S. automotive manufacturing industry.³
- The continuously shrinking population caused a diminishing tax base that pushed the municipal government to a fiscal crisis in 2013 – culminating in failing public services and ultimately declaring bankruptcy.⁴

¹ U.S. Department of Commerce. (1952). 1950 United States Census of Population. Retrieved from: <https://www2.census.gov/prod2/decennial/documents/41557421v3p2ch02.pdf>; United States Census Bureau (2020). Detroit City Population, Decennial Census 2010. Retrieved from: <https://data.census.gov/cedsci/table?q=Detroit%20city,%20population&g=1600000US2622000&tid=DECENNIALS12010.P1&hidePreview=false>

² Michigan Department of Technology, Management & Budget. (2020). Employment and Unemployment Statistics. Retrieved from: <https://milmi.org/DataSearch/LAUS>

³ Platzter, M. D. & Harrison, G. J. (2009). *The U.S. automotive industry: National and state trends in manufacturing employment*. Congressional Research Service. Retrieved from: https://digitalcommons.ilr.cornell.edu/key_workplace/666/

⁴ Forward Cities. (2018). DETROIT, MI CASE STUDY. Retrieved from: https://forwardcities.org/wp-content/uploads/2020/08/Case-Study-Detroit_-MI.pdf

Population of Detroit: 1900 - 2020



Why can't Detroit bounce back?

- The city continues to have a shrinking population, high-levels of poverty, high crime rates and thousands of blighted and vacant properties.
- There are several underlying factors that have hindered successful regeneration in Detroit:
 - A history of discriminatory housing policies and segregation have caused racial tensions and social unrest.
 - Rampant government corruption and the misuse of public funds have left underfunded public services and deterred private investment.
 - High property taxes, burdensome regulations, poor public services and blighted infrastructure have hindered the city's ability to attract capital.
 - A series of poor urban planning decisions ignoring streetscapes and public spaces have failed to make Detroit an attractive place to live and work.

Regeneration Initiatives

- Much of Detroit's regeneration can be attributed to forces outside of the municipal government's control, including billions of dollars of private investment from people like Henry Ford II, Dan Gilbert, and Marian Ilitch. In recent years, the city has also benefited from the wider U.S. automobile industry revival post 2009.
- At the same time, the municipal government attempted a number of regeneration tactics, including:

○ **Targeting Particular Sectors or Clusters.** The municipal government has attempted to encourage the growth of technology-based firms and entrepreneurship through providing business incubation support and encouraging clustering of businesses, universities and support organisations. As a result of these initiatives, the technology sector in the Detroit area has grown in recent years and helped to diversify the economy away from the automotive industry.

○ **Revitalising Brownfields and Urban Spaces.** In recent years, the municipal government has unveiled a number of initiatives aimed at addressing abandoned properties across the city by either demolishing vacant houses or taking ownership of them and selling them to people who will then care for the property.

○ **Encouraging High Skilled Immigration.** Detroit has introduced a number of policies contributing to making the city a welcoming place for immigrants, including having guidance/policies in multiple languages and setting up an office to assist with integrating immigrants into the community.

○ **Investing in Transport Links.** The city of Detroit has historically been a car-centric city, with very little public transit infrastructure. This lack of public transport has disproportionately impacted lower-income households who cannot afford a car and therefore struggle to move around the city either for work or for leisure.

○ **Improving Cultural Infrastructure.** The government has engaged in a number of initiatives to grow the culture and creative sectors of the economy, such as providing business support for creative start-ups and hosting cultural events. As a result, the creative sectors have grown significantly and Detroit is now listed as a UNESCO Creative City.

Where is Detroit now?

- In recent years, politicians and investors have become more optimistic about Detroit's future. The Detroit Metropolitan Area (which includes the city of Detroit and its surrounding counties) has performed particularly well, experiencing growth in per capita income and GDP. The inner city of Detroit, however, still continues to struggle with high rates of crime, poverty and unemployment.
- There has been some debate recently as to whether or not Detroit is really rebounding. Certainly, indicators such as falling unemployment rates, slower population decline, an influx of private investment, and the announcement of new employment opportunities – such as the new Jeep plant – all point to a positive future for Detroit. However, some argue that the underlying factors of poverty and low educational attainment remain in the central city, and may prevent it from continuing the recent rebound. Skeptics also argue that some of the city's indicators may be reflective of one-off investments rather than larger structural changes. For example, total employment grew by 18,000 jobs from 2010 to 2018, but 17,000 of these jobs were created through the opening of the Quicken Loans office in 2010.⁵

Lessons to be Learned

- **You can't separate cultural factors from economic factors.** While Detroit's economic struggles originated with the loss of competitiveness in its car industry, they have been significantly exacerbated by continuing racial strife and political corruption.
- **Big investments are not a silver bullet.** While Detroit's recent investments appear to have helped support the area's wider rebound, the city also has a long track record of other investments from Joe Louis Arena to the People Mover that did little to change its economic fundamentals.
- **A shrinking population can trap the city in a negative economic cycle.** Detroit's economic downturn led to a mass exodus from the city, leaving the municipal government with an ever-shrinking tax base and diminishing municipal budgets to implement revitalisation strategies.
- **Struggling cities cannot afford uncompetitive tax rates or inadequate basic infrastructure.** By encouraging businesses and wealthy residents to leave, Detroit's high tax further worsened the area's economy – and often proved counterproductive, with total revenue little higher after the impact of flight from the city.
- **Even with all its troubles, being a large city remains an advantage.** The economies of scale makes large cities very hard to kill altogether – and gives them a long runway to discover new industries.

⁵ Gallagher, J. (2019) Detroit can't cherry-pick statistics, ignore inconvenient facts. *Detroit Free Press*. Retrieved from: <https://eu.freep.com/story/money/business/john-gallagher/2019/08/21/detroit-recovery-data/2009516001/>

The Rise and Fall of Detroit's Automotive Industry

Historically, Detroit had many advantages that made it an attractive location for the automotive industry: it was geographically close to the nation's biggest coal, iron and copper mines which were manufacturing inputs; it was easily accessible by both land and water; and it was near well-established iron and steel production centres in Pennsylvania.⁶ In the early 1900s, dozens of automotive companies set up production facilities in Detroit, the most influential were the "Big Three" - Ford, General Motors, and Chrysler. At their height, the Big Three held a combined 90% of the U.S. market share for automobile producers,⁷ employed hundreds of thousands of people between them (Ford's River Rouge plant alone employed more than 90,000 people at its peak), and were the epicentre of innovation in the auto industry.

During the 1930s, the industrial union movement began to take root in the Detroit auto industry, demanding decent living wages and benefits. The United Automobile Workers (UAW) led the struggle for workers rights against auto producers, organising strikes and engaging in - often bloody - confrontations with security firms and law enforcement acting on behalf of the employers. By 1941, the UAW had negotiated contracts with every major auto firm in Detroit.⁸

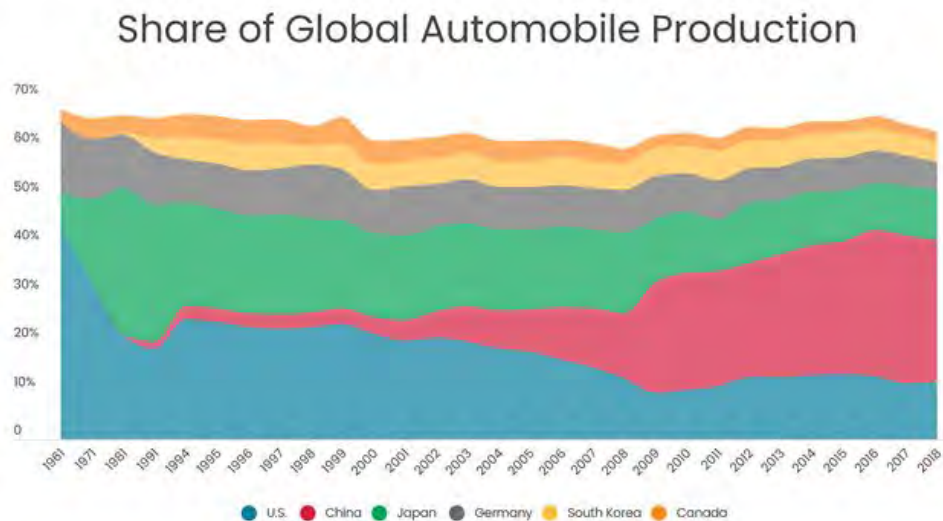
However, this prosperity was not eternal. Through the 1950s and 60s, the auto industry began to change. Firms began to decentralise production, moving factories outside of the city and into smaller towns in search of lower-wage workers and cheaper land. Simultaneously, the industry was transformed by automation, in which thousands of workers were replaced with machines.

⁶ Sugrue, T. J. (2014). Motor City: The Story of Detroit. The Gilder Lehrman Institute of American History. Retrieved from: http://gdelaugier.pbworks.com/w/file/85732135/Motor%20City_%20The%20Story%20of...pdf

⁷ Ahern, D.P. (1968) The Auto Industry and the Big Three. Financial Analysts Journal, 24(3), 96-102. Retrieved from: <https://www.jstor.org/stable/4470350>

⁸ Sugrue, T. J. (2014). Motor City: The Story of Detroit. The Gilder Lehrman Institute of American History. Retrieved from: http://gdelaugier.pbworks.com/w/file/85732135/Motor%20City_%20The%20Story%20of...pdf

Throughout the 1970s, the situation in Detroit went from bad to worse. The global oil crisis and increasing overseas competition (especially from Japan) weakened the American auto industry further. The Big Three struggled to compete on the global market, as Japanese competitors, such as Toyota, Nissan and Mazda, outperformed them on productivity. At the time, a small passenger car could be produced for \$2,000 less on average in Japan than in the U.S. This difference was attributed in part to lower labour costs, and in part to superior productivity by Japanese firms.⁹ Throughout the 1970s, labour productivity rose faster in the Japanese auto industry than the U.S.¹⁰ Much of the high labour costs in America that ultimately drove the automotive industry overseas can be attributed to unions, who in an effort to fight for workers rights rendered the industry incapable of competing with cheaper overseas labour.¹¹



Data Source: Bureau of Transportation Statistics (2019) World Motor Vehicle Production, Selected Countries.¹²

In 1979, Chrysler filed for bankruptcy and Ford and General Motors ran significant deficits. A concerted effort by the Big Three and the UAW began to lobby the government to enact protectionist policies for the U.S. auto industry by applying tariffs to Japanese automobile imports. Reagan's administration convinced the Japanese government to introduce a three year voluntary export restraint (VER) on automobiles to the U.S. market, which continued for an additional 10 years afterwards.¹³

⁹ Lieberman, M. B., Lau, L. J., Williams, M. D. (1990). Firm-Level Productivity and Management Influence: A Comparison of U.S. and Japanese Automobile Producers, *Management Science*, 36(10), 1193-1215.

¹⁰ Aizcorbe, Winston, and Friedlaender. (1987). Cost Competitiveness of the U.S. Automobile Industry. In Clifford Winstron and Associates, *Blind Intersection? Policy and the Automobile Industry*. The Brookings Institute.

Fuss, M., Waverman, L. (1985) Productivity Growth in the Automobile Industry, 1970-1980: a Comparison of Canada, Japan and the United States. *National Bureau of Economic Research Working Paper No. 1735*. Retrieved from: https://www.nber.org/system/files/working_papers/w1735/w1735.pdf

¹¹ The New York Times. (2020). U.A.W. and the Auto Industry. Retrieved from: https://www.nytimes.com/interactive/2015/10/08/business/uaw-auto-union-timeline.html/#time386_11139

¹² Bureau of Transportation Statistics. (2020). World Motor Vehicle Production, Selected Countries. Retrieved from: <https://www.bts.gov/content/world-motor-vehicle-production-selected-countries>

¹³ Pollack, A. (1994). Japan to End Restraints on Auto Exports to U.S. The New York Times. Retrieved from: <https://www.nytimes.com/1994/03/29/business/japan-to-end-restraints-on-auto-exports-to-us.html>

Over the next decade, almost all Japanese auto manufacturers had built transplant factories in the U.S. employing U.S. workers to avoid the VER. However, the policy did little to help Detroit because Japanese manufacturers chose to locate in other areas, such as Ohio, Tennessee, and Kentucky.¹⁴

As the automotive industry collapsed in Detroit, so did its supporting industries. Residents began to move away from the city by the thousands in search of new opportunities, starting the shrinking population trend that has continued to this day. As a result of this shrinking population and fewer businesses, the municipal government was faced with a diminishing commercial and residential tax base.¹⁵ In an attempt to kick start regeneration, the government attempted multiple investments into the city over the coming years, leaving the city in a precarious fiscal position of rising debt.

The situation in Detroit worsened during the 2008 global financial crisis, where a lack of liquidity made it impossible for the government to respond to the influx of foreclosures and resultant shrinking tax base.¹⁶ In June 2009, unemployment peaked at 17.2% in the metro area and 28.4% in the inner city of Detroit¹⁷ – the highest rate of all large cities in the U.S. The long-term impacts of the declining automotive industry and shrinking population, coupled with the effects of the financial crisis pushed Detroit past its breaking point. In 2013, the city declared bankruptcy with \$18 billion in debt.¹⁸

¹⁴ Risen, J. (1988). First Imports, Now Auto Plants in the U.S. : Japanese Stepping Up Pressure on Big 3. *Los Angeles Times*. Retrieved from: <https://www.latimes.com/archives/la-xpm-1988-10-15-fi-3525-story.html>

¹⁵ Forward Cities. (2018). DETROIT, MI CASE STUDY. Retrieved from: https://forwardcities.org/wp-content/uploads/2020/08/Case-Study-Detroit_-MI.pdf

¹⁶ Schindler, S. (2013). Other cities in crisis can learn from Detroit's bankruptcy-fostered Degrowth Machine Politics. *LSE Blogs*. Retrieved from: <http://eprints.lse.ac.uk/61188/1/blogs.lse.ac.uk-Other%20cities%20in%20crisis%20can%20learn%20from%20Detroits%20bankruptcy-fostered%20Degrowth%20Machine%20Politics.pdf>

¹⁷ Michigan Department of Technology, Management & Budget. Employment and Unemployment Statistics. Retrieved from: <https://milmi.org/DataSearch/LAUS>

¹⁸ Davey, M. & Williams Walsh, M. (2013). Billions in Debt, Detroit Tumbles Into Insolvency. *The New York Times*. Retrieved from: <https://www.nytimes.com/2013/07/19/us/detroit-files-for-bankruptcy.html>

Why Can't Detroit Bounce Back?

Why has Detroit been unable to regenerate its economy in the way other post-industrial cities have? We have identified the following factors which contribute to stifling the city's regeneration:

1. Social unrest/racial tensions

Following the decline of the automotive industry, Detroit became an increasingly segregated city. "White flight" from the city to the suburbs left behind vacant shops and abandoned homes; by 2010, white people made up only 12% of Detroit's population and neighbourhoods were heavily segregated by race.¹⁹ Discriminatory State and Federal government policies reinforced segregation and led to overcrowding and under-funding of black neighbourhoods.²⁰

Discriminatory housing policies, underinvestment, and obstructing access to capital meant that poverty rates rose in black neighbourhoods and as a result, they became subject to higher rates of police intervention. In the 1960s, the Detroit Police Department was 95% white even though the city's population was 40% black, and accusations of racial profiling and police brutality were an everyday occurrence.²¹

To this day, Detroit is still trying to overcome its legacy of racial and social tension, which has hindered the city's ability to attract both people and businesses. Repairing the damage done by decades of discriminatory policies will be needed to ensure that Detroit's regeneration benefits all of its residents regardless of race or class.

2. Corruption

Rampant corruption in Detroit's municipal government has also hindered the city's ability to regenerate. The Detroit News put together a database of corruption cases in Detroit throughout the past decade, identifying 108 labor leaders, politicians, police officers and bureaucrats charged with federal corruption-related crimes.²² The level of corruption in Detroit is so severe that the FBI launched the Detroit Area Public Corruption Taskforce in 2012 dedicated to tackling the issue.²³

¹⁹ United States Census Bureau. (2020). ACS Demographic and Housing Estimates. Retrieved from: <https://data.census.gov/cedsci/table?q=detroit%20population&tid=ACSDP1Y2010.DP05&hidePreview=false>

²⁰ Sugrue, T. J. (2005). *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit*. Princeton: Princeton University Press; Binelli, M. (2012). *Detroit City is the place to be: the afterlife of an American metropolis*. New York: Metropolitan Books; Galster, G. (2012). *Driving Detroit. The Quest for Respect in the Motor City*. Philadelphia: University of Pennsylvania Press.

²¹ Jordan, J. (2017). How the roots of Detroit's police department helped spawn 1967 rebellion. *Michigan Radio*. Retrieved from: <https://www.michiganradio.org/post/how-roots-detroits-police-department-helped-spawn-1967-rebellion>

²² The Detroit News. (2020). Driven by greed: A database of corruption in Detroit. Retrieved from: <https://content-static.detroitnews.com/projects/driven-by-greed-corruption-database/index.htm>

²³ Washburn, J. (2012). New Multi-Agency Public Corruption Task Force Formed. *The Federal Bureau of Investigation*. Retrieved from: <https://archives.fbi.gov/archives/detroit/press-releases/2012/new-multi-agency-public-corruption-task-force-formed>

One of the most high profile and egregious cases of corruption was that of the mayor Kwame Kilpatrick, who was arrested and charged along with some of his closest advisors for turning city hall into a criminal enterprise, making themselves rich with taxpayer money. Kilpatrick was charged with perjury, obstruction of justice, extortion, bribery, fraud, money laundering, and more. In 2013, he was convicted on 24 of 30 counts and was sentenced to 28 years in prison.²⁴

3. Lack of Economic Competitiveness

Firstly, Detroit has a history of high tax rates. In an effort to raise funds without raising the already high property tax, Detroit was the first city in Michigan to implement a local income tax. The income tax was levied at 1% on both income from wages and investment. No other major city at the time imposed a tax on investment income to the same degree as Detroit.²⁵ More recently, a 2014 study found that Detroit had the highest commercial property tax rates of any major U.S. city.²⁶ Detroit also charges the highest income tax in the state.²⁷ High tax rates discourage investors and businesses from moving to Detroit because they have the opportunity to operate with lower costs elsewhere.

Secondly, Detroit is notorious for its poor public services. The city's declining population (from 1.85 million in 1950 to just 714,000 in 2010) has resulted in a shrinking tax base for the municipal government and less money to spend on public services.²⁸ As a result, the city is notorious for slow police response times, waste not regularly taken off the street, and schools with crumbling infrastructure.²⁹

Third, the shrinking municipal budget has caused the city to become home to one of the worst public transit systems in the country. The city does not have an extensive rail or subway system, instead the transit system is rooted in an inadequate bus system.³⁰ Therefore, most people rely on cars to get around; lower income groups without cars lack an affordable and reliable mode of transit.³¹

Fourth, the municipal government places overly burdensome regulations on industry compared to other major cities. A 2013 study compared 'economic freedom' measures for U.S.

²⁴ Dan Austin. Meet the Five Worst Mayors in Detroit History. *Detroit Free Press*. Retrieved from: <https://eu.freep.com/story/news/local/2014/08/29/5-worst-mayors-in-detroit-history/14799541/>

²⁵ Bronder, L. (1962). Michigan's First Local Income Tax. *National Tax Journal*, 15(4), 423-431. Retrieved from: <https://www.jstor.org/stable/41790917?seq=1>

²⁶ Minnesota Center for Fiscal Excellence (2014). 50-State Property Tax Comparison Study. Retrieved from: https://www.lincolinst.edu/sites/default/files/pubfiles/50-state-property-tax-study-2015-full_0.pdf

²⁷ Citizen's Research Council of Michigan. (2018). Diversify Detroit's Tax Structure to Lower the City's High Property Tax Rate. Retrieved from: <https://crcmich.org/diversify-detroits-tax-structure-to-lower-the-citys-high-property-tax-rate>

²⁸ Beyer, S. (2018). Why Has Detroit Continued to Decline. *Forbes*. Retrieved from: <https://www.forbes.com/sites/scottbeyer/2018/07/31/why-has-detroit-continued-to-decline/#6fe162d73fbe>;

U.S. Department of Commerce (1952). 1950 United States Census of Population. Retrieved from: <https://www2.census.gov/prod2/decennial/documents/41557421v3p2ch02.pdf>;

United States Census Bureau (2020). Detroit City Population, Decennial Census 2010. Retrieved from: <https://data.census.gov/cedsci/table?q=Detroit%20city,%20population&g=1600000US2622000&tid=DECENIALSF12010.P1&hidePreview=false>

²⁹ Beyer, S. (2018). Why Has Detroit Continued to Decline. *Forbes*. Retrieved from: <https://www.forbes.com/sites/scottbeyer/2018/07/31/why-has-detroit-continued-to-decline/#6fe162d73fbe>

³⁰ Johnson, R. (2012). Broken Promises: DDOT Still Failing to Provide Adequate Bus Service. *Transportation Riders United*. Retrieved from: <https://www.detroittransit.org/wp-content/uploads/2019/11/TRU-DDOT-Bus-Timeliness-Report-May-2012.pdf>

³¹ Sullings, G. (2019). Detroit's Mobility Innovation Initiative. *Centre for Public Impact*. Retrieved from: <https://www.centreforpublicimpact.org/case-study/detroits-mobility-innovation-initiative/>

cities, ranking the degree of burden that municipal and state governments place on businesses through taxes, regulations, labour market restrictions, etc. This study found that Detroit ranked 345th out of 384 metro areas on its economic freedom ranking.³²

4. Poor urban planning

One reason why Detroit has continued on a declining path is because there has been insufficient investment in making Detroit a “nice” place to live. Green spaces, waterfront property, a well-functioning transit system, and good infrastructure make cities attractive places to live and work – Detroit’s regeneration process has failed to sufficiently invest in creating these spaces for its residents.³³

Another issue is the housing stock. The major population decline following the loss of the automotive industry (from 1.85 million in 1950 to 715 thousand in 2010) resulted in thousands of abandoned houses, buildings and lots. In 2013, the city had approximately 31,000 empty houses and 90,000 vacant lots.³⁴ These abandoned buildings and properties are a blight on the neighbourhood, reduce the nearby property values, and often invite criminal activity. In recent years, the municipal government has introduced some initiatives to deal with these abandoned houses and properties, but they remain a significant issue.

Progress Cleaning Up Abandoned Properties



■ Properties addressed - 46%

■ Properties not yet addressed - 54%

³² Stansel, D. (2013). An Economic Freedom Index for U.S. Metropolitan Areas. *The Journal of Regional Analysis & Policy*. Retrieved from: http://www.jrap-journal.org/pastvolumes/2010/v43/v43_n1_a2_stansel.pdf

³³ Eisinger, P. (2013) Is Detroit Dead? *Journal of Urban Affairs*, 00(0). Retrieved from: <https://milanoschool.org/wp-content/uploads/2013/11/eisenger.pdf>

³⁴ Brook, P. (2013). Captivating Photos of Detroit Delve Deep to Reveal a Beautiful, Struggling City. *WIRED*. Retrieved from: <https://www.wired.com/2013/01/detroit-dave-jordano/>

Regeneration Initiatives

Since the start of Detroit's decline in the 1950's, successive municipal governments have attempted a number of regeneration strategies and policies. These regeneration strategies have ranged from developing specific sectors and clusters, for example growing technology-based firms in SmartZones; improving the cultural environment for residents, for example through investments in the Joe Louis Arena (and later Little Caesars Arena) and the Detroit Creative Corridor; and investing in transport links, for example through the People Mover and the QLine.

Some of the city's regeneration can be attributed to forces outside of the municipal government's control. One such example is the Renaissance Center, a collection of seven interconnected skyscrapers in downtown Detroit built in the 1970s, which aimed to attract businesses, hotels, restaurants and visitors to the downtown area. The idea for the Renaissance Center was conceived by Henry Ford II and was financed primarily through the Ford Motor Company and the non-profit organisation Detroit Renaissance which consisted of Ford and other industrial giants with an interest in revitalising Detroit.³⁶ Ford invested \$300 million in the project, which according to the *New York Times*, may represent the largest civic investment ever made by a private company.³⁷

Another external force in Detroit's regeneration has been the influx of billions of dollars of philanthropic investment. Dan Gilbert, a Detroit native and founder of Quicken Loans, has invested over \$5 billion back into Detroit.³⁸ He started the Gilbert Family Foundation, which funds initiatives to transform and rebuild Detroit, and owns Rock Holdings Inc., through which he has spent billions acquiring and developing more than 100 properties throughout the city of Detroit.³⁹ Recently, Gilbert donated \$1.2 million to organisations in the city to combat the effects of Covid-19, including grants to help businesses maintain their operations, and donations to nonprofits that provide essential services to families impacted by the pandemic.⁴⁰

³⁵ Ferretti, C. (2020). Last Detroit house demolished in \$265 million blight -removal effort. Retrieved from:

[https://eu.detroitnews.com/story/news/local/detroit-city/2020/08/14/last-detroit-house-demolished-blight-removal/3349213001/;](https://eu.detroitnews.com/story/news/local/detroit-city/2020/08/14/last-detroit-house-demolished-blight-removal/3349213001/)

Alo, K. (2020). Detroit Land Bank oversight at issue as neighbors complain of poor upkeep. Retrieved from:

<https://eu.detroitnews.com/story/news/local/detroit-city/2020/02/13/detroit-land-bank-oversight-issue-amid-complaints-poor-upkeep/4592183002/>

³⁶ Detroit Historical Society. (2020). Encyclopedia of Detroit. Retrieved from:

<https://detroithistorical.org/learn/encyclopedia-of-detroit/renaissance-center>

³⁷ Bruce Knecht, G. (1983). Renaissance Center: Ford's Costly and Failing Bid to Revive Detroit. *The New York Times*. Retrieved from:

<https://www.nytimes.com/1983/07/03/business/renaissance-center-fords-costly-and-failing-bid-to-revive-detroit.html>

³⁸ Forbes. (2020). Profile: Dan Gilbert. Retrieved from: <https://www.forbes.com/profile/daniel-gilbert/>

³⁹ Gilbert Family Foundation. Retrieved from: <https://www.gilbertfamilyfoundation.org/>

⁴⁰ Quicken Loans Press Room. (2020). Quicken Loans Community Fund and Gilbert Family Foundation Announce \$1.2 Million Donation to

Address Detroit Coronavirus Impact. Retrieved from:

<https://www.quickenloans.com/press-room/2020/03/16/quicken-loans-community-fund-and-gilbert-family-foundation-announce-1-2-million-donation-to-address-detroit-coronavirus-impact/>

Another external factor contributing to regeneration was the rebound of the wider U.S. automobile industry from near extinction in 2009. Annual light-vehicle sales in the U.S. fell from over 16 million in 2007 to just over 10 million in 2009, and have since recovered to nearly 17 million in 2019 (though the effects of Covid-19 in 2020 will likely have long-lasting negative impacts on the industry going forward).⁴¹ Throughout this recovery, the Big Three in Detroit have been able to maintain a large market share in the U.S., with a combined 44% in 2019.⁴² A big part of the Big Three's success and financial viability came from the UAW agreeing to lower entry wages and allowing independent entities to take on the responsibility for retiree health care rather than the employer themselves. This agreement, which took place in 2007, allowed the gap in wages and benefits between the Big Three and transplant factories outside of the UAW to fall dramatically.⁴³

At the same time, the municipal government has attempted a number of regeneration initiatives, including:

⁴¹ Statista (2020). Light vehicle retail sales in the United States from 1978 to 2019. Retrieved from:

<https://www.statista.com/statistics/199983/us-vehicle-sales-since-1951/>

⁴² Statista (2020). Estimated U.S. market share held by selected automotive manufacturers in 2019. Retrieved from:

<https://www.statista.com/statistics/249375/us-market-share-of-selected-automobile-manufacturers/>

⁴³ Cutcher-Gershenfeld, J., Brooks, D., Mulloy, M. (2015). The Decline and Resurgence of the U.S. Auto Industry. *Economic Policy Institute*.

Retrieved from: <https://www.epi.org/publication/the-decline-and-resurgence-of-the-u-s-auto-industry/>

Target Particular Sectors or Clusters

In 2005, the Michigan Economic Development Corporation launched a state-wide initiative to improve collaboration between technology-based firms, entrepreneurs, researchers and academics.⁴⁴ The initiative is implemented through SmartZones, which are strategic geographic locations where business accelerators and incubators are set up near universities and research centres to encourage the growth of tech clusters.⁴⁵ The initiative offers business development mentoring, networking events, help with grant writing, market analysis and product development, as well as funds for businesses in early stages. There are 15 SmartZones across the state, including 5 in the Detroit Metro region.⁴⁶

Another initiative is the New Economy Initiative (NEI), which is an economic development initiative aimed at building a support network for entrepreneurs and small businesses across southeast Michigan. Since 2007, NEI has awarded 567 grants, assisted 14,083 companies, helped launch 3,009 companies and reached 360,593 people through events, workshops and programs.⁴⁷

Results

From 2014-2019, the number of people employed in Detroit's technology sector has grown by 12.3%.⁴⁸ The region's universities are contributing to the growth of the sector by providing high quality courses and high-skilled graduates; the University of Michigan boasts the 7th best undergraduate computer engineering programming degree in the country.⁴⁹ The sector has also benefited from investment from tech giants, such as Google, who have recently announced a \$13 million investment in manufacturing self-driving cars, creating 400 jobs in the city.⁵⁰ It is worth noting that while Detroit's technology sector is growing, it is still lagging behind the achievement and rate of growth of other cities, ranking 31st out of 50 in the CBRE's tech talent scorecard for the US and Canada.⁵¹

⁴⁴ City of Holland. (2014). SmartZone Overview. Retrieved from:

<https://www.cityofholland.com/DocumentCenter/View/1287/SmartZone---Overview>

⁴⁵ Forward Cities (2020). Detroit, MI Case Study: How can cities build inclusive local innovation ecosystems. Retrieved from:

https://forwardcities.org/wp-content/uploads/2020/08/Case-Study-Detroit_-MI.pdf

⁴⁶ Pure Michigan: Michigan Economic Development Corporation. (2014). Michigan Smartzones. Retrieved from:

https://www.gvsu.edu/cms4/asset/BABA760A-C7B5-EBE7-9DF54FB415B41571/mi_smartzone_factsheet.pdf

⁴⁷ New Economy Initiative (2020). 2019 Annual Report: Inclusive & Connected. Retrieved from:

<https://neweconomyinitiative.org/wp-content/uploads/2020/06/NEI-2019-Annual-Report.pdf>

⁴⁸ CBRE. (2020). Scoring Tech Talent 2020. Retrieved from:

<https://www.downtownkc.org/wp-content/uploads/2020/08/US-2020-Tech-Talent-July.pdf>

⁴⁹ University of Michigan. (2020). CSE by the Numbers. Retrieved from: <https://cse.engin.umich.edu/about/by-the-numbers/>

⁵⁰ Detroit Regional Partnership. (2019). Digital Technology. Retrieved from:

<https://www.detroitregionalpartnership.com/wp-content/uploads/2019/10/Digital-Technology-FINAL.pdf>

⁵¹ CBRE. (2020). Scoring Tech Talent 2020. Retrieved from:

<https://www.downtownkc.org/wp-content/uploads/2020/08/US-2020-Tech-Talent-July.pdf>

Revitalising Brownfields & Urban Spaces

To address the issue of abandoned houses and vacant lots, the city implemented the Detroit Land Bank Authority,⁵² which takes legal control of abandoned properties, puts them up for sale or auction, or demolishes those properties which are beyond repair. The Land Bank auctions four houses every day, with bidding starting at just \$1,000. The houses are sold to the highest bidder at the end of the day. They also have a “Own It Now” program, where buyers can make an offer on a property listed on the website and if they are the highest bidder after 72 hours they can buy it. A third program is targeted at protecting renters facing eviction due to a landlord not paying property taxes. In these situations, renters living in the property can buy the home for \$1,000 prior to property tax foreclosure.

The Land Bank also allows residents to buy the vacant lot next to their homes for \$100, many of which have been transformed into community gardens, urban farms or extended lawns.⁵³

The city has also awarded a \$4 million grant to rehabilitate 115 vacant homes, create a park, and landscape 192 vacant lots in the Fitzgerald neighbourhood. The renovated homes will become a mixture of rental properties and for sale homes, with 20% set aside as affordable housing to protect low-income residents.⁵⁴

Results

These programs have begun the long process of cleaning up the blighted properties across Detroit. So far, the municipal government has demolished over 15,000 abandoned homes and sold a further 4,000 houses through the Land Bank⁵⁵ However, an additional 22,000 vacant homes remain. There have been some complaints by residents that the program has neglected some neighbourhoods and that it is not moving quickly enough to solve the issue.⁵⁶

⁵² Detroit Land Bank Authority. Retrieved from: <https://buildingdetroit.org/>

⁵³ Gallagher, J. (2018). Detroit Land Bank notches many wins including 10,000 side-lot sales. *Detroit Free Press*. Retrieved from: <https://eu.freep.com/story/money/business/john-gallagher/2018/09/23/detroit-land-bank/1358663002/>

⁵⁴ City of Detroit. Strategic Neighborhood Fund Begins Work in Detroit’s Fitzgerald Neighborhood. Retrieved from: <https://detroitmi.gov/news/strategic-neighborhood-fund-begins-work-detroits-fitzgerald-neighborhood>

⁵⁵ Ferretti, C. (2020). The Detroit News. Retrieved from:

<https://eu.detroitnews.com/story/news/local/detroit-city/2020/08/14/last-detroit-house-demolished-blight-removal/3349213001/>; Alo, K.

(2020). Detroit Land Bank oversight at issue as neighbors complain of poor upkeep. *The Detroit News*. Retrieved from:

<https://eu.detroitnews.com/story/news/local/detroit-city/2020/02/13/detroit-land-bank-oversight-issue-amid-complaints-poor-upkeep/4592183002/>

⁵⁶ Alo, K. (2020). Detroit Land Bank oversight at issue as neighbors complain of poor upkeep. *The Detroit News*. Retrieved from:

<https://eu.detroitnews.com/story/news/local/detroit-city/2020/02/13/detroit-land-bank-oversight-issue-amid-complaints-poor-upkeep/4592183002/>

Encouraging High Skilled Immigration

In recent years, the Mayor of Detroit has been a national leader in building a city that is welcoming to immigrants. In 2014, the municipal government worked with the City Council Immigration Task Force to declare Detroit an official “welcoming city”,⁵⁷ which means the city is dedicated to working across both the private and public sector to implement policies and practices that are inclusive for immigrants (e.g. having government documents available in multiple languages).⁵⁸ The government also created an Office of Immigrant Affairs designed to help immigrants integrate into the city and support economic development in immigrant communities. The Office of Immigrant Affairs has also helped over 250 refugees settle in the city.⁵⁹

The municipal government has also worked closely with nonprofit organisations, such as Global Detroit, which advocates for and implements strategies to “drive equitable local, regional and statewide economic growth through immigrant inclusion.”⁶⁰ Global Detroit was launched in 2010 and continues to implement key strategies to make Detroit an inclusive city for immigrants.

Results

Detroit has made immigration a key part of its recent regeneration initiatives. The evidence so far suggests that there is significant potential for immigration to strongly support Detroit’s regeneration strategy by helping to combat the effects of a shrinking population, improving the skill level of the labour force and helping to revitalise distressed neighbourhoods.⁶¹

In 2018, immigrants made up just 9.9% of the metro area’s population, however they accounted for 37.5% of business owners in hospitality, 19.1% of business owners in retail trade, 19.2% of business owners in general services, 23.5% of business owners in healthcare and 10.8% of business owners in construction.⁶² Further, Immigrants in Michigan are more than three times more likely than U.S.-born residents to start a new business and six times more likely to start a high-tech firm.⁶³

⁵⁷ Detroit Immigration Task Force. (2018). Immigration Task Force: A Detroit-based initiative. Retrieved from: <https://detroitmi.gov/sites/detroitmi.localhost/files/2018-08/ITF%20One%20Pager.pdf>

⁵⁸ Welcoming America. What’s the Difference Between a Welcoming City and a Sanctuary City? Retrieved from: <https://www.welcomingamerica.org/difference-between-welcoming-city-sanctuary-city>

⁵⁹ Tobocman, S. (2017) Column: Immigrants revitalize Detroit. The Detroit News. Retrieved from: <https://eu.detroitnews.com/story/opinion/2017/06/06/detroit-immigrants/102535188/>

⁶⁰ Global Detroit. Our Impact. Retrieved from: <https://globaldetroitmi.org/our-impact/>

⁶¹ Tobocman, S. (2014). Revitalizing Detroit: Is There a Role for Immigration. *Migration Policy Institute*. Retrieved from: <https://www.migrationpolicy.org/research/revitalizing-detroit-is-there-a-role-for-immigration>

⁶² New American Economy Research Fund. (2020) New Americans in Detroit. Retrieved from: <https://research.newamericaneconomy.org/report/new-americans-in-detroit-2/>

⁶³ Tobocman, S. (2010). Global Detroit Full Report. Retrieved from: <https://www.scribd.com/document/39895138/Global-Detroit-Full-Report>

However, regardless of increasing levels of immigration,⁶⁴ Detroit continues to have one of the highest rates of population decline in the country. Between 2010 and 2019, Detroit lost 6.1% of its population.⁶⁵

Investing in Transport Links

In 1987, the People Mover began operating, which was the first major transportation system in downtown Detroit after the trams were removed. The People Mover runs on a 2.9 mile track around downtown Detroit and has 13 stops. The People Mover has been less impactful than the government originally hoped, by 2008 it had only reached 7,500 people a day – approximately 2.5% of its capacity of 288,000 daily passengers. Further, the People Mover has been another drain on public finances, with the municipal government paying approximately \$3.00 in subsidies for ever \$0.50 rider fare.⁶⁶

In recent years, the municipal government has tried to improve Detroit's transport links, however funding restraints have continually obstructed their development. In 2010, the U.S. Department of Transport (DOT) announced that it would award a \$25 million grant to Detroit to fund construction of a new 9.3 mile light rail line throughout the city. This funding, along with philanthropists, state grants, and the city of Detroit's own contributions, meant that a light rail service was feasible in Detroit's future. However, a year later the government reneged on its funding promise, citing concerns that the operational cost of the light rail would be too high for the municipal government to afford. They instead proposed extending the bus services, as they were a less costly option.⁶⁷

In light of this decision, the city settled on constructing a 3.3-mile streetcar route through the city centre instead, called the QLine. This project was seen to be a more financially sustainable option, and therefore the DOT provided grant funding. The QLine was opened to riders in 2017 and serves approximately 3,000 daily riders (vs. the goal of 5,000 daily riders), 40% of whom pay the fare.⁶⁸

⁶⁴ New American Economy. (2014). New Americans in Detroit: A snapshot of the demographic and economic contributions of immigrants in the city. Retrieved from: http://www.newamericaneconomy.org/wp-content/uploads/2017/06/Detroit_Brief_V3.pdf

⁶⁵ United States Census Bureau. (2020). Quick Facts: Detroit City, Michigan. Retrieved from: <https://www.census.gov/quickfacts/detroitcitymichigan>

⁶⁶ Detroit Historical Society. Encyclopedia of Detroit: Detroit People Mover. Retrieved from: <https://detroithistorical.org/learn/encyclopedia-of-detroit/detroit-people-mover>

⁶⁷ Freemark, Y. (2011). In a Failure of Municipal Ambition, Plans for Detroit Light Rail Shut Down as Focus Shifts to BRT. Retrieved from: <https://www.thetransportpolitic.com/2011/12/18/in-a-failure-of-municipal-ambition-plans-for-detroit-light-rail-shut-down-as-focus-shifts-to-brt>

⁶⁸ Livengood, C. (2017). 40% of QLine Riders Paying as Ridership Falls. *Crain's Detroit Business*. Retrieved from: <https://www.crainsdetroit.com/article/20170922/news/639976/40-of-qline-riders-paying-as-ridership-falls>

Results

The People Mover, QLine and the expansion of the bus system are positive steps in the right direction, but their unreliability and limited travel network means they fall short of making meaningful improvements in accessibility. Despite a quarter of households not having access to a car,⁶⁹ Detroit still has one of the worst public transit systems of any major city in the country.⁷⁰ According to the U.S. census, in 2019 only 7.5% of Detroit city's working population took public transport to work,⁷¹ highlighting the limited use of the existing transport links.

Improving Cultural Infrastructure

One early attempt at improving cultural infrastructure in Detroit was the construction of the Joe Louis Arena in 1979, one of the oldest NHL arena in the country. The municipal government spent \$57 million on constructing the 20,000-seat arena.⁷² The Joe, as it is locally known, was home to the city's hockey team, the Detroit Red Wings, until 2017. It has since been replaced by Little Caesars Arena, which is now home to the Detroit Red Wings and the city's basketball team, the Detroit Pistons. The new Area cost over \$860 million to construct, \$324 million of which was provided through public funds.⁷³

The municipal government has also worked closely with not-for-profit organisations to build the city's culture and arts sector, such as Midtown Detroit Inc. (MDI). Together MDI and the municipal government funded the creation of the Sugar Hill Arts District – a 2-block cultural destination home to several academic institutions, museums, art galleries and a library.⁷⁴

Detroit Creative Corridor Center (DC3) was launched in 2010 an economic development organisation aimed at strengthening Detroit's creative economy.⁷⁵ DC3 provides business incubator services for the creative sector, offering assistance with business strategy and

⁶⁹ Maciag, M. (2017). Vehicle Ownership in U.S. Cities Data and Map. *Governing: The Future of States and Localities*. Retrieved from:

<https://www.governing.com/gov-data/car-ownership-numbers-of-vehicles-by-city-map.html>

⁷⁰ Grabar, H. (2016) Can America's Worst Transit System Be Saved? *Slate*. Retrieved from:

<https://slate.com/business/2016/06/detroit-has-americas-worst-transit-system-could-the-regional-transit-master-plan-save-it.html>

⁷¹ US Census Bureau (2019) American Community Survey 1-year estimates.

⁷² Detroit Historical Society. Encyclopedia of Detroit: Joe Louis Arena. Retrieved from:

<https://detroithistorical.org/learn/encyclopedia-of-detroit/joe-louis-arena#>

⁷³ The City of Detroit City Council, Legislative Policy Division. Review of the Proposed 2017 DDA. (2017). Retrieved from:

<https://detroitmi.gov/Portals/0/docs/Legislative%20Policy%20Reports/2017/Review%20of%20DDA%20Amendments%20to%20Restated%20TIF%20P.pdf?ver=2017-05-17-081543-137>

⁷⁴ National Endowment for the Arts. How can public art be used to revitalize an inner city neighborhood? Retrieved from:

<https://www.arts.gov/exploring-our-town/sugar-hill-arts-district>

⁷⁵ Detroit Creative Corridor Center to Develop Inclusive Urban Development Strategy for Next Phase of Detroit City of Design Initiative with \$1 Million from Knight Foundation. (2017). *Knight Foundation*. Retrieved from

<https://knightfoundation.org/press/releases/detroit-creative-corridor-center-to-develop-inclusive-urban-development-strategy-for-next-phase-of-detroit-city-of-design-initiative-with-1-million-from-knight-foundation/>

analysis, as well as developing networks, recognition and sector development.⁷⁶ By 2018, it had assisted over 250 creative business start-ups, leading to over 3,000 new jobs.⁷⁷

Results

The Little Caesars Arena had 3 million visitors in its first year of operation and had a number of positive spillover effects on the community, including \$600 million in contracts to construction companies, a 456% increase in property tax base in the district by raising property values, and starting a catalyst for additional redevelopment projects and private investment in the surrounding area.⁷⁸

Detroit is home to the highest concentration of commercial and industrial designers in America.⁷⁹ The industry has been a significant driver of economic growth for the city, employing more than 45,000 people and generating \$2.5 billion in wages.⁸⁰ In 2015, Detroit was added to the UNESCO Creative Cities Network - the first and only U.S. city to be awarded this distinction in the design field.⁸¹

⁷⁶ Detroit Creative Corridor Center – Space as a Catalyst for Creativity. (2018). New Economy Initiative. Retrieved from [Detroit Creative Corridor Center – Space as a Catalyst for Creativity - New Economy Initiative](#)

⁷⁷ DC3 Announces New Brand Identity: Design Core Detroit. (2018). *Design Core*. Retrieved from <https://designcore.org/dc3-announces-new-brand-identity-design-core-detroit/>

⁷⁸ Brasuell, J. (2018, September). Little Caesars Arena as Catalytic Development. *Planetizen*. Retrieved from <https://www.planetizen.com/news/2018/09/100785-little-caesars-arena-catalytic-development>

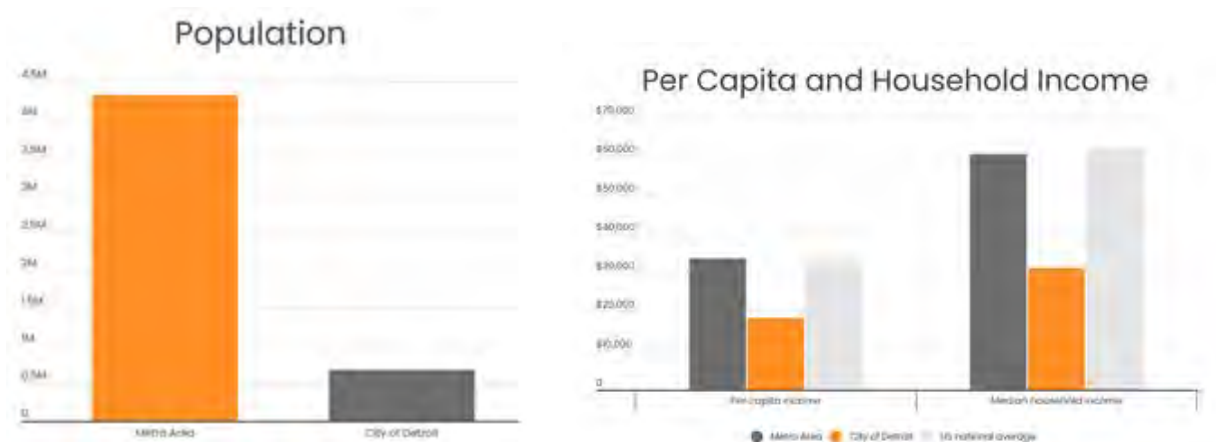
⁷⁹ Detroit City of Design Action Plan (2018). Retrieved from <https://www.designcities.net/wp-content/uploads/2016/01/Detroit-City-of-Design-Action-Plan-1.pdf>

⁸⁰ Detroit. (2018). UNESCO Creative Cities Network. Retrieved from <https://en.unesco.org/creative-cities/detroit>

⁸¹ Stella, O. (2017) Detroit Ignites UNESCO City of Design Designation to Build More Equitable, Sustainable Future. Retrieved from <https://knightfoundation.org/articles/detroit-ignites-unesco-city-of-design-designation-to-build-more-equitable-sustainable-future/>

Where is Detroit Now?

The inner urban area of Detroit is still very deprived, however the surrounding areas that make up the Detroit Metro Area are performing significantly better. Per capita income in the Metro Area reached nearly \$34k in 2018, approximately double that of the inner city of Detroit and on par with the U.S. national average. Median household income tells a similar story, reaching just over \$60k in the Metro Area in 2018 vs. just \$31k in the city of Detroit⁸² Further, the poverty rate in the city of Detroit remains the highest of any major city in the nation,⁸³ and crime remains a serious issue – according to the FBI, Detroit remains the most violent city in the United States⁸⁴



Data source: US Census Bureau (2018) American Community Survey 1-year estimates.

The Detroit Regional Chamber produces an annual State of the Region report to track Detroit's economic performance relative to peer regions. This report compares the Detroit Metro Area with the metro areas of Seattle, Dallas, Atlanta, Boston, Minneapolis, St. Louis, Chicago, Cleveland and Pittsburgh. By using metro areas, the report presents a slightly sunnier picture of Detroit's economic performance than a direct comparison with the inner city of Detroit would do. The 2019-2020 report shows that the region has continued to make progress in improving employment, per capita income, and property values while reducing poverty rates. However, despite its progress, the region continues to lag behind its peer cities on many indicators.⁸⁵

Throughout the period 2014-2018, Detroit's per capita income grew 18.2%. This is above the national average and about average in comparison to peer regions.⁸⁶

⁸² US Census Bureau (2018) American Community Survey 1-year estimates.

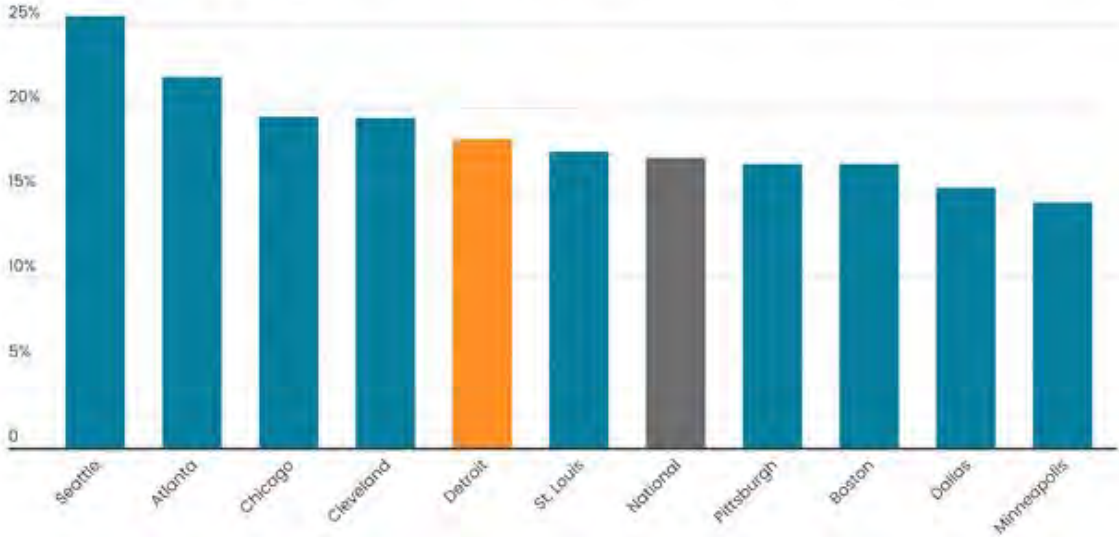
⁸³ 2019-2020 State of the Region. (2019). *The Detroit Regional Chamber*. Retrieved from <https://www.detroitchamber.com/sor/>

⁸⁴ FBI 2019 Crime in the United States Report (2019). Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019>

⁸⁵ Detroit Regional Chamber. (2019) State of the Region 2019-2020. Retrieved from: https://www.detroitchamber.com/wp-content/uploads/2019/12/updated_SOR2019-2020.pdf

⁸⁶ *Ibid.*

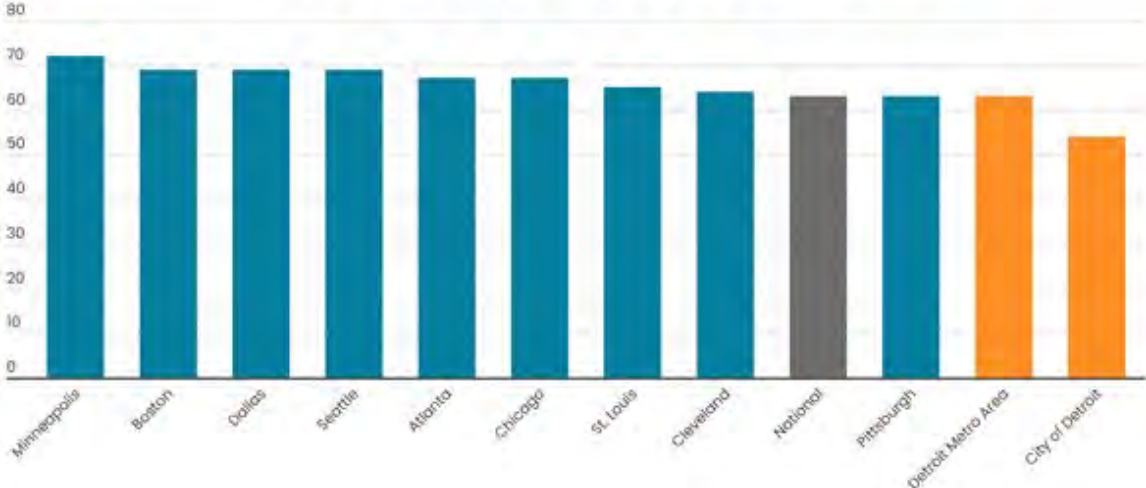
Per Capita Income Growth 2014-2018



Data source: State of the Region 2019-2020

In 2018, the Detroit region’s labour participation continued its slow upward trend, increasing by 0.3% from the previous year, outperforming the national average of 0.1%. Regardless of this progress, the region still suffers from one of the lowest labour force participation rates amongst peer regions, at 62.6% participation.

Labour Force Participation Rate



Data source: State of the Region 2019-2020

The Metro Area’s unemployment rate has been declining, although it continues to remain above national levels – falling from 16.7% in 2009 (vs. 9.7% national average) to 5.3% in 2019 (vs. 4.0% national average). The city of Detroit has also seen a declining unemployment rate, however it remains much higher than the region’s average – falling from 28.3% in 2009 to 11.1% in 2019.

Unemployment Rate			
Year	Metro Area	City of Detroit	National Average
2009	16.7%	28.3%	9.7%
2019	5.3%	11.1%	4.0%

Data source: State of the Region 2019-2020⁸⁷

Looking forward, predictions for Detroit’s future are more positive now than they have been in the past 70 years. According to a forecast⁸⁸ by the University of Michigan in partnership with the City of Detroit, Michigan State University and Wayne State University, Detroit Metro Area’s household income, employment, and labour force participation rate are all expected to continue to increase over the next 5 years.

Although there are reasons to be optimistic about the future of the wider Metro Area, many remain skeptical of the inner city’s ability to benefit from that growth. Indicators such as persistently high rates of crime and poverty, coupled with low rates of educational attainment are seen as fundamental obstacles to any “rebound” in the inner city. Skeptics argue that until these underlying factors are addressed, the city’s growth will either lag far behind that of the Metro Area or will be very unequal and leave behind lower income areas.⁸⁹

⁸⁷ Detroit Regional Chamber. (2019). *State of the Region 2019-2020*. Retrieved from:

https://www.detroitchamber.com/wp-content/uploads/2019/12/updated_SOR2019-2020.pdf

⁸⁸ Burton, J et al. (2020). *The Detroit Economic Outlook for 2019–2024, Research Seminar in Quantitative Economics - University of Michigan*, 7.

Retrieved from: https://detroitmi.gov/sites/detroitmi.localhost/files/2020-02/Detroit%20Forecast%20%282020.02%29_0.pdf

⁸⁹ Sands, G. (2017). Tale of two cities: Despite rebound, study says Detroit short 100,000 jobs. *Michigan Radio, NPR*. Retrieved from:

<https://www.michiganradio.org/post/tale-two-cities-despite-rebound-study-says-detroit-short-100000-jobs>

Lessons to be Learned

There are many lessons (both positive and negative) that we can learn from Detroit's experience:


You can't separate cultural from economic factors. While Detroit's economic struggles originated with the loss of competitiveness in its auto industry, they have been significantly exacerbated by continuing racial strife and political corruption. Windsor, fortunately, does not have the same history as Detroit, but even now, as we saw in our Ontario polling, is to an extent affected by wider impressions of Detroit.

Big investments are not a silver bullet. Many of the recent investments by Dan Gilbert or the municipally funded Sugar Hill Arts District appear to have made a significant difference to city life. However, there is also a long track record of other investments from Joe Louis Arena to the People Mover, that left much less of an impression. Amenity investments can be powerful, but they work best to further accelerate underlying improvements in the economy - rather than change the fundamentals on their own.

A shrinking population can trap the city in a negative economic cycle. Detroit's economic downturn led to a mass exodus from the city, leaving the municipal government with an ever-shrinking tax base and diminishing municipal budgets to implement revitalisation strategies. Windsor has had small but consistent population growth since 2010 and must consider strategies around how to continue and strengthen that trend.

Struggling cities cannot afford uncompetitive tax rates or inadequate basic infrastructure. High rates of debt, partly as a result of unsuccessful investments, are one reason for Detroit's very high relative taxes. By encouraging businesses and wealthy residents to leave, they further worsened the area's economy - and often proved counterproductive, with total revenue little higher after the impact of flight from the city is taken in.

Even with all its troubles, being a large city remains an advantage. Among urban economists, Detroit is a watchword for a declining city. Nevertheless, the economies of scale from a city make them very hard to kill altogether - and give them a long runway to discover new industries. In the last ten years, the urban area appears to have turned a corner. While there are still challenges to come, with the transition to a post fossil fuel world, there are grounds to be cautiously optimistic about the city's future.

PUBLICFIRST 

Annex 05

Policy Proposals

Annex 05

Policy Proposals

December 2020

PUBLICFIRST 

Policy Proposals

LOCATION

Strategy: Attract Michigan

Establish better links between Windsor and Detroit/Michigan

1. Establish an “R&D Arc” between University of Windsor, Western, Michigan State, Ann Arbor, and Wayne State.

The purpose: Increasing the level of collaboration between the University of Windsor and the universities in Michigan will increase the amount that students in Michigan hear about Windsor and therefore improve the chances they might relocate after graduation. Branding Windsor within the “R&D Arc” could make it more likely for STEM graduates to seek job opportunities there.

What it might look like: Requires all of the chosen universities to buy-in to the “R&D Arc” concept and produce branded messaging pushing the concept. For example, each university would produce materials showcasing what their students/faculty/alumni are doing in the R&D sector and share other universities’ materials with their own students, faculty and alumni. This policy initiative could also include, for example, a rotating annual R&D conference/workshop for students, faculty, alumni interested in the R&D sector to learn, share, and network across the universities and (potentially) also with local R&D industry leaders.

What it might cost: \$

What its impact might be: An R&D Arc will help to establish closer links between the two regions through their educational institutions. It will also promote the region as a leader in R&D, helping to attract residents and businesses to the region. This will give Windsor the opportunity to reach out to graduates at other universities and showcase the R&D and innovation work happening in the university and across the city more widely, opening the door for graduates across the region to move to Windsor.

2. Subsidise US passport cards for American visitors from Michigan

The purpose: To travel to Canada, American citizens must hold a passport book, passport card or a NEXUS card. However, according to the U.S. Department of State, in 2020 only around 43% of all Americans hold a passport (book or card). Removing some of the financial barriers would likely incentivise more people to get passport cards and could therefore increase the number of visitors from the US into Windsor. Subsidising passport cards (\$30 application fee) is a less expensive option than subsidising passport books (\$115 application fee).

What it might look like: Set up a webpage through which eligible American citizens can apply to have the application fee for their passport card refunded. To get the refund, they must agree to sign up for emails from Visit Windsor Essex. Eligibility requirements:

- American citizen
- Has applied for their passport card within the last month
- Does not currently hold a passport book or a NEXUS card
- Lives in Michigan

What it might cost: \$

What its impact might be: This policy would increase the amount of tourism flowing from Michigan into Windsor. This increase would not only come from people who are eligible for the subsidised passport cards (which would likely be a small subset of the population), but also from others who simply hear about the scheme and become interested in Windsor. If anything, it displays a sense of goodwill, and reinforces that Windsor is a friendly and welcoming city for American tourists.

3. Joint KPIs and pairing scheme for councillors and officials

The purpose: A closer relationship between the municipal governments of Detroit and Windsor will help Windsor capitalise on Detroit's revitalisation. Formalising these relationships through joint strategic plans and joint KPIs will ensure that the relationships between these two governments do not rely on individual efforts and relationships, but rather are systematised and can stand the test of time.

What it might look like: Following the model of Copenhagen and Malmö, Windsor could introduce a pairing scheme, whereby every member of the Windsor municipal government has a designated counterpart in Detroit. These pairs meet bi-annually, once to set joint KPIs for the year and again 6 months later to assess progress in meeting them. The city could also consider developing a joint 5-year strategic plan, agreed upon by both mayors, which lays out a shared vision for the region. Lastly, Windsor could take a lead in organising more joint conferences and events for councillors and officials to network, share ideas, and foster closer relationships.

What it might cost: \$

What its impact might be: Formalising the relationships between government officials in Detroit and Windsor will help the region create a comprehensive and coherent joint development plan. A shared long-term vision for the region will provide certainty for people and businesses in the area and will accelerate both cities' economic growth. It will also help to hold officials accountable to their commitments and solidify a strong relationship between Windsor and Detroit.

4. Establish deeper relationships with the Windsor and Detroit entrepreneur cluster

The purpose: Over the long-term, it will be important for key officials in Windsor to cement close relationships with important political and economic figures in Detroit. The goal is for the whole city of Detroit to recognise the benefit of being situated next to Windsor, and therefore introduce a closer working relationship between the cities. Reaching out to businessmen and

philanthropists to showcase Windsor as a gateway to the Canadian marketplace may also be an important driver of investment in Windsor.

What it might look like: These relationships could be built through invitations to conferences, events, and dinners. Windsor should seek to create a regular open line of communication between multiple government and economic actors with key decision-makers in Detroit.

What it might cost: \$

What its impact might be: A strong relationship with key decision-makers in Detroit will make it easier for the cities to collaborate, both through economic and social/cultural projects and events. Further, forging relationships with entrepreneurs and high profile business leaders may lead to investment in Windsor's regeneration as they are in Detroit. This could be an important avenue of private investment for Windsor

Create a competitive business environment

5. Create a Business Attraction Centre: a one-stop-shop for new businesses coming from Michigan

The purpose: The city should establish a Business Attraction Centre as a way of improving understanding of Windsor's relocation offer to businesses in Michigan. The Centre would be the one-stop-shop of any and all information and advice about relocating a business from Michigan to Windsor, including information about development and planning procedures, tax codes, the local workforce demographics, and available grants, loans and subsidies. It would essentially be the business version of what the Multicultural Council of Windsor and Essex County offers for people.

What it might look like: The Business Attraction Centre would have three main avenues for communicating with potential businesses:

1. Online. The Centre should have an easy-to-navigate website with a step-by-step explanation of how to relocate a business to Windsor (including all the relevant planning and development logistics). It should also outline the main reasons why businesses should relocate (i.e. lower costs, highly skilled workforce, avenue into the Canadian market), showcase testimonials of businesses that have moved, and provide links to relevant resources.
2. In Windsor. The Centre should have an in-person presence in Windsor where business owners can have in-person consultations with experts. The Centre should be available to provide continuous support for businesses in their first few years of relocating.
3. In Detroit. The Centre should also have an in-person presence in Detroit to improve its accessibility and reach for businesses across the city and greater Michigan.

What it might cost: \$\$\$

What its impact might be: The Business Attraction Centre would help expand Windsor's reach in Michigan so that more businesses understand the economic offer for relocating to Windsor. It would also make it easier to find information and advice about running a business in Windsor, which would facilitate more businesses relocating.

6. Create a new Community Improvement Plan with tax incentives for relocated SMEs

The purpose: Windsor can attract SMEs from Michigan by providing financial incentives, such as rebates on property tax for firms that relocate within strategic zones (i.e. downtown). The CIP would cover all sectors.

What it might look like:

- Option A : Small and medium size businesses can receive a 100% grant rebate for 2 years from the property taxes on their office accommodation in a zone defined by the City to include the downtown core. The subsidy is designed to support SMEs in their early years as they get established, and to incentivise them to locate in the downtown if they want to start up in Windsor. To avoid risks of gaming, this scheme would exclude new operations of existing businesses in the region or shell companies with no employees and/or trading record.
 - In certain sectors (to be determined by the city and WEEDC)
 - Which are new to Windsor
 - Who have more than 5 but less than 30 employees
- Option B: As above but alternatively the city could introduce a % discount over a longer period, say 50% off for 4 years.
- Option C: As above, but a 2, 3, or 5-year tax deferral, so taxes are repaid in future years (years 3-8, or 5-10) once the company is larger.
- Option D: A very aggressive (and broad) interpretation of “eligible costs” so firms in a certain downtown location can get rebates for much more than they currently do.

What it might cost: Option A/B: \$\$\$; Option C: \$

7. Take forward proposals for a downtown computer science and tech training hub

The purpose: In 2019, the University proposed a joint initiative called Windsor Centre for Computing, Innovation, and Technology (WinCITY) aimed at fostering public-private cooperation in driving high-tech skills development, corporate and industry engagement, opportunities for work-integrated and experiential learning, and credential and micro-credential acquisition with multiple entry points across an employee’s life cycle.

What it might look like: WinCITY is composed of the following components:

1. Community upskilling and professional development programs
 - a. Community computer literacy upskilling programs
 - b. Hosting and leading events drawing on the community developer model
 - c. Engagement with k-12 technological education
2. Private-public research and development collaborations
 - a. Space for project-based activities for companies not currently located in Windsor
 - b. A visible space for the School of Computer Science’s existing program of internship-based industry subcontracting
3. Enhancement and Expansion of Postsecondary Programming
4. Relocation of programming to enhance focus on artificial intelligence, machine learning, and multi-disciplinary tech applications.

What it might cost: \$\$\$

What its impact might be: The WinCITY proposal outlines several potential impacts of the initiative, including:

- Expanding the capacity of existing projects by providing space and infrastructure;
- Facilitating knowledge transfer between the City, academia and industry;
- Reducing duplication of effort across different companies;
- Providing a coworking space that can spark unforeseen collaboration and innovation;
- Contributing to a track record of collaboration that increases the potential access for both public and private investment;
- Puts Windsor/Essex on the map for potential investors.

8. Provide a people incentive through a “Windsor Welcome” grant for specific businesses

The purpose: This grant would incentivise companies in targeted sectors to move to Windsor because it would make them slightly more competitive when attracting talent compared to competitor companies in Michigan – these firms are able to essentially offer new employees a \$3,000 joining bonus at no cost to themselves.

What it might look like: The city of Windsor would create a fund for new companies (in targeted sectors: i.e. information & technology, advanced manufacturing, health & life sciences, etc.) registering in Windsor to allow them to offer a one-off “Windsor Welcome” grant for new employees after 12 months of living in Windsor. This grant is paid direct to the individual employee if certain criteria are met. The eligibility criteria would be as follows:

- Firms over 50 employees or based outside of Windsor-Essex, or less than 1 year old are not eligible.
- Foreign firms or those not registered in the region are not eligible.
- The grant is accessible once an employee has started work and has proof of address in Windsor.
- The employee is free to use the grant however they want, and there are no reporting requirements.
- The grant is valued at \$3,000.
- The grant is not income-assessed and is non-repayable.

What it might cost: \$\$

What its impact might be: A grant of this kind would make the overall employment package more attractive for firms in Windsor competing for graduate talent, and may enable more new tech companies to entice new graduates to choose a Windsor-based business. If successful, more graduates from universities outside of Windsor would join new companies in Windsor, over choosing similar roles (at similar pay levels) in other parts of Ontario.

Strategy: Sell Windsor-Detroit

Attract international investment into Windsor-Detroit

9. Target more joint bids between the development authorities

The purpose: Building off the 2017 joint Amazon HQ2 bid, Windsor and Detroit should do more joint development bids to sell the unique advantages of setting up a business in the region. Both cities have more to offer to potential investors together than they do separately.

What it might look like: Joint development bids that emphasizes all of the unique advantages of setting up a business in the region, such as taking advantage of Canada's generous R&D tax credit system, talent acquisition from top universities in Michigan, access points into both American and Canadian markets, the ability to draw on employees from both sides of the border, and good transport links between the two cities.

What it might cost: \$

What its impact might be: Publishing more joint development bids may attract new businesses to set up in the Windsor-Detroit region. It will also contribute to the perception of Windsor-Detroit as a single region made up of two complementary cities, which will help attract other businesses beyond only the targets of joint bids.

10. Establish a new Detroit-Windsor Board of Trade

The purpose: Establishing a joint Board of Trade to promote the Windsor-Detroit region and communicate a cohesive joint offering to businesses would help sell the Windsor-Detroit region to outside businesses. The joint Board of Trade would oversee commerce and industry in both cities and act as the main contact body for any outside businesses interested in setting up in the region.

What it might look like: The joint Board of Trade would be made up of councillors from both cities along with appointed business leaders. The board would have quarterly meetings, rotating between Windsor and Detroit, to discuss all matters related to inward or outward direct investment across the region.

What it might cost: \$\$

Sell Detroit-Windsor through marketing and targeted cultural events

11. Establish 'Prohibition Week'

The purpose: To celebrate the history of the Canadian-U.S. relationship during the 13 years of prohibition in the U.S. in the early 20th century. This celebration would attract U.S. residents to visit Windsor and increase the cultural connection between the two cities.

What it might look like: Prohibition Week would take place during the week of December 5th to commemorate the end of Prohibition (5 December 1933). Some ways the city could celebrate Prohibition Week:

- Windsor bars and distilleries put on special events, tours, and discounts for American visitors.
- The city organises a street festival downtown near the waterfront to showcase local breweries, food, and other local products.
- Some restaurants and bars (or rented event spaces) are turned into speakeasies for the week.

- Local museums put up special “Prohibition history” exhibitions.

The majority of Prohibition Week events would be held by private companies/bars/restaurants rather than the city itself. Beyond organising the street festival, the city would play more of a convening role, bringing together and publicising all of the different events happening across the city during the week.

What it might cost: \$

What its impact might be: Prohibition Week would attract several thousand U.S. visitors, generating significant income for Windsor bars and restaurants throughout the week. It would also have longer lasting impacts on helping to forge a strong relationship between the two cities.

12. Specific film festival themes that celebrate the Windsor-Detroit region and history

The purpose: The Windsor International Film Festival (WIFF) is a successful yearly event that contributes to building the city’s creative economy and building a sense of community downtown through the arts. With municipal government support, the WIFF non-profit would allocate a few days of the festival specifically to celebrating the rich history in the Windsor-Detroit region.

What it might look like: One or two days of the film festival would be themed around “celebrating Windsor-Detroit” and would showcase films that:

- Are created by a local Windsor or Detroit director, or
- Celebrate some aspect of the region’s history (i.e. Motown, prohibition, civil rights, etc.)

The festival should be more widely advertised in Detroit to encourage U.S. visitors during the themed days.

What it might cost: \$

What its impact might be: Hosting Windsor-Detroit specific days will result in a higher turnout of American visitors to the IFF. It will also contribute to forging a closer relationship between the two cities through shared cultural events.

13. Reinstating an expanded “International Freedom Festival”

The purpose: The International Freedom Festival was an annual joint celebration that commemorated both American Independence Day and Canada Day and culminated in a massive fireworks display over the Detroit river. Since 2007, the International Freedom Festival has been broken down into two distinct events, the Detroit Riverdays Festival and the Windsor Summerfest, which again culminate in a joint firework display. Were Windsor to support an expanded International Freedom Festival it would act as a symbolic step in strengthening the Windsor-Detroit relationship and increasing the amount of collaboration between the two cities.

What it might look like: This would not require any significant changes to the events during the Riverdays Festival or Summerfest, but rather a change in branding. The weeks should be coordinated so that major events do not overlap, special public transport schedules ensure

people can easily cross between the two cities, and all events are marketed to citizens on both sides of the border.

What it might cost: \$

What its impact might be: Reinstating the International Freedom Festival will likely increase the amount of visitors to Windsor during the week and help forge a closer relationship between Windsor and Detroit.

14. Seek access to Belle Isle Park

The purpose: Belle Isle Park is a beautiful park with an activity for everyone, including an aquarium, casino, conservatory, museum, and acres of natural wooded areas home to a variety of small animals and birds. Currently, the only way to access the 982-acre Belle Isle Park is from Detroit. Explore creating an easier way for people to access the park from the Windsor side so that visitors and residents of Windsor can benefit from the park's proximity, without compromising important border security requirements.

What it might look like: There are two options for improving access to Belle Isle Park:

- Option A: gaining direct access to the park through implementing a regular ferry service. This option is more complicated because it requires coordination with border officials, who would need to set up a new border checkpoint for people visiting the park from the Windsor side.
- Option B: implementing a new bus route that runs from downtown Windsor directly to Belle Isle Park, making it an easier trip for Windsor residents and visitors.

What it might cost: Option A \$\$\$; Option B \$\$

What its impact might be: Easier access to Belle Isle Park would increase the amount of leisure activities available for Windsor residents, making it a more attractive place to visit and live (especially for families).

15. New joint sporting events

The purpose: Many Windsor residents already cross the border into Detroit to watch and support Detroit's professional sports teams, including the Detroit Lions, the Tigers, the Pistons and the Red Wings. Sport has always been a significant contributor to the cultural link between the two cities, and holding Windsor vs. Detroit sporting events would strengthen this link.

What it might look like: These Windsor vs. Detroit sporting events could be organised at every level, from college teams and junior leagues to the major league professional teams. The lower level games would not likely attract thousands of fans or raise significant amounts of money but would help to forge connections between the cities at the local/individual level.

What it might cost: \$

What its impact might be: This policy would increase the connection between Detroit and Windsor residents and contribute to the perception of a single Windsor-Detroit region rather than two distinct and separate cities.

16. Update the city of Windsor's website so it becomes an attractive portal for accessing city services online

The purpose: Windsor's website currently displays most of the information that prospective business and families require, but does not display this information in a way that is effective in encouraging these groups to view Windsor as an attractive destination. Changing this will help Windsor sell itself to these groups, and hopefully boost their interest in the city.

What it might look like: Windsor should redesign their website, to update both the aesthetic and the narrative. This can be achieved in a few ways:

1. **Update the design template for the website:** The website's design template looks dated, with the display largely limited to separate plain text and pictures. A more modern design style which fluidly incorporates icons, text and pictures will help Windsor to appear more attractive. Niagara and Waterloo can be used as local examples of more effective design templates.
2. **Create a narrative for why Windsor is an attractive destination:** Windsor provides information on incentives for businesses and families to come to the city, for example through the business incentives page and the building Windsor's future page. However, the website does not provide a convincing narrative of why Windsor is a good place to live or do business. Framing Windsor's website pages such as 'For Residents' and 'For Business' around narratives such as "The Best City for Working Families" and "Accessing the best of US and Canadian business" would help to create a website that is more persuasive in attracting new businesses and residents. Windsor's "Visiting Windsor" page is a good example of this narrative approach, as is Niagara's economic website.
3. **Streamline the website sitemap:** Currently, Windsor's website has six major sections, each with many subsections. Windsor should streamline this by combining the "City Hall" and "Mayor and Council" pages.
4. **Provide more readily available data on Windsor:** Currently, data on why Windsor is a good place to live and work is not given prominence on the website. This sort of data is particularly important for prospective businesses, so Windsor should give this data a prominent position in the website, in the style of Niagara's business website.

What it might cost: \$

What its impact might be: It will be difficult to measure the precise impact of an updated website, as it will not in itself be enough to push businesses or people into relocating to Windsor. However, an improved website will help to push these groups towards Windsor, as part of a wider package of communications activities.

INFRASTRUCTURE

Strategy: Invest in infrastructure and plan new projects to support growth and quality of life

Build the housing stock that meets incoming demand

17. Implement a Downtown Residential Strategy aspiring for 3,000 new units in downtown core by 2030

The purpose: One of Windsor's main offers to new residents is that it is a safe and affordable city. The city should continue to build new housing in strategic areas to maintain its competitive advantage in affordable housing as its population grows.

What it might look like: The government should work with partners to create a Downtown Residential Strategy that aspires to build 3,000 new units in the downtown core by 2030. The strategy should emphasise the importance of increasing the variety within the housing supply to attract young families, i.e. building walk-ups, townhomes, larger 3-bed condos. After creating the strategy, the Government should then work closely with developers to ensure targets are met within the timeframe.

More generally, the city should continue to work with developers to ensure that housing developments and plans are approved and the housing stock is maintained as the population grows.

What it might cost: \$

What its impact might be: Maintaining Windsor's stock of affordable housing will be an important strategy for attracting new residents to move to the city. Pledging 3,000 new units downtown will build confidence for both residents and businesses that there will be continuous investment in the downtown area, making it an attractive place for people to move to or open businesses.

18. Complete the Riverfront Implementation Plan goals through construction of destination beacons

The purpose: The Central Riverfront Implementation Plan is centered around the construction of five key park pavilions called Beacons. These are visual landmarks where the public can gather and access services (i.e. washrooms, concessions, information, and shelter). Constructing these Beacons will be an important step in making sure the Waterfront can be used all year round.

What it might look like: Allocate funding in budget plans over the next two years to construct the remaining five Beacons, which are integral to the Central Riverfront Implementation Plan.

What it might cost: \$\$

What its impact might be: Constructing all five Beacons would help drive traffic to the Waterfront year-round and help keep people at the waterfront for longer by giving them a place to sit, gather, eat and rest.

19. Ongoing investment in roads and public transport to keep up with increasing population and demand

The purpose: As the city's population increases, it will need to continue to invest in roads and public transport options to keep up with rising demand. The city should continue to take advantage of provincial and federal funding towards infrastructure projects, which can reach a maximum of 33.33% and 40% respectively towards eligible costs through the Canada-Ontario Integrated Bilateral Agreement.

What it might look like: In July 2020, the city announced \$3.7 million of funding for the purchase of 19 buses to replace 16 older buses and expand the fleet by 3 buses. This is a good step and the city should continue to make investments in expanding and upgrading the bus fleet consistently over the next 10 years.

Ongoing investment in the city's roads is needed to address congestion and tackle air pollution. This should be through construction and rehabilitation of sidewalks and bike lanes, as well as investment in expanding roads and improving traffic flows.

What it might cost: \$\$\$

What its impact might be: Improving the city's roads and public transport systems will make it a better place to live and work, helping to attract new residents and especially young working families. Improving transit links with the downtown core will also contribute to the city's downtown revival strategy.

Enhance quality of life

20. Schedule more pop-up events on the waterfront

The purpose: Pop-up events help to attract more visitors (both residents and tourists) to the waterfront. This will help attract people to the downtown area, as well as help to establish Windsor as a city with lots of family-fun activities happening throughout the year.

What it might look like: During the summer, there should be events on the waterfront every weekend, drawing people into the downtown core, celebrating local businesses, and fostering a sense of community. Some ideas for pop-up events throughout the year:

- Annual Christmas market:
 - Alpine-style stalls filled by local restaurants/bars serving street food, desserts and drinks
 - Stalls for local artists/shops to sell their products
 - Heated tents/fire pits with outdoor seating

- Entertainment (i.e. live music, carnival games, Santa impersonator)
- Local community theatre:
 - Modelled off NYC's Shakespeare in the Park
 - Set up a temporary out-door theatre space during the summer for local community theatre pieces
 - Inexpensive tickets (\$5-\$10 per person), food and drink vendors on site
- Live music nights :
 - During the summer months the waterfront hosts "live music fridays" where local musicians put on free concerts
 - Food and drink vendors nearby
- Craft markets:
 - Weekly craft markets for local artists to sell their products
- Farmers markets:
 - Weekly farmers markets for grocers, farmers and bakers to sell fresh products
- Film nights:
 - Set up a giant screen and speakers and host outdoor "movie at the waterfront" nights playing classic films
 - People can bring their own blankets/food/drink, but there will also be food and drink vendors on site

What it might cost: \$\$

What its impact might be: These events would help to build a sense of community within the downtown core of Windsor and would also attract nearby visitors. Weekly events for the whole family will help sell Windsor as a safe and fun city for young families.

21. Work with an established e-scooter provider to trial a city-wide scheme

The purpose: E-scooters are a forward-looking and creative solution to public transport in cities across the U.S., which are becoming increasingly popular amongst students and young professionals. Windsor has a large student population, a flat topography, and a limited public transit system, which makes it an ideal location for e-scooter schemes. E-scooters would help to expand the city's public transport system, providing more options for people without cars to move around the city.

What it might look like: Bird, Lime and Spin are the main e-scooter providers in Detroit, and therefore would be the most obvious providers of e-scooters for Windsor as well. Working with one or more of these providers – or Tier, who operate in Europe – Windsor could implement a city-wide trial scheme next summer, placing 100 scooters around the downtown and university area and tracking their usage.

We also suggest revising the city's by-laws to permit residents and visitors to use private e-scooters to move around the city.

If the trial-schemes are successful then Windsor could introduce, like Detroit, subsidies for low-income residents using the e-scooters. In Detroit, individuals eligible for any state or federal assistance program can apply to receive a discount on all Bird, Spin and Lime rides. This would ensure that the e-scooter scheme is available to all residents.

What it might cost: \$

What its impact might be: Investing in e-scooters would help Windsor implement environmentally-friendly public transport solutions across the city. It would expand the public transport service at little cost to the city, and through subsidies would ensure all residents can safely and affordably move around the city.

22. Set up a popup shop grant program for businesses to set up subsidised temporary stores in Windsor to test and introduce themselves to the local market

The purpose: Downtown Windsor currently suffers from vacant retail spaces and low foot traffic. Popup or temporary shops are popular vehicles for retailers to grow awareness of their brand, and to test the waters in a new market, without making the financial commitment of a long term lease. By subsidising popup stores, Windsor would give retailers a low risk opportunity to test the waters in Canada and boost their brand awareness in a new market. These popup shops would help fill vacant retail spaces in the short term, while Windsor would provide support for popup shop program applicants to transition into a permanent Windsor retail space, permanently increasing Windsor's retail diversity.

What it might look like: Windsor should set up a popup store program through Windsor's Downtown CIP that provides grants to encourage retailers to set up temporary popup stores in Windsor. The total available grant for each popup should not exceed \$5,000 – a Business Insider survey found that 44% of respondents opened a popup shop for less than \$5,000 USD. To pilot the scheme, the city should run popup shops in a maximum of five locations. This program can be achieved in three ways:

1. The program can offer discounted rent in municipally owned Downtown properties
2. The program can offer a grant to cover the eligible costs of refurbishment for each popup
3. The program can offer property tax relief for the duration of the popup

The program should offer a range of popup durations, from a minimum of three weeks to a maximum of 6 months. The eligibility criteria for this program can be changed, but our initial thoughts are that businesses should:

1. Not be currently situated in Downtown Windsor
2. Have more than 5 but less than 50 employees
3. Have a current stock of less than 10 locations

Windsor will provide after care support for popup program participants, helping them to move into a permanent Windsor retail space if they want to. This aftercare will come in the form of:

1. Expedited planning permissions
2. Assistance in finding financiers for the project
3. Connecting business with local planning authorities
4. Connecting business with local community and business leaders
5. Providing a database of available properties and market analytics

In terms of making this initiative headline worthy, one could consider a push to more innovative popups that offer experiential retail, further pushing Windsor's reputation as the best place for working families. By offering entertainment as well as retail, these shops have found a way to provide extra value that online shopping cannot provide. To encourage

experiential popups, the maximum eligible grant for this type of popup could be increased to \$7,000.

What it might cost: \$\$

What its impact might be: In the short term, this popup shop program could help to fill vacant retail spaces in the Downtown area, boosting the variety and attractiveness of Downtown to tourists, residents and business alike. In the long term, the popup program could provide the incentive for businesses to test the water in the Windsor downtown core, opening the path for them to set up long term presences in the city, providing a permanent boost to the Downtown area.

The value of popup shops has only been increased in the wake of COVID-19, with vacancies increasing as retailers shut down, and uncertainty on the future of the market and local levels discouraging long term leases.

Municipal led popup initiatives have already seen success internationally. Banbury, a UK town in Oxfordshire, funded the creation of three pop-up shops and provided support for businesses that rented the popup shop space to establish a permanent residence in the town. This initiative helped Banbury reduce the number of retail vacancies from 53 in 2014 to 35 in 2016. The success of this scheme led to it being replicated in the nearby towns of Wantage and Wallingford, with both schemes leading to popup shop renters establishing permanent retail presences in the town.

Leverage new construction projects

23. Create an outline masterplan for a health R&D site to adjoin the new hospital

The purpose: The construction of a new hospital offers a massive opportunity for the creation of jobs in a health sector ecosystem created from the hospital's spillover effects. Creating a masterplan that designs the surrounding land and infrastructure to enhance the health sector cluster around the hospital will maximise the benefits created from the hospital health cluster, the potential of which could be squandered if the area is not managed.

What it might look like: The main part of this policy will be aligning planning permissions around the hospital site, as well as ensuring that municipal infrastructure is suitably developed as to ensure a medical hub can thrive.

In terms of planning permissions, this will mean encouraging planning for businesses that will support the medical hub through their proximity to the hospital.

In terms of infrastructure, this will mean ensuring that there is the necessary infrastructure set up around the hospital to allow the seamless growth of a significant medical hub. Given the significant infrastructural development that accompanies the creation of a new hospital, it is likely that much of the necessary work will already be completed as part of the hospital development.

What it might cost: \$

What its impact might be: Restricting the hospital environs to health sector organisations could allow a health cluster to build around the hospital, which in turn would encourage more

health sector organisations to locate in Windsor. There is significant potential for growth, with the Ontario life sciences sector already employing 26,000 people at 1,300 companies earning around \$13 billion in annual revenues.

FUTURE ECONOMY

Strategy: Be the site of Canada's future auto sector

Invest in manufacturing infrastructure, skills, and tech

24. Establish Canada's first ramp-up factory for EV/autonomous vehicles

The purpose: WEEDC currently has a proposal to implement a joint facility that will make it easier for start-ups, established companies and researchers to access flexible prototyping and manufacturing infrastructure. It will help reduce time to market, and make it easier for different businesses to collaborate with each other.

What it might look like: The creation of a single facility which takes EV/autonomous vehicle projects from the idea phase through to the prototype development stage and eventually to scaled up production. WEEDC is currently in the process of commissioning a feasibility study; the next steps would be to secure funding, put together a business plan and, finally, begin construction. Following through with the implementation of this facility should be a government priority.

What it might cost: \$\$\$

What its impact might be: According to WEEDC's proposal, the ramp-up factory would help to facilitate a flexible environment that enables innovation and rapid prototype production. Specifically it would:

- Reduce production development and industrialization costs
- Provide access to prototyping and manufacturing infrastructure
- Facilitate collaboration between start-ups, SMEs, OEMs, and academia
- Create jobs and long-lasting value in the region

25. Create an accelerator or venture capital fund for tech start-ups

The purpose: The goal of these initiatives would be to provide support (financial and otherwise) for local entrepreneurs looking to get their business ideas off the ground. The accelerator would be aimed at supporting early stage business ideas, fostering innovation and creativity, and building a network for entrepreneurs across the city. The venture capital fund, on the other hand, would seek to provide financial support for entrepreneurs further along in their business development within the tech sector. It would be used as a vehicle to leverage other investment in the sector.

What it might look like: A large-scale accelerator with its own website that accepts a new cohort of businesses every 6-months. The cohort would have access to 1-on-1 meetings with mentors; weekly business development workshops and events; \$2,000 monthly stipend (\$12,000 per business in total); access to a collaborative workspace; and opportunities to pitch to investors at the end of the programme.

Modelled on the 43North venture in Buffalo, NY, Sudbury Catalyst Fund, in Northern Ontario [and CyberNorth Ventures in Waterloo], a venture capital fund in Windsor would receive up to \$2 million in funding per year from the government, matched dollar-for-dollar by private investment (corporate sponsors, philanthropy), with a minimum and maximum allocation of \$50k-\$500k in up to 10 projects each year via a competition. To be eligible to compete for this funding a company must:

- Be based in Windsor
- Operate within the tech sector
- Be less than 5 years old

What it might cost: \$\$\$

26. Work with Province to prioritise the area for battery production by 2025

The purpose: While funding streams like the Strategic Innovation Fund already exist, given intensive global competition, more active support is likely to be needed to secure investment. Other countries such as the UK are investing significant amounts (~\$430m CAD) in boosting national battery production. Given its R&D specialisms, proximity to the US market and significant resources of key minerals such as lithium and nickel, Canada could potentially support at least one major battery factory.

What it might look like: As a first step, the municipal Government should commission a study into the potential spillover economic impact of government support for a battery factory in Ontario. Then, the Government should use this study as a tool to showcase the opportunities to the private sector. The Government's ultimate goal should be to advertise the fact that the SIF exists and make it easy to access for private companies operating in this space.

What it might cost: \$

What its impact might be: A battery factory in Ontario will signal to the automotive industry that the region is forward-thinking and preparing for the long-term future of the industry. This will attract more private investment in the automotive industry throughout the region.

27. Work with universities in Ontario and Michigan to develop a common skills plan and curriculum for the future auto workers

The purpose: This can both help reduce skills shortages, and make it easier for workers and companies on different sides of the border to cooperate.

What it might look like: Create links between the universities and leaders of the automotive industry so courses are designed and amended with up-to-date input from the industry. This could be formalised through an annual meeting where the heads of the relevant faculties (i.e. engineering) from universities and colleges across the region (University of Windsor, St. Clair College, University of Michigan, Wayne State, etc.) sit down with representatives/leaders in the automotive industry from both sides of the border to discuss the current skills gap and how universities and colleges can better prepare their graduates to work in the sector.

From this meeting, the heads of faculty from across the region should work together to develop a common skills plan and curriculum. This will ensure all the universities and colleges are all producing high-quality graduates ready to enter the industry. This will also mean that

students graduate with the skills to work for companies on both sides of the border, making it easier for Windsor to attract graduates from Michigan.

What it might cost: \$

What its impact might be: A common skills plan and curriculum will ensure that all graduates from universities and colleges in the region will enter the workforce with equivalent skills and qualifications, reducing the skills gap in the workforce and making it easier for companies across borders to collaborate and attract talent.

28. Partner with industry associations to publish annual competitiveness analysis for the Canadian car industry

The purpose: The competitive analysis could help monitor the success of the national, regional and local strategies for supporting the car industry, and ensure that key actors in Windsor remain focussed on the industry's priorities.

What it might look like: The municipal government and industry could partner to commission a competitive analysis - each paying half of the total cost of the report. The report would bring together: annual metrics on industry employment and investment; an anonymous industry survey on relative competitiveness; data on relative costs and burden from taxation, regulation, energy costs etc. Both the Government and industry should heavily publicise this report, making sure to work with key media partners in the process.

What it might cost: \$

What its impact might be: The annual competitive analysis report would have two major impacts:

- It would improve the nation's (and region's) ability to monitor the industry's success by defining consistent metrics and making year-on-year comparisons. This would help to identify where things are going well and where more attention is needed to realign priorities for the coming year.
- It could be used as a tool to showcase Canada's (and the region's) success in the automotive industry and therefore attract more private investment - possibly from places like Michigan - to the country/region.

29. Create a second campus for the Automotive and Surface Transportation Research Centre's Manufacturing and Automotive Innovation Hub in Windsor

The purpose: The Automotive and Surface Transportation Research Centre (AST) provides federal government support to the development of the advanced manufacturing and ground transportation sectors across Canada. One of its facilities is the Manufacturing and Automotive Innovation Hub, located in London, ON. The Hub is an open-space research station where the automotive and manufacturing industry can collaborate on-site with research specialists to research, design, and develop new technologies.

Given advanced manufacturing and automotive are key industries in Windsor's long-term economic plan, the city would benefit from a Manufacturing and Automotive Innovation Hub

campus. Given its physical proximity to Detroit, this campus could help build better links between the research ecosystems in the US and Canada.

What it might look like: The city should put together a proposal that outlines the advantages and opportunities of a second campus located in Windsor, including:

- The physical proximity to Detroit/Michigan opens the door to collaborative research and innovation with companies across the border.
- The growing advanced manufacturing and automotive industries in Windsor means there is already a strong base to build on and the second campus could accelerate the city's existing momentum.
- There are strong academic and research institutions in the area to work with.

Windsor could offer seed funding to develop the second campus as an incentive.

What it might cost: \$\$

What its impact might be: Having a second campus located in Windsor could help define the city as the region's go-to location for advanced manufacturing and automotive innovation. It would also attract human capital and businesses to the area looking to benefit from the innovation and new technologies developed at the second campus. Further, it would produce knowledge spill-over effects into other sectors in the area.

30. Endow the University of Windsor with funding for academic positions related to automotive research

The purpose: These academics could work with local industry partners to help ensure crossover between academic research and local practice. Some would be jointly supported with Michigan universities.

What it might look like: Providing the University of Windsor with sufficient funding, or seeking corporate or philanthropic donations to bring about 100 academic positions, including named chairs, post-docs and PhDs in automotive related research. These academics would continue to carry out research for the sector as well as solidify the link between academia and industry.

What it might cost: \$\$\$

What its impact might be: Providing funding for these specific academic positions would increase the amount of automotive research and innovation coming out of the city, as well as improve coordination between academic research and local industrial practice.

31. Partner with industry to offer relocation support for 1,000 national and international graduates with automotive related skills

The purpose: This policy would help attract highly-skilled graduates from across Canada and internationally (mostly Michigan) to help grow the automotive sector in Windsor. A growing pool of highly-skilled workers would incentivise more businesses to set up in Windsor.

What it might look like: The Government could offer a \$5,000 grant to all national and international graduates with relevant degrees. To be eligible for the grant, the individual must:

- Have graduated in the past year from a relevant Bachelors, Masters, or PhD course (i.e. engineering)
- Have not lived in Windsor for at least the past 5 years.
- Have a job offer from an approved automotive company in Windsor
- Plan to live in Windsor for at least two years

The grant would be conditional on the individual staying in the region for at least two years, if they leave before the two years, the grant must be repaid.

Automotive firms in the city would have to apply to be put on the list of approved businesses so their new hires could benefit from this grant.

What it might cost: \$\$

What its impact might be: This grant would help attract skilled workers from around the country and beyond by helping to cover some (if not all) of the cost of relocating. It would also give automotive companies in Windsor a competitive edge for attracting talent compared to neighbouring cities, helping them grow and maintain competitiveness in the region.

32. Explore the creation of a regulatory sandbox for self-driving vehicles

The purpose: A regulatory sandbox gives companies a temporary bypass to the usual rules and regulations to trial new products in a real-world setting. As pioneered by countries like Singapore, this would make it easier for companies to develop the next generation of self-driving vehicles – and help attract other automotive related research to the region.

What it might look like: The main function of the regulatory sandbox is to reduce the liability for autonomous vehicle operators if they are to get in an accident, as long as they are testing in approved environments (i.e. on certain roads and at certain times) with specified safety measures in place. Some countries, like Taiwan and Singapore, have already implemented regulatory sandboxes for self-driving vehicles, and Canada could replicate/build on these existing policies.

In Taiwan:

- The period for innovation experimentation for self-driving car testing is one year, but can be extended up to a maximum of four years.
- Any penalties and regulations that normally apply are suspended during the experimentation period.
- Companies applying to conduct innovative testing with self-driving vehicles must produce insurance plans and risk management mechanisms, as well as visibly display a testing notice on the vehicle.

In Singapore:

- The sandbox was implemented in 2017 and will last for 5 years.

- Operators of self-driving vehicles have diminished liability if they are to get in an accident
- Operators are required to have a qualified safety driver in the vehicle that can take over in case of emergency, and must have third-party liability insurance.
- Operators must share the data from their trials with the Land Transport Authority

What it might cost: \$

What its impact might be: A regulatory sandbox would incentivise more autonomous vehicle companies to come to Windsor to carry out their research, testing, and development. It will also help Windsor stay on the cutting edge of innovation in the automotive industry, and therefore solidify its reputation as an attractive location for future investment in the industry.

Campaign for a stronger domestic market for electric cars

33. Advocate for a national Electric Vehicle manufacturing mandate

The purpose: This can give greater certainty to consumers and industry about future timelines, and help encourage greater investment.

What it might look like: Windsor should commission a policy document that lays out the economic, social and environmental impact of internal combustion engine vehicles and how phasing them out is an important step in achieving Canada's environmental goals, including the pledge to achieve net zero by 2050 from the Paris Agreement.

This document can then be used as a public lobbying tool to push the national government to implement a 2040 deadline for phasing out ICE vehicles.

What it might cost: \$

What its impact might be: A national deadline to phase out ICE vehicles will help to drive long-term investment in electric vehicles. It will also drive up consumer demand for electric vehicles, which would help Windsor EV companies scale and grow.

34. Significantly increase investment in EV charging infrastructure

The purpose: Without a more comprehensive network, consumer uptake of EVs is likely to be limited. Therefore, if EVs and the future automotive industry are a priority for the Government, they should focus on ensuring there is infrastructure to support the industry's growth - especially if the Government does pledge a national EV manufacturing mandate and as a result EV demand rises sharply.

What it might look like: The government should explore creating a public-private Charging Investment Fund, which will match funding for any corporate investment in charging infrastructure.

What it might cost: \$\$

What its impact might be: Developing more comprehensive charging infrastructure across the city will likely make EV a more attractive option for consumers, therefore increasing demand and helping the industry grow.

Strategy: Diversify in adjacent sectors of education, borders and health

Explore health manufacturing strength

35. Explore how to upgrade the University of Windsor's offering to ensure an enhanced pipeline of medical training and healthcare research locally.

The purpose: Upgrading the University of Windsor's offering will help to strengthen the city's biomedical sector and take full advantage of the new hospital. A strong curriculum for local medical training will provide a consistent stream of local graduates to work in the hospital, both improving graduate retention and keeping the hospital fully staffed. The hospital and medical school could also work closely together to align research initiatives and amend courses based on the needs of the hospital.

What it might look like: The city administration and University of Windsor should commission independent research into the current and future landscape of the medical sector in the area (including projections for when the new hospital is built). For example, some questions this research should address are:

1. Is there a shortage of medical professionals in the area?
2. How will the construction of the new hospital impact healthcare demand and training needs?
3. Is there evidence that graduates of medical schools tend to stay and work in the areas where they attended school, therefore addressing the local workforce gap?
4. What steps can be taken to prepare training and medical education to take advantage of the arrival of a major acute care hospital in the region within a decade?

What it might cost: \$\$

What its impact might be: An expanded medical education and healthcare practitioner training curriculum will have a significant positive impact on the education, recruitment and retention of medical professionals in Windsor and the surrounding areas. This will help to keep the new hospital fully employed with high quality medical professionals, and contribute to the growth of the biomedical sector as the city continues to diversify its economy.

Medical schools also tend to stimulate local economic growth and have significant spillover effects into other sectors. For example, a study projecting the impact of the new College of Medicine at Florida International University found that the new medical school would create

more than 66,000 jobs and generate more than US\$8.9 billion for the local economy in the span of 16 years.¹

Explore border strength

36. Develop local border expertise and host an international conference on c21st borders

The purpose: The Institute for Border Logistics and Security (IBLS), thanks to its subject expertise and business development and support services, is a significant pull factor for organisations considering relocating to Windsor to join its logistics hub. Helping the IBLS to boost Windsor's and its own profile through hosting a 21st century borders conference will bring Windsor to the attention of new organisations who may consider expanding to the city. The University of Windsor's own Cross-Border Institute (CBI) could also play a role in such an event, showcasing their expertise in border policy and innovation.

What it might look like: An international borders conference should be ambitious in scale, set up expecting hundreds of attendees from prospective businesses and interested officials, as well as broadcasting online. To demonstrate the widespread engagement of Windsor in these issues, the conference could feature as speakers:

1. IBLS and CBI subject experts will demonstrate Windsor's wealth of expertise, as well as the IBLS' supporting role for local businesses
2. Windsor municipal officials will demonstrate Windsor's competitive advantages, in terms of location and cost and ease of doing business
3. Local business leaders will provide demonstrable examples of Windsor's success and potential in being a logistics hub

What it might cost: \$

What its impact might be: Direct impact of this policy will be hard to measure. The conference could be very effective in building Windsor's profile and attractiveness as a logistics hub capable of dealing with 21st century border challenges. This could encourage logistics companies who attend the conference, or those who hear about the conference, to consider and ultimately choose to relocate to Windsor.

¹ Florida International University, "The Beacon, March 30, 2009" (2009). The Beacon. Book 256.
http://digitalcommons.fiu.edu/student_newspaper/256

TALENT

Strategy: Attract and retain more national and global talent

Form a new leadership vehicle around talent and skills to support economic growth

37. Establish a Windsor Talent committee focused on training and retention of highly educated people

The purpose: With a joint accountability framework and partnership among educational institutions, the city and the private sector can support training for current and future skills needs, and take steps to ensure more talent is developed in Windsor and chooses to stay on in Windsor. The committee could conduct updated analysis of labour market shortages and new business skills requirements and courses at Windsor's post-secondary institutions. The committee might also develop a strategy to encourage international students studying in Windsor to stay in Windsor after graduation.

What it might look like: A 'joint accountability framework' should take the form of a high level 'Windsor Talent' steering group, chaired by the Mayor and with permanent representation from the university and the college presidents, as well as representatives from K-12 school board chairs, and major employers in the region. It should have a small budget to be able to commission independent analysis and research and should be chaired by the Mayor in order to convene senior leaders who would be able to decide on changes to local educational course portfolios, admissions arrangements, or anything else that might be required such that they attract, train, and retain the citizens who pass through their institutions.

What it might cost: \$

What its impact might be: The committee would provide local leadership around the talent agenda and serve as a focal point for key decisions involving external partners. The committee would enable the city to have a dedicated forum to develop a close partnership with the two post-secondary institutions and with local employers to ensure Windsor can attract, train and retain the talent it needs for its future economic development.

Become a hotspot for highly skilled workers

38. Subsidise visa fees for skilled immigrants serving Windsor/Michigan businesses in Canada

The purpose: The financial cost of immigration is one barrier preventing high skilled workers from moving from Michigan to Windsor. Removing this cost increases the incentive for skilled

workers to move and, therefore, Windsor businesses may be able to attract more talent from Detroit and Michigan more widely.

What it might look like: There are two types of visas that highly-skilled workers could come to Canada on: a Work Permit (for temporary residence) or Economic Immigration (for permanent residence). The Work Permit is \$155, and the Economic Immigration visa for skilled workers currently costs \$1,325 (plus an additional \$1,325 for spouses/partners and \$225 per dependent child). Under this policy the city would subsidise 50% of the fee for skilled workers in strategic sectors, including the costs of bringing spouses and dependent children (i.e. in sectors such as information & technology, advanced manufacturing, agri-business, etc.).

Steps:

1. Companies that want to take advantage of this program submit an application to the City proving their eligibility (i.e. that they work within a designated strategic sector, that they have >X amount of employees and that they have been in business for >X years).
2. If approved, the business is added to a list of registered eligible companies.
3. The high skilled immigrant worker completes their visa application as normal through the federal government.
4. Once the visa is approved, the immigrant can apply to the City for 50% reimbursement along with proof of employment with a registered eligible company and a registered Canadian bank account.
5. If deemed eligible for reimbursement, the City will deposit 50% of the visa costs back into the individual's Canadian bank account.

What it might cost: \$

What its impact might be: This will improve the ability for Windsor businesses to attract talent from competitor companies in Detroit/Michigan, as well as graduates from top tier universities such as the University of Michigan and Michigan State University, for whom the cost of immigration is too high.

39. Advertise Windsor/Michigan to skilled immigrants in e.g. Hong Kong

The purpose: As China's grip on Hong Kong increases, more and more residents are seeking to emigrate. Canada is a popular choice for Hong Kong emigrants, it has the second largest Hong Kong diaspora after the U.S. and is a familiar English-speaking commonwealth country with good educational and economic opportunities and universal healthcare. In 2015, 900 people moved from Hong Kong to Canada, but that has grown to 1,500 in 2019, a trend likely to continue (at least after COVID-19) given the political and social context. According to a recent poll, 43.9% of Hong Kong residents would emigrate if they had the chance.²

² Hong Kong Institute of Asia-Pacific Studies (2020) Survey Findings on Views about Emigration from Hong Kong. *Communications and Public Relations Office, CUHK*. Retrieved from: https://www.cpr.cuhk.edu.hk/en/press_detail.php?id=3379&t=survey-findings-on-views-about-emigration-from-hong-kong-released-by-the-hong-kong-institute-of-asia-pacific-studies-at-cuhk

Immigrants coming from Hong Kong tend to be highly skilled and could make significant contributions to the economy. The goal of this policy would be for Windsor to sell itself as the best location for Hong Kong immigrants in Canada.

What it might look like: While the city of Windsor does not have the power to impact national immigration laws, it can advertise itself better as the best city within Canada for highly skilled immigrants to settle in.

Some potential ways to reach these immigrants:

1. Online: pay for targeted online advertising (for example on immigration websites, Facebook, etc.) with “fast facts” about immigrating to Windsor and links to the Welcome to Windsor–Essex website.
2. Through immigration services in Canada: create pamphlets about why Windsor is a great choice for immigrants and hand them out to immigration services/lawyers across Ontario (or possibly across Canada), which they can provide to their clients.
3. Through immigration services in Hong Kong: work with partners working in immigration in Hong Kong by providing links to Windsor’s online resources for immigrants and sending pamphlets (both in English and Cantonese) that they can provide to their clients.
4. Through universities in Hong Kong: reach out to specific courses/degrees at universities in Hong Kong, for example the HKU Business School and the University of Hong Kong’s Faculty of Engineering, to promote Windsor as a promising city for graduates seeking to emigrate. This should include, for example, providing profiles of relevant successful businesses in Windsor, details about the city’s growing economy, and its strategic location on the border with the U.S.

What it might cost: \$

What its impact might be: These policies would help attract more highly skilled Hong Kong immigrants, which would have positive economic impacts across the city. According to a recent study by the Centre for Economics and Business Research, the effect of the potential influx of Hong Kong immigrants on the UK economy is estimated to be as much as £40 billion.

Leverage Windsor’s educational institutions

40. Nudge more University and College collaboration through programs that link professional students with tech-minded entrepreneurs


The purpose: Increasing collaboration between industry and students will help to close the skills gap in the labour market and help graduates grow their networks so they can move seamlessly from student to employment.

What it might look like: The university and college should implement programmes that connect students with entrepreneurs, giving them the opportunity to network and learn. The university and college could, for example, formalise a programme with a tech accelerator and offer:

- One-to-one mentorship program matching up business students interested in tech/entrepreneurship with an entrepreneur. This could look like, for example, students spending one day per week in the accelerator with their mentor, learning and working alongside them for a semester.
- Monthly workshops/seminars run by tech entrepreneurs for students to participate in.
- Networking events to connect students with professionals in both a formal and informal environment.

What it might cost: \$

What its impact might be: The impact of this policy can be measured by the amount of start-ups created in Windsor by University of Windsor students. Boosting collaboration between students and industry may only lead to the creation of a few successful start-ups per year, but these all have high potential to grow and provide a jobs and productivity boost. Furthermore, providing students with links to local industry will increase the chance that they, as members of a highly educated demographic, will choose to stay and work in Windsor.

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Annex 06

Municipal Affairs

Annex 06

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December 2020

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Municipal Affairs

Municipalities: Legal Status

Ontario's 2001 Municipal Act sets out the rules for all 444 Ontario municipalities, except Toronto, which, as Ontario's largest municipality, was given expanded powers, such as increased control over taxation.¹ There are over 100 provincial acts that also define municipalities' rights, although the Municipal Act appears to be the defining piece of legislation in this area.² Some Ontario cities are part of a two-tier system, in which the upper-tier municipality retains control over some services.³ Windsor is a single-tier municipality, and is not subject to the constraints of a lower-tier municipality.⁴ As such, the piece of legislation that defines Windsor's municipal powers is the Municipal Act 2001.⁵

Tools for economic development

Ontario has released a handbook issuing guidance for tools available for municipalities' aiming to drive economic development. Municipalities have broad powers in this context, including to pass by-laws concerning the economic, social and environmental well-being of the municipality and to provide economic development services.⁶

The handbook also contains a checklist for evaluating a municipalities' economic development plan; this may be useful for later in the project.⁷

¹ Ontario. (2020). *How municipalities and Ontario work together*. <https://www.ontario.ca/page/how-municipalities-and-ontario-work-together>

² Ontario. (2020). *List of Ontario Municipalities*. <https://www.ontario.ca/page/list-ontario-municipalities>

³ Ontario. (2020). *Municipal Government*.

<https://www.ontario.ca/document/ontario-municipal-councillors-guide-2018/4-municipal-government>

⁴ Ontario. (2020). *List of Ontario municipalities*. <https://www.ontario.ca/page/list-ontario-municipalities>

⁵ Ontario. (2020). *Municipal Act, 2001*. <https://www.ontario.ca/laws/statute/01m25>

⁶ Ministry of Municipal Affairs and Housing. (2011). *Municipal Planning and Financial Tools for Economic Development*. <http://www.mah.gov.on.ca/AssetFactory.aspx?did=9175>

⁷ Ibid.

Financial Tools

Municipalities have the following financial tools available to them:

- **General power to make grants**

- Grants that may be available include:
 - providing loan guarantees
 - selling or leasing land at a nominal amount
 - providing for the use of municipal employees on terms stated by the council
 - donating food and merchandise
- Generally, municipalities cannot provide financial assistance to bodies that undertake manufacturing, industrial or commercial activities through the granting of bonuses
 - However, exceptions to this prohibition against bonusing rule exist in relation to planning objectives (i.e., community improvement plans), small-business creation (e.g., small business programs, sometimes called business incubation), and/or the provision of municipal capital facilities.

- **Community Improvement Plans**

- These plans may include means by which municipalities can provide financial incentives, in order to achieve planning objectives that are for the broader public good.
- Single-tier municipalities can plan for community improvement for all or parts of their jurisdiction through development, redevelopment, maintenance and rehabilitation. This includes the ability to acquire, hold, clear, lease and sell land in designated areas, as well as to direct and stimulate development through grant and/or loan programs that support a municipality's community-building goals.
- Municipalities may wish to consider possible goals such as assessing soil contamination, retrofitting existing buildings or constructing buildings for energy efficiency and accessibility, improving streetscapes, building affordable housing, and adaptive reuse of industrial, commercial and historic buildings.
- Community improvement programs can be tailored to support municipal redevelopment and revitalization goals such as diversifying employment opportunities, improving accessibility, attracting green-technology industries, remediating and redeveloping brownfields, revitalizing core areas, and rural and urban green building practices. As examples, these could include municipal programs focused on public-space improvements such as barrier-free paths and walkways and park improvements, and financial incentive programs intended to stimulate private-sector retrofitting of existing buildings for energy efficiency.
- Municipalities must consult with the Province on any proposed plans, in accordance with the Planning Act.

● **Business Improvement Areas**

- A municipality can designate a Business Improvement Area (BIA) and establish a management board, customarily at the request of the local business community.
- BIA's have their own handbook⁸
- In general, a BIA has two objectives:
 - to oversee the improvement, beautification and maintenance of municipally-owned land, buildings and structures in a designated area, beyond what is provided by the municipality
 - to promote the area as a business or shopping area
- Examples of BIA activities include:
 - Supplementing municipal infrastructure through capital improvements to streetscapes
 - Organizing community events
 - recruiting businesses by working with commercial and industrial property owners to help ensure that available space is occupied, and that an optimum business and service mix is achieved and maintained

● **Heritage Property Tax Relief Program**

- Municipalities can establish a Heritage Property Tax Relief Program which may encourage good stewardship, maintenance, and conservation of designated heritage properties. This program provides tax relief (10 to 40 per cent) to owners of eligible properties to protect heritage features.

● **Municipal Capital Facilities Agreements**

- These agreements are commonly used by municipalities to create partnerships with other public bodies, the private sector, not-for-profit organizations, and First Nations to deliver municipal facilities.
- Common examples of facilities provided through municipal capital facilities agreements include affordable housing, and recreational or parking facilities.
- Assistance from a municipality can include: giving or lending money; giving, leasing or lending property; guaranteeing borrowing; and development charges exemptions. For example, a municipality may consider a partnership with and provide the financial incentives to a not-for-profit organization to provide a small renewable energy facility

⁸ Government of Ontario (2019) *Business Improvement Area handbook*. Retrieved from: <https://www.ontario.ca/document/business-improvement-area-handbook>

● **Municipal and City Services Corporations**

- Municipalities may establish a municipal services corporation (MSC) for most services that municipalities could deliver themselves. There are rules and conditions under which these MSCs must operate. Municipalities determine if it is the appropriate vehicle for delivering certain types of services and address any related legal or practical issues, such as financing and bonusing.
- Municipalities can collect a levy for MSCs for defined “economic development services”, including the following:
 - promotion of a municipality
 - acquisition, development and disposal of sites for residential, industrial, commercial, and institutional purposes
 - provision of public transportation systems
 - provision of residential housing (including affordable housing)
 - provision of general parking facilities
 - provision of small business counselling services
 - undertaking of community improvement plan activities under the Planning Act
 - improvement, beautification and maintenance of municipally-owned land, buildings and structures
 - provision of facilities for amusement, conventions, or visitors bureaus
 - provision of cultural and heritage systems
- Despite the general prohibition against bonusing, municipalities may provide assistance to MSCs if they are wholly-owned corporations and are limited to providing services to the municipality, or if the cost of public-transportation facilities or services, or public access to recreational and cultural facilities is being subsidized

● **Economic Development Corporation (EDC)**

- This is a type of MSC that involves the provision of the following services
 - undertaking marketing to attract tourists
 - working with business clients towards expanding the employment base
 - providing information, education, and support to business entrepreneurs

● **Small Business Programs/Business Incubators**

- A wide range of services and resources can be offered to support a new business venture, such as mentoring assistance, management assistance, business counselling and advisory services, as well as technical advice, financial advice, training and networking.
- Municipal small business programs/business incubators make available for municipalities an exception to the general prohibition against the granting of bonuses by municipalities

- **Brownfields Financial Tax Incentive Program**
 - This program is a provincial initiative to encourage the remediation and redevelopment of brownfields. The program provides school property tax assistance to match municipal property tax assistance for remediating eligible properties. Under the program, the Province can approve a by-law to cancel all or a part of the school portion of property taxes on a property for up to three years.

- **Exemption, Refund, Reduction of Application Fees**
 - To encourage desirable land-use development activities, fees related to the processing of planning applications may be waived or reduced by municipalities.

- **Development Charges By-Law**
 - Municipalities can collect growth-related development charges in order to recover some or all of the capital costs of municipal infrastructure needed for new development. They can:
 - apply to the entire municipality or only part of it to recover growth-related costs in targeted areas
 - phase in development charges to stimulate development
 - exempt or reduce development charges for specific types of development (e.g., brownfields redevelopment, affordable housing, core-area intensification, industrial and commercial projects)

Planning Tools

Municipalities have the planning following tools:

- **Zoning By-Laws:**
 - A municipality may specify matters such as density, uses of land, parking requirements and form-related standards – including building heights, lot coverage, setbacks, minimum lot sizes, and other building envelope specifications.

- **Site Plan Control:**
 - Municipalities can influence the layout and design of development, including compatibility with neighbouring structures, internal site circulation, building access, location of transit stops, and design of parking areas.

- **Minimum and Maximum standards:**
 - More efficient built forms can be achieved through by-law standards for minimum and maximum building height and density.

- **Height and density exchange**
 - Municipalities can require that facilities, services and matters, as set out in an official plan and by-law, be provided in return for an increase in building height and/or density.
- **Subdivision Review and Approval**
 - Municipal review and approval powers provide opportunities to assess the sustainability of proposed plans of subdivision at the lot, street and neighbourhood level.
- **Development Permit System**
 - This system combines zoning, site plan and minor variance processes into a single application and approval process, and can be applied to all or parts of a municipality. It allows for variations from minimum and maximum standards for height, density and lot area, as well as permitting a range of conditions to be imposed before or on the issuance of a permit.
- **Employment Lands Protection**
 - To better protect employment lands, where a municipality has official plan policies dealing with the removal of land from employment areas, a council's refusal or non-decision of an application to redesignate or rezone lands from employment to other uses cannot be appealed to the Ontario Municipal Board.
- **Reduction of Cash in Lieu of Parkland**
 - In redevelopment situations where parkland dedication cannot be accommodated, and appropriate official plan policies are in place, municipalities can reduce the required cash in lieu of parkland in exchange for sustainability features – including green/reflective roofing, external building shade structures, and renewable-energy technology (e.g., solar-heated water).
- **Reduction or Exemption from Parking Requirements**
 - A municipality can reduce capital and maintenance costs for itself and businesses, while facilitating pedestrian-friendly and transit-supportive areas, through agreements that reduce requirements or exempt an owner or occupant of a building from providing and maintaining parking facilities.

Community Incentive Programmes

Executive Summary

Development Incentives

Windsor has eight development incentives,⁹ all of which are composed of multiple sources for funding. Windsor also has nine business improvement areas (BIAS)¹⁰

From the data provided by the city administration, Windsor has committed to spending \$28.5m in property tax incentives on four of these projects (Brownfield, Sandwich, Economic Revitalization, Downtown). Of the money committed, so far \$2.3m has been spent as of Dec 31, 2019.

The development incentives can broadly be divided into thematically and geographically focused groups:

- **Thematic focus:** These programs aim to develop a certain theme within Windsor, such as Brownfield sites. They are:
 - 1) **Economic Revitalization CIP**
 - This aims to encourage new investment in targeted sectors, to diversify the economy and create/retain jobs.
 - This is achieved through four separate grants, three of which provide property tax relief for business developers, business retention and small business respectively. The fourth grant is for the offset of development charges, for which central locations and industrial developments are already largely exempt.
 - 2) **Brownfield Redevelopment CIP**
 - This aims to promote redevelopment of Brownfield sites
 - This is achieved through five financial incentives, which match costs for feasibility and environmental site assessments, as well as providing relief from property tax and development charges
 - 3) **Heritage Property Incentive Programs**
 - This aims to encourage the maintenance of heritage properties in Windsor
 - This is achieved through three incentives, one of which offers a property tax reduction, two of which offers grants for projects on heritage properties

⁹ The City of Windsor (2020) *Development Incentives*. Retrieved from:
<https://www.citywindsor.ca/residents/planning/development-incentives/Pages/default.aspx>

¹⁰ <https://www.citywindsor.ca/business/Business-Improvement-Areas/Pages/Business-Improvement-Areas.aspx>

4) Main Streets Building Facade CIP

- This aims to encourage the physical improvements of building facades on traditional Main Streets
- This is achieved through a grant matching the cost of facade improvements

- **Geographic focus:** These programmes aim to develop specific areas of the city, such as Downtown Windsor.

1) Downtown Windsor CIP

- This aims to encourage projects that will enhance the downtown area
- This is achieved through five grants that provide funding for residential conversions, funding for residential developments, funding for retail renovation or creation, facade improvement funding, property tax reduction for improvements

2) Sandwich Town CIP

- This aims to provide an economic boost for Sandwich town, a historical neighbourhood in Windsor.
- This is achieved through seven grant and loan programmes that provide: grants for facade restoration, loans and grants for building improvements, cost sharing grant for feasibility studies and residential home improvements as well as relief from development charges and building fees.

3) Ford City CIP

- This aims to rejuvenate Ford City, the former heart of the automobile industry.
- This is achieved through five incentives which: offer a grant for new residential development, offer property tax relief for building improvements, cost sharing grants for retail investment and residential building improvements and relief from development fees

4) Development charges in city core area

- This aims to stimulate growth in the core area of the city
- This is achieved by significantly reducing development charges for all types of development within the core area of the city

Common Tools

These development incentives have a high degree of overlap between them, particularly as some geographically focused incentives use near identical combinations of grants. The most commonly used grant types are:

● **Property tax relief**

- This offers reductions in property tax as an incentive for development, often for a period of three years.
- This is most commonly deployed to encourage the improvement of existing buildings. In such cases, the property is relieved of the increase in property tax that would have been incurred by the building improvements, if they would have moved the building up a tier in the property taxation system.
- The issue with this incentive is that it only applies to developments which improve a building to such a large extent that causes increased property value.
- This has been used in five of the eight development incentives, and was used three times in one development alone

● **Development charges relief**

- This offers heavy reductions or even full exemptions from development charges when developing or redeveloping property.
- This was once tied to environmental conditions being met, and in this case received very low uptake
- The effectiveness of this measure for encouraging specific redevelopment has been reduced by the decision to significantly reduce development charges for all types of development within the core area of the city, in which Rates for detached, attached, and multiple dwellings, as well as commercial development are less than 10% of the citywide rates. Meanwhile industrial development is exempt from paying development charges.
- Relief from development charges is sometimes accompanied by a similar relief from development and building fees
- This has been used in four of the eight development incentives

● **Property development grant**

- This is used to encourage the development or conversion of new properties.
- These are usually aimed at incentivising small scale developments, such as conversions of vacant space above shops to residential use.
- These grants can be paid as lump sum figures, often \$2,500 for a residential home, or through relief from property tax.
- This has been used in four of the eight development incentives

- **Property improvement grant**

- This is used to encourage the improvement of existing properties.
- These can be aimed at businesses, in which case the grant can aim to encourage the scaling up of a business
 - A significant subset of these are grants for facade improvements, which offer to match costs with businesses to improve their facades. Facade improvements are found in three of the eight development incentives
- These can be aimed at residential properties, in which case they aim to improve the exterior appearance of properties
- These can come in the form of relief from increased property tax, or a cost sharing grant.
- A significant proportion of these incentives aim to 'beautify' the city through external building improvements.
- This has been used in six of the eight development incentives

Thematic Focus

Economic Revitalization CIP

Established March 2011, the Economic Revitalization CIP provides financial incentives to encourage new investment in targeted sectors, to diversify the economy and create/retain jobs.

The CIP allows the municipality to take actions that would otherwise be prohibited by Ontario's Municipal Act, including:

- Acquisition and preparation of land
- Construction, repair, rehabilitation or improvement of buildings
- Sale, lease or disposal of land and buildings
- Provision of grants to owners or tenants of land

The CIP contains four financial incentive programs to encourage new investment in targeted economic sectors.¹¹ These programs address a wide range of business types including potential new businesses, expansion of existing businesses and small businesses.

¹¹ City of Windsor. (2015). *Economic Revitalization CIP*.

[https://www.citywindsor.ca/residents/planning/Plans-and-Community-Information/Know-Your-Community/Community-Improvement/Documents/Economic%20Revitalization%20CIP%20One-pager%20\(September%202015\).pdf](https://www.citywindsor.ca/residents/planning/Plans-and-Community-Information/Know-Your-Community/Community-Improvement/Documents/Economic%20Revitalization%20CIP%20One-pager%20(September%202015).pdf)

1) Business Development Grant Program

- Grant equivalent up to 100 percent of the municipal property tax increase created by the project for up to 10 years after project completion.
- Project must create a minimum of 50 new jobs within the manufacturing sector or more than 20 jobs within any other targeted sector(s).

2) Business Retention and Expansion Grant Program

- Grant equivalent up to 100 percent of the municipal property tax increase created by the project for up to 10 years after project completion.
- Project must create or retain a minimum of 50 jobs within the manufacturing sector or create more than 20 jobs or retain a minimum of 35 jobs within any other targeted sector(s).

3) Small Business Investment Grant Program

- Grant equivalent up to 100 percent of the municipal property tax increase created by the project for up to 10 years after project completion.
- Business must have less than 50 employees, if in the manufacturing sector, or less than 20 in any other targeted sector(s).
- Investment must result in a minimum increase of \$25,000 in assessed property value.

4) Development Charges Grant Program

- Applicants successful in obtaining one of the above mentioned grants may be eligible to receive a grant to offset up to 100 percent of development charges paid for a project.

Different sectors are eligible for CIP funding, detailed below. Other projects that don't fall in these sectors/uses may be considered for the Business Development Grant and Business Retention and Expansion Grant Programs.

The sectors all have specific eligible uses for CIP funding, such as R&D, Manufacturing and Physician Recruitment for the Health and Life Sciences, which I have omitted from this doc:

- Professional Services
- Renewable and Alternative Energy
- Creative Industries
- Health and Life Sciences
- Management of Companies and Enterprises
- Manufacturing
- Tourism
- Warehousing/Logistics

The following costs are eligible under the grant programs:¹²

- New Building construction
- Building rehabilitation and retrofit works
- Building demolition
- Specified costs associated with meeting Leadership in Energy and Environmental Design standards
- Development application fees, building permit fees, studies and reports related to eligible applications
- Upgrading on-site infrastructure including water services, sanitary sewers etc
- Constructing/upgrading off-site infrastructure including roads, water services, electric/gas utilities etc

Brownfield Redevelopment CIP

The Brownfield CIP is designed to promote brownfield redevelopment; it combines supportive planning policies, financial incentive programs, and a municipal leadership strategy where the City will take a leadership role in order to realize the benefits of brownfield redevelopment. The CIP is part of the wider Brownfield Redevelopment Strategy.¹³

Any property located in the city that is contaminated with respect to Ministry of Environment standards will be likely to be eligible for cleaning costs to be covered through incentive programs.

The CIP is made up of five financial incentive programs:

1) The Feasibility Study Program

- Offers a matching grant to property owners and prospective purchasers of brownfield sites to conduct studies on the feasibility of reusing, rehabilitating, retrofitting and constructing buildings on these sites.
- Equal to 50% of the cost of an eligible feasibility study with a maximum grant of \$7,500 and maximum of one study per property.

2) The Environmental Site Assessment (ESA) Grant Program

- Offers a matching grant to property owners and prospective purchasers of brownfield sites to undertake environmental studies that provide information on the type of contamination and potential remediation costs.
- Equal to 50% of the cost of an eligible environmental site assessment to a maximum grant of \$15,000 for one study and \$25,000 for two studies.

3) The Brownfields Property Tax Assistance Program

- Offers a freeze of City property taxes on a brownfield property for up to three years during and after remediation and construction. Property owners may also apply to the Province for a matching freeze of education property taxes for up to 3 years.

¹² City of Windsor (2015). *Economic Revitalization Plan Program Guide*.

[https://www.citywindsor.ca/residents/planning/Plans-and-Community-Information/Know-Your-Community/Community-Improvement/Documents/Master%20Economic%20Revitalization%20CIP%20Program%20Guide%20\(September%202015\).pdf](https://www.citywindsor.ca/residents/planning/Plans-and-Community-Information/Know-Your-Community/Community-Improvement/Documents/Master%20Economic%20Revitalization%20CIP%20Program%20Guide%20(September%202015).pdf)

¹³ Windsor. (2020). *Brownfield Redevelopment CIP*.

<https://www.citywindsor.ca/residents/planning/development-incentives/Pages/Brownfield-Redevelopment-Community-Improvement-Plan.aspx>

4) The Brownfields Rehabilitation Grant Program

- Starts after the Brownfields Property Tax Assistance Program ends. It offers an annual grant equal to 70% of the City property tax increase for up to ten years to help owners of brownfield sites offset the increase in property taxes that can result from redevelopment of their property.
- The annual Brownfields Rehabilitation Grant increases to 100% of the City property tax increase for any building project that achieves certification under the Leadership in Energy and Environmental Design (LEED) Program.

5) The Brownfields Development Charge Exemption Program

- A property owner with an approved application under the Brownfields Rehabilitation Grant Program has the option of applying their approved grant amount to a 60% reduction in the development charges payable for that property (after any demolition charge credits are applied).
- Additionally, for projects that achieve land use compatibility goals supported by the City's Official Plan, the inclusion of Smart Growth principles, and LEED certification into the proposed development, the cost of remediation applied against the development charges payable will not be deducted from the Brownfields Rehabilitation Grant to be paid.

Heritage Property Incentive Programs

This program is designed to encourage the maintenance of heritage properties in Windsor. It is made up of three incentives.¹⁴

1) Heritage Property Tax Reduction Program

- Eligible heritage properties can apply for a property tax reduction of up to 30% per year for works to restore heritage attributes

2) Community Heritage Fund

- Grants/loans are available for the acquisition and conservation of designated heritage properties

3) Built Heritage Fund

- Grants are available for special projects on designated heritage properties

¹⁴ The City of Windsor (2020) *Heritage Property Incentive Programs*. Retrieved from:

<https://www.citywindsor.ca/residents/planning/Plans-and-Community-Information/Know-Your-Community/Heritage-Planning/Heritage-Property-Incentive-Programs/Pages/default.aspx>

Building Facade Improvement Program for Main Streets CIP

This builds on recent investment in municipal infrastructure improvements, such as road rehabilitation and streetscape projects and leverages public investment by encouraging the physical improvement of building facades along traditional Main Streets.¹⁵

The program offers funding through the **Financial Incentive Program**, in which:

- The City will match 50% of the costs for eligible building facade and storefront restoration improvements to commercial and mixed use buildings within the designated Main Street area
- Grants are up to a maximum of \$30,000 per project, with a maximum of \$60,000 per project for larger buildings with multiple storefronts.

Geographic Focus

Downtown Windsor CIP

The program offers grants to encourage projects that will enhance downtown. Grants are offered for the conversion of existing upper storey space to new residential units, the development of new residential units, retail enhancements, and facade improvements.¹⁶

The CIP consists of five grant programs:¹⁷

1) Upper Storey Residential Conversion Grant Program

- Aimed at attracting new investment and interest in converting currently non-residential vacant or underutilized upper storey space to residential units. A minimum of two new residential units must be created.
- Offers a grant of \$5,000 for every new residential unit created on the upper storey(s) of an existing mixed use building, up to a maximum of \$50,000.

2) New residential development grant program

- Aimed at attracting new residential development. A minimum of four new residential units must be created.
- Offers a grant of \$2,500 for every new residential unit, up to a maximum of \$50,000 per property.

¹⁵ Windsor. (2020). *Building Facade Improvement Program for Main Streets*.

<https://www.citywindsor.ca/residents/planning/development-incentives/Pages/Building-Fa%C3%A7ade-Improvement-Program-for-Main-Streets-CIP.aspx>

¹⁶ Windsor (2020). *Downtown Windsor CIP*.

<https://www.citywindsor.ca/residents/planning/development-incentives/Pages/Downtown-Windsor-CIP.aspx>

¹⁷ The City of Windsor (2020) *Downtown Windsor Enhancement Strategy and Community Improvement Plan Grant Program*. Retrieved from: <https://www.citywindsor.ca/residents/planning/Plans-and-Community-Information/Major-Projects/Documents/CIPs%20Poster%20Layout-%20June%202018.pdf>

3) Retail Investment Grant Program

- Renovating and/or creating retail units on the ground floor, provided the space was vacant for six months at the time of application.
- Offers a grant up to 50% of eligible costs for improvements to a maximum amount of \$15,000 per retail unit in a building.

4) Building/Property Improvement Tax Increment Grant Program

- Encourages improvements to property/buildings in downtown
- Offers a grant equal to the increase in municipal taxes as a result of the property/building improvements. Grant lasts for five years, with a possible extension for a further five years.

5) Commercial/Mixed Use Building Facade Improvement Grant Program

- Encourages improvements to the facades of mixed use/ commercial buildings.
- Offers a grant for 50% of the eligible costs of the facade improvements, up to \$20,000 per property.

Sandwich Town CIP

Sandwich town is host to a CIP, as well as a Heritage Conservation District Plan. The CIP is designed to support the four pillars of Windsor's Community Strategic Plan, which are to cultivate a competitive economy, foster a diverse and caring society, use clean and efficient technologies and have a responsive and responsible government.¹⁸

The Sandwich CIP is made up of seven grant and loan programs.¹⁹

1) Commercial/ Mixed Use Building Facade Grant Program

- Designed to promote the rehabilitation, restoration and improvement of commercial and mixed use buildings. Offers a grant equal to 70% of the cost of eligible façade and storefront improvement/ restoration works to commercial and mixed use buildings. The Maximum grant per project is \$15,000.

2) Commercial/ Mixed Use Building Improvement Loan Program

- Designed to encourage building improvements. Provides a 0% interest loan equal to 70% of cost of eligible interior/exterior building maintenance and improvements to commercial and mixed use buildings. The Minimum Loan is \$10,000 and the Maximum Loan is \$30,000 per property/project.

3) Revitalization Grant Program

- Encourages rehabilitating or developing buildings and property. Reduces the tax increase that can result when a property is improved. Annual grant equal to 70% of the increase in the municipal portion only of the property taxes for up to 10 years after project completion.

¹⁸ Windsor (2020). *Sandwich Town Community Improvement Plan*.

<https://www.citywindsor.ca/residents/planning/development-incentives/Pages/Sandwich-Town-Community-Improvement-Plan.aspx>

¹⁹ Windsor (2012) *Olde Sandwich Towne Community Improvement Plan*. Retrieved from:

https://www.citywindsor.ca/residents/planning/Plans-and-Community-Information/Documents/Sandwich%20CIP_JN27_2011-FOR%20WEB.pdf

4) Commercial Core Feasibility Study Grant Program

- Provides a grant equal to 50% of the cost to assist applicants with determining the feasibility and cost of adaptively reusing, rehabilitating, retrofitting, redeveloping, or developing a commercial or mixed use building. Maximum grant per property/project is \$5,000 with a maximum of one feasibility study per property/project.

5) Development Charge Grant Program

- Offers a grant equal to between 50% and 100% of the City Development Charge paid to promote redevelopment on commercial and mixed use properties. The grant is based on an environmental LEED certification.
- This grant has never been used because most owners do not want to spend the extra cost to bring buildings to LEED certification.
- Since development charges were lowered significantly in the older core areas of the City there is no real reason to try and reduce development charges any further.

6) Development and Building Fees Grant Program

- Provides a Grant equal to 100% of the fees paid for a wide range of development application and building permit types once the project is completed.

i)

7) Neighbourhood Residential Rehabilitation Grant Program

- Provides a grant equal to 50% of the cost of eligible exterior building maintenance and property improvement for residential properties. Minimum grant is \$2,000 and the Maximum grant is \$15,000 per property.

8) Industrial Properties Grant Program

- Provides a grant for 50% of the cost of fencing and landscaping works on industrial properties that improve the aesthetics of the site, and/or provide effective screening of outside storage areas. The minimum grant is \$2,000 and maximum grant is \$15,000 per property.

9) Public Art Grant Program

- Provides a grant for 50% of the cost of eligible art pieces and displays on public property or private property that are clearly visible to the public. The minimum grant is \$2,000 and maximum grant is \$5,000 per property.

Ford City Economic Incentive Program

Ford City CIP aims to produce a “distinct, attractive, and pedestrian-centered neighbourhood where residents and visitors feel safe and have a sense of ownership. This ethnically diverse community will build on its culture and history as the birthplace of the automobile industry in Canada and encourages the arts, crafts and skills found in the neighbourhood and greater community.”²⁰

- 1) **New Residential Development Grant Program**
 - Offers a grant of \$2,500 for every new residential unit, up to a maximum of \$50,000 per property. A minimum of two new residential units must be created in order to be eligible. Projects on Infill Catalyst Sites are eligible for a grant increase of up to \$5,000 per unit, up to \$50,000.
- 2) **Building/Property Improvement Tax Increment Grant Program**
 - Encourages building/property improvement. Offers an annual grant equal to 100% of the increase in municipal property taxes for ten years, after the project is completed and reassessed.
- 3) **Retail Investment Grant Program**
 - A grant of up to 50% of eligible costs for improvements to a maximum amount of \$15,000 per retail unit in a building, up to a maximum of \$30,000 per property.
- 4) **Neighbourhood Residential Rehabilitation Grant Program**
 - Grant equal to 50% of the cost of eligible exterior building maintenance and property improvement works to residential properties. The minimum grant per property will be \$1,000, up to a maximum of \$15,000, with a maximum of one application per property.
- 5) **Municipal Development Fees Grant Program**
 - Property owners will be eligible to receive a grant for 100% of the specified Municipal Development Fees, up to a maximum of \$50,000 per property.

Reduced Development Charges


This program aims to stimulate growth in the core area of the city.²¹

- Development charges have been significantly reduced for all types of development within the core area of the city.
- Rates for detached, attached, and multiple dwellings, as well as commercial development are less than 10% of the citywide rates.
- Industrial development is exempt from paying development charges.

²⁰ Windsor. (2020). *Ford City Community Improvement Plan*.

<https://www.citywindsor.ca/residents/planning/development-incentives/Pages/Ford-City-CIP.aspx>

²¹ Windsor. (2020). *Development Charges*. <https://www.citywindsor.ca/residents/building/Building-Permits/Pages/Development-Charges.aspx>

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December 2020

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