

City of Mississauga Agenda



General Committee

Date

2019/05/01

Time

9:00 AM

Location

Civic Centre, Council Chamber,
300 City Centre Drive, Mississauga, Ontario, L5B 3C1

Members

Mayor Bonnie Crombie	
Councillor Stephen Dasko	Ward 1
Councillor Karen Ras	Ward 2 (Chair)
Councillor Chris Fonseca	Ward 3
Councillor John Kovac	Ward 4
Councillor Carolyn Parrish	Ward 5
Councillor Ron Starr	Ward 6
Councillor Dipika Damerla	Ward 7
Councillor Matt Mahoney	Ward 8
Councillor Pat Saito	Ward 9
Councillor Sue McFadden	Ward 10
Councillor George Carlson	Ward 11

Contact

Stephanie Smith, Legislative Coordinator, Legislative Services
905-615-3200 ext. 3795
Email stephanie.smith@mississauga.ca

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and archived at Mississauga.ca/videos

GENERAL COMMITTEE INDEX - May 1, 2019

1. **CALL TO ORDER**
2. **APPROVAL OF AGENDA**
3. **DECLARATION OF CONFLICT OF INTEREST**
4. **PRESENTATIONS** – Nil
5. **DEPUTATIONS**
 - 5.1. Orville Edwards, Community Development and Vjayanthi Janakiraman, Youth President Mississauga Youth Advisory Council regarding Nation Youth Week May 1 - 7, 2019
 - 5.2. Tim Beckett, Fire Chief and Teresa Burgess, Director & Manager of Emergency Management regarding Emergency Preparedness Week May 5 - 11, 2019
 - 5.3. Item 8.2 Nick Michael, N Barry Lyons Consultants
 - 5.4. Item 8.3 Michelle Berquist, Project Leader, Transportation Planning
6. **PUBLIC QUESTION PERIOD** - 15 Minute Limit (5 minutes per speaker)

Pursuant to Section 42 of the Council Procedure By-law 0139-2013, as amended:
General Committee may grant permission to a member of the public to ask a question of General Committee, with the following provisions:

 1. The question must pertain to a specific item on the current agenda and the speaker will state which item the question is related to.
 2. A person asking a question shall limit any background explanation to two (2) statements, followed by the question.
 3. The total speaking time shall be five (5) minutes maximum, per speaker.
7. **CONSENT AGENDA**
8. **MATTERS TO BE CONSIDERED**
 - 8.1. Lower Driveway Boulevard Parking – Hollymount Drive (Ward 5)
 - 8.2. 2019 Development Costs Review – The Effect of Development-Related Costs on Housing Affordability
 - 8.3. Mississauga Transportation Master Plan
 - 8.4. Mississauga Digital Gateway Signage Community Partnership Program with Van Horne Outdoor LP - Proposed Extended Signage Inventory

- 8.5. 2019 Tax Ratios, Rates and Due Dates
- 8.6. Surplus Declaration of City lands adjacent to 731 Sir Richard's Road (Ward 7)
- 8.7. Contract Renewals for HLP, Inc. (Chameleon, Animal Licenses) and Enghouse Transportation Ltd. (Interactive Voice Response to Hastus System)

9. **ADVISORY COMMITTEE REPORTS**

- 9.1. Environmental Action Committee Report-2 - April 16, 2019
- 9.2. Towing Industry Advisory Committee Report 2 - 2019 - April 23, 2019
- 9.3. Traffic Safety Council Report 2 - 2019 - April 24, 2019

10. **MATTERS PERTAINING TO REGION OF PEEL COUNCIL**

11. **COUNCILLORS' ENQUIRIES**

12. **OTHER BUSINESS/ANNOUNCEMENTS**

13. **CLOSED SESSION**

(Pursuant to Subsection 239 (3.1) of the Municipal Act, 2001)

- 13.1. Education Session: Security Enhancements for the Civic Precinct

14. **ADJOURNMENT**

City of Mississauga

Corporate Report



Date: 2019/04/09

To: Chair and Members of General Committee

From: Geoff Wright, P. Eng., MBA, Commissioner of
Transportation and Works

Originator's files:
MG.23.REP RT.10.Z-37E

Meeting date:
2019/05/01

Subject

Lower Driveway Boulevard Parking – Hollymount Drive (Ward 5)

Recommendation

That a by-law be enacted to amend the Traffic By-law 555-00, as amended, to implement lower driveway boulevard parking between the curb and sidewalk, at any time on both sides of Hollymount Drive, as outlined in the report from the Commissioner of Transportation and Works, dated April 9, 2019, entitled "Lower Driveway Boulevard Parking – Hollymount Drive (Ward 5)".

Background

The Transportation and Works Department received a completed petition from an area resident to implement lower driveway boulevard parking on both sides of Hollymount Drive. Lower Driveway Boulevard parking between the curb and sidewalk is currently prohibited and five-hour parking is permitted on Hollymount Drive. A location map is attached as Appendix 1.

Comments

To determine the level of support for lower driveway boulevard parking between the curb and sidewalk, a parking questionnaire was distributed to the residents of Hollymount Drive. Sixty-two questionnaires were delivered and 31 (50%) were returned; 25 (81%) supported the implementation of lower driveway boulevard parking and 6 (19%) were opposed. Since greater than 66% of the total respondents support lower driveway boulevard parking, the Transportation and Works Department recommends implementing lower driveway boulevard parking between the curb and sidewalk, at any time, on both sides of Hollymount Drive.

The Ward Councillor supports the proposal for lower driveway boulevard parking. The existing on-street parking regulations will be maintained.

Financial Impact

Costs for the sign installation can be accommodated in the 2019 operating budget.

Conclusion

Based on the results of the questionnaire, the Transportation and Works Department supports lower driveway boulevard parking between the curb and sidewalk, on both sides of Hollymount Drive.

Attachments

Appendix 1: Location Map - Lower Driveway Boulevard Parking – Hollymount Drive.



Geoff Wright, P. Eng., MBA, Commissioner of Transportation and Works

Prepared by: Wasan Yonan, C.E.T., Traffic Technician



MISSISSAUGA

**Transportation and Works
Traffic Mgmt & Municipal Parking**

**Lower Driveway Boulevard Parking
Hollymount Drive
(Ward 5)**

SCALE FOR REDUCED DRAWINGS

0m 25m 50m 100m 150m 200m 250m 500m

City of Mississauga

Corporate Report



Date: 2019/04/23

To: Chair and Members of General Committee

From: Gary Kent, CPA, CGA, ICD.D,
Commissioner of Corporate Services and Chief
Financial Officer

Originator's files:

Meeting date:
2019/05/01

Subject

2019 Development Costs Review – The Effect of Development-Related Costs on Housing Affordability

Recommendation

1. That the report dated April 23, 2019, entitled "The Effect of Development-Related Costs on Housing Affordability" from the Commissioner of Corporate Services and Chief Financial Officer be received for information.
2. That the report entitled "*Discussion Paper: The Effect of Development-Related Costs on Housing Affordability*" (Appendix 1) from N. Barry Lyon Consultants Ltd with Hemson Consulting Ltd. be received.

Report Highlights

- The City is currently reviewing its Development Charges (DC) By-law (161-2014) and Parkland Conveyance By-law (400-2006). The 2019 Development Charges Background Study was released on April 5, 2019 for the statutory 60-day public comment period. Cash-in-Lieu (CIL) of Parkland rates are also under review. DCs and CIL represent two of the City's development-related costs.
- In light of the City's review of DC and CIL rates, and the City's overall policy objective to encourage more affordable housing, N. Barry Lyon Consultants Limited ("NBLC") with Hemson Consulting Ltd. ("Hemson") were retained by the City of Mississauga to prepare a discussion paper examining the relationship between development-related costs and housing affordability. This project was undertaken in partnership with the Town of Caledon and the Region of Peel.
- The findings of the NBLC & Hemson report indicate house prices are determined based on supply and demand and not development-related costs. Reducing development-related costs for market housing will not result in lower house prices, unless there is a clear

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mechanism in place to require developers to reflect cost-savings in prices and pass them directly to end-users.

Background

The City is undertaking its legislated 5-year review of the Development Charges (DC) By-law, as prescribed by the *Development Charges Act*, 1997. The proposed 2019 DC Background Study was released for public review and comment on April 5, 2019. The draft 2019 DC By-law was released on April 22, 2019. A statutory Public Meeting will be held at the May 8, 2019 Council Meeting to provide members of the public and interested stakeholders with the opportunity to comment on the proposed 2019 DC By-law, Background Study, and proposed rates and policies to be applied city-wide.

In addition to the DC review, the City is also reviewing the Parkland Conveyance By-law and specifically examining current Cash-in-Lieu of Parkland (CIL) rates with the aim of better aligning the costs of acquiring parkland in the City with the amount that developers are required to pay through Section 42 of the *Planning Act*, R.S.O.1990.

DCs and CIL are collected from property developers to help fund the costs of growth. DCs recover part of the costs the City incurs to provide growth-related infrastructure to Mississauga residents and businesses, such as community centres, libraries, fire stations, and roads. CIL revenues are increasingly becoming the primary method of acquiring land for park and recreation purposes. In the absence of DCs and CIL, the City would have to exclusively rely on other revenue sources, such as property taxes, to pay for capital infrastructure that supports population and employment growth.

For property developers, DCs and CIL represent part of the development-related costs of delivering housing. The building industry regularly asserts housing prices in Ontario have been increasing, and affordability declining, as a result of increasing development-related charges, such as Development Charges, Cash-in-Lieu of Parkland, HST, and others.

Affordable housing is a significant policy issue for the City as demonstrated by the City's "Making Room for the Middle" housing strategy. This strategy considers housing to be affordable when the price of homes is between \$270,000 and \$400,000 and monthly rents are approximately \$1,200. However, the strategy acknowledges that in Mississauga, these house prices are limited to certain condominium apartments and townhouses, and that the overall cost of housing is increasing. Other municipalities are facing the same issues.

In light of the City's review of DC and CIL rates, and the City's overall policy objective to encourage more affordable housing, N. Barry Lyon Consultants Limited ("NBLC") with Hemson Consulting Ltd. ("Hemson") were retained by the City of Mississauga to prepare a discussion paper examining the relationship between development-related charges and housing

affordability. This project was undertaken in partnership with the Town of Caledon and Region of Peel. The executive summary of the report is attached in Appendix 1.

Comments

The NBLC & Hemson report provides a clear presentation of the factors influencing housing prices and the impact of housing delivery costs on the viability of development projects. The key message of the discussion paper is that home pricing is established by market supply and demand considerations. Development costs, which include hard construction costs, soft costs, developer profit, and land costs, can influence whether a project is feasible. Once feasibility is determined, homes are priced based on the maximum amount the market will pay regardless of development costs. Key themes from the report are summarized below.

Market Housing Pricing Decisions

The establishment of house prices is primarily based on demand and supply conditions in the housing market, not by development costs. Demand arises from dynamics like population growth, local employment opportunities, transit and infrastructure investments, and neighbourhood amenities. Supply is determined by the characteristics of planned developments, as well as the characteristics and performance of resale homes in the secondary market.

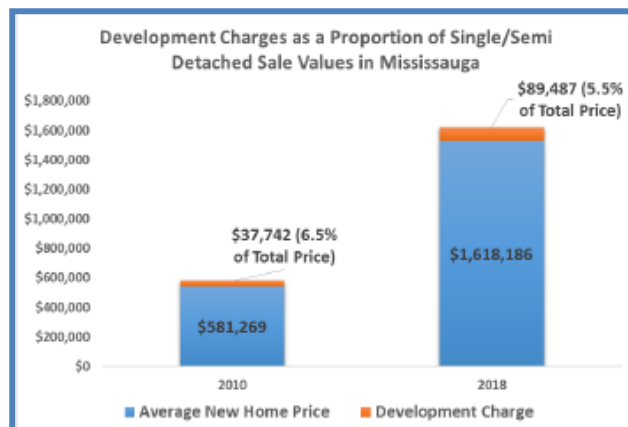
Developers carefully examine supply and demand in order to charge the maximum the market will bear to achieve a balanced sales absorption between selling out a project too quickly or too slowly. Conditions are also monitored throughout a sales campaign. A key example is the fact that developers often will not release all units within a project at the same time. If the first phase of a project sells out quickly, developers will increase prices for the second phase. If the first phase has not sold out, developers will consider decreasing prices. Their pricing decision is not dependant on their initial development costs but on what the market is willing to pay. The only time residents may be impacted by some development – related costs is when developers pass on DC increases to purchasers in Purchase of Sale Agreements, if DCs increase between the time of sale and issuance of building permits.

Housing Prices and Development Related Costs in Mississauga

The following discussion focuses on Development Costs as this information was available in the report. House prices and DCs have trended differently in Mississauga. The average new home price of a Single/Semi Detached home has increased from approximately \$581,000 in 2010 to \$1,618,000 in 2018 (Figure 1). However, the proportion of that sale value attributed to DCs declined from 6.5% in 2010 to 5.5% in 2018.

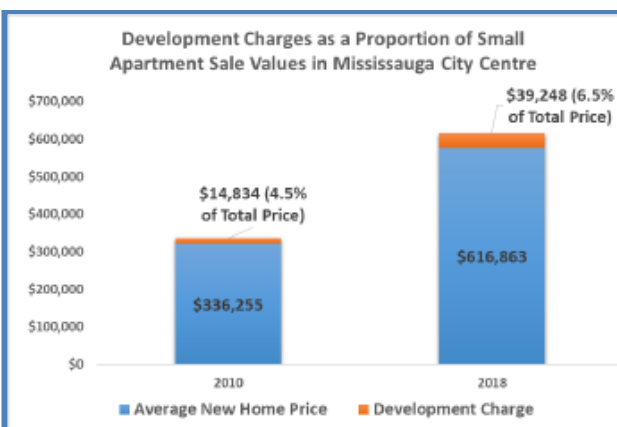
In the case of Small Apartments (those under 700 sq. ft.), the average new home price increased from approximately \$336,000 in 2010 to \$617,000 in 2018 while the DC share of those sale values increased slightly from 4.5% to 6.5% (Figure 2).

Figure 1: DCs as a Proportion of Single/Semi Detached Sale Values in Mississauga



The Effect of Development-Related Charges on Housing Affordability (NBLC & Hemson, 2019).

Figure 2: DCs as a Proportion of Small Apartment Sale Values in Mississauga



The Effect of Development-Related Charges on Housing Affordability (NBLC & Hemson, 2019).

Both figures demonstrate that despite increases over time, DCs make up a very modest portion of the average sale value of homes in Mississauga. If Development Charges were a major driver of house prices, it would be expected that the share of average sale value attributed to DCs would be larger and this DC share would correlate more directly with increasing sale values.

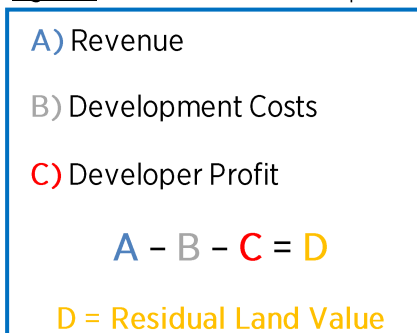
The observed trends in Mississauga support the key message of the NBLC & Hemson report: increases to Development Charges and similar fees do not drive increases in house prices in Mississauga. Similarly, reducing DCs and similar fees will not automatically produce lower house prices since prices are established by market demand and supply conditions.

The Economics of Land Development: House Prices, Development Costs, and Project Feasibility

A developer's decision to purchase or develop real estate is based on whether a project is 'feasible' or 'viable' from the developer's perspective. Developers determine this by calculating the Residual Land Value (RLV) of a given project. The RLV lets the developer know how much they can pay for a potential parcel of land given their specific redevelopment plans.

A developer will find a parcel of land and envision a specific development. The developer will then evaluate the three main inputs of the project: revenue, development costs, and developer profit. The result

Figure 3: Economics of Land Development



The Effect of Development-Related Charges on Housing Affordability (NBLC & Hemson, 2019).

(RLV) will determine how much that specific parcel of land is worth to the developer (Figure 3). The RLV calculation is complex, and considers many factors. The following explains the components of the RLV calculation using an example where a developer has identified a parcel of land on which they envision a mid-rise condominium apartment building with 20 units.

- A. Revenue: The amount of revenue anticipated for the project will be how much the planned 20 units will sell for. This is based solely on market supply and demand. Pricing must remain competitive with both comparable existing homes and other new housing developments. Developers will price homes at the maximum the market will bear.
- B. Development Costs: A developer will then estimate how much it will cost to provide the 20 units. This includes construction costs, development-related charges and fees, marketing, etc. It is important to note this component is determined separately from the market pricing strategy outlined above.
- C. Developer Profit: Land and real-estate development decisions are primarily based on the viability of a project. The developer has a minimum profit requirement when determining whether to proceed with this development, based on other investment opportunities available to the developer. This component is therefore considered fixed, based on the amount the developer is investing in the project.
- D. Residual Land Value: The RLV is the result of $A - B - C$ – the amount the developer would be able to pay for the land in the land market, given its development potential. If the RLV of a given project is equal to or higher than the current market rate for land, the developer will proceed with the development. If the RLV is below the current market rate for land the project is not viable and will not proceed.

Market pricing may drop due to demand and supply conditions. Development costs may rise due to general inflation or increased fees. A developer's profit expectation may increase, based on other investment opportunities. Such changes to the inputs would reduce the RLV (the amount the developer is willing to pay for land) and could impact project viability. However, a change in development costs will not result in a change in the market price of the development, because these two parts of the equation are not dependent on each other.

A Residual Land Value analysis was performed for four case-studies in Mississauga: High-Rise Apartment in Mississauga City Centre, High-Rise Apartment in Port Credit, Mid-Rise Apartment along Dundas Corridor, and Stacked Townhomes in Erin Mills. The analysis demonstrated in most market areas, pricing is strong enough to absorb moderately increasing development costs and still produce viable residential projects. For the mid-rise case study along the Dundas Corridor, the local market conditions and maximum pricing do not generate similarly healthy residual land values. This suggests if development costs increase at a faster rate than market pricing in the future, the viability of mid-rise apartments in this area could be affected.

Development-Related Costs and Affordable Housing

The NBLC and Hemson report recommends utilizing Community Improvement Plans or similar mechanisms to require residential developers to provide housing at an explicitly defined affordability level if reductions to development-related costs are to be considered. Because house prices are determined by the market, providing cost-savings in the form of lower development-related charges to all residential development projects would likely result in many projects simply absorbing these savings in higher profits or prompting higher residual land values. Meanwhile, these projects would continue to charge the maximum price that the market can bear. Without a mechanism such as a Community Improvement Plan, the City does not have the ability to require reductions to development-related costs to be reflected in lower housing prices. Utilizing Community Improvement Plans enables the City to identify and target specific funding sources to achieve policy objectives in a clear and transparent manner.

Financial Impact

There are no financial impacts arising from the recommendations in this report.

Conclusion

Municipal development-related costs, such as Development Charges and Cash-in-Lieu of Parkland, are required to help pay for growth-related infrastructure that supports new development. These costs are frequently reviewed to ensure that the cost of providing municipal infrastructure is being appropriately and adequately funded. DCs typically increase every five years, when a new By-law is approved. In general, these increases are driven by historical service levels that improve over time, and construction costs for municipal capital projects that increase over time. The proposed 2019 DC rates represent moderate increases for residential development projects.

The findings of the NBLC & Hemson report indicate house prices are influenced by market supply and demand conditions and not development-related costs. Development-related costs may affect the viability of certain projects in market areas with lower market pricing. The Executive Summary of the report concludes that “reducing development-related costs for all development projects in a City is not recommended as projects that do not require the incentives are likely to absorb the cost savings through increased profit and/or paying more for a development site. There would be no guarantee that the savings in costs would be passed onto purchasers and the City would lose Development- Related Charges that would have to be funded through another source such as property taxes.”

Attachments

Appendix 1: NBLC & Hemson Report: "The Effect of Development-Related Costs on Housing Affordability."



Gary Kent, CPA, CGA, ICD.D, Commissioner of Corporate Services and Chief Financial Officer

Prepared by: Jahnavi Ramakrishnan, Policy Analyst, Development Financing and Reserve Management

The City of Mississauga, Town of
Caledon, and Region of Peel

Discussion Paper:

**The Effect of Development Related
Costs on Housing Affordability**

April 2019

N. BARRY LYON CONSULTANTS LIMITED
WITH HEMSON CONSULTING LIMITED



HEMSON
Consulting Ltd.

The City of Mississauga, Town of Caledon, and Region of Peel

The Effect of Development Related Costs on Housing Affordability

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Disclaimer:

The conclusions contained in this report have been prepared based on both primary and secondary data sources. NBLC makes every effort to ensure the data is correct but cannot guarantee its accuracy. It is also important to note that it is not possible to fully document all factors or account for all changes that may occur in the future and influence the viability of any development. NBLC, therefore, assumes no responsibility for losses sustained as a result of implementing any recommendation provided in this report.

This report has been prepared solely for the purposes outlined herein and is not to be relied upon, or used for any other purposes, or by any other party without the prior written authorization from N. Barry Lyon Consultants Limited.

Executive Summary

N. Barry Lyon Consultants Limited (“NBLC”) with Hemson Consulting has been retained by the City of Mississauga, Town of Caledon, and Region of Peel to prepare a discussion paper examining the relationship between development related charges and housing affordability. The term *development related charge* refers to government imposed charges that are encountered by the private sector when developing real estate. Development related charges can therefore include building permit fees, Development Charges, development application fees, cash-in-lieu of parkland, Section 37 contributions, property taxes, land transfer tax, HST, and others.

This paper explores the economics of home building in the GTA with a view to assessing how new home pricing is established and the relationship between the delivery costs of home building, pricing, and affordability. Affordability in this paper is used as a relative term, and does not refer to any formal definition of “affordable” housing as defined by the Province or others.

NBLC leans on its 42 years of experience in housing market research in Canada in developing this paper. The majority of our experience has been helping developers pinpoint residential product types, positioning, pricing and anticipated sales or leasing rates for new home construction. This experience provides us with the insight that home pricing is related to market supply and demand considerations. These market characteristics ultimately establish how much a purchaser or renter is willing to spend given the features and location of the home and the competitive choices in the marketplace. Understanding this, developers and/ or owners will charge the maximum rent or sale value for a home that the market can bear at any given time, irrespective of the cost of constructing the home in the first place. If the maximum price supported by the market does not produce enough revenue to cover all development costs (including the purchase of land and an attractive profit), the developer will not build the project. They cannot simply increase the price of homes beyond what is supported by the market when faced with rising costs.

Ultimately, supply and demand conditions in the market determine how much a developer can charge a purchaser for a home. This is illustrated by the fact that Development Charges have increased at similar rates in Mississauga and Caledon while low-density homes in Mississauga are twice as expensive on average from what they are in Caledon due to market fundamentals being quite different.

If development costs increase, which can be due to a variety of factors aside from development related charges, developers will discount the amount they pay for a development site. The land value is negatively impacted because other elements of the equation (**Figure i**) are generally fixed: development costs are relatively fixed, the sale price of homes cannot exceed what the market of willing buyers are willing to pay, and a developer is generally unwilling to reduce their required profit expectation.

The impact of rising development costs therefore reduce the residual land value of a project, which is simply the amount that a developer can afford to pay for a development site. Generally, in communities where market pricing supports land values that well exceeds the value of other competing uses (retail, gas stations, low-density residential, etc.), there should be no impact to the viability, pricing, and supply of residential development. In these situations, developers will continue to purchase developable land in the market and charge purchasers an amount that is supported by local supply and demand conditions.

Figure i:

A) Revenue
B) Development Costs
C) Developer Profit

$$A - B - C = D$$

D = Residual Land Value

However, if the RLV of a residential development site is reduced below the value of other competing uses or below the expectation of a land owner, a developer will not be able to purchase the property and would not be able to build the project. If the viability of residential development is impacted on a large scale, the supply of housing will be reduced as developers will be unable to build new housing. If supply does not meet demand, the price of both new and existing homes will increase, which is a function of basic housing economics (i.e. a large pool of buyers competing for a comparatively shallow supply of homes). It is noted that NBLC has not assessed the impact of the proposed Development Charge increase on project viability, however the evidence suggests that the impact will vary across the Region's different market areas.

The City of Mississauga and Region of Peel housing strategies note that a greater supply of housing is needed for low and middle income households. This housing is largely not addressed by the development industry because the market either supports higher pricing, which is pursued by the development industry, or the market does not support higher pricing however the sale values do not provide enough revenue to cover all development costs and an attractive profit. It is possible that if development costs were lower, some of these residential projects would be able to move forward with lower relative pricing. It is important to note that "lower relative pricing" does not mean affordable housing as defined by the City and Region's housing strategies.

To encourage a greater supply of housing targeted to low and middle-income households, consideration can be given to waiving, reducing, or deferring development costs (e.g. Development Charges) in exchange for developers delivering housing at an explicitly defined affordability level through a Community Improvement Plan ("CIP") or other similar mechanism. This direction would ensure that only projects that are providing affordable housing would be eligible to receive incentives. A CIP would also allow a flexible approach where different incentives are unlocked depending on the depth of affordability that is provided. These cost savings are directly passed through to the purchaser/tenant, because developers would have to build to a predetermined affordability level.

Reducing development related charges for all development projects in a City is not recommended as projects that do not require the incentives are likely to absorb the cost savings through

increased profit and/or by paying more for a development site. There would be no guarantee that the savings in costs would be passed on to purchasers and the City would lose Development Related Charges that would have to be funded through another source such as property taxes.

1.0 Introduction

N. Barry Lyon Consultants Limited (“NBLC”) with Hemson Consulting has been retained by the City of Mississauga, Town of Caledon, and Region of Peel to prepare a discussion paper examining the relationship between development related charges and housing affordability. The term *development related charge* refers to government imposed charges that are encountered by the private sector when developing real estate. Development related charges can therefore include building permit fees, Development Charges, development application fees, cash-in-lieu of parkland, Section 37 contributions, property taxes, land transfer tax, HST, and others.

The purpose of this discussion paper is to determine the level to which development related charges affect housing prices. The paper will explore the economics of home building in the GTA with a view to assessing how new home pricing is established and the relationship between the costs of building a new home and housing sale values.

While this discussion paper will evaluate all development costs encountered by the building industry, much of the commentary will focus specifically on the impact of Development Charges and cash-in-lieu of parkland. The City of Mississauga is currently undertaking the legislated 5-year review of its Development Charges By-law as well as the cash-in-lieu of parkland policies, which this paper is meant to inform.

To develop this paper, NBLC relies on over 42 years of experience in housing market research in Canada. The majority of our experience has been helping developers pinpoint product types, positioning, pricing, and anticipated sales or leasing rates for new home construction. We also use this research to assess the financial feasibility of projects, determine land/project values, and prepare land acquisition/disposition strategies for both the private and public sectors.

2.0 Background

The following chapter provides background information relevant to the discussion paper. Topics include a description of development related charges, a brief literature review of other reports that have explored similar themes, the affordability context in Peel Region, and trends in home prices and Development Charges in Peel Region.

2.1 Development Related Charges

Development related charges that are imposed on the building industry when undertaking a real estate development can include the following items:

Local and Regional Municipal Charges:

- **Development Charges:** Municipalities collect Development Charges on development to pay for capital costs associated with expanding infrastructure to meet the increased servicing needs of development. Not all municipal services and capital costs are eligible for Development Charge funding. In Peel Region, Mississauga, and Caledon, as with most Ontario municipalities, residential charges are calculated on a per capita basis and differentiated by housing types (e.g. single-detached, apartments, etc.) based on average occupancy patterns. Given the focus of this paper, additional insights are provided to follow.
- **Cash-in-Lieu of Parkland:** Mississauga and Caledon require on-site parkland dedication when a development is proposed in order to accommodate a new park and/or open space. In situations where a development cannot accommodate on-site parkland, a cash-in-lieu payment can be made. New apartment or other higher intensity uses often will pay a cash-in-lieu payment to the municipality, which is required to be paid prior to building permit issuance. Given the focus of this paper, additional insights are provided to follow.
- **Development Application Review Fees:** Local and Regional municipalities will charge fees for the review of development applications, such as Official Plan Amendments, Rezoning applications, site plan control, and committee of adjustment applications. Municipalities are permitted to charge fees to offset the cost of providing land use planning and building code services in accordance with Provincial legislation. As per Section 69 the Planning Act, these fee rates are designed to meet only the anticipated cost to the City in respect of the processing of each type of application. This ensures that such costs are not borne by tax payers.
- **Building Permit Fees:** Similar to the above, building permit fees are also charged to offset the costs to the municipality of administering and enforcing the building code. This process typically involves one or more inspections of the building site as well as processing and administration of the building permits. As per the Building Code Act, municipal building permit fee rates are designed to not exceed the anticipated costs of administration and enforcement of the Building Code.

- **Section 37 Contribution:** Section 37 of the Planning Act allows municipalities to request community benefits in exchange for heights/densities above the existing zoning permissions. Section 37 contributions can include on-site community benefits such as a community facility or streetscape/park improvements. Section 37 contributions can also include a cash payment that will be used by the municipality to address various City-wide needs. In Mississauga, the City's highest priority is that the community benefit be located on-site or in the immediate location. It is noted that not all development projects will include a Section 37 contribution. It is also important to note that when a contribution is required, the contribution (payment or on-site benefit) is meant to be a reasonable proportion of the increase in value as a result of the increase in height/density. However, there is no standard calculation or methodology for calculating the payment/benefit.
- **Public Art (or similar) Contribution:** Some municipalities require a contribution from developers for the implementation of public art or other similar initiative. The City of Mississauga strongly encourages for the inclusion of public art in developments with greater than 10,000m² in gross floor area, with the exception of non-profit organizations and social housing. Developers are encouraged to include public art as part of their development and/or contribute an agreed upon amount of the construction costs to the City's Public Art Program. The suggested contribution is equal to 0.5% (at a minimum) of the Gross Construction Costs of the Development.
- **Property Taxes:** Developers will pay property taxes on a development site as soon as the property is acquired. Taxes will also be paid during application review and construction, ceasing once the new homes are transferred to the purchaser, at which time purchasers begin paying property taxes on their individual unit.

Provincial and Other Development Related Charges:

- **Land Transfer Tax:** Developers pay the provincial land transfer tax when acquiring a development site. Additionally, the land transfer tax is also paid by purchasers when closing on their home. First time home-buyers are however eligible for a rebate on all or part of the land transfer tax, to a maximum rebate of \$4,000.
- **Tarion Enrolment Fee:** Tarion requires developers of new homes in Ontario to pay an enrollment fee, which varies depending on the value of the home as per the Enrolment Fee Calculation Table. The purpose of Tarion is to protect consumers of new homes by ensuring that builders comply with provincial legislation and building codes.
- **HST:** New home sales in Ontario are subject to the Harmonized Sales Tax of 13%. A rebate on this tax is provided, which varies depending on the sale value of the home. The advertised price of new homes typically include the HST amount in the purchase price.

2.1.1 Development Charges – Additional Insights

Development Charges are fees imposed on development to fund “growth-related” capital costs and to pay for new infrastructure and facilities to maintain existing service levels. In Ontario, municipalities impose development charges under the *Development Charges Act, 1997* (DCA) and the accompanying Ontario Regulation 82/98.

Like many two-tier municipalities, development in Peel Region is subject to Development Charges imposed by the upper-tier municipality for Regional services and infrastructure (e.g. Water, Waste Water, Regional Roads, Police, Paramedics, etc.) as well as the lower-tier municipalities for their respective services (e.g. Library, Fire, Recreation, Transit, Public Works, Local Roads, Storm Water Management services, etc.). In addition to municipal services, development in Peel Region is subject to Development Charges levied by GO Transit as well as Education charges levied by the local school boards.

The principle behind Development Charges is that “growth pays for growth” so that the financial burden of growth-related capital costs are not borne by existing tax or rate payers. It is noted that only the initial construction of new growth-related infrastructure may be funded through Development Charges; any subsequent maintenance or rehabilitation costs are the funded through property taxes, user fees, or other municipal funding sources.

Development Charges are a primary source of funding for growth-related infrastructure. As such, any reduction or discount from the fully calculated development charge rates typically results in a revenue loss to the municipality. The growth-related infrastructure costs that would otherwise have been funded through development charges would need to be funded through other means, such as property taxes. Development Charges play an important role in maintaining reasonable property tax and user fee rates while ensuring that overall service levels are maintained as municipalities experience population and employment growth.

Like many municipalities in Ontario, the Region of Peel, Mississauga, and Caledon have different residential Development Charge rates for different housing types (small unit, apartment, other residential, single or semi-detached). This is reflective of each unit type’s respective demand for services: the Development Charge rates are first calculated on a per-capita basis and then converted to a variable charge by housing unit type based on unit occupancy factors. Single-detached dwellings have a higher occupancy rate than apartment dwellings, and therefore these units place a greater demand on municipal services and are charged accordingly.

The DCA requires that the Development Charge by-law and rates be reviewed every five years at minimum. In addition to these five-year reviews, municipalities typically index their Development Charge rates on an annual or semi-annual basis in line with the Statistics Canada Non-Residential Building Construction Price Index, as permitted under the DCA. As a result, there has been an upward trend in Development Charge rates in most Ontario municipalities due to increasing construction costs and land values in recent years. This is consistent with the broader increases in constructions costs and other fees experienced by the development industry.

Under the DCA, Development Charges are payable at issuance of the first building permit. Municipalities may require Development Charges for engineered services (e.g. Water, Waste Water, Storm Water Drainage, Roads and Road Related services) to be paid at the time of draft plan of subdivision or consent agreement if this is provided for under the Development Charges by-law. It is common for municipalities to charge Development Charges for engineered services at the time of subdivision agreement; as there is often a significant time lag between subdivision agreement and the issuance of the first building permit. This practice is helpful in funding the significant up-front costs typically associated with engineered infrastructure that is required to enable development to occur.

It is noted that the DCA is currently being reviewed by the Province and the analysis in this report is based on the prevailing legislation.

2.1.2 Cash-in-Lieu of Parkland – Additional Insights

Public parks and green space are an important component of urban development in a municipality. As municipalities grow, they require additional park space for current and future residents. Municipalities therefore will typically require park space to be included in many new developments. This is done in accordance with Section 42 of the *Planning Act*.

Where on-site parkland cannot be provided, such as in the case of high-density apartment developments, municipalities may instead collect cash-in-lieu of parkland. The City of Mississauga, for example, collects cash-in-lieu of parkland on a per-unit basis for medium to high density residential development. For single detached and semi-detached residential dwellings, the cash-in-lieu rate is 5% of the market value of the lands. Cash-in-lieu funds collected are then used by the City to purchase additional parkland, or make improvements to existing parkland, in order to maintain service levels as its population grows.

It is noted that while development charges may be applied to growth-related parkland development, Development Charges cannot be used to fund the purchase of land for the purposes of park development as this is typically done through parkland dedication or cash-in-lieu. This prevents any duplication of fees or charges.

2.2 Literature Review – Development Related Charges and the Impact on New Home Prices

The building industry regularly raises the issue that housing affordability in Ontario has been declining as a result of increasing development related charges. The following briefly highlights three of the key documents on this topic.

2.2.1 Government Charges and Fees on New Homes in the Greater Toronto Area (May 2018) – Altus Group Economic Consulting prepared for the Building Industry and Land Development Association

Altus Group Economic Consulting (Altus) was retained by the Building Industry and Land Development Association (BILD) to review the government charges and fees on new homes in the Greater Toronto Area (GTA). The purpose of the report was to identify the charges imposed by different levels of government on the development of new homes.

The report identifies that government fees and charges account for roughly 21.7% of the price of a new single-detached home and approximately 23.9% of the price of a new condominium apartment across the six sample municipalities evaluated (Oakville, Brampton, Markham, Bradford West Gwillimbury, Ajax, and Toronto). The report further notes that the most significant government charge for new homes are Development Charges, which can typically comprise 23% - 45% of the total government charge on new homes.

The report notes that government charges and housing prices have not increased at the same rate, with the price of low-rise homes increasing at a higher rate than government charges between 2013 and 2018. Conversely, government charges have increased at a higher rate than high-rise home prices over the same period.

Altus Group isolates the government charges into two distinct categories:

- **Charges imposed on land owner/ developer / home builder:** Typically 46% - 51% of government charges are paid for by this group. These charges include Development Charges, building permits, planning approval fees, parkland dedication, and others.
- **Charges imposed directly on purchasers:** Will account for the remaining 49% - 54% of government charges. These charges can include CMHC mortgage insurance, HST, land transfer tax, and others.

The report concludes with the following commentary for each category of government charge:

Government charges imposed on land owners/developers/home builders can have direct impacts on the price of new housing, as increased costs are likely to get passed on to new home buyers where the market will allow for increase house prices. Where the housing market may not allow for increase house prices, homes will either become more difficult to market, prices will have to moderate, or developers will have to absorb the additional costs.

Charges imposed on new home buyers increase the costs of home ownership and reduce the amount of income available to pay on-going mortgage costs, as well as other costs of living. Additionally, where charges imposed on developers/home builders are passed on to home buyers through higher prices, home buyers will have both a higher mortgage principal to repay, but will also have higher interest costs associated with a higher mortgage.

The report appears to take the position that housing costs and new home prices are directly linked. However, aside from identifying the increase in average new home prices over the past

decade, the report does not acknowledge how the private sector establishes the price of new homes or the impact of market forces (e.g. supply and demand characteristics) on home prices. Similarly, the conclusions assume that increasing development costs will be passed on to new home buyers if the market supports a price increase. However, no acknowledgement is given to the fact that if the market could support higher pricing, developers would exploit this pricing irrespective of costs.

2.2.2 City of Vancouver City-wide DCL Rate Update: Evaluation of Potential Impacts on Urban Development (June 2017) – Coriolis Consulting Corporation prepared for the City of Vancouver

Coriolis Consulting Corporation (Coriolis) was retained by the City of Vancouver to evaluate the financial ability of new development projects in the City to support an increased Development Charge Levy (DCL) rate. The City of Vancouver charges DCLs on new development to generate revenue for infrastructure costs associated with new urban growth. DCLs are therefore similar to Development Charges in the Ontario context. Housing affordability is also a major issue in the City of Vancouver, with the City often cited as one of the least affordable global housing markets.

The Coriolis report acknowledges the widespread perception that development levies can have a direct impact on the cost of new development, where increasing costs will result in a corresponding increase in residential prices. However, the report acknowledges and addresses the fact that the market dynamics impacting home prices are much more complex. The report makes the following economic observations:

1. *In a competitive marketplace, developers cannot simply add the cost of a levy onto the asking prices for new floor space. Adding the levy on to the asking price would imply that purchasers are willing to pay more for “levied” space than they would pay for comparable space in comparable neighbourhoods with lower (or no) levies. This, of course, does not happen. Unless someone has a monopoly on a commodity, prices are set by the interaction between supply and demand; no supplier can unilaterally determine price simply because costs are higher. In a sense, a levy in a particular area is no different than if the area had unusually poor soil conditions and therefore above average construction costs. Prices in the affected area will not be arbitrarily higher than in directly competitive areas simply because costs are higher. Something else must “give”.*
2. *While developers pay the levy when they obtain project approval, they will seek ways to transfer the impact to others, because developers require a profit margin to make development an attractive business. Being neither willing to absorb the levy as a reduction in profit nor able to simply add a surcharge on end prices for their products, the first response of developers to a levy is to lower the bid price for development sites by an amount equal to the levy. The primary impact of levies, therefore, is to put downward pressure on the value of properties for redevelopment. As noted earlier, this is no*

different than a developer's response to the fact that an area has worse soils conditions than comparable areas. A developer will be willing to pay less for such sites, by an amount equal to the cost of remedial work (e.g., piling, drainage, excavation, or extra construction costs) needed to make the net cost of the site equivalent to comparable land with no soils problems.

3. *It is the land market's response to the downward pressure on land value that mainly determines the ultimate impact of a new (or increased) levy. If the same amount of land remains available for new development projects (i.e., available for sale at a price developers are willing to pay) after the introduction of a levy, broadly speaking the supply of new product to the market should be unchanged and there will not be an impact to the price of new floor space. Developers experience the same total project cost (albeit made up of different line items) as they would face without the levy, the same amount of new development happens, and there is no reason for demand to change, so prices to consumers and profits for developers remain where they were before the introduction (or increase) of the levy. Only the land value supported by redevelopment changes.*

However, if the downward pressure on land value for development sites means that less land is available for new development after the levy (because the reduced offered price for land results in less land being available on the market), the supply of new product will be reduced. This leads to rising prices for all existing and new supply, not just for new floor space.

The Coriolis study provides contrasting position to that of the Altus report. Ultimately, the Coriolis study concluded that the impact of increased DCLs on the apartment market in Vancouver will vary based on the project location/market context and achievable density.

2.3 Affordability Context in Peel Region

The Region of Peel completed a Housing Needs Assessment in the spring of 2018, which informed the Region's updated Housing and Homeless Plan as well as the Peel Housing Strategy. Similar to many municipalities in Ontario, the Housing Needs Assessment identified an affordable housing need for low and middle-income households. Specifically, the needs assessment determined that approximately 70% of low-income households (less than \$59,110 before taxes) and 29% of middle-income households (\$59,111 - \$105,922) cannot secure housing that is affordable to their income level.

The City of Mississauga has also prepared a housing strategy ("Making Room for the Middle – 2017") designed to address housing for middle income earners (\$55,000 - \$100,000 annual household salary). The report targets the development of homes priced between \$270,000 and \$400,000 to maintain affordability for these middle income households, which currently do not exist in the market aside from some condominium apartments and a limited selection of townhomes.

It is important to understand that “affordability” is a relative term. Housing for low-income households (“deep affordability”) will often require significant public-sector financial incentives/contributions to be viable. This depth of affordable housing is rarely supplied by the private-sector outside of non-profit and cooperative housing providers and government agencies (e.g. Peel Living). Due to the significant costs of operating and maintaining deep affordable housing, and the significant financial resources required to construct new units, the supply of this housing often falls short of demand. This results in large waiting lists for deep affordable housing.

Moderate affordable housing, which targets the middle segment of the income spectrum, also often falls short of demand. This housing often falls within the definition of “the missing middle” and was the focus of Mississauga’s housing strategy. Housing at the prices identified in Mississauga’s housing strategy (\$270,000 - \$400,000) is often not supplied by the market due to the following considerations:

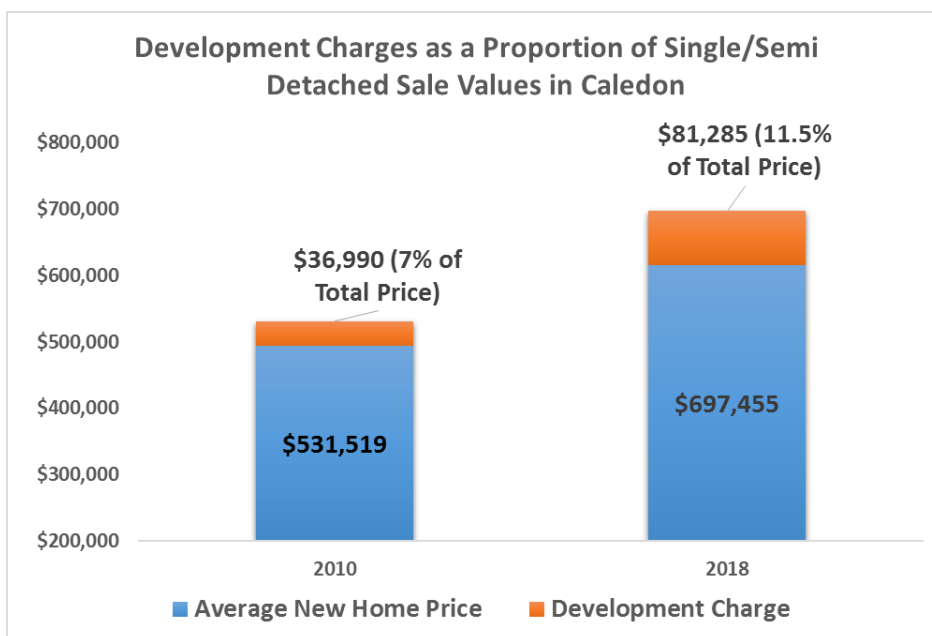
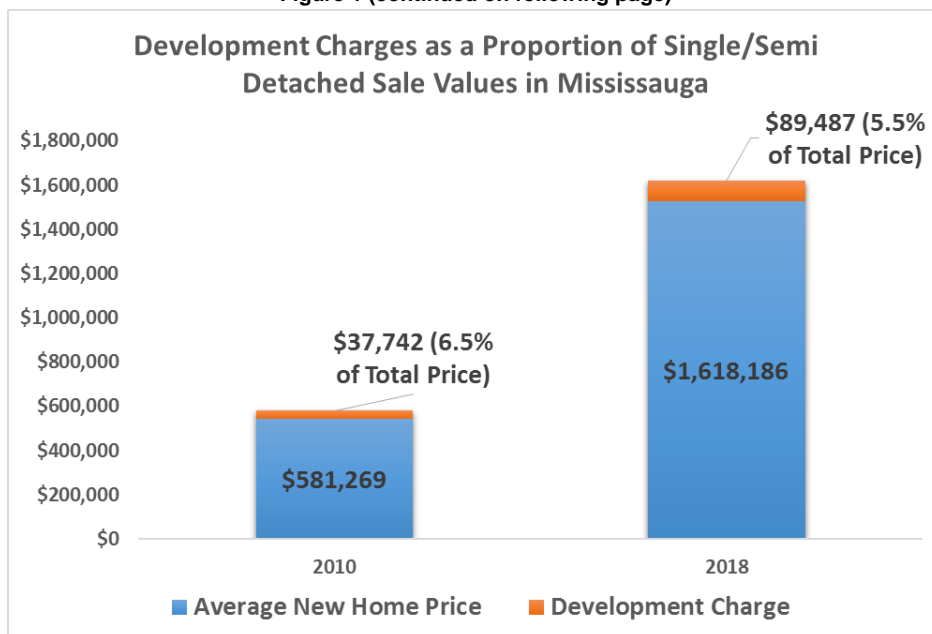
- The market supports higher pricing, which is pursued by the development industry; OR
- The market does not support higher pricing, however the pricing level does not provide enough revenue to cover all development costs, the purchase of land, and produce an attractive profit. In this scenario, financial incentives and other non-financial tools are necessary for the project to be viable and therefore to encourage private-sector participation at this affordability level. Local programs as well as programs from senior levels of government (e.g. Investment in Affordable Housing, National Housing Strategy) attempt to address this issue.

To address the latter scenario, many municipalities and provincial/federal programs have investigated strategies to lower development costs or provide direct financial support (e.g. capital grants) to qualifying affordable housing projects. Both the Peel and Mississauga housing strategies propose a number of incentives ranging from making lands development ready through pre-zoning, providing public lands for development, implementing inclusionary zoning and other affordable housing policies, encouraging second units, providing financial incentives, and many others. While these strategies can be effective at encouraging a greater supply of affordable housing, this discussion paper focuses on market housing supplied by the private sector.

2.4 Trends in New Home Prices and Development Costs in Peel Region

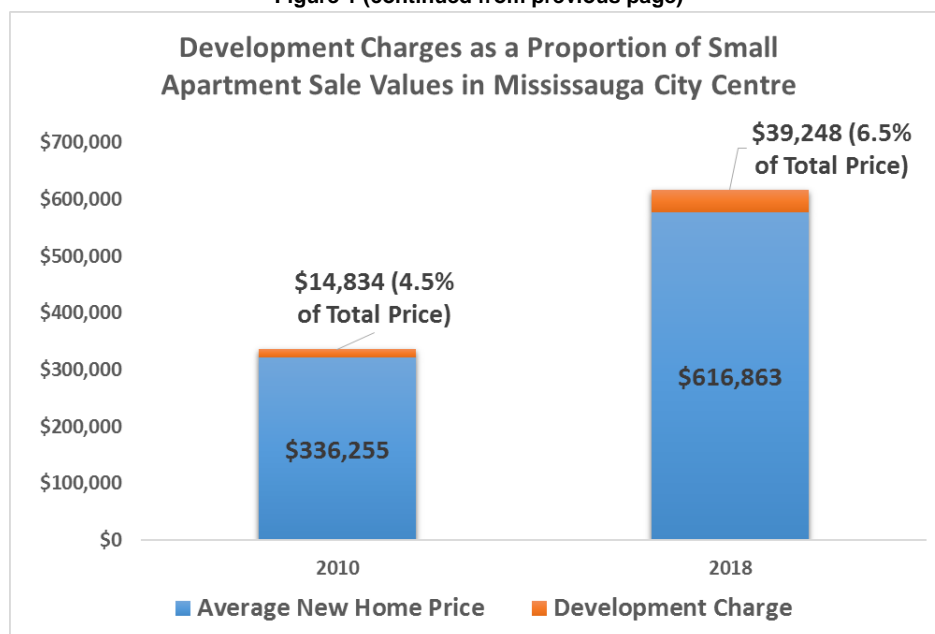
As illustrated by **Figure 1**, both home prices and Development Charges have been on the rise in Caledon and Mississauga since 2010.

Figure 1 (continued on following page)



Note: Caledon Development Charge includes both water and wastewater servicing however the average housing price may include properties that do not have Regional water/wastewater services

Figure 1 (continued from previous page)



The three charts illustrate how the different market areas have trended since 2010, with the average price of a single and semi-detached home increasing by 178% and 31% in Mississauga and Caledon respectively over this time. New condominium apartments in Mississauga City Centre have increased by approximately 83% since 2010.

At the same time, Development Charges have also been increasing in both municipalities. Overall, the rate of increase over the past 8 years has been similar in both municipalities for all housing types. The Development Charge for single and semi-detached homes have increased by 137% and 120% and apartments have increased by 112% and 106% in Mississauga and Caledon respectively. The Development Charge for a small unit, which could be an apartment, townhome or any other unit under 700 square feet (Mississauga definition) or 750 square feet (Peel definition), has increased by 165% and 135% in Mississauga and Caledon respectively. Currently, Development Charges in Mississauga are marginally higher than in Caledon (see **Appendix D** for more data).

Figure 1 also illustrates the current and historical proportion that Development Charges represent of the average sale price of new homes. Due to the fact that Development Charges have increased at a quicker rate than new single/semi-detached home prices in Caledon, the Development Charge as a proportion of the average sale value is now higher than it was in 2010. Development Charges comprised only 7% of a new single/semi-detached home price in 2010, which has grown to 11.5% as of 2018. This trend is also observed for new apartments in Mississauga City Centre, however the proportional change has been more modest (4.5% in 2010 and 6.5% in 2018).

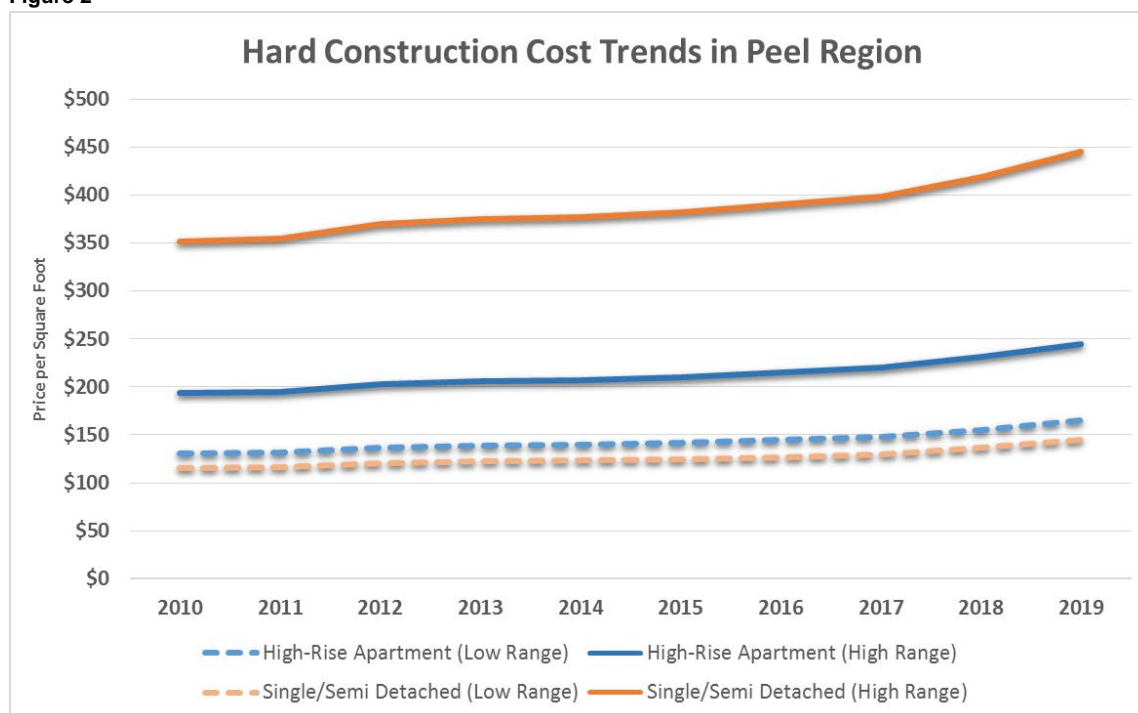
The exact opposite trend has been observed for single and semi-detached homes in Mississauga, where Development Charges accounted for around 6.5% of the purchase price in 2010 and only 5.5% in 2018. This is due to the fact that home prices have increased more rapidly than Development Charges.

2.4.1 Hard Construction Costs Trends and Observations

It is important to note that in addition to rising Development Charges, virtually all costs that a developer encounters are increasing on an annual basis. These costs include consultant fees, financing costs, construction costs, and many others. While the rate at which these others costs are increasing will vary, they also contribute to the cost of delivering housing.

For example, hard construction costs have been increasing as illustrated by **Figure 2**. Cost consultants Turner and Townsend have provided historical hard construction cost estimates for high-rise apartments and single/semi-detached homes in Peel Region. While these costs have typically increased around the rate of inflation between 2010 and 2016 (1-2%), construction costs have increased more significantly in recent years (5% - 6%). The recent growth in construction costs have been due to macro-economic trade impacts, labour shortages, competition amongst builders, rising price of materials and commodities, and other similar factors. Some reports have noted that costs have increased even more rapidly over the past two years.

Figure 2



Source: Turner & Townsend; Notes: Cost per square foot of buildable GFA; does not include soft costs; Rates assume typical standards/condition and assume ideal soil and site conditions, rates have not been adjusted to current dollars.

To illustrate the impact of rising construction costs, consider the following example. Assuming a single/semi-detached home size of 1,800 square feet and the low-end¹ of the range provided in **Figure 2** (\$150 per sq.ft.), this home would cost approximately \$270,000 to build (in addition to other site preparation costs, soft costs, developer profit, and land purchase), relative to a Development Charge of nearly \$90,000. While these hard construction costs have increased by around 26% since 2010, the higher rate of growth experienced over the past two years is having a significant impact on the overall delivery cost of housing.

¹ Low-end of the range has been used due to the fact that the high-end of the range (\$420 per sq.ft.) would represent a super-luxury product. The Altus Cost Guide for 2019 recommends a hard cost price range of \$115-\$215 per sq.ft. for a single-family home with unfinished basement and over \$400 per sq.ft. for a custom built single family home.

3.0 Housing Prices and Costs – The Factors Influencing these Fundamental Inputs of Real Estate Development

This section reviews how home prices and costs are established and the connection between these two fundamental factors that impact real estate development.

3.1 Housing Prices Are Determined By Market Demand – Not Costs

NBLC has over 42 years of experience completing housing market research in Canada. The majority of our experience involves assisting private developers with determining highest and best use of their property through market research and analysis. We arrive at the highest and best use by determining the most marketable housing types, achievable pricing, product positioning (e.g. mid-market, luxury), sales absorption rates, target purchasers and marketable suite mix, required project amenities, and other similar items. Often, we use these inputs to prepare a financial pro forma analysis to determine project viability, land values, and profit.

When deciding how to price homes, it is important to consider both demand and supply conditions in the local market area. This generally involves an analysis of the following:

Demand



- ☐ Population Growth and Projections
- ☐ Demographics and Incomes
- ☐ Target Purchaser Groups
- ☐ Purchaser Preferences
- ☐ Local Employment Opportunities
- ☐ Property Market Strengths and Weaknesses
- ☐ Neighbourhood Amenities
- ☐ Project Location
- ☐ Lending Rates and Regulations
- ☐ Future/Planned Transit and Infrastructure Investments

Supply



- ☐ Sale values and absorption of other marketing projects "the competition"
- ☐ Project positioning, interior features and finishes, and amenities of competitive projects
- ☐ Provision of parking/storage lockers and associated pricing at competitive projects
- ☐ Sale values and market performance of resale homes "secondary competition"
- ☐ Review of development applications to understand future supply "future competition"
- ☐ Assess growth and land use policies impacting future development patterns

The process of establishing pricing typically begins by characterizing the demand-side of the market, which includes identifying target purchasers (e.g. first-time buyers, young professional singles and couples, families, move-down buyers, seniors), assessing recent growth patterns and projections, defining the market strengths and weaknesses of the site and area (e.g. nearby schools and parks, strong regional employment opportunities, transit improvements are proposed nearby, busy intersection/traffic congestion, etc.), preferences of target purchasers (e.g. mid-rise buildings, stacked townhomes, high-rise towers), impact of lending rates and regulations (e.g. mortgage stress test impact on pool of first-time buyers, foreign buyer tax impact on investors, etc.), and other similar analyses.

Once the demand-side has been adequately characterized, the supply of housing in the local market is assessed. This is completed by surveying other comparable housing developments that are actively marketing to understand how the competitive supply is priced, the rate at which product is absorbed by the market, the positioning and amenities included, and other design/market features that warrant review.

Understanding the resale market is also an important consideration, as purchasers will often consider both a new-build and an existing home when making a purchase. Pricing must therefore remain competitive with both comparable existing homes and other new housing developments. Other factors such as proposed development projects, price trends, future transit investments,

growth management and land use policies, and other similar considerations are also evaluated when determining how to price and position a new housing development.

Ultimately, developers are seeking to determine the maximum they can charge purchasers and still sell their project within a predetermined time frame. If a developer sells very few homes, this is generally a sign that pricing was too high for the project (or some other project flaw). On the other hand if the entire project sells out immediately, the developer may have priced the project too low. Developers carefully examine supply and demand to ensure this does not happen, instead charging the maximum the market will bear to achieve a healthy sales absorption. Developers also monitor supply and demand conditions throughout a sales campaign, often increasing pricing throughout the process at specific thresholds (e.g. at 50% sales, 70% sales, beginning of construction, completion of construction). Some developers will also not release all units within a development project at the same time, in order to adjust pricing or other elements based on the market experience of the initial phase. This is an important consideration, as developers can, and often do, increase pricing if the market supports such an increase, regardless of any shift in development costs.

In conclusion, the development costs associated with a project never come into consideration when determining the achievable market price of a new home.

3.2 Factors that Influence Housing Development Costs

The costs of building housing generally fall into one of four discrete categories:

1. Hard Construction Costs
2. Soft Development Costs
3. Developer Profit
4. Land Cost

The following provides a brief description of each cost category, including commentary related to how these costs are determined.

3.2.1 Hard Construction Costs

Hard construction costs encompass all of the materials and labour required to physically construct a building. These costs include construction contracts, building materials, appliances, site servicing, landscaping, site preparation (e.g. demolition, excavation, grading), parking, and other related costs. Hard construction costs will vary from project to project as factors such as topography and grading, geotechnical issues, site contamination, building materials (e.g. concrete vs wood), the height of a building, surface vs. underground parking, and other similar considerations can all impact construction costs.

Hard construction costs are dictated by the market, albeit a different market than home prices:

- Developers will purchase building materials in the market like any other commodity, which are subject to fluctuations in price. Macro-economic trade impacts (e.g. steel tariffs) can also impact the price of materials and other commodities.
- Similar to building materials and commodities, developers must pay the market price for labour, which can fluctuate based on availability, unions, and other factors.
- Competition amongst builders can also increase the cost of building materials and specialized labour under particular supply and demand conditions.

Overall, once the specifics of a development project are well known, hard construction costs become relatively fixed.

3.2.2 Soft Development Costs

Soft development costs include all of the other costs that a developer will encounter when developing real estate. These items include the government imposed development related charges identified earlier in this paper, as well as a host of other costs such as:

- The consultant team - typically consisting of urban planners, architects, urban designers, landscape architects, engineers, lawyers, public consultation experts, and others.
- Project marketing costs (e.g. sales centre, news ads, billboards, radio advertisement, etc.).
- Sale commission fees – paid to the sales team hired by the developer.
- Construction financing costs.
- Development and construction project management.
- General overhead and cost contingency.
- General legal fees.
- Project/construction insurance costs.
- Others.

Similar to hard costs, soft development costs can also shift depending on the specific development project. Factors such as project scale and absorption rates can impact development timing, which can affect financing and other carrying costs. These costs can also shift depending on the approvals required, size of the property (e.g. building permit fees), value of the land (cash in lieu of parkland), the section 37 agreement negotiated, rising Development Charges, and others.

Rising development related charges therefore directly increase the soft development costs of delivering new homes.

3.2.3 Developer Profit

Developers require a certain profit threshold to undertake a development project. They are investing their skill and equity, as well as taking on significant risk in order to make a profit that is superior to the rate of return through some other investment vehicle. In our experience, most active developers seek a target profit of 15% of gross project revenue.

If an acceptable profit cannot be achieved, developers will seek development opportunities in other markets, invest in other real estate classes, or choose another investment vehicle altogether.

3.2.4 Land Acquisition Cost

The value of land is directly connected to the market strength of an area. Typically strong market areas support higher land values than weaker market areas. This is expanded on in the following section.

3.3 The Economics of Real Estate Development

The economics of development are based on two fundamental inputs: revenues and expenses.

Project revenues are driven by the sale value of homes as well as other sources such as parking spaces, storage lockers, and ground-floor commercial space within an apartment building. Once project revenues have been estimated, developers will then begin to calculate all anticipated project costs. As evaluated in the previous section of this paper, these costs will include all hard and soft development costs, the latter of which will include the development related charges. As illustrated by **Figure 3**, developers will then subtract all development hard and soft costs, as well as their required profit from the estimated revenue of the project. The remaining amount, or residual amount, is referred to as the Residual Land Value (RLV). The RLV represents the price a developer could pay for the land to construct the housing project and make an attractive profit.

Figure 3: Development Economics Illustration

A) Revenue
B) Development Costs
C) Developer Profit

$$A - B - C = D$$

D = Residual Land Value

The RLV will result in one of two scenarios:

- **RLV is equal to or higher than the asking price of land in the market:** If the RLV of a proposed development is greater than the asking price of developable land in the market, a developer can, in theory, purchase the land and build the project while also meeting their profit expectation. If a developer is able to acquire land below the supportable RLV, and no cost overruns occur, the developer's profit will be enhanced.
- **RLV is below the asking price of land in the market:** In this situation, the housing development would not be considered viable because a developer would not be able to afford the price of land in the market and still meet their profit expectation. This project would therefore not move forward.

If development costs increase, the amount subtracted from the project's revenue will also increase, which results in a lower RLV. In other words, the developer would pay less for the development site because costs have increased. The RLV is impacted because the other elements of the equation (**Figure 3**) are more or less fixed. Developers are not likely to reduce their profit expectation as discussed earlier in this report. Developers also cannot simply increase the price of homes beyond what the market will support. If the market does support an increase in the price of new homes, developers are likely to increase pricing regardless of any change in development costs.

Instead, developers will pay less for land when faced with rising development costs. Rising costs can be due to rising development related charges, rising hard construction costs, rising interest rates, new government regulations impacting lending practices, and many others. Rising development related charges would be treated no differently than a developer discovering soil contamination issues at a property they are considering purchasing. Similar to the example provided in the Coriolis Report summarized in Section 2 of this report, a developer will not pay market value for a site with soil contamination issues and attempt to recapture the increased cost by increasing the sale value of homes beyond what is supported in the market. Rather, if the soil remediation costs will require \$2.0 million in added project costs, the developer will pay \$2.0 million less for the property, as determined by the impact of the cost increase on the residual land value. The same will be true for any developer who is considering the purchase of a development site knowing that Development Charges are expected to increase the following year(s).

3.4 Discussion

The commentary in this chapter illustrates the differences in how housing prices and development costs are determined in the market. Ultimately, supply and demand conditions in the market determine how much a developer can charge a purchaser for a home. This is illustrated by the fact that Development Charges have increased at similar rates in Mississauga and Caledon, however the market fundamentals for low-density homes in Mississauga are much stronger than in Caledon, which supports new home prices that are twice as expensive on average (**Chapter 2.4 – Figure 1**). The local supply and demand conditions support the level of price growth observed in Mississauga due to the City's strategic location in the region, waterfront accessibility, local and regional transit accessibility, broader employment opportunities, and many other market factors.

If market pricing was determined by costs alone, the price of a single-family home in Mississauga and Caledon would be similar. If market pricing was determined by supply and demand conditions, but developers could unilaterally increase pricing when faced with increasing costs, the price of single and semi-detached homes in Caledon would have increased more rapidly than what was observed between 2010 and 2018. Rather, the market has supported a specific price threshold in both Caledon and Mississauga, which has been met by developers regardless of any shift in development costs.

The impact of rising development costs reduce the RLV of a project, which is simply the amount that a developer can afford to pay for a development site. Generally, in communities where market pricing supports land values that well exceeds the value of other competing uses (retail, gas stations, low-density residential, etc.), there should be no impact to the viability, pricing, and supply of residential development. In these situations, developers will continue to purchase developable land in the market and charge purchasers an amount that is supported by local supply and demand conditions.

However, if the RLV of a residential development site is reduced below the value of other competing uses or below the expectation of a land owner, a developer will not be able to purchase

the property and would not be able to build the project. If the viability of residential development is impacted on a large scale, the supply of housing will be reduced as developers will be unable to build new housing. If supply does not meet demand, the price of both new and existing homes will increase, which is a function of basic housing economics (i.e. a large pool of buyers competing for a small amount of space).

Finally, it is acknowledged that if development costs were lower, it would be possible for some new development to proceed at “lower” pricing. For example, there are many communities in Peel Region that currently do not support viable development. This is due to the fact that the local supply and demand conditions do not support pricing that is able to cover all development costs (including land purchase) and produce an attractive profit. It is possible that if development costs were lower, some of these projects would be able to move forward with lower relative pricing. It is important to note that the lower pricing levels are still determined by the market, however the project might be able to proceed because development costs were lower. Conversely, rising development costs will further erode the possibility of these projects being constructed.

The type of project described above can be supported by the public-sector with financial incentives and other tools to broaden the supply of housing brought to market as identified in housing strategies (e.g. Mississauga’s Housing Strategy: Making Room for the Middle). This topic is expanded on further in Chapter 5 of this paper.

4.0 Development Case Studies in Peel Region

The following chapter has selected six development case studies to illustrate the economic principals discussed in this report. The purpose of this chapter is to exemplify how the development industry determines the built-form of a project (e.g. lot size, surrounding context, planning controls, market), achievable market pricing (e.g. supply and demand conditions), development costs, the supportable land value of the project (i.e. property purchase price), and overall project viability.

The analysis also isolates the relative impact of Development Charges and other development costs on a housing project. In consultation with the City of Mississauga, Town of Caledon, and Region of Peel, we have selected the following case studies to illustrate a broad range of possible housing projects:

- Mississauga - High-rise condominium apartment in Mississauga City Centre
- Mississauga - High-rise condominium apartment in Port Credit
- Mississauga – Mid-rise condominium apartment along the Dundas Street Corridor
- Mississauga – Stacked townhome development in Erin Mills
- Caledon – Mid-rise condominium apartment in Bolton
- Caledon – Single-detached subdivision

For each case study, we have developed a “prototypical” development concept that is considered reflective of local development patterns and market dynamics. The prototype development concept prepared for each case study therefore includes an assumed lot area, building floorplate, density, and unit yield estimate. We have also prepared a market scan for each case study to understand the local market and provide inputs for the proforma analysis. Relevant inputs gained from the market scan include: pricing, suite mix and unit sizes, market absorption, density and height, project positioning, parking requirements, sale values of parking and storage lockers (if applicable), and other relevant items.

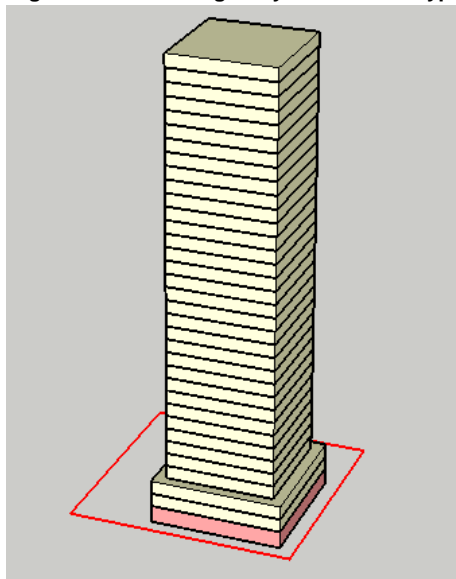
The following subsections briefly describe each case study, with the full built-form analysis and market data available in the appendix of this report.

4.1 Case Studies

4.1.1 *Mississauga City Centre – High-Rise Condominium Apartment*

Mississauga City Centre serves as Mississauga's downtown and is one of the city's most vibrant and urban communities. The area offers a variety of retail services at Square One Shopping Centre as well as an art gallery, performing arts centre, post-secondary institution and recreational centres. City Centre also provides access to local and regional transit via the Square One Bus Terminal and the Cooksville GO Train station. In addition to the abundance of services and amenities, City Centre also hosts community festivals and displays of public art at Celebration Square, which contributes to the area's desirability. Over the past two decades, Mississauga City Centre has experienced a proliferation of high-rise residential activity primarily in the form of condominium apartments.

Figure 4: Mississauga City Centre Prototype



Reflective of many development projects in the local area, as well as planning policies and guidelines, we have assumed a 35-storey tower that accommodates approximately 372 units on a lot size of just under 1 acre. The assumed density is a floor space index ("FSI") of approximately 6.9. To attract a wide range of purchasers, a broad suite mix will be offered, however the average unit size will be relatively small at 645 square feet overall. It is likely that half of the units offered will qualify as a "small unit" under the Development Charge by-law.

As determined by the market scan, many of the new condominium projects to come to market over the past year have offered units just below \$800 per square foot (PSF) at project launch. Many of these projects have since increased pricing to exceed this threshold, including the Edge Towers project: Tower 1 (323 units) is 82% sold with remaining units currently priced at \$844 PSF and Tower 2 (422 units) is 37% sold with remaining units currently priced at \$874 PSF. The third tower in M City launched last year at an average price of \$792 PSF and is currently 52% sold.

Based on the performance of other projects in the local area as determined by the market scan, we assume the prototype concept can be priced at \$800 PSF at project launch. This would result in an average end-price of \$516,000, however a range of suite types and unit prices would be offered (e.g. \$516,000 for a 645 square foot unit, \$800,000 for a 1,000 square foot unit). This pricing recommendation would be competitive with the supply currently for sale in the market at other competing pre-construction condominium projects (e.g. below the pricing observed at Edge Towers but slightly higher than M City tower 3).

Further, as observed in other marketing projects in City Centre, we assume parking spaces will be provided at a ratio of 0.8 spaces per unit (including visitor spaces) and can be sold for \$35,000 per space with all parking underground. Storage lockers are also assumed to be sold for \$4,000.

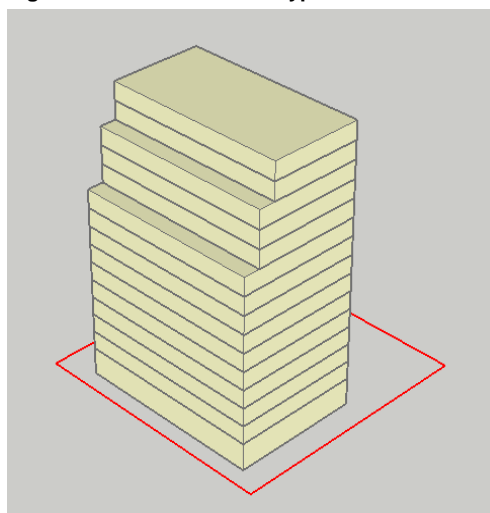
The performance of competitive projects in the local area will likely support an absorption rate of 15 units per month over the sales program.

4.1.2 Mississauga Port Credit – High-Rise Condominium Apartment

Port Credit is a highly desirable neighbourhood along Mississauga’s waterfront with high real estate values. The area offers a broad range of commercial and retail services along Lakeshore Road East with access to regional GO Rail service and the proposed Hurontario LRT, which all contribute to Port Credit’s attractiveness. The area has experienced recent growth in higher density formats with the development of high-rise and mid-rise apartment buildings near the Hurontario Street and Lakeshore Road East intersection, including the 185-unit ‘Port Credit Village’ townhouse development on the southeast corner. While the area has experienced limited development activity relative to the broad market appeal, this is due to a lack of easily developable sites and built-form impacts with the adjacent low-density neighbourhoods.

Typical of local projects and the type of development likely to occur in the area looking forward, which was also informed by a review of the Port Credit Built Form Guide, we have assumed a 15-storey tower with approximately 97 condominium units and an FSI of around 5.3. It is likely that new high-rise development in Port Credit will be a modest scale relative to Mississauga City Centre and other locations in Peel Region. Many new projects in the Port Credit area target a more affluent end-user purchaser, largely consisting of seniors and move-down households. As such, larger unit sizes are typical, and we assume an average size of 900 square feet for this development concept. The larger unit size reduces the number of units within the building, and also the number of unit that would qualify as a “small unit” by the Development Charge by-law (assume 25% would qualify).

Figure 5: Port Credit Prototype



Given the setback and other built-form requirements, as well as the modest building size, we assume a lot area of approximately 0.5 acres with generous front façade setbacks and rear lot setbacks. Parking spaces will be provided at a ratio of 1.25 spaces per unit (reflective of the target purchase group and including visitor spaces) and can be sold for \$35,000 per space with all parking underground. Storage lockers are also assumed to be sold for \$4,000. The performance of competitive projects in the local area will likely support an absorption rate of 7 units per month over the sales program.

As determined by the market scan, there have been few projects to come to market in Port Credit in recent years. However, the two projects that have launched in recent years have carried a

premium over other market areas in Mississauga. Strong pricing and absorption rates are driven by the positive market attributes of the community. We therefore assume the project can be priced at \$850 PSF at project launch, which would result in an average overall end-price of \$765,000. It is expected that some smaller units could be priced lower and some larger suites would be over \$1.0 million.

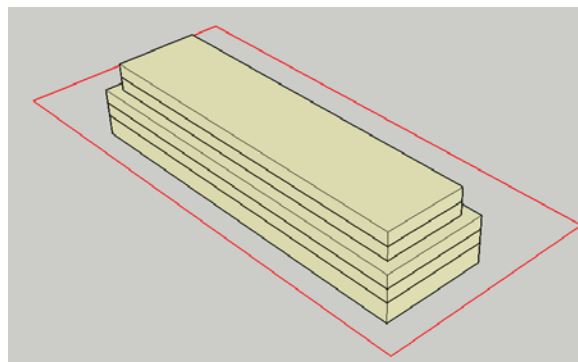
Tanu is a condominium project currently selling in Port Credit. The project is 15 storeys, contains 204 units, and is priced at \$877 PSF. Since it began sales in October 2018, 71% of the total units have sold. The average unit size is just over 915 square feet. This project, along with the existing condominium apartments in the local area, would be considered the core competitive supply for any new project to come to market. Many of the existing condominium apartments around the intersection of Hurontario Street and Lakeshore and on Port Street are priced between \$700 and \$900 PSF based on recent resale transactions, with much of this supply over ten years old. The positioning of Port Credit Prototype would be competitive with this supply.

4.1.3 Mississauga Dundas Corridor – Mid-Rise Condominium Apartment

The Dundas Street Corridor is a major route within the City of Mississauga stretching almost 20 km from Oakville in the west to Etobicoke in the east. Although there are a variety of retail and commercial services along the Dundas Corridor, there is currently limited market appeal for higher density housing. The few mid-rise apartments that have been developed are mainly concentrated near Cawthra Road or Erin Mills Parkway. However, the City has initiated the Dundas Connects master plan to create a planning framework that is intended to encourage intensification and convert the corridor into a mixed-use, transit-oriented route supported with bus rapid transit. Notwithstanding this initiative, market demand is likely to be modest over the near to mid-term given the current context.

Given the lack of significant market activity, we have also reviewed the Dundas Connects master plan to understand the type of mid-rise development that is expected along this corridor looking forward. This analysis has led us to assume a five storey “slab” style building on a rectangular lot of approximately 1.4 acres. With an assumed average unit size of 800 square feet, the building will yield 95 units with about half of the suites qualifying as a “small unit” by the Development Charge

Figure 6: Dundas Street Prototype



by-law. The average unit size is reflective of the building targeting a larger range of purchasers relative to the Mississauga City Centre and Port Credit case study, which will include small units that are popular amongst investors, first time purchasers, and singles as well as larger suites for seniors, move-down purchasers, and couples/families priced out of the low-density market. The

building has an assumed FSI of 1.5. We also assume the building would be wood-framed, resulting in construction cost savings.

There is only one mid-rise project actively marketing along the Dundas Street corridor, which is The EV Rolaye Condos located on Dundas Street West near the University of Toronto Mississauga campus. The project launched in 2016 at an average price of \$666 PSF and is 86% sold. The remaining 14% of suites are priced \$683 PSF. Overall the project has sold at an average absorption rate of 3.3 sales per month.

We have assumed the prototype building can be priced at \$650 PSF, however the price would include a parking space. Parking would be provided both at surface level and underground and be provided at a ratio of 1.1 spaces per unit (including visitor spaces). The pricing would result in an average end price of \$520,000, with smaller units driving a lower end price and larger units driving a higher end price. The pricing assumed takes into consideration the options that purchasers would have in the market, which includes some older apartments, townhomes, and even a select number of semi-detached homes within the western and eastern segments of the Dundas corridor that are priced between \$450,000 (older apartments) and \$600,000 (townhomes). The pricing level assumed, and the decision to include parking in the purchase price, would allow the project to remain competitive with the local housing supply and achieve an absorption rate of 3 sales per month.

The lack of mid-rise activity in Mississauga is not uncommon and frequently referred to as a “missing middle” housing type in the GTHA context. This is due to developers pursuing higher density projects that offer higher profits or single family projects that are higher priced and comparatively easier to gain approval for and market. Mid-rise buildings will also share many of the same costs as a high-rise project, however the costs are spread over a smaller saleable floor area. They also face competition from other comparable development forms, such as stacked townhomes.

4.1.4 Mississauga Erin Mills – Stacked Townhome

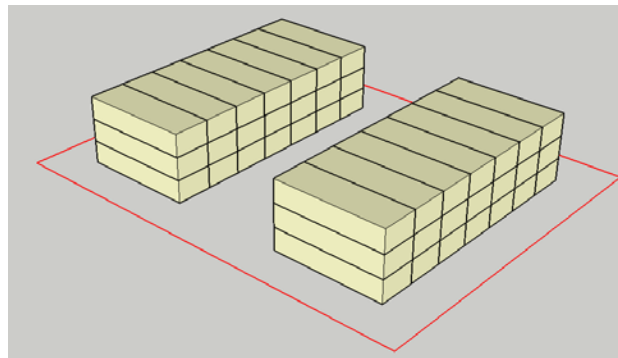
Stacked townhomes are essentially a three or four-storey apartment building that “looks and feels” like a ground-oriented townhome building. These buildings are often “half sunken”, with entrances to units accessible by a small staircase down a level and another set of entrances a half storey above grade. Stacked townhomes can be very attractive to first time purchasers as they are an entry level product offering for young families and professionals. They typically accommodate larger units than condominium apartment buildings, achieve significantly lower maintenance fees due to the lack of amenities, and offer a ground-oriented product type that many purchasers desire. However, given the lack of elevator service and the abundance of stairs, older populations have not responded well to this product.

Stacked townhomes have become very popular in the GTHA as the price of single-family homes have escalated to unaffordable levels. This is also true in Mississauga, which has seen several

stacked townhome projects launch over the past several years. Stacked townhomes are attractive to developers because they can be implemented through a large scale and phased development of multiple blocks or as a modest infill project. Stacked townhomes are also attractive to developers as they can be much cheaper to construct than high-rise or even mid-rise apartment buildings, especially if wood-frame construction is utilized.

We have assumed a smaller scale infill stacked townhome project as a prototype. The prototype therefore includes two three-storey stacked townhome blocks on a 0.5 acre site with an FSI of approximately 0.9. This built-form, including site design and setbacks, is informed by other marketing and built projects in Mississauga and the City's Draft Urban Design Guidelines for Back to Back and Stacked Townhouses.

Figure 7: Stacked Townhome Prototype



Utilizing an average unit size of 850 square feet, the project would yield approximately 39 residential units. The larger average unit size would accommodate a wide range of smaller one-bedroom units and larger three bedroom suites. It is assumed that only 30% of suites would qualify as a “small unit” by the Development Charge by-law.

There are five stacked townhome projects currently marketing in the City of Mississauga, totalling nearly 650 units. While the average price of the remaining available supply is approximately \$640 PSF, it is noted that location will play a significant impact in how prices are established. Two of the most recent projects to launch in November/December of 2018 launched with pricing between \$640 and \$670 PSF, with the former located in the Clarkson neighbourhood and the latter located in Lakeview. Both of these projects are within a 25 minute walk of a GO Station. Another stacked townhome project (WayUrban Towns) launched in March 2018 within Erin Mills and is currently priced at \$581 PSF.

We have assumed the prototype building can be priced at \$600 PSF and would include a parking space in the purchase price. Parking would be provided both at surface level and underground and be provided at a ratio of 1.1 spaces per unit (including visitor spaces). The pricing would result in an average end price of \$510,000. This pricing would be higher than the WayUrban Towns project currently selling in Erin Mills, however this project has experienced strong sales absorption, selling 120 units in only 10 months and reaching 70% sales (construction financing threshold) in only 4 months. This project launched in March 2018 at an average price of \$525 PSF, which has increased considerably to \$581 PSF at the time of our survey. The pricing level assumed for the prototype, and the decision to include parking in the purchase price, would allow the prototype to remain competitive with the competitive supply in the local area and achieve an absorption rate of 3.5 sales per month.

4.1.5 Caledon Bolton Downtown – Mid-Rise Apartment

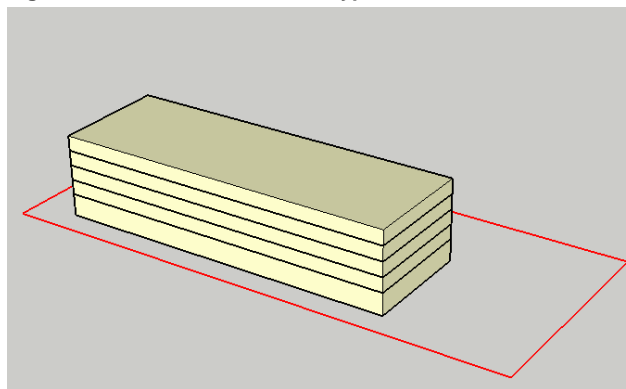
Bolton is Caledon's most populous community with a historic downtown core that has a full complement of local retailers and services with access to several nearby hiking trails and recreational opportunities. The area has a small-town charm while still being in close proximity to larger urban areas. Bolton's existing residential development is comprised predominantly of single-detached homes on the fringe of the downtown core. In regard to higher density formats, there has only been one condominium apartment building developed in Bolton - River's Edge by Armour Heights Developments.

River's Edge is a five-storey and 72 unit adult lifestyle building that targeted more affluent move-down and senior purchasers that began sales in 2007. The majority of units are two-bedroom or larger at an average unit size of 1,128 square feet. The large unit sizes and significant amenity offering (indoor pool, gym, guest rooms, underground parking with car wash, large lobby area, and outdoor landscaped space) is designed to attract local populations that are used to larger living spaces and may require more amenities to be enticed to move to a condominium.

There is a development application for another 5-storey and 73 unit condominium building immediately adjacent to River's Edge that is currently under review by the Town. While this project has not yet begun marketing, it is likely that it will be positioned similarly to River's Edge, targeting move-down and senior households in the local and surrounding area.

We have therefore assumed a prototype that shares similarities with these two projects. The prototype includes a five-storey and 72 unit building on a 1.2 acre rectangular site with an FSI of 1.6. The average unit size will be approximately 1,000 square feet given the target purchaser group. One parking space will be included in the purchase price and an additional space will be available for purchase for \$15,000. Parking will be both surface and underground and be provided at a rate of 1.5 spaces per unit (including visitor parking), which will allow some purchasers to have two parking spaces given the rural context. Due to the large average unit size, it is assumed only 20% of units would qualify as a "small unit" by the Development Charge by-law.

Figure 8: Bolton Mid-Rise Prototype



To understand potential pricing, we have reviewed resale data within the River's Edge project, with units typically selling for under \$700,000 with an index price of between \$610 and \$650 PSF. The units at the higher end of the range took multiple months to sell, with one of the units taking seven months to sell. This indicates that while demand exists at this pricing level, the

market depth is shallow. It therefore appears it would be difficult to market 72 units at a price above \$600 PSF and maintain a healthy absorption rate. We therefore assume an average index price of \$575 PSF, which should result in an absorption rate of 2 sales per month with an average index price of \$575,000.

4.1.6 Caledon Mayfield West – Single-Detached Homes

The Town of Caledon has experienced strong low-density residential housing development through greenfield subdivisions over the past decade. Low-density housing starts in the Town averaged just over 465 units per year between 2010 and 2014, which has increased to an annual average of nearly 610 new units since this time. At the time of our survey, there were seven actively marketing projects in the Town currently selling single-detached homes. In total, there were 1,236 total single-detached lots within these projects, of which 90% were sold, meaning there were only 125 units available for sale. It is noted that most of these projects have a combination of single and semi-detached homes as well as townhomes available for sale.

The Mayfield West area had the largest concentration of actively marketing single-detached projects in Caledon. Three of the seven projects were located in this area, totaling 892 lots (about 70% of the total lots). While there are a wide variety of single-detached homes available for sale in the market, the most popular offering by far is a 36 foot lot ranging in size between 2,300 and 2,950 square feet.

We have therefore assumed a 2,650 square foot single-detached home on a 36 foot lot as the prototype. The subdivision will contain 40 total units and will require 2.0 hectares of land at a density of 20 units per hectare. The project will require on-site parkland dedication of 5% of the lot area and approximately 275 metres of local roads (assumes each home is 36 feet * 40 units = 1,440 feet; assume 2 units on each side of the street and a 25% gross up = 900 feet or 275 metres). We assume pricing would start at \$415 PSF, which result in an end-price of just under \$1.1 million. This pricing would be directly comparable to the Stowmarket Springs subdivision (similarly sized 36 foot lot homes) currently marketing in Mayfield West as well as other competitive projects in Caledon. This pricing would likely support an absorption rate of 2.5 sales per month.

4.2 Analysis

4.2.1 Methodology

NBLC has prepared a financial analysis for each of the prototype development concepts. The methodology utilized in our analysis is a Residual Land Value (RLV) model, which was detailed in Section 3.3 of this paper (**Figure 3**). The objective of the model is to establish a site's estimated land value, assuming a developer requires the current market return rate of 15% profit on gross revenue. This model accounts for all potential revenue attributed to the project and then subtracts all development costs and the developer's profit. The remaining amount is referred to

as the residual land value, which is then discounted to the present day. To show evidence of financial feasibility, we seek to illustrate if a development would meet the following two tests:

1. a developer could earn a target profit of 15% of gross revenues; and,
2. the residual land value derived is equivalent to current market land values.

Regarding the second test, NBLC has surveyed land transactions within the City of Mississauga and Town of Caledon for low, medium, and high-density development (**Appendix C**). The results of the financial analysis will be evaluated relative to these comparable land transactions.

It is important to note that there are situations where a project might not meet the above tests, but a developer would still move forward with the development. This includes a situation where a land owner may already own a property and has capitalized the original cost from its former use as a retail site or some other venture. In these cases, where there is no effective land cost, the combined profit and land value return may still encourage investment.

4.2.2 General Assumptions Common to All Case Studies

The following assumptions are utilized for all of the case studies evaluated. Other site-specific assumptions for each development concept are detailed separately within each pro forma analysis (**Appendix E**):

- The net to gross efficiency is 85% for apartments and 100% for stacked townhomes and single-detached homes.
- A discount rate of 7% is used for all case studies in Mississauga. A slightly higher discount rate of 8% is used for the apartment in Bolton and a slightly lower discount rate of 6% is used for the Caledon subdivision to reflect the different market conditions and overall risk.
- The developer has a target profit of 15.0% of gross revenues.
- Above and below grade hard construction costs are generated using the Altus Construction Cost Guide for 2019; landscaping, contingencies, and other related costs are calculated separately. Local roads and site servicing costs are also calculated using the Altus Construction Cost Guide based on the length of roads within the project, which includes the costs of underground storm, sewer, water, electrical, street lighting, earthworks, curbs, asphalt, and sidewalks.
- Soft costs include all the other costs a developer encounters when developing real estate, such as consulting fees, Development Charges, HST, marketing and sales commissions, and other similar items. These costs are estimated/calculated as per the assumptions detailed in the model.

- The analysis accounts for only the costs and revenues associated with the residential GFA of the project.
- Development Charges are based on the current rates in both Caledon and Mississauga.
- Cash-in-lieu of parkland is \$9,520 per unit for the Mississauga apartment case studies as per the City's current policy. The apartment in Bolton requires a cash-in-lieu payment of 1 hectare per 300 units, with the payment based on the residual land value of the site at the time of permit. The subdivision will include on-site parkland dedication of 5% of the total site area.
- Revenues and costs are inflated by 2% annually. We assume pricing will increase by 3% at the start of construction (for the remaining 30% of suites) and again at construction completion (for all remaining units as calculated by the absorption rate).
- We assume no Section 37 contribution in any of the case studies. Due to the uncertainty associated with the ultimate payment of Section 37, we have not included a cost in the financial model. This does not mean that a payment or other community benefit would not be required. Of note, the policy context in Mississauga City Centre does not provide the City with an avenue to request a Section 37 agreement.
- Parking and lockers are assumed to be saleable for the condominium in Mississauga City Centre and Port Credit only.
- Parking can be accommodated below grade, and no extraordinary costs are incurred in the construction of any underground parking facility.
- All projects are either condominium or freehold in tenure and approvals will be granted for the proposed development concepts.
- We assume all case studies will require a zoning by-law and Official Plan amendment. Applications will also require all other standard applications where applicable (e.g. site plan, subdivision, DARC, Region of Peel review fee, condominium, building permits, etc.).
- We assume that there are no environmental remediation costs incurred by the developer aside from typical demolition and/or site preparation.
- All condominium apartments require a pre-sale of 70% prior to construction beginning.

4.3 Results of the Financial Analysis

Table 1 illustrates the results of the financial analysis for each case study. The full pro forma, including a detailed list of all assumptions and calculations, is available in the appendix of this report. The following describes some of the findings from the analysis.

4.3.1 Mississauga City Centre and Port Credit High-Rise Condominium Apartments

Both the Mississauga City Centre and Port Credit markets support high pricing levels as well as a relatively healthy pace of sales. The revenue associated with each project supports a very healthy land value within the Mississauga market once project costs and developer profit is accounted for. The Port Credit scenario supports a land value of \$8.25 million, which is approximately \$80 per square foot of gross buildable GFA, or nearly \$85,000 per unit. The Mississauga City Centre case study supports land value of \$18.0 million, which is approximately \$64 per square foot of gross buildable GFA, or around \$48,500 per unit.

The Port Credit case study results in a higher land value than the Mississauga City Centre prototype on a per square foot and per unit basis due to the following:

- The assumed market pricing is higher on a per square basis for the Port Credit case study;
- The Port Credit case study has lower softs costs:
 - The Development Charges paid, on a per square foot basis, is lower due to the fact that the Port Credit case study incorporates a larger average unit size. There are therefore less units in the Port Credit case study, which results in a lower total Development Charge payment, notwithstanding the fact that there are a lower proportion of units that qualify as a small unit.
 - Similar to the above, the cash-in-lieu of parkland payment is lower for the Port Credit case study because there is a lower unit yield in the building due to the larger unit size. Cash-in-lieu of parkland is currently paid on a per unit basis.
 - Finally, the modest building size and steady absorption rate results in a shorter development timeline for the Port Credit scenario relative to the City Centre prototype. This reduces financing and other carrying costs as well as the period over which the residual land value is discounted.

Reviewing land transactions for high-density residential development in the City of Mississauga (Appendix C), both case studies evaluated here appear to be viable. For example, the Tanu Condominium property in Port Credit sold for \$56 per square foot of buildable GFA (\$56,100 per unit) in 2017. Similarly, multiple land transactions in Mississauga City Centre have ranged from \$17 to \$95 per square foot of buildable GFA (\$15,000 - \$84,000 per unit) over the past two years.

These land values are also higher than the value that would be supported by lower intensity uses in most situations (e.g. retail property, single-storey commercial services, employment use). It is therefore possible that higher costs could be absorbed (effectively reducing the land value of the projects) with project viability being impacted.

Table 1: Summary of Financial Results						
	High-Rise Apartment Mississauga City Centre	High-Rise Apartment Port Credit	Mid-Rise Apartment Dundas Corridor	Stacked Townhomes Erin Mills	Mid-Rise Apartment Bolton	Single-Detached Homes Caledon
Development Stats						
Site Area (sq.ft)	42,679	20,721	59,201	36,597	52,291	215,278
Site Area (acres)	0.98	0.48	1.36	0.84	1.20	4.94
Building Height (storeys)	35	15	5	3	5	2
Total Number of Residential Units	372	97	95	39	72	40
Total Gross Floor Area (sq.ft)	282,531	102,881	89,609	32,938	85,250	106,000
Net Saleable Area (sq.ft)	240,151	87,449	76,168	32,938	72,463	106,000
Net to Gross Efficiency	85%	85%	85%	100%	85%	100%
Total Parking (Visitor + Resident)	298	121	105	43	109	Parking included in the garages / driveways of homes
Surface Parking	0	0	39	5	34	
Below Grade Parking	298	121	66	38	74	
Parking Ratio	0.80	1.25	1.10	1.10	1.50	
Development Timeline (years)	6.2	5.1	5.6	4.4	5.9	2.8
Suite Mix						
Small Unit	50%	25%	50%	30%	20%	0%
Non-Small Unit	50%	75%	50%	70%	80%	100%
Average Unit Size	645	900	800	850	1,000	2,650
Project Revenue						
Residential Index Price at Project Launch (per sq.ft.)	\$800	\$850	\$650	\$600	\$575	\$415
Average Sale Value at Project Launch	\$516,000	\$765,000	\$520,000	\$510,000	\$575,000	\$1,099,750
Sale Value of Parking	\$35,000	\$35,000	\$0	\$0	\$0	\$0
Sale Value of Storage Locker	\$4,000	\$4,000	\$0	\$0	\$0	\$0
Total Project Revenues (sale of units + parking and storage lockers, interim occupancy charges) (Future\$)	\$214,342,309	\$82,738,992	\$52,402,106	\$20,762,633	\$44,177,634	\$46,740,583
Per Square Foot (Gross GFA)	\$759	\$804	\$585	\$630	\$518	\$441

Table 1: Summary of Financial Results						
	High-Rise Apartment Mississauga City Centre	High-Rise Apartment Port Credit	Mid-Rise Apartment Dundas Corridor	Stacked Townhomes Erin Mills	Mid-Rise Apartment Bolton	Single-Detached Homes Caledon
Project Costs						
Total Hard Costs (Future\$)	\$87,731,403	\$34,775,466	\$22,707,550	\$7,761,453	\$22,132,557	\$20,316,697
Total Soft Costs (Future\$)	\$72,373,396	\$26,000,846	\$17,890,258	\$7,130,924	\$15,032,918	\$14,672,408
Total Development Costs (Future\$)	\$160,104,799	\$60,776,311	\$40,597,808	\$14,892,376	\$37,165,475	\$34,989,104
Per Square Foot (Gross GFA)	\$567	\$591	\$453	\$452	\$436	\$330
Land Value						
Total Residual Land Value and Profit (Future\$)	\$54,237,510	\$21,962,681	\$11,804,298	\$5,870,257	\$7,012,160	\$11,751,479
Developer Profit (Future\$)	\$26,870,007	\$10,342,984	\$6,926,638	\$2,744,077	\$5,839,006	\$6,195,802
Total Residual Land Value (Future \$)	\$27,367,503	\$11,619,696	\$4,877,659	\$3,126,180	\$1,173,153	\$5,555,676
Total Residual Land Value (Present\$)	\$17,993,526	\$8,251,279	\$3,339,058	\$2,321,922	\$747,093	\$4,723,917
per square foot	\$64	\$80	\$37	\$70	\$9	\$45
per unit	\$48,327	\$84,920	\$35,070	\$59,921	\$10,310	\$118,098
per acre	\$18,365,026	\$17,346,386	\$2,456,856	\$2,763,677	\$622,352	\$955,852

4.3.2 Mid-Rise Apartment (Dundas Corridor) and Stacked Townhome (Erin Mills)

The mid-rise apartment has a lower cost base than the high-rise apartments in Port Credit and Mississauga City Centre due to the wood framed construction and incorporation of a mix of surface and underground parking, however the weaker market location along the Dundas Corridor results in lower pricing. This results in a modest supportable land value of \$3.3 million for this case study, which is approximately \$37 per square foot of gross buildable GFA, or around \$35,000 per unit.

By comparison, the stacked townhome prototype supports a land value of \$2.3 million, which is approximately \$70 per square foot of gross buildable GFA or around \$60,000 per unit. The land value is higher than the mid-rise apartment on a per square foot and per unit basis because stacked townhomes are less expensive to construct (lower hard construction cost), the entire GFA is saleable (no common area, elevators, stairwells, etc.), requires less underground parking and the average unit size is slightly larger resulting in less units and lower Development Charges/cash-in-lieu payment (similar to Port Credit discussion).

As noted previously, stacked townhomes are a very popular housing option in the GTHA, and Mississauga specifically. They offer a similar product to mid-rise apartment without the common area amenities, elevators, ground-floor retail, and other features of a condominium apartment. The built-form can therefore be constructed more cheaply than an apartment and will also carry lower maintenance fees, which is attractive to purchasers. The built-form is also more efficient than condominium apartments, as virtually the entire GFA is saleable. These features result in stacked townhomes being very attractive to developers, and also explains why they tend to drive a higher land value than mid-rise apartment buildings.

While stacked townhomes can often be a preferred building type relative to a mid-rise apartment for developers, they may not be appropriate in every situation. For example, stacked townhomes often occur on larger infill sites that are somewhat insular from major roads and include multiple townhome blocks. While they can also front major roadways, like the Dundas Street corridor, municipalities often will not prefer this outcome due to the lack of street animation caused by the absence of ground-floor retail. The units fronting a major road can also be difficult to sell due to noise and other nuisance issues, which might cause the developer to discount the sale price of these units.

A review of land transactions for stacked townhomes in Mississauga indicates that the case study appears to be a viable product in the City. The land value supported by the mid-rise apartment case study also appears to result in a viable project based on a very limited sample of land transactions in the City for mid-rise apartments. However, the land value is much lower than the other Mississauga case studies, indicating that if higher costs erode the land value any further, it is very possibly that a developer would not be able to purchase land in the market to build the project. Further, relative to the high-rise case studies, the profit associated with the mid-rise

apartment is much lower, which further explains why developers have pursued high-rise sites over modest infill apartment opportunities.

4.3.3 Mid-Rise Apartment (Bolton)

Much of the commentary related to mid-rise apartments remains constant between Mississauga and Caledon. Due to the relative affordability of the ground-oriented housing in Caledon, apartments and stacked townhomes have not been a major component of new housing development in the Town. The only apartment building constructed in Caledon, as well as the single application for a new apartment in Bolton, are targeting an older population and therefore elevator access and a strong package of common amenities are required for any project.

Relative to the mid-rise apartment along the Dundas Corridor, the case study in Bolton supports a much lower land value of \$750,000 or approximately \$9 per square of buildable GFA or nearly \$10,500 per unit. While the higher parking ratio results in higher hard construction costs compared to the Dundas Street case study, the soft costs in Bolton are lower due to the large overall unit size assumption (see similar discussion in Section 4.3.1). The cash-in-lieu of parkland payment is also lower in this prototype relative to any of the other case studies because the payment is based on 5% of the value of the land at time of permit; the value of the mid-rise apartment site is modest.

The land value will only result in a viable project if a developer could acquire a development site at the \$9 per square foot / \$10,500 per unit. Currently, this would likely be challenging in the market, albeit not impossible. It is also worth noting that at this land value, other lower intensity uses would compete (gas station, retail, etc.). Any further increase in costs, relative to changes in market pricing, would significantly challenge the viability of mid-rise apartments in Caledon due to downward pressure on the residual land value.

4.3.4 Single-Detached Homes (Caledon)

Finally, single-detached homes remain a strong development option where developable greenfield lands are available in the GTHA. Caledon is no different in this regard, where developers are able to charge a healthy price for new homes as supported by the market. Unlike condominium apartments, there is no market pressure to reach the 70% sales threshold in order to receive construction loan financing. Rather, homes can be built as they are sold and site servicing becomes available.

Construction costs are relatively modest relative to other development forms and pricing is high, as driven by the market. This results in strong pricing and strong residual land values. The residual land value supported by this development concept, which includes a 5% on-site parkland dedication, is approximately \$4.7 million or \$955,000 per acre. The price per acre of low-density land transactions in Caledon have varied widely over the past two years, ranging from under

\$100,000 per acre to nearly \$1.7 million per acre. In areas where market pricing is higher, the value of low-density land can greatly exceed this.

4.4 Observations from the Case Studies

The financial analysis illustrates the economic discussion from Section 3 of this paper. Developers will undertake a significant amount of research to determine what they can build on a property and the eventual highest and best use by accounting for all project revenues, which is based on market conditions, and then subtract all development costs and their required profit to arrive at a land value that they can afford to pay to acquire the development site. In situations such as Port Credit and Mississauga City Centre, as well as stacked townhomes in Mississauga and single-detached homes in Caledon, pricing appears to support a land value that exceeds lower intensity uses. If development costs were to increase, which would negatively impact the residual land value, it is likely that developers would still be able to purchase land in the market assuming the magnitude of impact is not overly punitive.

In other situations, such as mid-rise apartments in Mississauga and Bolton, the residual land value is lower due to lower project revenue as determined by the local market conditions and the built-form. The economics of building these types of projects are already marginal in some cases, and if costs were to increase quicker than market pricing looking forward, the viability of implementing the project will erode even further.

Figure 9 illustrates how total project revenues are broken out as a proportion of individual components (e.g. hard construction costs, soft development costs, developer profit, and the residual land value). As noted previously, if the land is purchased below the supportable land value, the excess project revenue will be absorbed by profit. As demonstrated by **Figure 9**, and consistent with the economic commentary found throughout this report, the developer's profit remains consistent amongst all case studies. Profit is noted at 13% of total project revenue, rather than the 15% threshold identified, because profit is calculated on the sale of units only, net of HST. Once HST is removed from the purchase price, profit is calculated based on 15% of the remaining amount. Profit is also not calculated on revenue from other sources such as parking or storage locker sale.

The hard construction costs as a proportion of total project revenue ranges from 37% for the stacked townhomes (lower construction costs, relatively high sales values) to 50% for the mid-rise apartment in Bolton (moderate construction costs, relatively low sale values). The other case studies range from 41% to 44%. Soft costs were relatively similar for all case studies, ranging from 31% to 34%. Finally, the land values varied widely, from only 3% in the Bolton apartment case study to 15% for the stacked townhome. As noted, the land value is a direct reflection of project revenues and costs.

Figure 10 isolates the soft development costs for each case study, highlighting the seven largest items in this category. HST (with the rebate accounted for) and Development Charges are by far the largest soft costs, representing roughly half of total project soft costs across the case studies.

In addition to Development Charges and HST, construction financing, sales commissions, consultant fees and cash-in-lieu of parkland make up the majority of remaining soft costs. As noted, the subdivision will provide on-site parkland dedication (at a cost), but will not pay cash-in-lieu. The remaining 13%-15% of soft costs are made up of various other items such as property taxes, building permit and development applications, project/construction management, and others.

The proportion of each soft cost fluctuates between the case studies because the total soft costs are not identical. The fluctuation is also observed due to the following:

- The proportion that Development Charges make up of total soft costs is dependent on the average unit size and overall number of units in the project as well as the number of units that might qualify as a “small unit” by the Development Charges by-law.
- HST costs will also fluctuate based on the unit purchase price and calculated rebate (also assessed based on the unit sale value).
- Financing costs will fluctuate based on the overall development timeline, which is why the two high-rise projects have higher financing costs than the small subdivision and stacked townhome project.

Overall, this analysis illustrates that government imposed fees on development, especially HST, Development Charges, and cash-in-lieu of parkland, represent a significant proportion of the total soft costs of delivering new housing.

Figure 9

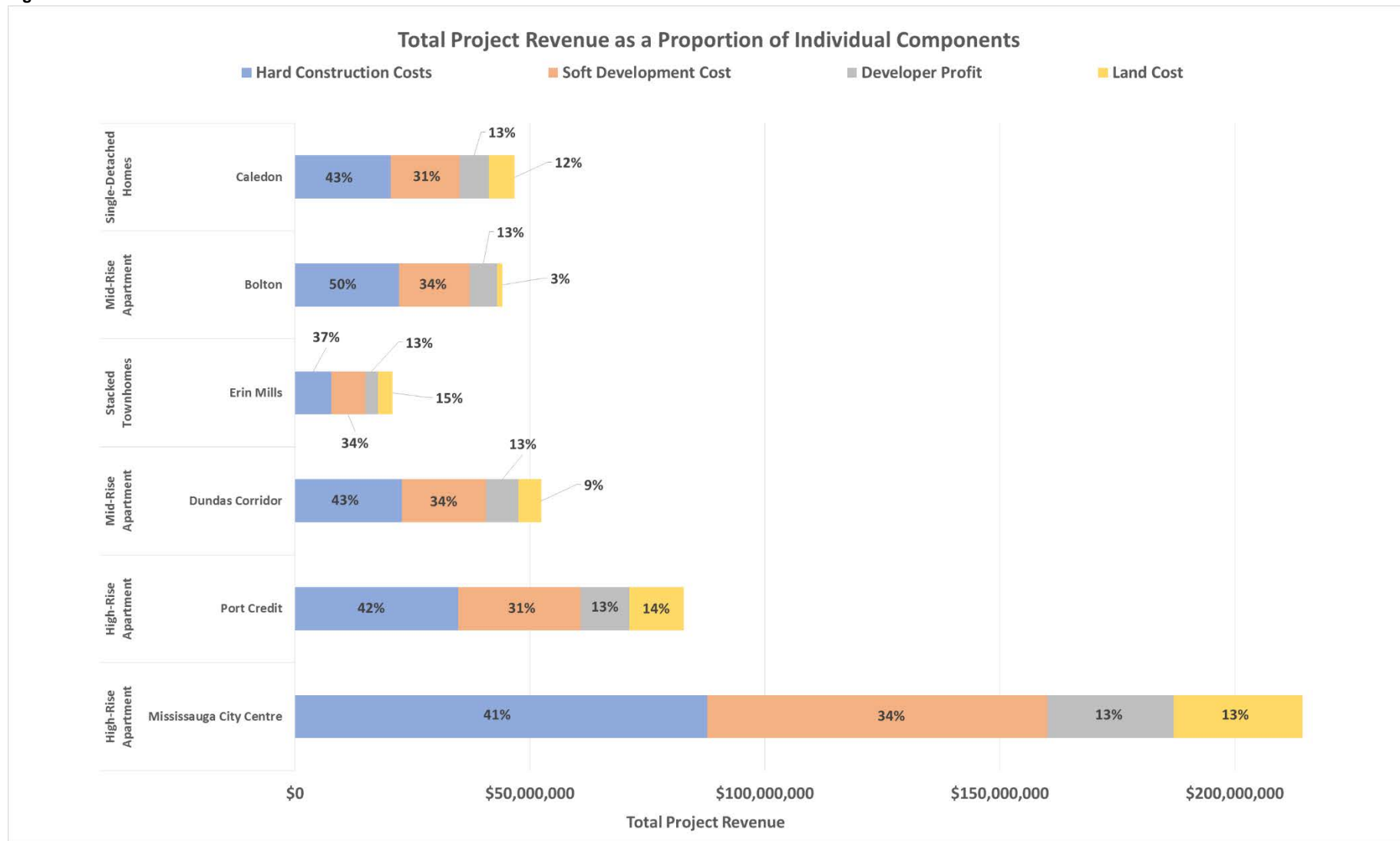
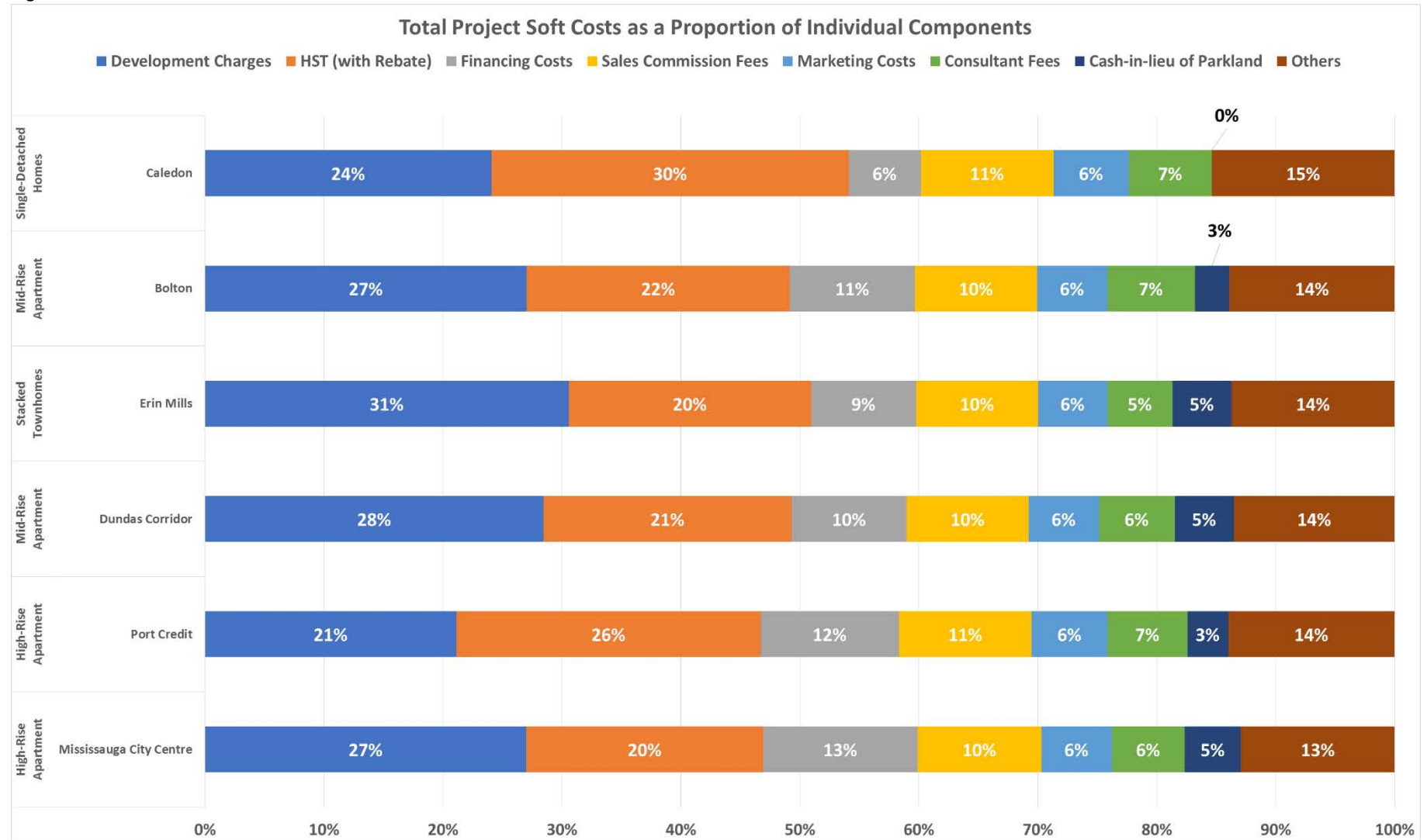


Figure 10



5.0 Discussion Questions and Conclusions

5.1 Do Development Costs Impact Housing Prices?

As discussed throughout this paper, there is a common misunderstanding that the cost of constructing new housing determines the price at which new housing can be sold, and that any new development costs introduced due to government policy can be “passed on” to the buyer through higher sale prices. Though related, the market that determines the price of a home (i.e. the market of willing buyers and sellers), is fundamentally distinct from the market that determines the cost of development.

Developers and/ or owners will charge the maximum rent or sale value for a home that the market can bear at any given time, irrespective of the cost of constructing the home in the first place. In free markets, these prices are established by the characteristics of supply and demand. Developers spend a considerable amount of effort analyzing local supply and demand conditions to determine the maximum sale price the market will absorb. This underpins the principle of the “willing buyer and seller”. As illustrated in this report, the nature of supply and demand supports different pricing levels in different areas. If costs were the major determinant of housing prices, we would observe similar pricing for housing across a region.

If the market does support an increase in the price of new homes, developers are likely to increase pricing regardless of any change in costs. This is often observed in housing projects, where the price of homes in a project increase over the sales period. The price increase is often supported by natural appreciation in the market, as well as increased demand due to a project beginning construction and therefore limiting a purchaser’s risk and the time they must wait to occupy a unit. Developers will respond to shifting market conditions and adjust pricing, regardless of any shift in construction costs. To further exemplify this economic reality, if development costs decreased by 10%, but the market supports a price increase, developers are not likely to reduce or even maintain the price of homes in their project. Rather, it is likely that they will increase the sale value of homes, as supported by the market.

Development costs do not therefore come into consideration when pricing new homes. As discussed in this paper, development costs and the developer’s required profit is subtracted from the estimated revenue of the project to determine how much the developer can afford to pay for the development site. If the sale value of homes as determined by the market does not allow a developer to meet their profit expectation and/or purchase land in the market, they are not able to build the project and will search for another development opportunity. In situations such as these, developers cannot simply increase pricing beyond what the market can support to offset development costs.

5.2 How Do Rising Development Costs Impact a Housing Project Where Land Has Already Been Purchased and/or Begun Sales?

The only exception to the economic discussion in the previous commentary is situations where developers have already purchased a development site and have presold units, but have been unable to obtain a permit before the rate increase occurs (e.g. Development Charge). In this situation, the burden of the increased fee must either be covered by the purchaser or by the developer. Most pre-construction projects “cap” the purchaser’s exposure to rising Development Charges, however some do not. In these situations, the purchaser will be responsible for covering all or a portion of the increase in Development Charges at the time of closing, which in effect increases the cost of purchase. Where the purchaser’s exposure to rate increases are capped, the increase must be shared by the developer, effectively reducing the profit associated with the project.

In situations similar to the above, a housing project could cancel if increased development costs erode a developer’s profit to the point where it no longer makes financial sense to continue. These situations are difficult for developers because they have already purchased a site, begun selling units at market value, but costs have increased significantly beyond original estimations. Rising costs can be due to construction cost increases, the discovery of physical property complications requiring greater effort/costs (e.g. geotechnical issues, archaeological discovery, etc.), rising development related charges (e.g. Development Charges, cash-in-lieu of parkland), and many others. In situations such as this, a project could cancel. There has been several high profile condominium cancellations in the GTHA over the past two years due to rising hard construction costs as well as rising soft costs.

Transition policies that phase in increased Development Charges and other development related charges are often implemented to offset this impact.

5.3 How do Development Costs Affect Overall Housing Affordability Conditions?

Development costs can affect overall housing affordability in two ways:

First, if development costs exceed the market value of housing, developers will not invest and supply will not be created. As discussed throughout this report, this is due to rising costs eroding the supportable land value of a project below the threshold where developers can acquire land in the market and make an attractive profit. If supply falls below demand, affordability of all housing supply (new and resale) will increase. Pricing will increase in this situation because there will be a larger pool of willing buyers (demand) competing for a relatively smaller number of homes (supply). However, if market pricing supports land values that well exceeds the value of other competing uses (retail, gas stations, low-density residential, etc.), there should be no impact to the viability, pricing, and supply of residential development. In these situations, developers will continue to purchase developable land in the market and charge purchasers an

amount that is supported by local supply and demand conditions. It is noted that NBLC has not assessed the impact of the proposed Development Charge rates on development viability.

Second, it is acknowledged that if development costs were lower, it would be possible for some new development to proceed at “lower” pricing. For example, there are many communities in Peel Region that currently do not support viable development. This is due to the fact that the local supply and demand conditions do not support pricing that is able to cover all development costs (including land purchase) and produce an attractive profit. It is possible that if development costs were lower, some of these projects would be able to move forward with lower relative pricing. It is important to note that the lower pricing levels are still determined by the market.

The above is a critical consideration. The economics of development are such that if the achievable home price of a project does not cover all development costs, the project will not be built. The developer will instead seek another development opportunity that displays greater evidence of viability. This practice will result in only projects located in strong market areas being able to move forward, which is generally what is observed in the market currently. This has the effect of limiting the number of more affordable housing options being supplied to the market in new development. Notwithstanding the previous point, the active supply of housing will maintain relative affordability across the entire housing market (e.g. existing homes) if demand is being satisfied through new construction.

The impact of lowering development costs to encourage a greater supply of housing at lower pricing is evaluated in the following discussion question.

5.4 Will Reduced Development Related Charges Be Passed Along to Purchasers?

In weaker market areas, where market pricing does not currently support development viability, reduced development costs can result in a project becoming viable. It is therefore possible that a greater supply of housing could be implemented if development costs were lower. However, for projects that do not require lower development costs to move forward, lowering these costs would either increase developer profits or result in increased land values. As illustrated by **Figure 3**, reducing development costs will reduce the amount that is subtracted from project revenues, which will increase the RLV (or be absorbed by profit if land can be acquired for less).

In areas where market pricing already supports a viable project, it is unlikely that developers will pass along the cost savings to purchasers because the development sector is a for-profit industry. Excluding non-profit entities and a small number of for-profit projects that specifically target an affordable market (e.g. rent to own, second mortgage programs, etc.), developers are seeking to maximize profits just like any other for-profit company. In competitive markets, available land will often have competing bids, which requires that developers be aggressive in order to acquire a development site. It is therefore likely that in strong market areas, developers will pass the cost savings through to the land value, which will allow them to bid higher for the land. As noted, if

the land is acquired for less, the savings in costs are most likely to be absorbed by the developer's profit.

Building off the above, if development costs are reduced due to decreasing development related charges, such as Development Charges, the municipality will have a funding gap for growth related infrastructure and services that would have to be funded through another avenue, which would likely be property taxes. There would also be no certainty that the reduction in development costs would be passed along to the purchaser, aside from the hope that some new housing would be developed due to the decrease in development costs.

5.5 When Have Municipalities Reduced Development Related Charges?

The waiving or deferring of Development Charges is a common incentive utilized by municipalities in Ontario for the development of affordable housing. The term “affordable housing” is explicitly defined (e.g. rent geared-to-income, 100% of CMHC average market rent, etc.) and is granted to developers that will deliver the housing at the agreed upon “below market” price. These cost savings are directly passed through to the purchaser/tenant, because developers have to build to a predetermined affordability level. Development Charge waivers can be rationalized because the provision of affordable housing is determined to be worth the cost to the municipality. However, it is important to note that this is not market housing.

Some municipalities such as Hamilton have also deployed Development Charge waivers and other incentives to encourage high-rise development in their downtown at market rates. This has nothing to do with affordability directly. Rather, the market simply does not support pricing that results in a viable project, which means that no developer would be able to build without the incentives. Hamilton is attempting to revitalize their downtown, and encourage more housing options, which is why they are offering the program. The City is now considering removing the financial incentive package due to improvements in the market and achievable pricing. Maintaining the incentives when they are no longer required, and without defined affordability targets, will result in increased developer profits and/or land values at the expense of the City.

There are many other examples of municipalities that have introduced financial incentives in Ontario to achieve various policy/planning initiatives.

5.6 Are there any implications for the City of Mississauga's “making room for the middle housing strategy”?

The City of Mississauga has prepared an affordable housing strategy designed to address housing for middle income earners (\$55,000 - \$100,000 annual household salary). The report targets the development of homes priced between \$270,000 and \$400,000 to maintain affordability for these middle income households, which currently do not exist in the market aside from condominium apartments and a limited selection of townhomes. Housing at the above noted price levels is not implemented in the current for-profit market due to the following:

- Developers can charge more for homes, as supported by the market; and
- The modest sale values noted above do not provide enough revenue to cover all development costs (hard and soft costs, land, and profit).

Consideration could therefore be given to waiving, reducing, or deferring development costs (e.g. Development Charges) in exchange for developers delivering housing at an explicitly defined and guaranteed affordability level. This would be a more appropriate response to encouraging the supply of more affordable housing types, relative to reducing development costs for all projects. The most appropriate implementation tool for providing a range of financial and non-financial tools would be through a community Improvement Plan or other similar mechanism. This approach would however result in a funding shortfall that would have to be made up by another revenue source (e.g. property taxes).

5.7 Do Development Charges Affect One Particular Housing Type More Than Others?

The impact of Development Charges on housing type is directly attributed to the revenue associated with the specific project. New single-detached homes anywhere in the GTHA are priced very high relative to other housing forms. Low-density housing types are therefore often able to absorb the higher Development Charge with less impact to the project's viability. This is also true for apartments in strong market areas, where market pricing is high relative to the Development Charge. Given that single-detached homes will often achieve a higher price than a semi-detached home, but both forms will be charged the same amount, the Development Charge will impact the lower value unit more.

On the other hand, apartments in weaker market areas will achieve lower overall project revenue but be charged the same applicable Development Charge as a building in a strong market area. This is illustrated in the case study analysis, where Development Charges account for roughly 7%-8% of total project revenue in the Port Credit and Caledon (subdivision) case study and between 9%-10% for the others. This trend is also generally observed when viewing Development Charges as a proportion of the average sale value of new homes in Mississauga and Caledon, where Development Charges account for only 5.5% of the price of a new single/demi-detached home in Mississauga and 11.5% of the price of a new single/semi-detached home in Caledon.

The impact will also depend on how many units are in the development, the size of units and qualification as a small unit by the Development Charges by-law, and when the charge is ultimately paid.

5.8 Is There a Significant Difference in Impact Depending on How Rates are Applied (e.g. per square foot, per hectare, etc.)?

Currently, Development Charges are applied on a per unit basis. From a high-level perspective, there is no evidence to suggest that the impact of Development Charges would increase or decrease if they were charged based on another metric, such as property or unit size. The Development Charge rates are determined by estimating all capital costs and other items eligible to be funded through the *Development Charges Act*. The charge is then determined by converting the total required revenue to a per capita charge, which is then converted to a variable charge by housing unit type based on unit occupancy factors (see section 2.1.1). While the application of how the charge is applied could shift, ultimately the total amount that the City is attempting to recover from new development will not change.

Currently, the City's Development Charges favour projects that incorporate larger units over more affordable smaller units. **Table 2** illustrates this finding for a hypothetical 100,000 square foot apartment building. The example highlights two scenarios, one where the average unit size is low (675 square feet) and one where the average size is larger (900 square feet). The first scenario results in more units due to the smaller unit size, where 50% will qualify as a small unit relative to only 20% in the other scenario. Due to the fact that there are more units in the first scenario, and the fact that the gap between the small unit and apartment charge is not excessive, the first scenario will pay almost 20% more in Development Charges. Of note, **Table 2** does not include the City's stormwater management charge.

Table 2

Example of Development Charges Paid for a Hypothetical Apartment		
Building Size - Gross (square feet)	100,000	
Building Size - Net (square feet)	85,000	
Development Charge - Apartments (per unit)	58,382	
Development Charge - Small Units (per unit)	40,528	
	Scenario 1	Scenario 2
Average Unit Size	675	900
Unit Yield	126	94
% Small Unit	50%	20%
Total Development Charge Paid	\$6,227,635	\$5,176,579
Development Charge Paid (per square foot)	\$62	\$52

Shifting the Development Charge to a per square foot bases can address the situation noted in **Table 2**. It would also address the low-density issue noted previously, where a smaller and less expensive semi-detached home would be charged the same as a more expensive and larger single-detached home. At the same time, many municipalities desire more family-sized units in apartment buildings, which the current Development Charge context appears to indirectly support.

It is noted that the current *Development Charges Act* does not currently allow for the residential charge to be applied by gross floor area (GFA) due to a lack of nexus between GFA and household size / demand for services.

5.9 Does the Timing of When Development Charges are Charged Have an Impact on Housing Costs?

The timing of Development Charges can have an impact on the cost of delivering housing. While most municipalities will require Development Charges to be paid at the time of building permit, some municipalities in Ontario have deferred the payment until a later date. The period of deferral varies widely, however many municipalities requiring payment upon completion of the project. Some municipalities will offer lengthier deferrals in exchange for affordable housing.

The deferral of Development Charge payment can result in cost savings for a developer, who otherwise would be required to pay the charge out of pocket or through financing at the time of building permit and therefore prior to receiving revenue from the sale of units. Deferring the payment allows a developer to avoid financing costs or out of pocket expenses, instead paying the charge with revenue received from the sale of homes. The impact of a deferral will vary, as high-rise projects with longer development time periods between building permit and project completion will benefit more than a smaller project. Similarly, many subdivision projects in Caledon are required to pay some Development Charges at the time of draft plan approval. The period between draft plan approval and project completion can be lengthy.

5.10 What Is the Impact Of Rising Cash-In-Lieu Of Parkland Charges?

As noted, cash-in-lieu of parkland is another development related charge encountered by the development industry. The charge is a measureable proportion of total project soft costs, ranging between 3%-5% of total soft costs in the Mississauga case studies evaluated. If the cash-in-lieu rate were to increase, this would be treated no differently than any other cost increasing as discussed in this report. The ultimate result of increasing soft costs would place downward pressure on land values, which depending on the specific market characteristics of the property, could negatively impact project viability. However for other projects where viability is not impacted, the increase in costs is absorbed by the land value (i.e. purchase price of land) with no impact to the sale price of homes, assuming supply and demand conditions are not significantly affected.

5.11 Overall Conclusions

Ultimately, developers and/ or owners will charge the maximum rent or sale value for a home that the market can bear at any given time, irrespective of the cost of constructing the home in the first place. If the maximum price supported by the market does not produce enough revenue to cover all development costs (including the purchase of land and an attractive profit), the developer will not build the project.

If development costs increase, which can be due to a variety of factors, developers will discount the amount they pay for a development site. The land value is negatively impacted because other elements of the equation (**Figure 3**) are generally fixed: the sale price of homes cannot exceed what the market of willing buyers are willing to pay and a developer is generally unwilling to reduce their required profit expectation. Understanding that developers are already charging the maximum the market will support (and are likely to increase pricing if the market is supportive regardless of any shift in development costs) clearly illustrates that the only flexible variable in development economics is the purchase price of a development site.

In communities where market pricing supports land values that well exceeds the value of other competing uses (retail, gas stations, low-density residential, etc.), there should be no impact to the viability, pricing, and supply of residential development. In these situations, developers will continue to purchase developable land in the market and charge purchasers an amount that is supported by local supply and demand conditions.

However, if the land value of a residential development site is reduced below the value of other competing uses or below the expectation of a land owner, a developer will not be able to purchase the property and would not be able to build the project. If the viability of residential development is impacted on a large scale, the supply of housing will be reduced as developers will be unable to build new housing. If supply does not meet demand, the price of both new and existing homes will increase, which is a function of basic housing economics (i.e. a large pool of buyers competing for a small amount of space).

The case studies evaluated in this report illustrate this market commentary. Some of the case studies had strong supporting land values such as the high-rise buildings in Mississauga City Centre and Port Credit, Stacked Townhomes in Mississauga, and single-detached homes in Caledon. As such, much of the development occurring in Mississauga and Caledon is dominated by these housing forms. While this report has not evaluated the impacts of the proposed Development Charge increase in any significant detail, it is possible that these types of projects will be able to absorb moderate cost increases without a major impact to project viability (subject to the magnitude of cost increase and other considerations mentioned in this report).

On the other hand, the mid-rise apartments in Bolton and on Mississauga's Dundas Corridor produce much weaker land values and display weaker evidence of project viability. This is not surprising given the fact that this built-form is a modest component of Mississauga's development activity and only one apartment project has ever occurred in Bolton.

To encourage a greater supply of housing targeted to low and middle-income households, such as apartments in modest market areas, consideration can be given to waiving, reducing, or deferring development costs (e.g. Development Charges) in exchange for developers delivering housing at an explicitly defined affordability level through a Community Improvement Plan or other similar mechanism. Reducing development related charges for all development projects is not

recommended as projects that do not require the incentives would absorb the cost savings through increased profit and/or by paying more for a development site. There would be no guarantee that the savings in costs would be passed on to purchasers and the City would lose Development Charge revenue that would have to be funded through another source such as property taxes.

Appendix A: Case Study Built Form Analysis

Case Study #1: High-Rise Apartment in Mississauga City Centre

Mississauga City Centre serves as Mississauga's downtown and is one of the city's most vibrant and urban communities. The area offers a variety of retail services at Square One Shopping Centre as well as an art gallery, performing arts centre, post-secondary institution and recreational centres. City Centre also provides access to local and regional transit via the Square One Bus Terminal and the Cooksville GO Train station. In addition to the abundance of services and amenities, City Centre also hosts community festivals and displays of public art at Celebration Square, which contributes to the area's desirability.

Over the past two decades, Mississauga City Centre has experienced a proliferation of high-rise residential activity primarily in the form of condominium apartments, which contrasts with the existing stock of older purpose-built rental apartment buildings and ground-oriented housing in the surrounding area. The majority of the new high-rise development activity is predominately concentrated around Burnhamthorpe Road West near both the Hurontario Street / Confederation Parkway intersections.

Many of the recent high-rise projects in City Centre tend to have large podiums and are located on large parcels of land with heights exceeding 40 storeys (e.g. Amacon Blocks, Daniels Blocks, M City property). Looking forward, these large properties located away from Hurontario will be in short in supply. We have therefore examined the Edge Towers development as a representative project due to the smaller floor plates and location near Hurontario Street.

Edge Towers is a multi-phase development by Solmar Development Corp. located at the southwest corner of Hurontario Street and Elm Drive. The first tower opened in October 2017 and is currently in pre-construction. It will have a 3-storey podium for a total of 35 storeys with 323 units. The podium will have a floor plate of 1,118 m² with a tower floor plate of 750 m² for a total gross floor area ("GFA") of 24,450 m².

The second tower opened in May 2018 and is also in pre-construction. It will also have a 3-storey podium with an overall height of 40 storeys with 422 units. Similar to the first tower, the second tower will have a floor plate of 1,118 m² with a tower floor plate of 750 m² for a GFA of 28,500 m². There is a proposed third tower expected to open at a future date that will have a podium floor plate of 1,197 m² and tower floor plate of 750 m² with a GFA of 36,000 m². The overall floor

Edge Towers 1 & 2

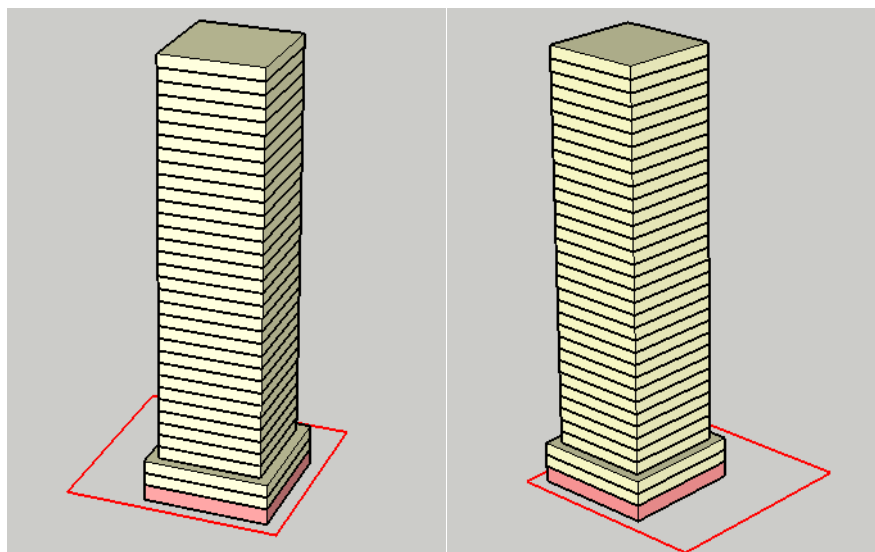


space index (“FSI”) of the development is expected to be 6.9. While newer projects such as M City are proposing over 700 units per building, we believe the building scale of Edge to be a more typical scale to base the prototype on.

The first two towers have similar suite mixes, with approximately 55% of the units being two-bedroom or two-bedroom plus den and 45% being one-bedroom or one-bedroom plus den. The average unit size across both projects is approximately 660 square feet. In addition to the surveyed comparable precedents, NBLC reviewed the January 2013 Downtown Core Built Form Standards (the “Standards”) to determine appropriate setbacks, tower step backs and tower floorplates.

NBLC has assumed the prototype for the Mississauga City Centre to be a 35-storey tower atop a 3-storey podium. Following the recommendations outlined in the Standards and the requirements of By-law 0225-2007, NBLC has assumed that the podium is setback 3 metres from the property line. Furthermore, as outlined in the Standards, a tower floor plate of 750 m² has been assumed and a tower step back of 3 metres to all podium edges. Based on the provided step backs and similar to the Edge Tower developments, the podium has a floor plate of 1,124 m². The ground floor height is assumed to be 4.5 metres for commercial uses and all residential floors have a floor height of 3.5 metres, for a total building height of 123.5 metres.

To arrive at a lot size, NBLC has assumed the FSI of the prototype would be 6.9, which is the overall FSI for the Edge Tower development. Based on an overall GFA of 27,372 m², the site area for the prototype is 3,965 m² (.98 acres). NBLC has assumed an average unit size of 645 ft². The smaller unit size is based upon the observed trend within the Edge towers and other projects in the area. It is assumed that no units will be located on the ground floor and the building will achieve a net to gross efficiency of 85%, therefore the unit yield is 372 units. It is assumed that there will be a fairly even split between 1-bedrooms and 2-bedroom unit types at 45% and 55% respectively. Parking is assumed to be underground.



Development Statistics for Prototype - Mississauga City Centre								
Floor	# Floors	Height (m)	Avg. Floor Plate Size (m2)	Average Unit Size (sf)	# of Units	Total GFA (m2)	Lot Area (m2)	FSI
Precedents								
Edge Tower 1	35	-	937	690	323	24,450	3,543	6.90
Edge Tower 2	40	-	937	641	422	28,500	4,130	6.90
Totals/Average:	38	-	937	660	373	26,475	3,837	6.90
Prototype								
1	1	4.50	1,124	-	-	1,124	-	-
2-3	2	7	1,124	645	32	2,248	-	-
4-35	32	112	750	645	340	24,000	-	-
Totals:	35	123.5	999	645	372	27,372	3,965	6.90

Source: N. Barry Lyon Consultants Limited

Case Study #2: High-Rise Apartment in Port Credit

Port Credit is a highly desirable neighbourhood along Mississauga's waterfront with high real estate values. The area offers a broad range of commercial and retail services along Lakeshore Road East with access to regional GO Rail service and the proposed Hurontario LRT, which all contribute to Port Credit's attractiveness. The area has experienced recent growth in higher density formats with the development of high-rise and mid-rise apartment buildings near the Hurontario Street and Lakeshore Road East intersection, including the 185-unit 'Port Credit Village' townhouse development on the southeast corner.

There are two new condominium projects in Port Credit. The first project, Tanu Condos by Edenshaw Developments, opened in October 2018 and is currently the only actively marketing high-rise project in Port Credit. The project is currently in pre-construction and is expected to be 15 storeys with 192 residential units. The site is located mid-block on Park Street East with a lot area of 3,072 m². The building will have an approximate gross floor area ("GFA") of 19,216 m² for an overall floor space index ("FSI") of 6.26.

The second project, Nola Condos by Fram Building Group and Slokker, opened in May 2016 and is the most recently sold out high-rise project in Port Credit. The project is currently under construction and will be 15 storeys in height with 70 residential units, including two semi-detached homes. The site is located on the southeast corner of High Street East and Ann Street with a lot area of 1,924 m². The lot area of the apartment building, excluding the area for the semi-detached homes, is approximately 1,532 m². The building will have a GFA of 8,231 m² with a 5.37 FSI.

Both of these projects have similar suite mixes, with approximately 60% of units being two-bedroom or larger and 40% being one-bedroom or bachelor. The average unit size across both projects was approximately 950 ft², which is considered large relative to many other market areas in Mississauga and the GTHA for high-rise condominium buildings. These projects are likely targeting move-down and senior purchasers.

In addition to the recent precedents in the local market area, NBLC reviewed the November 2014 Port Credit Built Form Guide (the "Guide") to determine appropriate lot sizes, overall height, building design and maximum tower floorplates. The Guide recommends that a mid-block site

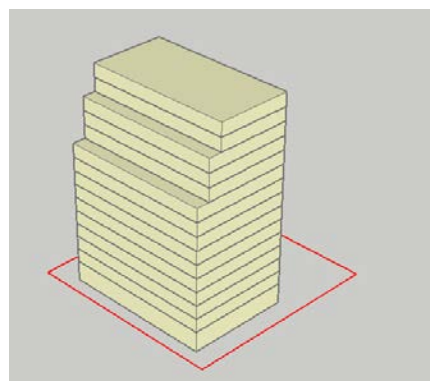
Tanu Condos (Top) & Nola Condos (Bottom)



should be a minimum of 45 metres by 45 metres (2,025 m²), whereas a corner block site should be at least 40 metres by 45 metres (1,800 m²).

Based on the precedents and the Guide, and the limited availability of corner lots, NBLC believes that a 15-storey mid-block apartment building would be appropriate in Port Credit as a representative prototype. Notwithstanding the recommended minimum site area of 2,025 m² for a mid-block property, the precedents provided a slightly smaller site area; therefore, NBLC has assumed a site area of 1,925 m² (.48 acres), which is consistent with Nola Condos. Consistent with the Guide and the precedents, the prototype is setback 3-metres from the front and side property lines with a 23-metre depth from floors 1 to 10 to allow for maximum efficiency. To allow for a mixture of uses on the ground floor, the height of the first floor is 4.5 metres, while the remaining floors are 3 metres in height. To minimize potential adverse impacts to the surrounding neighbourhood, the building steps back 3 metres at floors 11 and 14. The step backs and floors at which the building steps back are similar to those seen in both Tanu Condos and Nola Condos.

Following the recommendations from the Guide, the prototype has a tower floor plate between 540 m² and 730 m². The overall GFA of the prototype is approximately 10,288 m², giving an FSI of 5.37 times the site area. It has been assumed that the prototype will have a similar suite mix to the precedents, with 40% of units being 1-bedroom types, 55% 2-bedroom types and 5% three-bedrooms. We therefore assume an average unit size of approximately 900 ft², which yields 97 total units, assuming no units are on the bottom floor and the building achieves a net to gross efficiency of 85%. Parking is assumed to be underground.



Development Statistics for Prototype 1 - Port Credit								
Floor	# Floors	Height (m)	Avg. Floor Plate Size (m ²)	Average Unit Size (sf)	# of Units	Total GFA (m ²)	Lot Area (m ²)	FSI
Precedents								
Tanu	15	-	1,227	897	192	19,216	3,072	6.26
Nola	15	-	6,413	1,104	70	8,231	1,924	4.28
Totals:	15	-	3,820	952	131	13,724	2,498	5.27
Prototype								
1	1	4.5	730	-	-	730	-	-
2-10	9	27	730	955	63	6,570	-	-

11-13	3	9	636	955	18	1,908	-	-
14-15	2	6	540	955	10	1,080	-	-
Totals:	15	47	659	900	97	10,288	1,925	5.34

Source: N. Barry Lyon Consultants Limited

Case Study #3: Mid-Rise Apartment Along the Dundas Corridor

The Dundas Street Corridor is a major route within the City of Mississauga stretching almost 20 km from Oakville in the west to Etobicoke in the east. Although there are a variety of retail and commercial services along the Dundas Corridor, there is currently limited market appeal for higher density housing. The few mid-rise apartments that have been developed are mainly concentrated near Cawthra Road or Erin Mills Parkway. However, the City has initiated the Dundas Connects master plan to create a planning framework that is intended to encourage intensification and convert the corridor into a mixed-use, transit-oriented route supported with bus rapid transit.

The EV Rolaye Condos by YYZed Project Management and Nurreal Capital is the only actively marketing project along the Dundas Street Corridor. The project opened in November 2016 and is currently in pre-construction. The building is proposed at 7 storeys with 99 units and is located in the Erindale Village neighbourhood. The building proposes a gross floor area (“GFA”) of 12,415 m² with a floor space index (“FSI”) of 3.7 on a site area of 3,480 m² (0.86 acre). The project has a suite mix of approximately 60% two-bedroom or larger units and 40% one-bedroom and one-bedroom plus den units, with an average unit size of 1,183 ft². It is important to note that this project is still in the development approvals process and has not yet been approved.

Park 570 (Top) & Windows on the Green (Bottom)



Given the lack of new mid-rise development along Dundas, NBLC also examined two older mid-rise buildings to help inform a representative built form prototype. The first building, Park 570 by Vandyk Properties Inc., opened in 2010 and is located near the Dundas Street East and Cawthra Road intersection. The building is 4 storeys in height with 180 units. It is located on 11,153 m² (2.8 acre) property with a GFA of 18,816 m² for an overall FSI of 1.69. In regard to suite mix, approximately 55% two-bedroom and two-bedroom plus den units and 45% are one-bedroom and one-bedroom plus den units, with an average unit size of 1,003 ft².

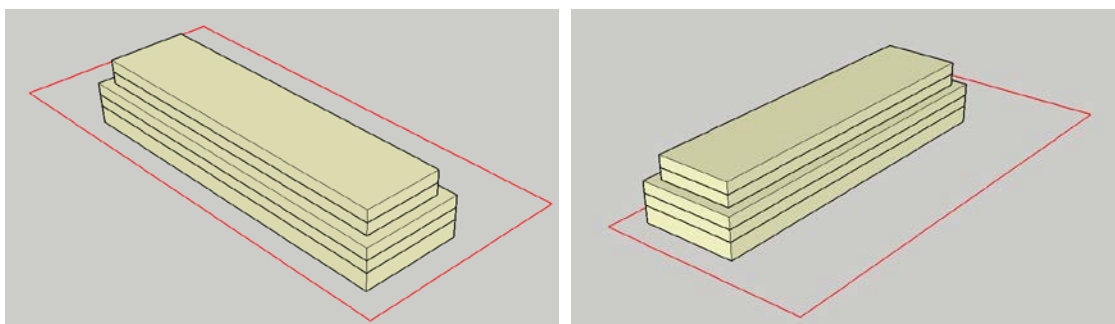
The second building, Windows on the Green by Vandyk Properties Inc. (3170 Erin Mills Parkway), opened in 2012 and is located just north of the Dundas Street West along Erin Mills

Parkway. The building is also 4 storeys in height with 150 units. Similar to the Park 570 building, it is located on a large property with a site area of 10,967 m² (2.7 acres) and an overall GFA of 15,904 m² for an overall FSI of 1.69. This building has a higher proportion of one-bedroom and one-bedroom plus den units (approx. 60%) than Park 570 with remaining 40% being two-bedroom or larger. The average unit size is slightly smaller than the other projects with an average of 945 ft².

After completing a review of the available lots along the Dundas corridor, NBLC has assumed a rectangle lot with an overall area of 5,500 m² (1.4 acre). Based on the lot shape, as well as the vision for Dundas Connects, NBLC believes that a long building (80 metres) fronting onto Dundas is appropriate. Consistent with the Official Plan, the prototype is setback 5-metres from the property line and has allowed for a driveway and some parking to be located above ground to the rear of the building. To allow for maximum efficiency, the depth of the base of the prototype is 23 metres. The ground floor has a height of 4.5 metres with subsequent floors having a height of 3 metres, for an overall building height of 17.5 metres.

In order to arrive at a floor plate, NBLC assumed a similar size floor plates as the buildings in the Dundas / Cawthra area according to the Dundas Connects 3-D mapping illustration. The podium of the building has a floor plate of 1,863 m², and an overall GFA of 5,590m². Above the 3-storey podium, the prototype steps back 3 metres on each side leading to a floor plate of 1,368 m². The overall GFA of the prototype is 8,325 m². The prototype has an FSI of 1.51, which is approximately the average of the two approved projects along Dundas.

Based on the estimated average unit size of 8000 ft², the prototype yields 95 units. It has been assumed that the prototype will have a similar suite mix to the precedents, with 50% of units being 1-bedroom, 45% being two-bedrooms and 5% of units being three-bedrooms. Parking is assumed to be located above ground to the rear of the building, as well as below ground.



Development Statistics for Prototype 1 - Dundas Corridor								
Floor	# Floors	Height (m)	Avg. Floor Plate Size (m2)	Average Unit Size (sf)	# of Units	Total GFA (m2)	Lot Area (m2)	FSI
Precedents								
EV Royale	8	-	-	1,183	96	12,415	3,480	3.57

Windows on the Green	4	-	369	945	154	15,904	10,967	1.45
Park 570	4	-	437	1,003	180	18,816	11,153	1.69
Totals:	5	-	403	951	143	15,712	8,533	2.23
Prototype								
1	1	4.5	1,863	950	12	1,863	-	-
2-3	2	6	1,863	950	36	3,726	-	-
4-5	2	6	1,368	950	26	2,736	-	-
Totals:	5	17	1,698	800	95	8,325	5,500	1.51
<i>Source: N. Barry Lyon Consultants Limited</i>								

Case Study #4: Stacked Townhome in Erin Mills

The majority of actively marketing stacked townhouse projects in Mississauga are large developments consisting of over 100 units that require large properties and therefore not considered appropriate as a representative built form likely to be seen on a significant scale looking forward. Given the lack of recent precedents for infill stacked townhomes in Mississauga, NBLC surveyed two recently approved infill projects located near the Mississauga border within the City of Toronto.

The first project is located at 62 Long Branch Avenue on a 2,114 m² (0.52 acre) lot and proposes two blocks of three-storey stacked townhomes containing a total of 28 units. The proposed gross floor area (“GFA”) is approximately 3,300 m² for a floor space index (“FSI”) of 1.56 times the lot area. The project will consist of only two-bedroom units with an average unit size of 1,270 ft². Parking will be provided in an underground garage.

The second project is located at 400 East Mall and proposes three blocks of four-storey stacked townhomes containing 62 units. The proposed GFA is 4,709 m² with an FSI of 1.02 times the lot area. The project proposes a suite mix of approximately 65% one-bedroom units and 35% two-bedroom units. Parking will also be provided in a single level underground garage.

In addition to the surveyed precedents, NBLC reviewed the Draft Urban Design Guidelines for Back to Back and Stacked Townhouses (the “Guidelines”) as well as Zoning By-law 0225-2007 (the “by-law”).

Based upon the precedents, NBLC has assumed that the prototype will be located on a square lot with an overall area of approximately 3,400 m² (0.84 acre). The two precedents found in Toronto have an average FSI of 1.29 times the property size, however the by-law has outlined a maximum FSI of

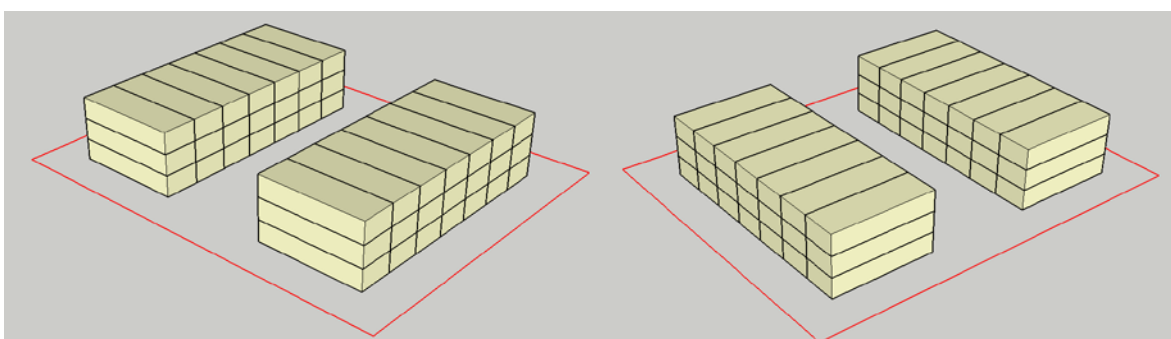
62 Long Branch Ave (Top) & 400 East Mall (Bottom)



0.9 times the site area for stacked townhouses; therefore, this is the density that NBLC has assumed.

The prototype has a front yard setback of 5.5 metres and is consistent with the Guidelines recommendation of 4.5 metres from the side property lines. The block length is approximately 34 metres, which is below the Guide's recommendation of a maximum block length of 41 metres. The two blocks are setback 15 metres from one another, consistent with the Guidelines. Based upon the stacked townhouse projects marketing in Mississauga, NBLC has assumed that the prototype will be 3-storeys in height, for an overall height of 9 metres, which complies with the maximum height of 10 metres set out in the by-law.

Based upon the assumed lot size and the maximum allowable FSI, NBLC has assumed an overall GFA of 3,060 m², which results in an average floor plate of 510 m². According to the Guidelines, the minimum unit width is 4.5 metres, therefore the depth of the prototype is 14.85 metres. Based upon an average unit size of 850 ft², the unit yield is 39 units. Based upon the precedents in Toronto, as well as the active marketing projects, NBLC has assumed a suite mix of 42% 1-bedrooms, 55% two-bedrooms and 3% 3-bedrooms. Parking is assumed to be below grade with some surface spaces. These are single-loaded stacked townhomes.



Development Statistics for Prototype - Stacked Townhouse								
Floor	# Floors	Height (m)	Avg. Floor Plate Size (m ²)	Average Unit Size (sf)	# of Units	Total GFA (m ²)	Lot Area (m ²)	FSI
Precedents								
62 Long Branch Ave.	3	11.7	555	1,270	28	3,301	2,114	1.56
400 East Mall	4	14	514	637	62	4,709	4,600	1.02
Totals:	4	13	535	954	45	4,005	3,357	1.29
Prototype								
Block 1	3	9	510	955	17	1,530	-	-
Block 2	3	9	510	955	17	1,530	-	-
Totals:	6	9	510	850	39	3,060	3,400	0.90
<i>Source: N. Barry Lyon Consultants Limited</i>								

Case Study #5: Mid-Rise Apartment in Bolton

Bolton is Caledon's most populous community with a historic downtown core that has a full complement of local retailers and services with access to several nearby hiking trails and recreational opportunities. The area has a small-town charm while still being in close proximity to larger urban areas. Bolton's existing residential development is comprised predominantly of single-detached homes on the fringe of the downtown core. In regard to higher density formats, there has only been one condominium apartment building developed in Bolton - River's Edge by Armour Heights Developments.

River's Edge is an L-shaped 5-storey, 72-unit adult lifestyle building. It opened in 2007 and is located along the Humber River in the downtown core. The site area is 6,879 m² (1.7 acre) with a gross floor area ("GFA") of 8,879 m² for an overall floor space index ("FSI") of 1.29. About 75% of the building consists of two-bedroom and two-bedroom plus den units with the remaining 25% being one-bedroom and one-bedroom plus den units. The average unit size is approximately 1,128 ft², which is significantly larger relative to many other market areas in Peel Region and the GTHA for mid-rise condominium buildings.

In addition, NBLC examined a development proposal for a new 5-storey, 73-unit residential condominium apartment building located at 50 Ann Street, immediately adjacent to the River's Edge building. The site area is 3,616 m² (0.9 acre) with a proposed gross floor area of 7,001 m² for an overall FSI of 1.94. This proposal is still in the development approvals process and is not yet marketing, so there is currently no available information regarding suite mix and unit sizing.

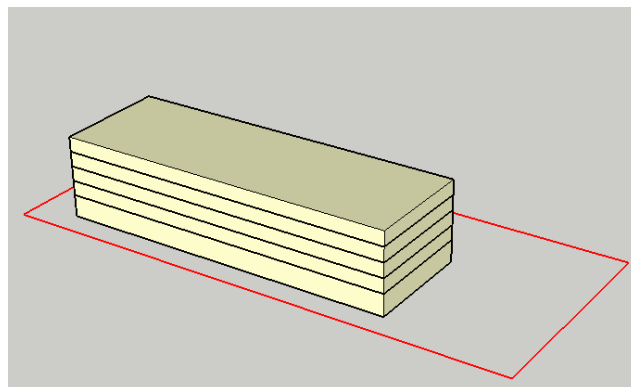
Due to the scarcity of higher density development in Bolton, NBLC has largely based the prototype on the proposed 50 Ann Street development. Additionally, NBLC has consulted the Town of Caledon Official Plan Section 5.10.4.5 "Bolton Settlement Area" to determine the appropriate built form.

Because both precedents found in Bolton are on adjacent blocks of varying size, NBLC has assumed that the prototype will be built on a similar shaped (rectangle) lot of approximately 4,858 m² (1.2 acre). The prototype has a ground floor height of 4 metres with all other floors having a height of 3.5 metres, for an overall building height of 17 metres. The prototype is a 5-storey building with a floor plate of 1,584 m², for an overall GFA of 7,920 m². Based on a property size of 4,858, the prototype has an overall FSI of 1.63.

River's Edge (Top) & 50 Ann Street (Bottom)



NBLC has assumed an average unit size of 1,000 ft², which is the estimated average of the two precedents. Based on the prototype's GFA and the assumed unit size, the prototype has 72 units. Similar to River's Edge and the proposed 50 Ann Street, there will be a mix of surface and underground parking.



Development Statistics for Prototype - Bolton								
Floor	# Floors	Height (m)	Avg. Floor Plate Size (m2)	Average Unit Size (sf)	# of Units	Total GFA (m2)	Lot Area (m2)	FSI
Precedents								
50 Ann	5	20	1,400	877	73	7,001	3,617	1.94
River's Edge	5	20	1,776	1,128	72	8,879	6,880	1.29
Totals:	5	20	1,588	1,002	73	7,940	5,248	1.61
Prototype								
1	1	3.9	1,584	1,000	14	1,584	-	-
2-5	4	13.1	1,584	1,000	58	6,336	-	-
Totals:	5	17	1,584	1,000	72	7,920	4,858	1.63

Source: N. Barry Lyon Consultants Limited

Case Study #6 Single-Detaches Homes in Caledon

The Town of Caledon has experienced strong low-density residential housing development through greenfield subdivisions over the past decade. Low-density housing starts in the Town averaged just over 465 units per year between 2010 and 2014, which has increased to an annual average of nearly 610 new units since this time. At the time of our survey, there were seven actively marketing projects in the Town currently selling single-detached homes. In total, there were 1,236 total single-detached lots within these projects, of which 90% were sold, meaning there were only 125 units available for sale. It is noted that most of these projects have a combination of single and semi-detached homes as well as townhomes available for sale.

The Mayfield West area had the largest concentration of actively marketing single-detached projects in Caledon. Three of the seven projects were located in this area, totaling 892 lots (about 70% of the total lots). While there are a wide variety of single-detached homes available for sale

in the market, the most popular offering by far is a 36 foot lot ranging in size between 2,300 and 2,950 square feet.

We have therefore assumed a 2,650 square foot single-detached home on a 36 foot lot as the prototype. The subdivision will contain 40 total units and will require 2.0 hectares of land at a density of 20 units per hectare. The project will require on-site parkland dedication of 5% of the lot area and approximately 275 metres of local roads (assumes each home is 36 feet * 40 units = 1,440 feet; assume 2 units on each side of the street and a 25% gross up = 900 feet or 275 metres).

Appendix B: Market Data

Surveyed Actively Marketing (New) Condominium Apartment Projects in Mississauga City Centre As of December 31, 2018														
Map ID	Project Name / Developer	Open Date	Con. Status ¹	Storeys	Total Units	Total Units Released	Total Sales	% Sold	Size Range (sf)	Price Range	Avg. \$PSF ²		Avg. Sales/Mo. ³	
											Org.	Curr.	70%	Overall
1	Keystone - West Tower <i>Kaneff</i>	Nov-18	Pre	23	202	202	71	35%	601 - 1,117	\$425,990 - \$745,990	\$715	\$716	-	36.6
2	M3 - M City Condominiums <i>Rogers Real Estate Development Limited and Urban Cap</i>	Oct-18	Pre	81	864	680	449	52%	522 - 1,006	\$420,400 - \$798,900	\$792	\$787	-	184.6
3	Edge Towers 2 <i>Solmar Development Corp.</i>	May-18	Pre	40	422	308	157	37%	492 - 721	\$434,900 - \$616,900	\$773	\$874	-	21.4
4	Edge Towers <i>Solmar Development Corp.</i>	Oct-17	Pre	35	323	323	264	82%	465 - 1,247	\$390,900 - \$1,049,900	\$639	\$844	34.6	18.0
5	Daniels City Centre - Wesley Tower <i>Daniels Corporation</i>	Aug-17	UC	43	503	503	452	90%	458 - 996	\$405,900 - \$709,900	\$602	\$768	85.9	28.1
6	M2 - M City Condominiums <i>Rogers Real Estate Development Limited and Urban Cap</i>	Apr-17	UC	61	797	797	746	94%	446 - 1,310	\$259,900 - \$867,900	\$630	\$660	271.8	37.1
7	M City <i>Rogers Real Estate Development Limited and Urban Cap</i>	Mar-17	UC	60	781	781	748	96%	402 - 1,282	\$245,400 - \$867,900	\$610	\$664	550.6	35.1
8	Grand Mirage <i>Conservatory Group</i>	Feb-16	UC	22	344	344	328	95%	583 - 950	\$459,900 - \$663,900	\$472	\$728	17.2	9.6
9	Pinnacle Grand Park 2 <i>Pinnacle International</i>	Oct-12	SI	48	461	461	456	99%	590 - 2,312	\$398,900 - \$1,399,900	\$425	\$635	7.2	6.1
Total / Average / Range: 9 Projects				46	4,697	4,399	3,671	78%	402 - 2,312	\$245,400 - \$1,399,900	\$629	\$791	32.2	19.0
¹ Construction Status: "Pre" = pre construction, "UC" = under construction, "SI" = Standing Inventory ² Average dollar per square foot: original value is based on total inventory at the time of the project launch, current value is based on remaining inventory. ³ Average sales per month (absorption rate): the top number represents the number of sales per month, the bottom number represents the number of months. 70% rate is calculated from the project opening date until at least 70% sold, overall rate is calculated from the project opening date to the current date (December 31, 2018). Source: Altus Group / RealNet														

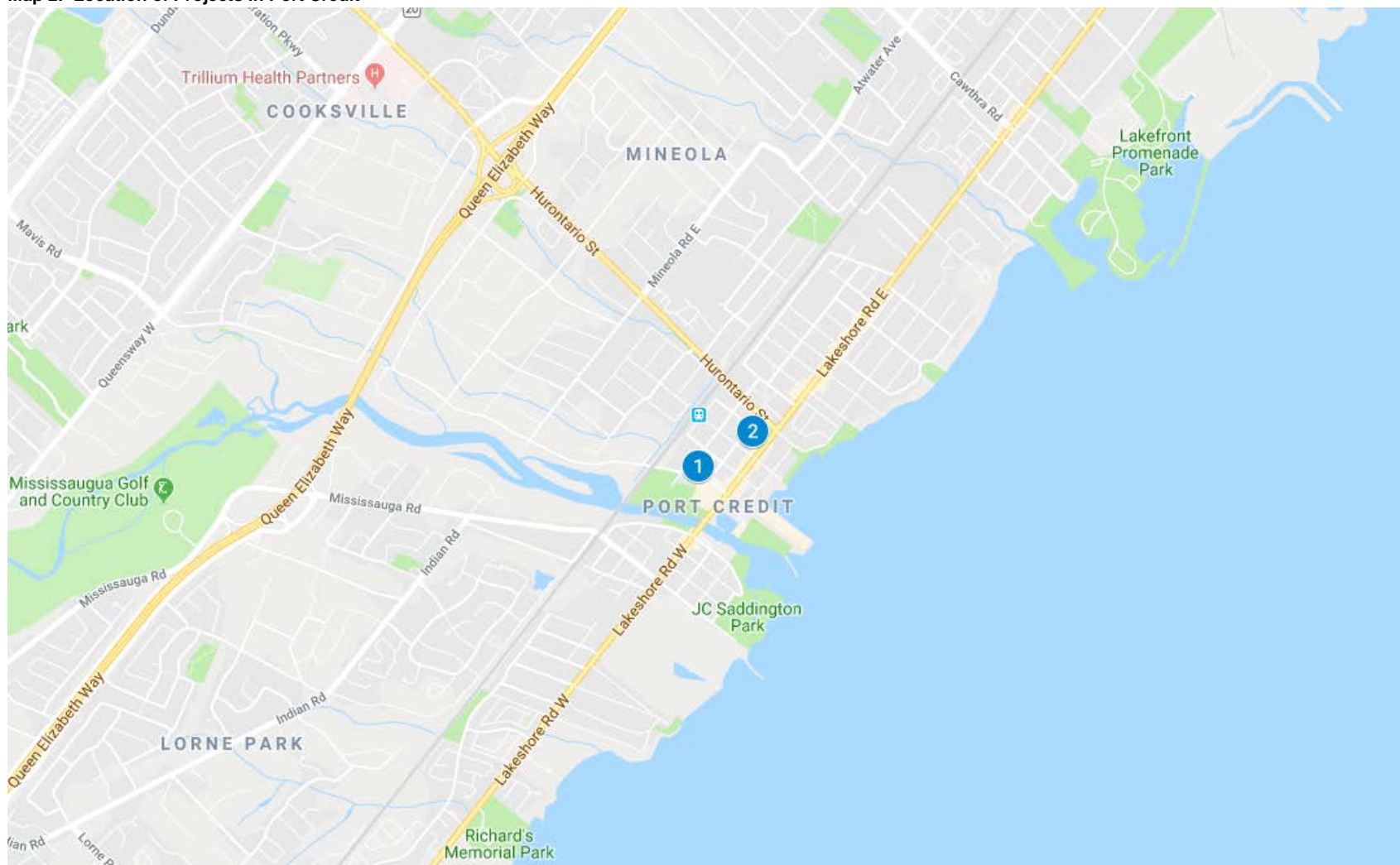
Map 1: Location of Projects in Mississauga City Centre



Surveyed Actively Marketing (New) Condominium Apartment Projects in Port Credit As of December 31, 2018															
Map ID	Project Name / Developer	Open Date	Con. Status ¹	Storeys	Total Units	Total Units Released	Total Sales	% Sold	Size Range (sf)	Price Range	Avg. \$PSF ²		Avg. Sales/Mo. ³		
											Org.	Curr.	70%	Overall	
1	Tanu Edenshaw Developments	Oct-18	Pre	15	204	192	145	71%	626 - 1,500	\$546,900 - \$1,357,900	\$878	\$877	63.9 2	63.9 2	
Total / Average / Range: 1 Projects				15	204	192	145	71%	626 - 1,500	\$546,900 - \$1,357,900	\$878	\$877	63.9	63.9	
1. Construction Status: "Pre" = pre construction, "UC" = under construction 2. Average dollar per square foot: original value is based on total inventory at the time of the project launch, current value is based on remaining inventory. 3. Average sales per month (absorption rate): the top number represents the number of sales per month, the bottom number represents the number of months. 70% rate is calculated from the project opening date until at least 70% sold, overall rate is calculated from the project opening date to the current date (December 31, 2018). Source: Altus Group / RealNet															

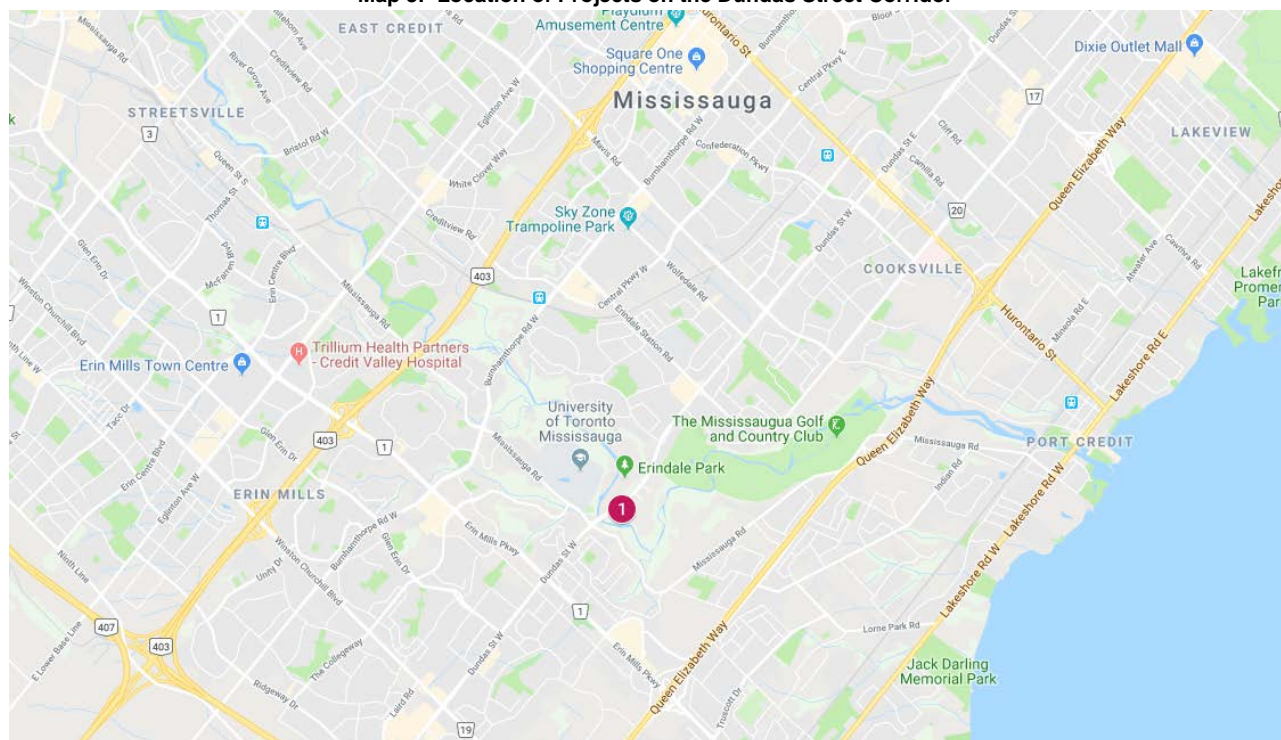
Recently Sold Out Condominium Apartment Projects in Port Credit														
As of December 31, 2018														
Map ID	Project Name / Developer	Open Date	Con. Status ¹	Storeys	Total Units	Total Units Released	Total Sales	% Sold	Size Range (sf)	Price Range	Avg. \$PSF ²		Avg. Sales/Mo. ³	
											Org.	Curr.	70%	Overall
2	Nola <i>Fram Building Group and Slokker</i>	May-16	UC	15	70	70	70	100%	510 - 2,240	\$276,900 - \$1,729,900	\$599	\$775	50.7 1	5.7 12
Total / Average / Range: 1 Projects				15	70	70	70	100%	510 - 2,240	\$276,900 - \$1,729,900	\$599	\$775	50.7	5.7
1. Construction Status: "Pre" = pre construction, "UC" = under construction 2. Average dollar per square foot: original value is based on total inventory at the time of the project launch, current value is based on remaining inventory. 3. Average sales per month (absorption rate): the top number represents the number of sales per month, the bottom number represents the number of months. 70% rate is calculated from the project opening date until at least 70% sold, overall rate is calculated from the project opening date to the current date (December 31, 2018).														
Source: Altus Group / RealNet														

Map 2: Location of Projects in Port Credit



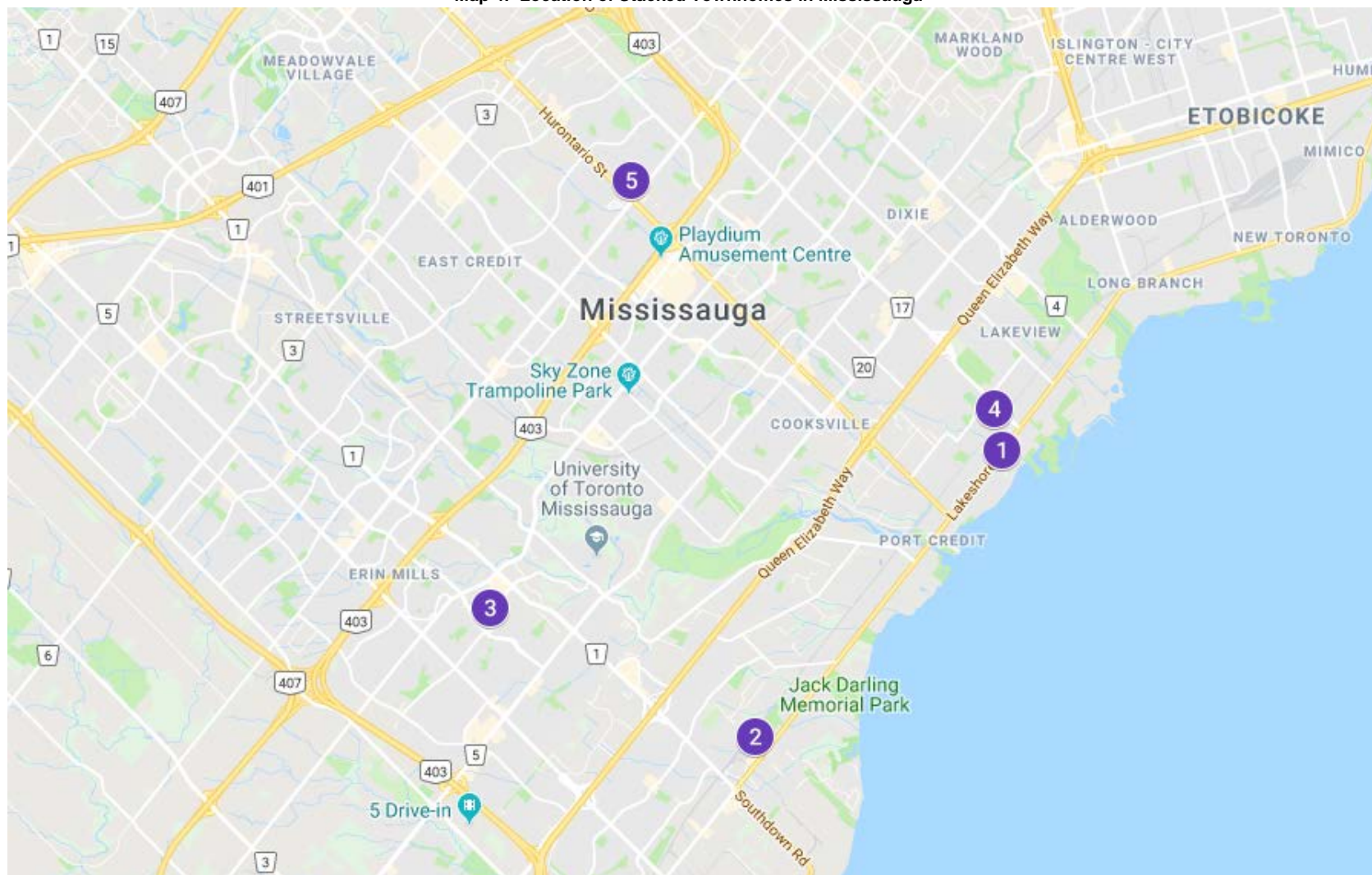
Surveyed Actively Marketing (New) Condominium Apartment Projects along the Dundas Corridor														
As of December 31, 2018														
Map ID	Project Name / Developer	Open Date	Con. Status ¹	Storeys	Total Units	Total Units Released	Total Sales	% Sold	Size Range (sf)	Price Range	Avg. \$PSF ²		Avg. Sales/Mo.	
											Org.	Curr.	70%	Overall
1	EV Royale YYZed Project Management and Nurreal Capital	Nov-16	Pre	7	99	99	85	86%	616 - 2,059	\$435,900 - \$1,273,900	\$666	\$683	30.4 2	3.3 25
Total / Average / Range: 1 Projects				7	99	99	85	86%	616 - 2,059	\$435,900 - \$1,273,900	\$666	\$683	30.4	3.3
1. Construction Status: "Pre" = pre construction, "UC" = under construction 2. Average dollar per square foot: original value is based on total inventory at the time of the project launch, current value is based on remaining inventory. 3. Average sales per month (absorption rate): the top number represents the number of sales per month, the bottom number represents the number of months. 70% rate is calculated from the project opening date until at least 70% sold, overall rate is calculated from the project opening date to the current date (December 31, 2018).														
Source: Altus Group / RealNet														

Map 3: Location of Projects on the Dundas Street Corridor



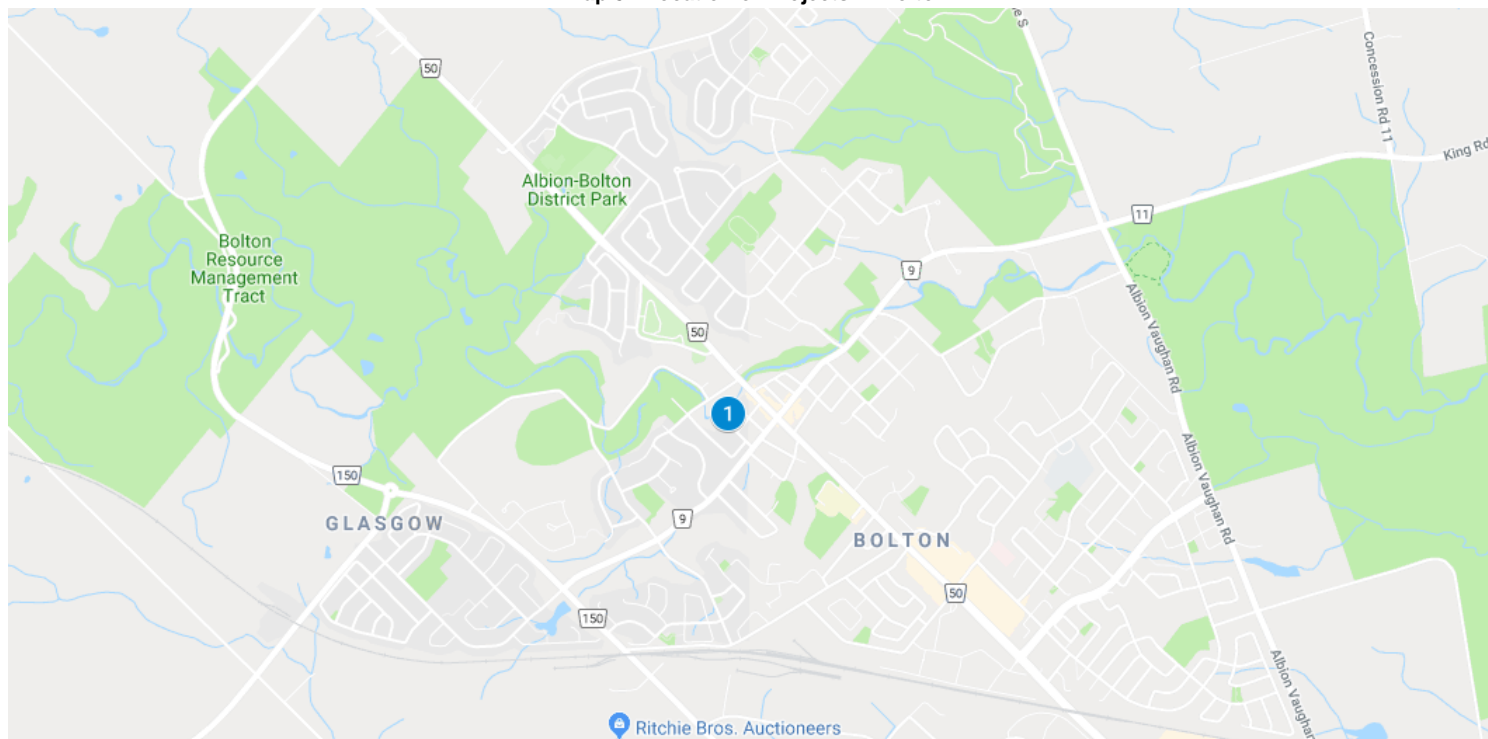
Surveyed Actively Marketing (New) Stacked Townhouse Projects in the City of Mississauga As of December 31, 2018														
Map ID	Project Name / Developer	Open Date	Con. Status ¹	Storeys	Total Units	Total Units Released	Total Sales	% Sold	Size Range (sf)	Price Range	Avg. \$PSF ²		Avg. Sales/Mo. ³	
											Org.	Curr.	70%	Overall
1	Stride <i>Kingsmen Group Inc.</i>	Dec-18	Pre	4	164	52	0	0%	823 - 1,567	\$573,900 - \$1,033,900	\$670	\$670	-	0.0
2	Eleven11 Clarkson <i>Saxon Developments</i>	Nov-18	Pre	4	136	56	38	28%	710 - 1,687	\$512,900 - \$1,070,900	\$640	\$639	-	22.7
3	Way Urban Towns in Erin Mills <i>Sorbara</i>	Mar-18	UC	4	144	144	120	83%	988 - 1,339	\$620,900 - \$731,900	\$525	\$581	29.8	12.5
4	Reserve East Mineola <i>Queenscorp Group</i>	Apr-17	UC	3	146	146	99	68%	940 - 1,896	\$629,900 - \$975,900	\$519	\$597	-	4.9
5	Summit Collection at Summit City Centre <i>Summit View Homes</i>	Apr-17	Pre	3	54	54	44	81%	1,060 - 1,305	\$559,990 - \$624,990	\$479	\$501	16.0	2.4
Total / Average / Range: 5 Projects				4	644	452	301	47%	710 - 1,896	\$512,900 - \$1,070,900	\$548	\$640	24.0	5.7
¹ Construction Status: "Pre" = pre construction, "UC" = under construction ² Average dollar per square foot: original value is based on total inventory at the time of the project launch, current value is based on remaining inventory. ³ Average sales per month (absorption rate): the top number represents the number of sales per month, the bottom number represents the number of months. 70% rate is calculated from the project opening date until at least 70% sold, overall rate is calculated from the project opening date to the current date (December 31, 2018). Source: Altus Group / RealNet														

Map 4: Location of Stacked Townhomes in Mississauga



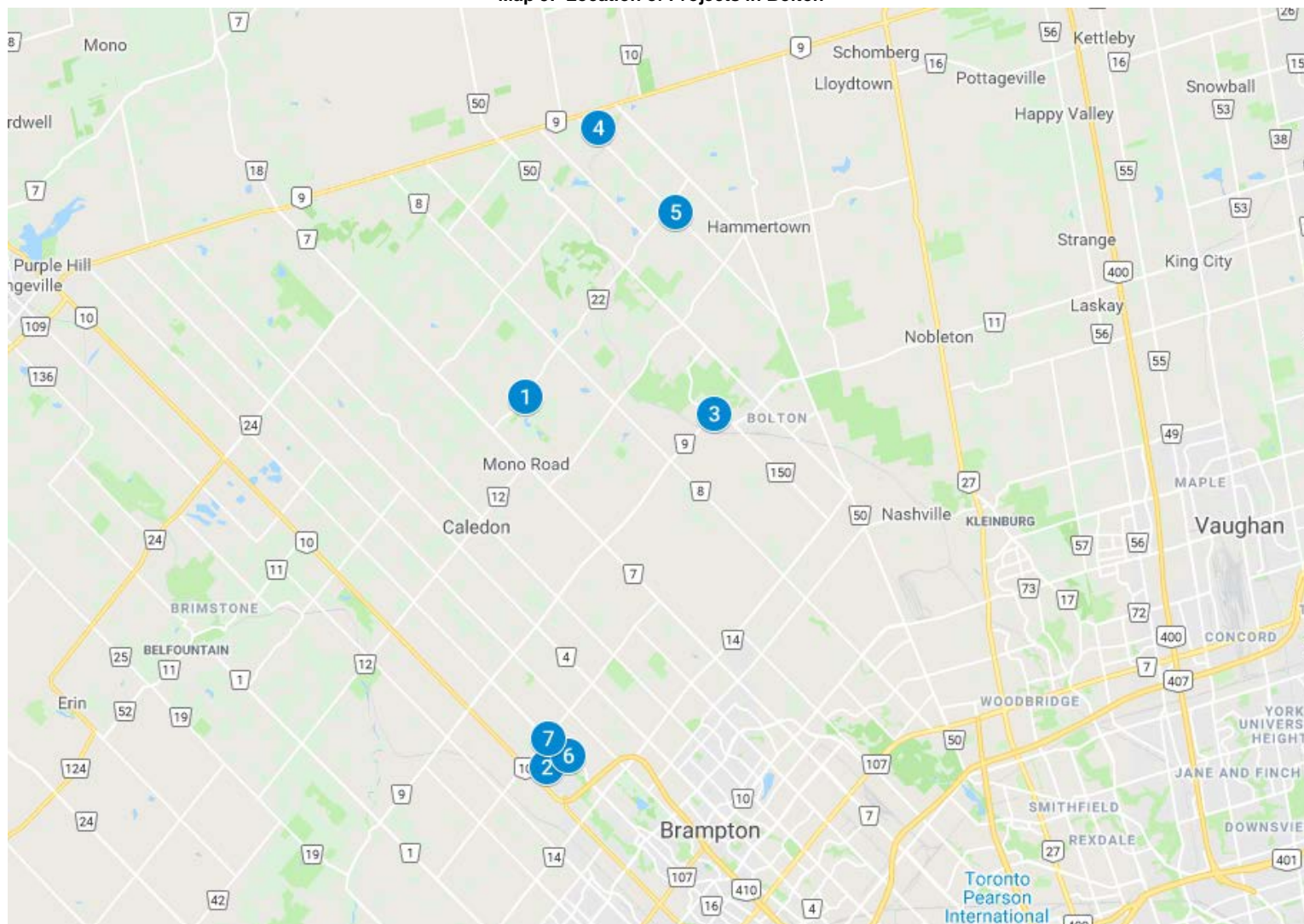
Recently Sold Out Condominium Apartment Projects in Bolton														
As of December 31, 2018														
Map ID	Project Name / Developer	Open Date	Con. Status ¹	Storeys	Total Units	Total Units Released	Total Sales	% Sold	Size Range (sf)	Price Range	Avg. \$PSF ²		Avg. Sales/Mo.	
											Org.	Curr.	70%	Overall
1	River's Edge Armour Heights Developments	Oct-07	SI	5	67	67	67	100%	785 - 1,325	\$299,990 - \$471,990	\$360	\$367	2.1 22	1.7 40
Total / Average / Range: 1 Projects				5	67	67	67	100%	785 - 1,325	\$299,990 - \$471,990	\$360	\$367	2.1	1.7
1. Construction Status: "Pre"= pre construction, "UC"= under construction 2. Average dollar per square foot: original value is based on total inventory at the time of the project launch, current value is based on remaining inventory. 3. Average sales per month (absorption rate): the top number represents the number of sales per month, the bottom number represents the number of months. 70% rate is calculated from the project opening date until at least 70% sold, overall rate is calculated from the project opening date to the current date (December 31, 2018).														
Source: Altus Group / RealNet														

Map 5: Location of Projects in Bolton



Surveyed Actively Marketing (New) Single-Detached Homes in Caledon As of December 31, 2018													
Map ID	Project Name / Developer	Open Date	Product Type	Tenure	Lot Size (ft)	Lot Type	# Units	# Sold	% Sold	Size Range (sf)	Price Range	Avg. \$PSF ¹	Avg. Sales / Mo. ²
1	Pathways Caledon East CountryWide Homes & Brookfield Residential	Apr-18	Detached	Freehold	50	Traditional	17	13	76%	3,056 - 4,164	\$1,289,990 - \$1,464,990	\$387	1.6
		Oct-17	Detached	Freehold	46	Traditional	20	2	10%	2,840 - 3,480	\$1,129,990 - \$1,229,990	\$379	0.1
		Jun-17	Detached	Freehold	46	Traditional	30	11	37%	2,504 - 3,880	\$1,119,990 - \$1,329,990	\$390	1.2
		May-17	Detached	Freehold	38	Traditional	26	24	92%	2,270 - 3,090	\$959,990 - \$1,104,990	\$390	1.2
		May-17	Detached	Freehold	42	Traditional	24	22	92%	2,890 - 2,890	\$1,174,990 - \$1,174,990	\$407	1.1
		Nov-10	Detached	Freehold	50	Traditional	165	161	98%	3,090 - 3,770	\$1,199,990 - \$1,279,990	\$366	2.9
2	Lotus Pointe Starlane Home Corporation	Apr-18	Detached	Freehold	43	Traditional	33	28	85%	3,196 - 3,589	\$1,099,900 - \$1,137,900	\$330	3.4
		Sep-14	Detached	Freehold	38	Traditional	164	155	95%	2,504 - 3,171	\$969,900 - \$1,099,900	\$351	5.5
3	Humberside Marycroft Homes	Oct-17	Detached	Freehold	30	Wide Shallow	8	0	0%	2,502 - 2,721	\$1,006,900 - \$1,096,900	\$404	0.0
4	Caledon Estates Beaverhall Communities	May-17	Detached	Freehold	189	Traditional	33	13	39%	2,259 - 7,119	\$1,615,000 - \$3,200,000	\$522	0.7
		May-17	Detached	Freehold	205	Rear Lane	9	7	78%	2,259 - 6,619	\$1,615,000 - \$3,010,000	\$558	0.4
5	Mount Pleasant Preserve Dunsire Developments	Apr-17	Detached	Freehold	220.5	Traditional	12	10	83%	3,876 - 4,441	\$1,979,000 - \$2,130,000	\$496	0.5
6	Stowmarket Springs Digreen Homes	Apr-17	Detached	Freehold	36	Traditional	68	43	63%	2,290 - 2,950	\$949,900 - \$1,199,900	\$415	2.5
7	Village of Southfields Coscorp Inc.	Sep-08	Detached	Freehold	36	Traditional	627	622	99%	2,450 - 2,869	\$957,000 - \$976,000	\$360	6.6
Totals / Ranges / Averages: 7 Projects (14 Product Offerings)							1,236	1,111	90%	2,259 - 7,119	\$949,900 - \$3,200,000	\$414	3.2
1. Average dollar per square foot is based on available inventory. 2. Average sales per month is calculated from the project opening date to the current date, subtracting months when no inventory was on the market. Source: Altus Group / Real Net													

Map 5: Location of Projects in Bolton



Appendix C: Land Transaction Data

HighDensity Residential Land Transactions in Mississauga January 1, 2014 to December 31, 2018										
Base Transaction Information							Staff Report/Approval Information			
Map ID	Address	Transaction Date	Purchaser	Transaction Price	Land Area (Ac.)	Price per Acre	No. Proposed Units	Price per Unit	Proposed GFA (SF)	\$PSF Buildable
1	3154 Hurontario Street	Nov-18	TAS DesignBuild	\$14,000,000	0.89	\$11,266,865	-	-	-	-
	25 Hillcrest Avenue	Jul-18		\$10,500,000	1.28					
2	22 Ann Street	Nov-18	Edenshaw Developments Ltd.	\$2,300,000	0.13	\$13,856,041	-	-	-	-
	28 Ann Street	Oct-18		\$1,640,000	0.13					
	78 Park Street East	May-18		\$1,450,000	0.14					
3	619 Lakeshore Road East	Jun-18	Breda Group	\$4,125,000	0.41	\$9,963,768	-	-	-	-
4	1381 Lakeshore Road East	Jun-18	City Park Homes	\$5,465,000	1.04	\$5,249,760	-	-	-	-
5	3324 Mississauga Road	May-18	The Governing Council of The University of Toronto	\$2,160,000	2.03	\$1,851,079	-	-	-	-
	3300 Mississauga Road	Apr-18		\$1,640,000	0.40					
	3284 Mississauga Road	Apr-18		\$1,520,000	0.44					
6	800 Hydro Road (Lakeview Lands)	Mar-18	Lakeview Community Partners Limited	\$274,770,000	176.68	\$1,555,167	8,000	\$34,346	-	-
7	21 Queen Street North	Dec-17	Lamb Development Corp	\$5,200,000	2.40	\$2,166,667	430	\$12,093	336,624	\$15
8	425 Lakeshore Road East	Nov-17	Indwell Community Homes	\$2,650,000	0.54	\$4,907,407	66	-	-	-
9	29 Park Street East	Oct-17	Edenshaw Park Developments Limited	\$6,000,000	0.25	\$15,302,372	207	\$56,109	206,839	\$56
	27 Park Street East	Aug-17		\$1,105,800	0.07					
	25 Park Street East	Aug-17		\$1,658,700	0.18					
	21 Park Street East	Aug-17		\$2,850,000	0.25					
10	1345 Lakeshore Road East	Sep-17	VANDYK Group of Companies	\$16,000,000	3.13	\$5,111,821	397	\$40,302	383,798	\$42
11	3518, 3528 & 3536 Hurontario Street & 24, 34, 38, 44, 50, 58, & 64 Elm Drive West	Sep-17	Solmar Development Corp.	\$34,200,000	3.59	\$9,521,158	1,367	\$25,018	1,457,411	\$23
12	501 Lakeshore Road East	Aug-17	Senator Homes	\$12,500,000	6.54	\$1,912,777	296	\$42,230	-	-
13	90 High Street East	Jun-17	Real-T-Masters Inc.	\$3,100,000	0.54	\$5,794,393	-	-	-	-
14	70 Mississauga Road South	Mar-17	Port Credit West Village Partners Inc.	\$175,000,000	72.76	\$2,405,035	2,969	\$58,942	4,095,959	\$43

15	152 & 180 Burnhamthorpe Road West and 3672 Kariya Drive	Mar-17	Bene Development (Ontario) Ltd.	\$35,000,000	5.91	\$5,925,174	416	\$84,135	366,497	\$95
16	4064 - 4070 Dixie Road	May-16	Hazelton Development Corporation	\$3,950,000	0.95	\$4,217,736	261	\$22,414	181,544	\$32
	4078 Dixie Road	May-16		\$1,900,000	0.44					
17	3480 Hurontario Street	Feb-16	The Conservatory Group	\$5,250,000	0.58	\$9,098,787	360	\$14,583	303,590	\$17
18	6 Ann Street	Jan-15	Fram Building Group	\$2,260,000	0.19	\$9,102,296	71	\$61,408	88,532	\$49
	8 Ann Street	Jan-15		\$1,200,000	0.17					
	10 Ann Street	Dec-12		\$900,000	0.12					
19	3 Benson Avenue	Jun-14	Tiffany Development	\$1,025,000	0.10	\$4,815,796	325	\$42,705	270,183	\$51
	7 Benson Avenue	Jun-14		\$1,025,000	0.14					
	266 Lakeshore Road West	Jul-13		\$2,300,000	0.37					
	5 Benson Avenue	Jul-13		\$1,210,000	0.14					
	139 High Street West	Jul-13		\$653,625	0.14					
	125 High Street West	Jul-13		\$650,000	0.17					
	131 High Street West	Jul-13		\$735,000	0.23					
	135 High Street West	Jul-13		\$810,000	0.21					
	143 High Street West	Jun-13		\$950,000	0.14					
	127 High Street West	Jun-13		\$862,500	0.23					
	280 Lakeshore Road West	Jun-13		\$1,200,000	0.33					
	141 High Street West	Sep-12		\$580,000	0.14					
	290 Lakeshore Road West	Sep-12		\$778,000	0.21					
	274 Lakeshore Road West	Mar-12		\$1,100,000	0.34					
20	71 - 79 Agnes Street	Jan-14	Matas Homes	\$3,500,000	0.70	\$4,985,755	-	-	-	-
Total/Average (20 Transactions):				\$647,673,625	285.76	\$2,266,467	15,165	\$39,144	7,690,977	\$40
Source: RealNet Canada Inc.; Urbanation Marsh Report; City of Mississauga Planning Department; NBLC										

Medium Density Residential Land Transactions in Mississauga January 1, 2014 to December 31, 2018										
Base Transaction Information							Staff Report/Approval Information			
Map ID	Address	Transaction Date	Purchaser	Transaction Price	Land Area (Ac.)	Price per Acre	No. Proposed Units	Price per Unit	Proposed GFA (SF)	\$PSF Buildable
1	Ninth Line & Roadside Way	Oct-18	Mattamy Homes	\$8,375,000	7.02	\$1,192,850	-	-	-	-
2	2225 Erin Mills Parkway (Sheridan Centre)	May-18	Dunpar Homes	\$70,000,000	29.95	\$2,337,541	-	-	-	-
3	1575 Hurontario Street	Apr-18	Dream Maker Developments Inc.	\$6,750,000	0.97	\$6,958,763	60	\$112,500	301,389	\$22
4	Ninth Line & Roadside Way	Mar-18	Argo Land Development	\$6,120,000	7.02	\$871,671	-	-	-	-
5	1041 Lakeshore Road East	Sep-17	Fortress Real Developments	\$11,950,000	0.81	\$14,753,086	73	\$163,699	-	-
6	208 Emby Drive	Jun-17	NYX Capital Corp.	\$5,540,000	3.14	\$2,438,707	155	\$72,516	-	-
	51 Tannery Street	Jun-17		\$2,200,000	0.76					
	57 Tannery Street	Apr-17		\$3,500,000	0.71					
7	611 Derry Road West	May-17	Realux Mississauga Inc.	\$5,500,000	1.76	\$3,125,000	30	\$183,333	-	-
8	4005 Hickory Drive	Apr-17	Sierra Building Group	\$4,830,000	1.97	\$2,451,777	102	\$47,353	109,588	\$44
9	189 Dundas Street West	Feb-17	Solotex Corporation	\$12,100,000	3.48	\$3,477,011	224	\$54,018	-	-
10	3016-3032 Kirwin Avenue & 3031 Littlejohn Lane	Sep-16	2531388 Ontario Inc.	\$1,850,000	1.59	\$1,162,060	64	\$28,906	-	-
11	1198 Cawthra Road	Jun-16	Queenscorp Residences	\$1,250,000	0.48	\$1,951,477	146	\$44,349	211,403	\$31
	1206 Cawthra Road	May-16		\$1,100,000	0.47					
	1174, 1178, 1184, 1188 & 1192 Cawthra Road	Jun-14		\$4,125,000	2.37					
12	2200 Bromsgrove Road	Jun-16	Haven Developments	\$3,250,000	1.25	\$2,595,847	74	\$43,919	54,368	\$60
13	1115 Clarkson Road North	Feb-16	Continental Saxon Group	\$3,300,000	0.49	\$3,370,610	216	\$38,653	163,906	\$51
	1109 Clarkson Road North	May-15		\$625,000	0.10					
	1105 Clarkson Road North	Jul-14		\$1,999,000	0.29					
	1101 Clarkson Road North	May-13		\$2,425,000	1.59					
14	2277 South Millway	Jan-16	The Sorbara Group	\$6,000,000	3.01	\$1,994,018	144	\$41,667	186,216	\$32
15	3355 The Collegeway	Dec-15	The Sorbara Group	\$15,610,000	6.57	\$2,376,675	364	\$42,885	441,320	\$35
16	3111 Cawthra Road	Aug-15	Maple Valley Development Corporation Inc.	\$1,300,000	0.55	\$2,176,781	42	\$78,571	48,321	\$68
	3123 Cawthra Road	Aug-15		\$2,000,000	0.96					
17	650 Atwater Avenue	Apr-15	Sierra Building Group	\$4,275,000	1.77	\$2,412,528	110	\$38,864	-	-
Total/Average (17 Transactions):				\$185,974,000	79.09	\$2,351,393	1,804	\$56,252	1,516,512	\$36
Source: RealNet Canada Inc.; Urbanation Marsh Report; City of Mississauga Planning Department; NBLC										

Low Density Residential Land Transactions in Caledon January 1, 2017 to December 31, 2018										
Base Transaction Information							Staff Report/Approval Information			
Map ID	Address	Transaction Date	Purchaser	Transaction Price	Land Area (Ac.)	Price per Acre	No. Proposed Units	Price per Unit	Proposed GFA (SF)	\$PSF Buildable
1	n/e corner of Heart Lake Road & Mayfield Road	Dec-18	Coscorp Inc. (Coscorp HL Developments Inc.)	\$11,000,000	15.74	\$698,768	-	-	-	-
2	8410 Mayfield Road	Dec-18	Boltcol Holdings South Inc.	\$4,060,799	6.58	\$617,143	-	-	-	-
3	12168 & 12280 Humber Station Road	Nov-18	Solmar Development Corp. (Venture Holding Corp.)	\$9,315,000	119.73	\$77,803				
4	Side Road No. 5 & Highway 50	Oct-18	Treasure Hill Homes (Villalago	\$1,464,020	0.05	\$1,645,360				
	9023 Sideroad 5	Mar-16	Residences Inc.)	\$10,083,053	6.97					
5	17346 Centreville Creek Road	Aug-18	Lockton Estate Farm Ltd.	\$2,100,000	96.39	\$21,786	-	-	-	-
6	12156 Chinguacousy Road	Jul-18	Argo Development Corporation (Argo Mayfield West III Limited)	\$4,300,000	14.71	\$292,338	-	-	-	-
7	8282 Mayfield Road	Jun-18	2635922 Ontario Inc.	\$2,750,000	4.88	\$563,525	-	-	-	-
8	12529 Chinguacousy Road	Jun-18	FP Mayfield West (Caledon) Inc.	\$8,000,000	103.47	\$77,317	-	-	-	-
9	Troiless Street & Travelled Road	Jun-18	Hira Homes (Hira Custom Homes Inc.)	\$1,220,000	3.23	\$377,358	-	-	-	-
10	12191 Centreville Creek Road	May-18	An individual(s) acting in his/her own capacity	\$2,500,000	10.00	\$250,000	-	-	-	-
11	s/w corner of Kennedy Road & Dougall Avenue	Mar-18	Genesis Homes (Buttermill Developments Inc.)	\$11,000,000	6.53	\$1,685,565	-	-	-	-
12	12728 Kennedy Road	Dec-17	Greenpark Homes (Yeoman Developments Inc.)	\$1,071,000	not listed					
13	12782 Kennedy Road	Nov-17	Coscorp Inc. (Brentwood Development Corporation)	\$5,062,000	3.69	\$1,372,357	66	\$76,697	cannot find GFA	?
14	8040 Mayfield Road	Oct-17	Townwood Homes (Participant Investors Inc.)	\$1,500,000	1.64	\$912,409				
15	15505 Airport Road	Oct-17	DG Group (Triple Crown Line Developments Inc.)	\$6,830,194	9.51	\$656,900	562	\$184,840	cannot find GFA	?
	15717 Airport Road	Oct-16		\$97,050,000	148.62					
16	1 & 2 Russel Mason Court & 6122, 6126 & 6142 Old Church Road	Oct-17	Stylux Caledon Inc.	\$4,660,000	2.99	\$1,559,572	-	-	-	-
17	12944 Albion Vaughan Road	Jul-17	Mosaik Homes (Queensgate (Mosaik) Inc.)	\$3,950,000	2.43	\$1,625,514				
18	12306 Chinguacousy Road	Jul-17	Argo Land Development (Argo Mayfield West II Limited)	\$20,000,000	99.50	\$201,003	-	-	-	-

19	Coleraine Drive & Mayfield Road	Jun-17	Solmar Development Corp. (Equity Inc.)	\$4,414,500	9.82	\$449,359	-	-	-	-
20	Mississauga Road & Shaws Creek Road	Jun-17	The Manors of Belfountain Corp.	\$5,800,000	226.28	\$25,632				
21	12519 Humber Station Road	Apr-17	Solmar Development Corp. & Royal Pine Homes	\$44,262,000	99.30	\$445,731				
22	Humber Station Road	Apr-17	Ballantry Homes	\$40,120,200	49.26	\$741,007	-	-	-	-
	Humber Station Road	Apr-17		\$32,951,200	49.35					
23	12461 McLaughlin Road	Mar-17	The Conservatory Group (Shanontown Developments Inc.)	\$92,500,000	145.00	\$637,944	677	\$136,632	cannot find GFA	?
24	550 Glasgow Road	Mar-17	Zancor Homes (Zancor Homes (Bolton) Ltd.)	\$3,125,000	5.05	\$1,401,071	-	-	-	-
	615 Glasgow Road	Feb-17		\$1,725,000	6.78					
	13977 Chickadee Lane	Feb-17		\$2,350,000	1.04					
	13999 Chickadee Lane	Feb-17		\$1,425,000	0.75					
	600 Glasgow Road	Feb-17		\$1,425,000	0.98					
	13935 - 13951 Chickadee Lane	Jan-17		\$24,740,000	10.24					
25	6600 Old Church Road & 16133 Innis Lake Road	Mar-17	Country Wide Homes & Brookfield Residential	\$101,600,000	71.44	\$1,422,153	321	\$316,511	cannot find GFA	?
26	12456 Heritage Road	Feb-17	Primont Homes (Primont (Caledon 1) Inc.)	\$18,934,729	105.47	\$179,532	-	-	-	-
27	Amelia Street & Queen Street West	Feb-17	Mount Nicholas Holdings Inc.	\$1,450,000	14.64	\$99,030	-	-	-	-
28	12729 Torbram Road	Feb-17	Pemberton Group (Sentinel (Torbram) Holdings Inc.)	\$20,007,976	150.51	\$132,368	-	-	-	-
	Torbram Road	Feb-17		\$9,992,024	76.13					
29	12515 Mississauga Road	Jan-17	2536630 Ontario Inc.	\$6,000,000	49.90	\$120,245	-	-	-	-

Source: RealNet Canada Inc.; Urbanation Marsh Report; Town of Caledon Planning Department; NBLC

High Density Residential Land Transactions in Caledon

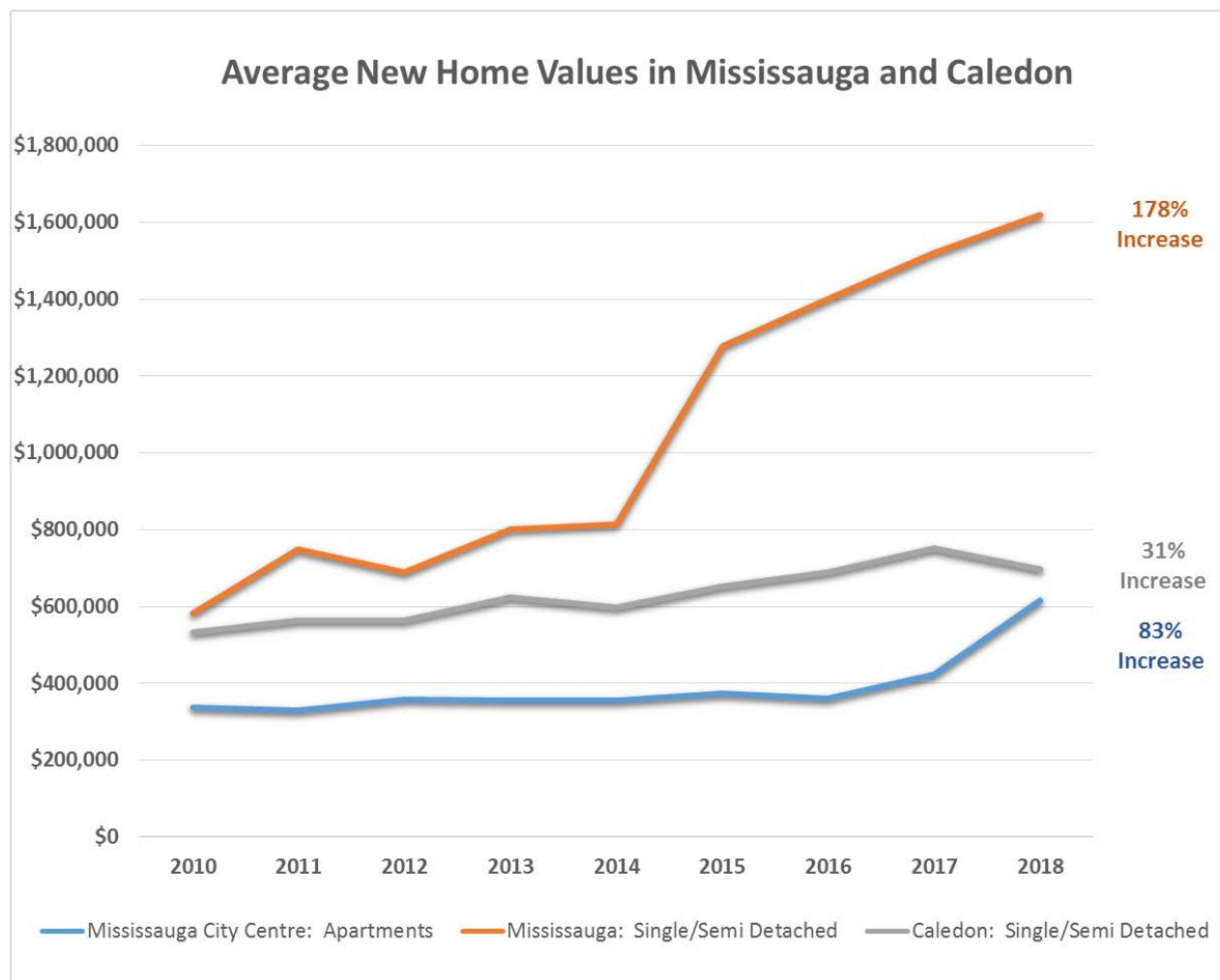
January 1, 2014 to December 31, 2018

Base Transaction Information

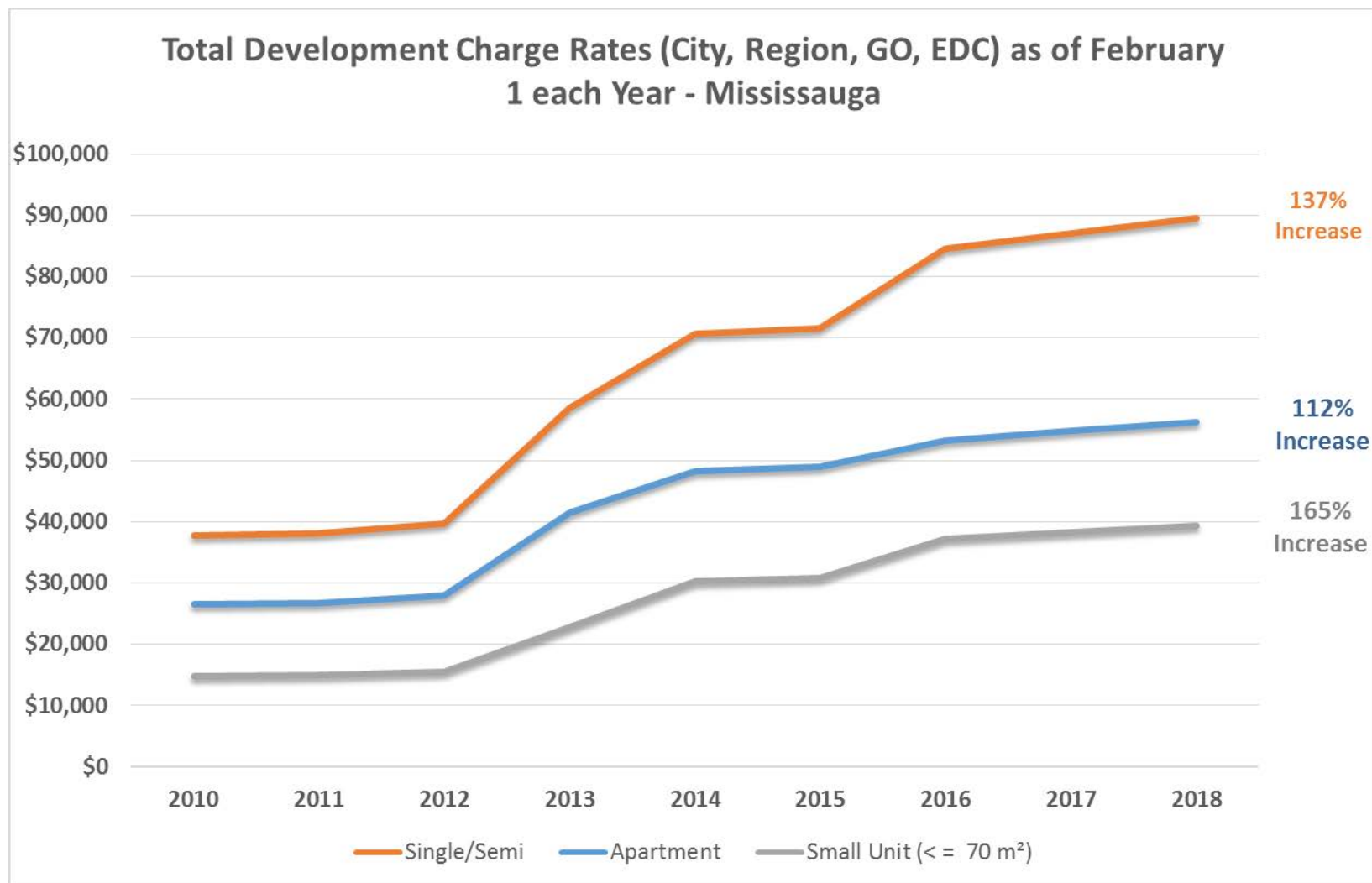
Map ID	Address	Transaction Date	Purchaser	Transaction Price	Land Area (Ac.)	Price per Acre	Staff Report/Approval Information			
							No. Proposed Units	Price per Unit	Proposed GFA (SF)	\$PSF Buildable
1	50 Ann Street	Dec-15	Brookfield Homes (Brookfield Homes (Ontario) Limited)	\$1,700,000	0.89	\$1,901,566	72	\$23,611.11		

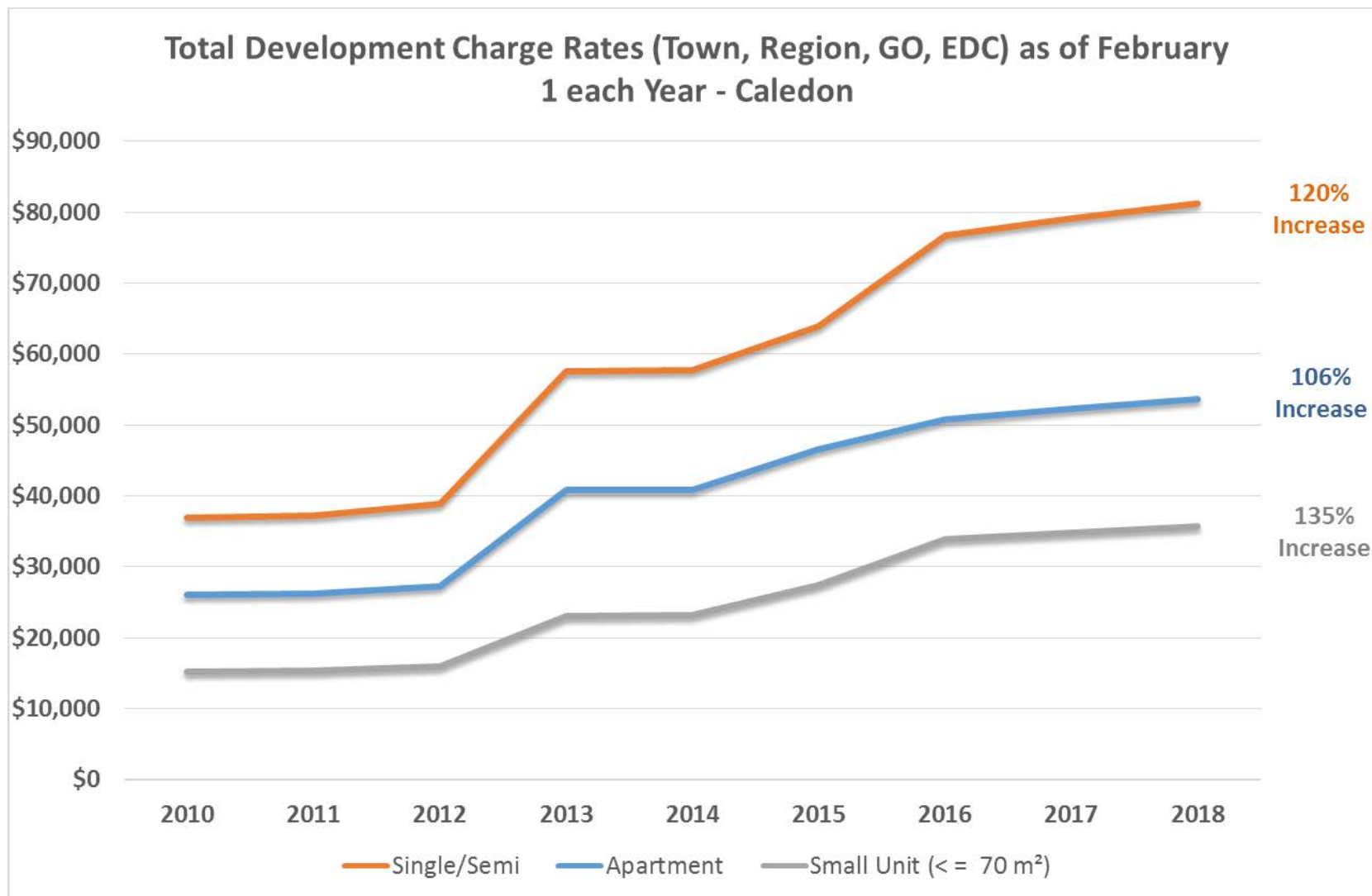
Source: RealNet Canada Inc.; Urbanation Marsh Report; Town of Caledon Planning Department; NBLC

Appendix D: Home Value and Development Charge Data



Source: Altus New Homes High Rise Submarket Report Mississauga City Centre (February Reports 2010-2018) and CMHC Housing Portal Data





Source: City of Mississauga and Town of Caledon (For Mississauga Stormwater Management Charge Calculation: Assume 100 units per 0.5 hectare for apartments/small units and 25 units per hectare for single/semi-detached homes for Mississauga's Stormwater Charge. Small unit in Mississauga is below 65 m², Region of Peel is 70 m²).

Appendix E: Financial Analysis

The Effect of Development Related Costs on Housing Affordability Financial Analysis of Development Scenarios							
<div><div>Disclaimer</div><div><p><i>This high-level financial analysis is provided for illustrative purposes only. Any assumptions or conclusions contained herein are subject to change. All figures are present dollars.</i></p><p><i>No responsibility for the information, analysis, conclusions, or recommendations is assumed by N. Barry Lyon Consultants Limited or any of its employees or associates.</i></p><div><div>Green indicates input from Site Conceptual Design</div><div>Blue is a calculation within the model</div><div>Black indicates an assumption/NBLC input</div></div><div>10.7639</div></div></div>							
Assumptions							
	High-Rise Apartment Mississauga City Centre	High-Rise Apartment Port Credit	Mid-Rise Apartment Dundas Corridor	Stacked Townhomes Erin Mills	Mid-Rise Apartment Bolton	Single- Detached Homes Caledon	Notes
Site							
Site Area (square metres)	3,965	1,925	5,500	3,400	4,858	20,000	
Site Area (acres)	0.98	0.48	1.36	0.84	1.20	4.94	
Site Area (square feet)	42,679	20,721	59,201	36,597	52,291	215,278	
Site Area (hectare)	0.4	0.2	0.6	0.3	0.5	2.0	
On-Site Parkland Dedication (acres)	0.0	0.0	0.0	0.0	0.0	0.1	All projects will provide cash-in-lieu payment except for the subdivision, which will provide 5% of total developable lands for on-site park.
Buildings							
No. of Units	372	97	95	39	72	40	20 units per hectare

No. of Storeys	35	15	5	3	5	2	
Avg. Net Unit Size (sq. ft.)	645	900	800	850	1,000	2,650	
Avg. Net Unit Size (sq. m.)	60	84	74	79	93	246	
Net/ Saleable Floor Area (sq. ft.)	240,151	87,449	76,168	32,938	72,463	106,000	
Net to Gross Efficiency (%)	85%	85%	85%	100%	85%	100%	
Gross Floor Area (sq. ft.)	282,531	102,881	89,609	32,938	85,250	106,000	
GFA (sq. m.)	26,248	9,558	8,325	3,060	7,920	9,848	
Suite Mix							
Bachelor and 1-Bedroom	50%	25%	50%	30%	20%	0%	
2-Bedroom and Larger	50%	75%	50%	70%	80%	100%	
Local Roads (metres)	0	0	0	0	0	275	All road costs for apartments and stacked townhomes assumed in hard construction and site preparation costs. Subdivision assumes each home is 36 ft * 40 units = 1,440 ft; Assume 2 units on each side of the street and a 25% gross up = 900 ft / 275 metres Model does not account for costs or revenues of commercial space.
Ground Floor Commercial GFA (sq. ft.)	12,099	7,858	0	0	0	0	
Total GFA (sq. ft.)	294,629	110,739	89,609	32,938	85,250	106,000	
Project FSI	6.9	5.3	1.5	0.9	1.6	-	
Parking							
Parking Ratio (per unit - including visitor spaces)	0.80	1.25	1.10	1.10	1.50		
No. of Below Grade Parking Stalls	298	121	66	38	74		
Average Parking Stall (sq. ft.)	375	375	375	375	375		
Total Below Grade Parking Area (sq. ft.)	111,698	45,546	24,743	14,109	27,844		
No. of Surface Visitor Parking Stalls	0	0	39	5	34		
Total Above Grade Parking Area (sq. ft.)	0	0	14,531	1,875	12,917		
Construction Costs							
Hard (Construction) Costs							
Above Grade Construction Cost (per sq. ft.)	\$223	\$245	\$188	\$158	\$188	\$163	Altus Construction Cost Guide 2019 (premium of 10% applied to Port Credit for higher quality)
	\$138	\$138	\$105	\$105	\$105	\$0	Altus Construction Cost Guide 2019 - mid-rise apartments and stacks have lower cost, assume single level open cut excavation
Below Grade Parking Construction Cost (per sq. ft.)							
Surface Parking Construction Cost (per sq. ft.)	\$14	\$14	\$14	\$14	\$14	\$14	Altus Construction Cost Guide 2019
Local Roads and Servicing (per linear m.)	\$3,650	\$3,650	\$3,650	\$3,650	\$3,650	\$3,650	Altus Construction Cost Guide 2019
Demolition & Site Prep (per sq. ft. of entire site)	\$10	\$10	\$10	\$10	\$10	\$0	Assume subdivision is vacant land

Servicing Connection Cost (per unit)	\$500	\$500	\$500	\$500	\$500	\$500	
Landscaping and Hardscaping (per unit)	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$4,000	
Green Space Construction Costs (per sq. ft.)	\$25	\$25	\$25	\$25	\$25	\$25	
Cost Inflation (per year)	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Contingency (% of hard costs)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Soft Costs							
Development Charge - Apartments (per unit)	\$58,382	\$58,382	\$58,382	\$58,382	\$56,226	\$56,226	
Development Charge - Small Units (per unit)	\$40,528	\$40,528	\$40,528	\$40,528	\$37,325	\$37,325	
Development Charge - Single and Semi Detached (per unit)	\$89,757	\$89,757	\$89,757	\$89,757	\$85,258	\$85,258	Mississauga/Caledon Development Charge By-Law as of February 1, 2019. Includes Regional, Local, Education, GO Charges
Development Charge - SWM Charge (per hectare) - Mississauga Only	\$103,203	\$103,203	\$103,203	\$103,203	-	-	
Development Application Fees							
Base Fee (Official Plan and Rezoning)	\$45,032	\$45,032	\$45,032	\$45,032	\$49,357		
Variable Fee (Official Plan and Rezoning)							
\$/unit for first 25 units	\$943	\$943	\$943	\$943			
\$/unit for units 26-100	\$499	\$499	\$499	\$499			
\$/unit for units 101-200	\$207	\$207	\$207	\$207			
\$/unit for units beyond 200	\$96	\$96	\$96	\$96			Mississauga and Caledon Fees per By-Laws
Base Fee (Site Plan)	\$0	\$0	\$0	\$0	\$32,182		
\$/gross hectare					\$5,125		
DARC Meeting (per application)	\$4,249	\$4,249	\$4,249	\$4,249			
Base Fee (Plan of Condo)	\$13,329	\$13,329	\$13,329	\$13,329	\$21,473		
Variable Fee (Plan of Condo - \$/unit)	\$36	\$36	\$36	\$36	\$50		
Transportation and Infrastructure Fees + other department review	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000		Lump estimate
Region of Peel Review Charge	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	
Plan of Subdivision						\$31,296	
Per unit Fee						\$607	
Building Permit Fee							Mississauga and Caledon Fees per By-Laws
Base Fee	\$150	\$150	\$150	\$150	\$250	\$250	
Residential Fee (per square metre)	\$17.25	\$17.25	\$17.25	\$17.25	\$12.10	\$13.20	
Property Tax Rate	0.39%	0.39%	0.39%	0.39%	0.84%	0.84%	Mississauga and Caledon Tax Rates
Section 37 Requirement (per unit)	\$0	\$0	\$0	\$0	\$0	\$0	Assume no Section 37
Cash-in-lieu of parkland (per unit)	\$9,520	\$9,520	\$9,520	\$9,520	1ha/300 units	\$0	Subdivision does on-site parkland dedication at 5% of land area. Assume 5% of land value for Caledon Condo.
Consultants (% of total hard costs)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Development Project Management (% of total hard costs)	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Construction Management (% of total hard costs)	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	

General Overhead Expenses (per unit)	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	
Legal Fees (per unit)	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	
Insurance (% of Total Hard Costs)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
Marketing Cost (% of total revenue)	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Sales Commission Fee (% of total revenue)	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
TARION Enrolment Fee (per residential unit)	\$1,040	\$1,356	\$1,040	\$1,040	\$1,130	\$1,639	Calculated as per TARION
After Sales Service (per residential unit)	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	
Lender's Administrative Fee (% of total costs)	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	
Construction Loan Interest Rate (term)	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
HS							
T	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	Ministry of Finance
HST Rebate (per unit)	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	
Development Rates and Timing							
Profit Margin (% of gross revenue)	15%	15%	15%	15%	15%	15%	
Discount Rate	7%	7%	7%	7%	8%	6%	
Absorption Rate (per month)	15.00	7.00	3.00	3.50	2.00	2.50	per NBLC market study
Time Prior to Land Sale	0.25	0.25	0.25	0.25	0.25	0.25	
Time to Begin of Marketing after Land Purchase	1.00	1.00	1.00	1.00	1.00	1.00	Assume sales program can occur at the same time
Pre-sales Period	1.4	0.8	1.9	0.6	2.1	0.5	
Construction Period	3.0	2.5	2.0	2.0	2.0	1.0	
Occupancy Period beyond Construction	0.5	0.5	0.5	0.5	0.5	0.0	
Completion Date	6.2	5.1	5.6	4.4	5.9	2.8	

Assumptions (cont.)

	High-Rise Apartment Mississauga City Centre	High-Rise Apartment Port Credit	Mid-Rise Apartment Dundas Corridor	Stacked Townhomes Erin Mills	Mid-Rise Apartment Bolton	Single- Detached Homes Caledon	Notes
Revenue							
Market Revenue							
Residential Index Price (per sq. ft.)	\$800	\$850	\$650	\$600	\$575	\$415	
Starting End Price at Launch (per unit)	\$516,000	\$765,000	\$520,000	\$510,000	\$575,000	\$1,099,750	
Market Revenue Inflator (year)	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Average Attained Price over Marketing Period	\$843	\$891	\$685	\$628	\$607	\$440	
Parking Sale Price	\$35,000	\$35,000	\$0	\$0	\$0	\$0	
Storage Locker Sale Price	\$4,000	\$4,000	\$0	\$0	\$0	\$0	
Absorption							
Initial Deposit (end price)	10%	10%	10%	10%	10%	10%	

Final Deposit (end price)	10%	10%	10%	10%	10%	10%
Price Increase at Start of Construction	3%	3%	3%	3%	3%	3%
Price Increase at Construction Completion	3%	3%	3%	3%	3%	3%
Sold During Pre-Construction / Presales	70%	70%	70%	70%	70%	40%
Sold During Construction	20%	20%	20%	20%	20%	40%
Sold at Completion	10%	10%	10%	10%	10%	20%
Revenue and Cost Calculations						
	High-Rise Apartment Mississauga City Centre	High-Rise Apartment Port Credit	Mid-Rise Apartment Dundas Corridor	Stacked Townhomes Erin Mills	Mid-Rise Apartment Bolton	Single- Detached Homes Caledon
Revenue						
Residential Revenue						
Revenue from Sale of Market Units	\$202,420,719	\$77,917,146	\$52,180,676	\$20,672,049	\$43,987,181	\$46,675,043
Total Revenue Before Interim Occupancy Charges	\$202,420,719	\$77,917,146	\$52,180,676	\$20,672,049	\$43,987,181	\$46,675,043
Interim Occupancy Charges	\$439,159	\$165,810	\$122,449	\$50,300	\$108,571	\$0
Municipal taxes on the unit	\$283,541	\$109,143	\$73,092	\$28,956	\$61,615	\$0
Projected common expense contribution	\$155,618	\$56,667	\$49,357	\$21,344	\$46,956	\$0
Tarion Recoveries	\$387,072	\$131,757	\$98,980	\$40,285	\$81,883	\$65,540
Sale of Parking and Locker	\$11,095,359	\$4,524,279	\$0	\$0	\$0	\$0
Total Revenue	\$214,342,309	\$82,738,992	\$52,402,106	\$20,762,633	\$44,177,634	\$46,740,583
psf	\$759	\$804	\$585	\$630	\$518	\$441
Costs						
Hard Costs						
Above Grade Construction Cost	\$66,312,994	\$26,228,489	\$17,865,984	\$5,386,121	\$17,085,304	\$17,844,164
Below Grade Construction Cost	\$16,201,372	\$6,523,354	\$2,762,558	\$1,538,162	\$3,124,928	\$0
Above Grade Parking Cost	\$0	\$0	\$216,323	\$27,254	\$193,288	\$0
Servicing Connection Cost	\$196,380	\$50,605	\$50,620	\$20,116	\$38,727	\$20,719
Landscaping and Hardscaping	\$392,761	\$101,211	\$101,241	\$40,232	\$77,453	\$165,751
Roads and Servicing	\$0	\$0	\$0	\$0	\$0	\$1,039,830
Demolition & Site Prep	\$450,210	\$215,831	\$629,512	\$379,973	\$558,925	\$0
Park Space	\$0	\$0	\$0	\$0	\$0	\$278,770
Contingency	\$4,177,686	\$1,655,975	\$1,081,312	\$369,593	\$1,053,931	\$967,462
Total Hard Costs	\$87,731,403	\$34,775,466	\$22,707,550	\$7,761,453	\$22,132,557	\$20,316,697

Assumption: 40% of units, due to staggered occupancy
Assumption: \$0.30 PSF / month; 40% of units, due to staggered occupancy

divided proportionately based on GFA

Included in other hard cost assumptions aside for the subdivision
Assume 50% of subdivision site area requires site prep

psf	\$311	\$338	\$253	\$236	\$260	\$192	
Soft Costs							
Development Charges	\$19,467,039	\$5,477,795	\$5,067,184	\$2,169,777	\$4,062,106	\$3,532,912	
Development Application Fees	\$201,035	\$151,358	\$150,287	\$119,345	\$134,411	\$248,734	
Section 37 Fees	\$0	\$0	\$0	\$0	\$0	\$0	
Cash-in-lieu of Parkland	\$3,739,080	\$963,527	\$963,810	\$383,013	\$450,266	\$0	On site parkland for subdivision - estimated based on land value
Building Permit Fee	\$477,780	\$171,894	\$152,860	\$54,960	\$102,699	\$134,920	
Property Tax	\$621,683	\$219,974	\$96,295	\$51,311	\$50,099	\$123,714	Property tax estimated based on land value
Provincial Land Transfer Tax Rate	\$712,791	\$323,101	\$126,612	\$85,927	\$22,934	\$182,007	
Consultants	\$4,386,570	\$1,738,773	\$1,135,378	\$388,073	\$1,106,628	\$1,015,835	
Development Project Management	\$2,631,942	\$1,043,264	\$681,227	\$232,844	\$663,977	\$609,501	
Construction Management	\$2,631,942	\$1,043,264	\$681,227	\$232,844	\$663,977	\$609,501	
General Legal	\$372,327	\$97,166	\$95,210	\$38,750	\$72,463	\$40,000	
Insurance	\$877,314	\$347,755	\$227,076	\$77,615	\$221,326	\$203,167	
Marketing Cost	\$4,286,846	\$1,654,780	\$1,048,042	\$415,253	\$883,553	\$934,812	
Sales Commission Fee	\$7,501,981	\$2,895,865	\$1,834,074	\$726,692	\$1,546,217	\$1,635,920	
Tarion Enrolment Fee	\$387,072	\$131,757	\$98,980	\$40,285	\$81,883	\$65,540	
After Sales Service	\$372,327	\$97,166	\$95,210	\$38,750	\$72,463	\$40,000	
Lender's Administrative Fee	\$1,206,005	\$462,119	\$311,033	\$114,121	\$284,711	\$272,824	
Construction Loan Financing Costs	\$8,148,181	\$2,549,346	\$1,407,709	\$513,167	\$1,291,837	\$613,326	25% equity assumed for Residential
HS	\$23,287,339	\$8,963,920	\$6,003,087	\$2,378,200	\$5,060,472	\$5,369,695	
T							
HST Rebate	(\$8,935,859)	(\$2,331,977)	(\$2,285,041)	(\$930,001)	(\$1,739,102)	(\$960,000)	
Total Soft Cost	\$72,373,396	\$26,000,846	\$17,890,258	\$7,130,924	\$15,032,918	\$14,672,408	
psf	\$256	\$253	\$200	\$216	\$176	\$138	
	\$14,351,480						
Total Development Cost	\$160,104,799	\$60,776,311	\$40,597,808	\$14,892,376	\$37,165,475	\$34,989,104	
psf	\$567	\$591	\$453	\$452	\$436	\$330	
per unit	\$430,011	\$625,491	\$426,403	\$384,319	\$512,892	\$874,728	
Residual Land Value and Profit Calculations							
	High-Rise Apartment Mississauga City Centre	High-Rise Apartment Port Credit	Mid-Rise Apartment Dundas Corridor	Stacked Townhomes Erin Mills	Mid-Rise Apartment Bolton	Single- Detached Homes Caledon	
Residual Land Value and Profit							
Total Residual Land Value and Profit (FV)	\$54,237,510	\$21,962,681	\$11,804,298	\$5,870,257	\$7,012,160	\$11,751,479	
psf	\$192	\$213	\$132	\$178	\$82	\$111	

Profit						
Total Profit (FV)	\$26,870,007	\$10,342,984	\$6,926,638	\$2,744,077	\$5,839,006	\$6,195,802
Residual Land Value						
Total Residual Land Value (FV)	\$27,367,503	\$11,619,696	\$4,877,659	\$3,126,180	\$1,173,153	\$5,555,676
psf	\$97	\$113	\$54	\$95	\$14	\$52
Total Residual Land Value at Time of Permit (FV)	\$22,801,294	\$10,108,171	\$3,954,425	\$2,749,838	\$905,595	\$5,007,352
psf	\$81	\$98	\$44	\$83	\$11	\$47
Total Residual Land Value (PV)	\$17,993,526	\$8,251,279	\$3,339,058	\$2,321,922	\$747,093	\$4,723,917
psf	\$64	\$80	\$37	\$70	\$9	\$45
per unit	\$48,327	\$84,920	\$35,070	\$59,921	\$10,310	\$118,098
per acre	\$18,365,026	\$17,346,386	\$2,456,856	\$2,763,677	\$622,352	\$955,852

City of Mississauga Corporate Report



Date: 2019/4/17

To: Chair and Members of General Committee

From: Geoff Wright, P. Eng., MBA, Commissioner of
Transportation and Works

Originator's files:
Project site 156

Meeting date:
2019/5/1

Subject

Mississauga Transportation Master Plan

Recommendation

That the Vision, Goals, and Actions of the Mississauga Transportation Master Plan, attached as Appendix 2 to the report entitled "Mississauga Transportation Master Plan" dated April 17, 2019 from the Commissioner of Transportation and Works, be endorsed.

Report Highlights

- The first Mississauga Transportation Master Plan (TMP) is hereby presented for consideration and endorsement; it lays out a Vision for "freedom to move", six Goals and over 90 Action items that will guide the City's stewardship of Mississauga's transportation system as it evolves to meet the rapidly changing demands of the 21st Century.
- The TMP has been developed through Mississauga Moves, a study which integrated policy review, transportation and transit data analysis, benchmarking, trend investigation, and a robust public conversation, including over 2,500 face-to-face interactions, and over 10,000 connections through social media.
- Endorsement of the TMP will signal the commencement of work on a first wave of Actions, and as a result the creation of a Vision Zero Program Leader position will be requested through the 2020-2023 Business Planning and 2020 Budget process in order to ensure that successful pursuit of Vision Zero.
- Progress Indicators will be measured to inform routine updates to the TMP that will take place in coordination with the Mississauga Official Plan review cycle.

Background

The City's first Mississauga Transportation Master Plan (TMP) has been delivered by Mississauga Moves, a study which integrated policy review, transportation and transit data

analysis, benchmarking, trend investigation, and a robust public conversation with community members and stakeholders about the future of mobility into, out of, and around Mississauga.

The Mississauga TMP is unique among its peers. Traditionally, a municipal TMP is heavily-focused on vehicular traffic flow with only marginal consideration of safety, accessibility, or non-car travel. The Mississauga TMP is a policy framework and strategic action plan that considers the full picture of urban mobility, addressing a wide spectrum of hopes and frustrations of Mississauga residents, businesses, and other travellers. The TMP addresses, but also reaches beyond, improvements to the efficient flow of traffic by looking at the bigger picture of transportation and the role it plays in city building and quality of life. The resulting TMP defines the Vision, Goals, and strategic Actions that will guide the City's stewardship of the transportation system as it evolves to meet the rapidly changing demands of the 21st Century.

This project comes at a critical moment in the evolution of transportation in Mississauga when:

- the international Vision Zero movement is shining a spotlight on the opportunities the City has to be greater stewards of road safety in Mississauga;
- Mississauga has reached a new phase of higher-density urban growth;
- the travelling public has an unprecedented appetite for multi-modal travel options, including walking, cycling, transit, ridesharing, and ridehailing in taxis or TNCs; and
- innovative technologies (i.e. 'ACES' – automated, connected, electric and shared vehicles) are disrupting the status quo and revolutionizing the transportation sector.

The TMP serves as a support to the Mississauga Official Plan, outlining how the transportation system can mature to enable and support growth and urbanization from today to 2041.

The Mississauga Moves project used a robust engagement program to involve stakeholders and the public in developing the Vision, Goals, and Actions for Mississauga's transportation future. Highlights of the engagement program include:

- Over 2000 casual conversations with residents at nearly 40 pop-up events;
- Over 10,000 social media engagements with 78 posts;
- Over 6,500 website visitors making approximately 1000 comments;
- Nearly 250 people hosted at two public open houses and five industry workshops;
- Over 50 meetings with Committees, staff team, stakeholders, and partners; and
- Student-led pop-ups in more than a dozen high schools by the MiWay Ambassadors.

Appendix 1 outlines the full list of engagement and communications tactics used in the project.

Comments

The TMP is attached to this report (Appendix 2); it opens with a brief Executive Summary on pages iii - vi. The City's bold Vision for the future of transportation is outlined in Chapter 1. A snapshot of mobility in Mississauga today is documented in Chapter 2, including a series of

charts, graphs, maps and key statistics. Chapters 3 and 4 showcase where Mississauga can go from here; these chapters illustrate how transportation can transform life for the people who live, work, learn and play here and how transportation and city building work symbiotically in diverse types of places. Chapter 5 establishes a set of six Goals that guide the City toward the Vision, and Chapter 6 specifies a 'to do list' of over 90 Actions that will move Mississauga toward these Goals. Finally, Chapter 7 explains how the Mississauga Transportation Master Plan will become a living document in Mississauga's family of governing policies and plans, and documents a set of Progress Indicators that can be used to measure the City's progress toward the Goals of the TMP over the long term.

The comments below highlight the Vision, Goals, and Actions of the TMP that are recommended for endorsement, as well as a few of the key findings about mobility in Mississauga today. This section of the report also includes a summary of the first round of work that will be done to take action on this plan, and the additional effort it is expected to take to pursue all the Goals to the same standard of excellence.

Vision: Freedom to Move

The TMP sets a bold Vision for providing mobility in Mississauga from today to 2041 (Figure 1).

Figure 1. Vision Statement of the Mississauga Transportation Master Plan

In Mississauga, everyone and everything will have the
freedom to move safely, easily and efficiently to anywhere at any time.

This Vision calls on decision makers to be stewards of a transportation system that will:

- create an inclusive transportation system that serves *everyone*, regardless of a person's reason for travelling, time of travel, destination, journey length, or individual needs;
- enable the movement of *everything*, both people and the essential goods and freight required to support quality of life in the city and a robust regional economy;
- ensure all travellers can move *safely* by any mode;
- provide the ability to move *easily*, so that people enjoy convenient, comfortable, and barrier-free trips, regardless of their age or circumstances;
- move people and goods *efficiently*, by making best use of a finite amount of roadspace, rights-of-way and trails to maximize travel options; and
- offer comprehensive options that can take people and goods *anywhere* within Mississauga or beyond, *any time* they need to be there.

Further discussion of the Vision and the role transportation plays in realizing the strategic goals of the Mississauga Strategic Plan can be found in Chapter 1 of the TMP (Appendix 1). Illustrations of how the Vision can transform quality of life and the experience of places in Mississauga can be found in Chapters 3 and 4 of the TMP, respectively.

Mobility in Mississauga Today

Mississauga is a dynamic, successful city that has grown rapidly over the last 50 years, offering families and businesses the freedom to grow. Cars and trucks have been an essential support to that growth, enabling people and goods to flow within and beyond the city. As Mississauga enters its next stage of maturity, the freedom to move cannot be achieved without more options for mobility. A transportation system that heavily relies on single-occupant vehicles is known to face escalating congestion, economic burden, declining air quality, accelerating climate change, negative physical and mental health impacts, and risk of isolation for those who cannot drive or access a personal vehicle. Mississauga is well positioned to address these issues by expanding capacity for other modes of travel alongside the option to drive, and by finding new ways to manage traffic of all kinds as more people travel to, from, and within Mississauga.

Chapter 2 of the TMP provides an extensive characterization of Mississauga and its transportation system today. A few key aspects are highlighted below.

Mississauga is expected to remain a net importer of commuters

People who come from outside Mississauga are the largest and fastest growing demographic of workers in Mississauga. Mississauga residents commuting out of the city is a smaller, but also steadily growing demographic of Mississauga workers. It is crucial that Mississauga continue to advocate for regional transit, and continue to build and reinforce strong links to regional transit and transportation networks.

The majority of trips in Mississauga are for the ‘business of life’

Even at rush hour, commuters are outnumbered on Mississauga roads by people travelling for the ‘business of life’; 52% of trips in Mississauga on an average weekday are for reasons other than work or school. Though peak flow remains an important measure of traffic, the transportation system must be designed to cater to the needs of any traveler, at any time of day, for any reason.

Mississauga roads are relatively safe, but are not yet at ‘Vision Zero’

Peel Region has the lowest rate of annual fatal and injury-causing collisions of any upper tier municipality in the GTHA, and Mississauga has the lowest rate of the three lower tier municipalities within Peel Region. However, at 1.6 per 1000 residents, the rate is not zero. Road safety is a top concern for travelers in Mississauga and is a barrier to walking and cycling. The City must invest in the “5 Es of Road Safety” – engineering, education, enforcement, empathy, and evaluation – in order to move toward Vision Zero.

The population of vulnerable age groups is growing

By 2041, the population over the age of 65 is expected to grow by 123%, and the population of children (age 0 - 19) is expected to grow by 12%, while the population of working-aged residents is expected to decline by 2%. A greater portion of the population will be made up of vulnerable travellers who cannot rely on having the ability or confidence to drive nor on having

access to their own car. People of all ages and abilities need to have options to complete their daily activities without owning and operating a vehicle.

Transit is an increasingly popular mobility option in high demand

MiWay experienced ridership growth of more than 15% in the five years between 2011 and 2016, and MiWay riders take the most local transit rides per capita in the GTHA, outside of Toronto. Where high quality transit options are provided, Mississauga travellers choose transit. For example, since 1986 over 5,000 more trips a day are taken from Mississauga to downtown Toronto, yet there has been no change in the number of car trips, thanks to improved service on the Lakeshore West GO Train line. Local and regional transit service must continually improve to meet latent demand for competitive alternatives to making long trips by driving.

Six Goals to Move Towards the Vision

The TMP Vision for transportation can be realized through the pursuit of six interdependent Goals (Figure 2; see TMP Chapter 5 for more detail). The pursuit of these Goals will ensure the transportation system fulfills its essential role in city building and quality of life in Mississauga.

Figure 2. Six Goals of the Mississauga Transportation Master Plan

Safety: Freedom from Harm

Safe conditions for all travellers, advancing Vision Zero by supporting hazard-free travel and striving for zero fatalities.

Inclusion: Freedom from Barriers

An accessible network, where moving is easy regardless of a person's age, ability, income, or familiarity with the city

Integration: Freedom of Choice

An integrated network, where people and goods have viable options for moving within and beyond the city

Connectivity: Freedom of Access

Simple and pleasant connections between people and the places and things they need to prosper

Health: Freedom to Flourish

Support for the health of people and the planet, with more people-powered trips, lower vehicle emissions, and better stewardship of the natural environment

Resilience: Freedom to Evolve

Leadership in adapting to changes that reshape the transportation system and how it is used

Action Plan

Over 90 strategic Actions are listed in Chapter 6 of the TMP; each is a discrete initiative the City can take to help achieve the Goals of the TMP. Each Action indicates the City Division most responsible, the target timeline (short | 1 - 5 years, medium | 6 – 15 years, or long | 16+ years) and which of the six Goals would be pursued through the Action. Actions are grouped by pathways to implementation, highlighting various ways the City can shape the transportation system, namely: policies, guidelines and standards; plans and studies; programs; procedures; and partnerships.

Immediate Focus Areas

Endorsement of the TMP will be the signal for the momentum of the Mississauga Moves study to be redirected into taking action. Several initiatives have already begun and several more are scheduled to begin in 2019 or come forward with funding requests through the 2020 Budget process. The work that is underway or is soon to begin is concentrated on priority aspects of the transportation system that will be most impactful in making bold change at an aggressive pace, as described below.

Advance Vision Zero in Mississauga

Vision Zero is the principle that *no loss of life is acceptable on roads in Mississauga*. It demands that the City apply a new way of thinking when completing each and every Action in the TMP. There are several Actions the City will take specifically to advance Vision Zero, such as:

- road safety infrastructure enhancements (Action 43)
- speed management program (Action 46)
- Vision Zero road safety education (Action 45) and
- road safety data monitoring (Action 47)

Reframe Roads and Rights-of-Way

The City will update policies that govern how roads and rights-of-way are designed and operated to ensure they continue to meet the needs of the evolving city as it grows and matures. Mississauga will get the most out of its public rights-of-way and will optimize safety, ease of travel, and efficiency for all road users by:

- introducing new Complete Streets design guidelines (Action 1)
- modernizing the City's road classification (Action 2)
- updating the City's long-term road network (Action 14) and
- updating the City's engineering design standards (Action 3)

Introduce New and Revised Policies for New Developments

The function, layout and design of private properties and the buildings, streets, parking facilities, cycling facilities, driveways, and walkways within them play a significant role in the

success of our transportation system. The City will build on lessons learned in recent corridor studies (such as Dundas Connects and Lakeshore Connecting Communities) and ongoing major developments (such as Port Credit West Village and Lakeview Village) to advance the policies that govern all development city-wide. In addition to the road and rights-of-way policies described above, the City will:

- conduct the next Mississauga Official Plan Comprehensive Review (Action 69)
- update the City's Traffic Impact Study Guidelines (Action 5)
- review and update parking requirements (Action 7) and
- introduce requirements for electric vehicle charging (Action 22)

Provide New, Improved and Evolving Transit Service

MiWay is a leader among local transit providers and will continue to be. In addition to preparing the next MiWay Five Service Plan for the years 2021 to 2026, MiWay will demonstrate leadership through:

- the MiWay Infrastructure Growth Plan (Actions 15 and 16) and
- coordination with Peel Region's strategic planning for TransHelp (Action 75)

Better transit for Mississauga also requires the City to continue to be a strong voice in regional transit planning, integrating with GO Transit and neighbouring local transit providers. To this end, the City will:

- prepare a long-term transit network (Action 13) to map out the service network required to keep pace with expected growth and development by 2041
- continuously advocate for improved regional transit service (Action 82), including all-day two-way service on the Milton GO Line (Action 73) and
- participate in Metrolinx-led work on transit fare integration (Action 84)

Leverage Smart Technology for Traffic Management

The recently completed upgrade of the City's traffic control system has enabled Mississauga to make significant advancements in adaptive traffic management. Guided in part by the forthcoming Smart Cities Master Plan, the City will discover and apply new and smarter ways to manage traffic flow in normal and disrupted conditions, by:

- preparing of a five-year Traffic Management Plan (Action 24)
- taking stock of existing and required transportation data assets (Action 66) and
- exploring potential applications for 'big data' management practices (Action 23)

Expand and Enhance Cycling and Pedestrian Networks

The Mississauga Moves study learned that only 23% of trips under 2 kilometres are taken by active transportation, such as walking or cycling, and that residents often feel the routes available are not as safe, connected, comfortable, and convenient as they need to be for residents to feel confident choosing to use them. The City will build on the comprehensive work of the 2018 Cycling Master Plan by:

- continuing to implement the long-term cycling network (Action 59)
- making a comparable plan for the pedestrian network (Action 12)
- reviewing and updating policies related to walkways (Action 4)
- seeking opportunities to improve winter maintenance standards (Action 62)
- reconsidering maintenance practices through City's forthcoming Corporate Asset Management Plan (Action 70)

Integrate New Mobility Alternatives to Car Ownership

New mobility encompasses the diverse, and at times surprising, breadth of transportation-based businesses arriving on the scene. The City will continue to learn and evolve with the changing times by:

- updating the Mobile Licensing By-law that governs ridehailing (Action 18)
- concluding the on-going study of accessible ridehailing (Action 19)
- investigating micromobility systems (e.g. networks of shared bikes, e-bikes and e-scooters for short term rental) in Mississauga (Action 20) and
- actively monitoring innovation and change in the industry (Action 71)

Continue to Offer Strategic Advantages for Business

Mississauga is home to Canada's largest airport, Toronto Pearson, is in close proximity to two major intermodal rail-to-road facilities, and has direct access to five 400-series highways making it a strategic location for any business, especially those related to the movement of goods. The evolving nature of e-commerce is having a significant impact on the associated employment landscape, especially in sectors related to storage and distribution. The City will:

- remain active on the Peel Region Goods Movement Task Force (Action 80) and
- investigate a policy to support the unique needs of warehousing and logistics (Action 10)

By undertaking this initial series of Actions in the immediate term, the City will lay a strong foundation for the next rounds of Actions in the short, medium and long term and for the next TMP to build on.

Enabling the Shift to Vision Zero

Looking at the work ahead, it is clear that for the City to meet its Vision Zero ambitions, safety must be an integral part of all aspects of the transportation system, from planning to design to construction to operation and maintenance. A series of standalone Vision Zero initiatives must also be pursued, ranging from a speed management program to enhanced safety data monitoring to a memorial program. This work must be properly resourced in order for it to be achieved in a timely manner and to the City of Mississauga's standard of excellence. To this end, a Budget Request will be submitted as part of the 2020-2023 Business Planning and 2020 Budget process requesting the creation of a full-time Vision Zero Program Leader position. In

the interim, in order to ensure that the City aggressively moves forward with the identified Vision Zero Actions, the Transportation and Works Department will be looking to fill this position immediately. The Program Leader will coordinate and lead projects to advance the implementation of the Vision Zero framework established in the Safety chapter of the TMP, will serve as a strong and consistent voice for Vision Zero in the City's major road projects and regional committees, and will increase the Corporation's capacity to fully engage with the community and other leaders in the industry.

Strategic Plan

Chapter 1 outlines how the TMP helps advance nearly every goal under all five pillars of the Mississauga Strategic Plan.

Financial Impact

Financial considerations for each of the Actions in the TMP will be prepared separately prior to initiation and will be presented to Council for consideration through established processes (e.g. the City Business Plan and Budget, Development Charges By-law, intergovernmental grant applications or a stand-alone Corporate Reports).

As part of the 2020-2023 Business Planning and 2020 Budget process, a Budget Request will be submitted to create a permanent Vision Zero Program Leader position. In the interim, the Transportation and Works Department will proceed to fill this position immediately and fund the position through departmental gapping for the balance of 2019.

Conclusion

With Council's endorsement, the TMP will provide clear and decisive direction to the City and its current and future partners in their objective of serving the transportation needs of residents, businesses, visitors, and other travellers in Mississauga from today to 2041. Dedicating appropriate resources to the implementation of Vision Zero will ensure that road safety becomes not only a Goal guiding a set of Actions, but also a part of the working culture on all projects and programs in the transportation system. This Plan and the work to implement it will set Mississauga apart from its peers, demonstrating the City's strategic leadership in transportation planning that encompasses the full picture of urban mobility and the role it must play in city building and quality of life.

Attachments

Appendix 1: Summary of Mississauga Moves Engagement and Communication

Appendix 2: Mississauga Transportation Master Plan - Draft for Council Consideration



Geoff Wright, P. Eng., MBA, Commissioner of Transportation and Works

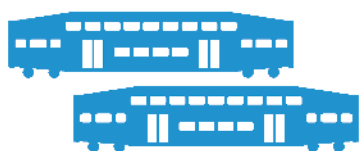
Prepared by: Michelle Berquist, RPP, MCIP, Project Leader Transportation Planning

Corporate Report to General Committee - Mississauga Transportation Master Plan
Appendix 1: Summary of Mississauga Moves Engagement and Communication

Where Are We Now? Summer and Fall 2017	Where Do We Want to Be? Summer 2018	How Do We Get There? Winter 2019
<i>Engagement Tactics</i> <ul style="list-style-type: none"> • Deputation at General Committee on March 1, 2017 • Face-to-face dialogue with nearly 1,400 people at 23 pop-up community conversations, with nearly 900 comment cards filled out • A Community Feedback Panel orientation session and survey, with 40 members • 15 stakeholder interviews with representatives from key organizations • Five stakeholder workshops with 58 attendees • An Open House on November 16, 2017, with over 150 attendees • Over 2,200 visitors to website, which featured a survey, idea 'wall', mapping activity and Q&A portal 	<i>Engagement Tactics</i> <ul style="list-style-type: none"> • Deputation at General Committee on May 30, 2018 • Deputations at over a dozen Committees/staff meetings • Face-to-face dialogue with nearly 600 people at 15 pop-up community conversations, with 300 surveys completed • 15 stakeholder interviews with key organizations • A Community Conversation Kit available online for individuals and groups to host their own conversation • Comment cards from 400 high school students, through students involved in MiWay Ambassadors Program • Over 1,600 visitors to the website, which featured an interactive survey completed by 1,200 people, mapping activity and Q&A portal 	<i>Engagement Tactics</i> <ul style="list-style-type: none"> • Full length Draft TMP online, with over 900 downloads • Community Panel focus group on January 23, 2019 attended by six Panelists • An Open House on January 29, 2019, with 40 attendees despite inclement weather • Drop-in access to Open House material at Civic Centre Great Hall January 30, 2019 to February 3, 2019 • Deputations at nearly a dozen Committees/staff meetings • Feedback on Draft received from nearly 50 people using Open House workbook, online feedback survey, or email • Over 2,800 visitors to the website, which featured access to Draft and Open House material, feedback survey and Q&A portal
<i>Communications Tactics</i> <ul style="list-style-type: none"> • 13 Tweets on Twitter - 49,306 impressions - 996 engagements • 3 Facebook posts - 30,187 impressions - 1,661 engagements • 2 media articles - 255,097 impressions • Ads in Mississauga News and InSauga - 195,000 impressions • City owned digital screens - 625,000 impressions 	<i>Communications Tactics</i> <ul style="list-style-type: none"> • 28 Tweets on Twitter - 109,570 impressions - 2,233 engagements • 22 Facebook posts - 100,595 impressions - 3,507 engagements • 1 LinkedIn post - 8,422 impressions - 276 engagements • 2 media articles - 9,211 impressions • City eNewsletter - 40,000 subscribers 	<i>Communications Tactics</i> <ul style="list-style-type: none"> • 4 Tweets on Twitter - 10,909 impressions - 314 engagements • 3 Facebook posts - 52,831 impressions - 1,333 engagements • 4 LinkedIn posts - 11,010 impressions - 168 engagements • 5 media articles - 131,151 impressions • Ad in Mississauga News - 70,000 impressions • City owned digital screens - 605,713 impressions • City eNewsletter - 40,000 subscribers

Mississauga Transportation Master Plan

DRAFT FOR COUNCIL CONSIDERATION
April 2019



Prepared by:

Steer

1502-80 Richmond St W

Toronto, ON

M5H 2A4

Canada

(647) 260 4860

www.steergroup.com

Prepared for:

City of Mississauga

300 City Centre Dr.

Mississauga, ON

L5B 3C1

Canada

(905) 615 4311

www.mississauga.ca

www.mississaugamoves.ca

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EXECUTIVE SUMMARY

Freedom to move

Mississauga's transportation system provides people with the freedom to move.

Quality of life in the city depends on people having reliable access to the people, places, and things they need and enjoy, whether part of a routine or a special occasion. That access must be available to all people, regardless of their reason for travelling, time of travel, destination, journey length, or personal circumstances. It must be also available at all times of day throughout the year, and for all places people need to go. It requires that goods and freight are also able to move around the city to and from businesses, retailers, and residents' mailboxes. It must be safe for the diversity of trips that are taken in a shared system of roads and rights-of-way. It must be efficient, making best use of a finite amount of roadspace. It must also be easy, so that people enjoy convenient, comfortable, and barrier-free trips with viable options for getting around.

The freedom to move is the heart of the Transportation Master Plan Vision Statement:

In Mississauga, everyone and everything will have the **freedom to move** safely, easily, and efficiently to anywhere at any time.

Guided by this vision, the Transportation Master Plan will further the aims of the Mississauga Strategic Plan, supporting and strengthening the City's strategic pillars: move, belong, connect, prosper, and green.

Turning point

Transportation is essential to continued prosperity at this turning point in Mississauga.

Mississauga is a dynamic and successful city. It is a preferred choice for raising a family, growing a business, and taking part in cultural diversity from around the world. Since incorporating as a City less than 50 years ago, Mississauga has expanded its urban area to the municipal boundaries. The city's rapid growth has been enabled and supported by significant investment in major transportation infrastructure, including provincial highways, GO Rail, and an intricate network of regional and local roads.

The next phase of growth will be different. It demands new and different investments in transportation. Current and future growth in Mississauga is focused on key nodes and corridors within the existing urban area. The growth of neighbouring municipalities is creating new links with employers and major attractions in Mississauga. The number of trips made to, from, and within Mississauga will continue to rise.

New features of modern life are emerging, such as e-commerce, work-life balance adjustments and the gig economy. Together with changing demographics, these will put different demands on Mississauga's transportation system. Safeguarding and enhancing the freedom to move around the city will rely on additional options for mobility. Future investment must focus on managing congestion and providing new options. That investment will provide transit services, smart traffic management systems, and cycling and pedestrian networks that are safe, comfortable, connected and convenient. The investment must also leverage innovations in new transportation technology. Transportation will remain an essential part of city building, so that Mississauga will remain a place where people and businesses choose to be.

Goals and Actions to 2041

Mississauga will advance the freedom to move by pursuing six Goals for transportation:



Safety: Freedom from Harm

Safe conditions for all travellers, advancing Vision Zero by supporting hazard-free travel and striving for zero fatalities



Inclusion: Freedom from Barriers

An accessible network, where moving is easy regardless of a person's age, ability, income, or familiarity with the city



Integration: Freedom of Choice

An integrated network, where people and goods have viable options for moving within and beyond the city



Connectivity: Freedom of Access

Simple and pleasant connections between people and the places and things they need to prosper



Health: Freedom to Flourish

Support for the health of people and the planet, with more people-powered trips, lower vehicle emissions, and better stewardship of the natural environment



Resilience: Freedom to Evolve

Leadership in adapting to changes that reshape the transportation system and how it is used

The Transportation Master Plan lays out nearly 100 Actions that will take Mississauga towards these Goals. The Actions are specific items that the City of Mississauga can accomplish, sometimes relying on partnership with others. Actions are planned for all the ways the City can affect change. They include:

- Policies, guidelines, and standards – actions to establish or update the rules and regulations that govern the transportation system at the local municipal level
- Plans and studies – actions to establish clear, well-informed direction on new transportation initiatives based on sound research and strategic planning
- Programs – actions to invest in new programs or improved levels of service in the planning, design, construction, operation, and maintenance of the transportation system
- Procedures – actions to implement new ways of doing business to align with evolving best practices
- Partnerships – actions to collaborate with allies, stakeholders, and partner agencies in the transportation field

A target timeline has been set for the completion of each Action, either short term (next 5 years – by 2024), medium term (next 5 – 15 years – between 2025 and 2034), or long term (next 16 – 22 years – between 2035 and 2041). The Division of the City of Mississauga responsible for leading each Action are also indicated in the Plan.

This Plan

This Plan is the result of extensive engagement with stakeholders and the public, coupled with in-depth, evidence-based research and analysis. It will serve as a framework to guide City policy and business planning. The Plan will direct the City's investment in and stewardship of the transportation system, which is understood to be more than a network of roads and traffic lanes. It is the interconnected system of:

- Infrastructure such as roadways, railways, highways, bikeways, sidewalks, walkways, and trails;
- public rights-of-way, waterfronts, green spaces, and the lands adjacent to them;
- public services such as transit, municipal parking, and traffic management;
- regulations that govern service providers such as taxis, Transportation Network Companies (TNCs), and towing and delivery vehicles; and
- people who travel and engage with rules, etiquette, and on-going education

This Plan takes a long-term strategic view of the transportation system to determine appropriate courses of action for the short, medium and long term. Detailed network planning, forecasting, project scoping, costing, budgeting, and annual prioritization will be first steps toward implementing the Plan.

This Plan will take Mississauga and its transportation system where they need to go.

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1

VISION

The future of Mississauga and its transportation,
from today to 2041.

Vision

Building on Mississauga's Pillars of Change

Vision

Mississauga is a dynamic, successful city that has grown rapidly over the last 50 years, offering families and businesses the freedom to grow. Cars and trucks have been an essential part of that growth, enabling people and goods to flow within and beyond the city. As Mississauga enters its next phase of growth, it is clear that the **freedom to move** around the city cannot be achieved without more options for mobility.

A transportation system that heavily relies on single-occupant vehicle trips is known to face escalating congestion, economic burden, declining air quality, accelerating climate change, negative physical and mental health impacts, and risk of isolation for those who cannot drive or access a personal vehicle. Mississauga is well positioned to escape these perils as the city continues to grow and change, by expanding capacity for other modes of travel alongside the option to drive, and by finding new ways to manage traffic of all kinds as more people travel to, from, and within Mississauga.

The **freedom to move** must support the quality of life in Mississauga through the next phase of growth. This Transportation Master Plan lays out a Vision for providing mobility in Mississauga from today to 2041, outlined above. Delivering the Vision will:

- create an inclusive transportation system that serves **everyone**, regardless of a person's reason for travelling, time of travel, destination, journey length, or personal circumstances;
- enable the movement of **everything**, both people and the essential goods and freight required to support quality of life in the city and a robust regional economy;
- ensure all travellers can move **safely** by any mode;
- provide the ability to move **easily**, so that people enjoy convenient, comfortable, and barrier-free trips, regardless of their age or circumstances;
- move people and goods **efficiently**, by making best use of a finite amount of roadspace, rights-of-way and trails to maximize travel options; and
- offer comprehensive options that can take people and goods **anywhere** within Mississauga or beyond, **any time** they need to be there.

Vision Statement

In Mississauga, everyone
and everything will have the
freedom to move
safely, easily, and efficiently
to anywhere at any time.

Building on the Pillars of Change

The Mississauga Strategic Plan (2009) sets out five Strategic Pillars of Change that guide how Mississauga will grow and develop. The Transportation Master Plan strengthens and builds upon each of these pillars.

“Mississauga will inspire the world as a dynamic and beautiful global city for creativity and innovation, with vibrant, safe and connected communities; where we celebrate the rich diversity of our cultures, our historic villages, Lake Ontario and the Credit River valley.”

“A place where people choose to be.”

Mississauga Strategic Plan (2009)



Move

Developing a transit-oriented city



Belong

Ensuring youth, older adults and new immigrants thrive



Connect

Completing our neighbourhoods



Prosper

Cultivating creative and innovative businesses



Green

Living green



Move

The **Move** pillar envisions a bold transformation of the city's transportation system to give travellers in Mississauga options and to provide freedom from automobile dependence. It also directs transit to be a desirable choice for travellers.

The Transportation Master Plan will advance the Goals of the Strategic Plan:

- **build a reliable and convenient transit system** by making transit a faster and more affordable alternative to the automobile;
- **develop environmental responsibility** by improving travel choices other than driving alone and by supporting compact mixed-use development that encourages active travel and transit use;
- **connect the city**, both by connecting communities within Mississauga and by connecting Mississauga with the wider region;
- **increase transportation capacity** by enhancing transit and improving travel options that require less road space per person and by better managing traffic flow within existing road capacity; and
- **direct growth** by supporting policies that advance transit-oriented development and help manage the effects of growth.



Belong

The **Belong** pillar aims for a socially and culturally diverse city where people of all ages and backgrounds can thrive. People's transportation needs change depending on their abilities, socioeconomic situation, and life needs. An effective transportation system allows all members of society to travel to the people, places, and events they need and enjoy. It also widens the area where people can live and access services. This pillar will help with affordability by expanding the areas where people can live and by expanding the number of destinations they can access.

The Transportation Master Plan will advance the Goals of the Strategic Plan:

- **ensure affordability** by providing connections between affordable housing and people's daily needs;
- **ensure accessibility for all** by guaranteeing accessible travel options;
- **support aging in place** by ensuring that transportation facilities and networks are available and accessible for all and by supporting independent travel options that do not require a car; and
- **attract and retain youth** by providing transportation options to post-secondary education, jobs, social activities, and cultural/artistic destinations.



Connect

The **Connect** pillar aims for vibrant and strong neighbourhoods where people can live, work, and prosper. This aim is underpinned by the development of a range of viable transportation choices.

The Transportation Master Plan will advance the Goals of the Strategic Plan:

- **build vibrant communities** by creating better links between urban areas and neighbourhoods, improving access to commercial, social, artistic, cultural, civic, and recreational experiences for all;
- **create a vibrant downtown** by providing transit, walking, and cycling connections for people from near and far;
- **nurture villages** to promote “village” main streets as destinations as well as transportation corridors, by developing a “Complete Streets” approach to roadway planning and improving pedestrian connections;
- **help develop walkable, connected neighbourhoods** by planning for safe and convenient connections in the pedestrian and cycling networks;
- **provide mobility choices** integrating travel across all modes, and by maintaining Mississauga’s reputation as a safe city; and
- **support great public spaces** by providing access to parks, plazas, and unique natural environments for everyone.



Prosper

The Prosper pillar aims for a city that values a strong global business future and a prosperous and sustainable economy that attracts and grows talent. Effective, affordable, and competitive transportation options will entice employees and employers to move to or work in Mississauga. Arts, culture, and tourism will also be supported by denser and more vibrant communities.

The Transportation Master Plan will advance the Goals of the Strategic Plan:

- **meet employment needs** by providing transportation connections to improve employees’ access to jobs in Mississauga; and
- **attract innovative business** by supporting goods movement and related industries, by responding to the transportation needs of new businesses, and by enhancing businesses’ access to customers and employees.



Green

The **Green** pillar aims for a city that ensures a clean and healthy natural environment. Transportation is a major source of greenhouse gas emissions in Mississauga. Developing and supporting more sustainable travel choices—such as transit, carpooling or ridesharing, walking, or cycling—will reduce greenhouse gas emissions and promote a green future.

The Transportation Master Plan will advance the Goals of the Strategic Plan:

- **lead and encourage environmentally responsible approaches** and **conserve, enhance, and connect natural environments** by improving transportation connections on a variety of travel modes to support travel habits that reduce greenhouse gas emissions, improve air quality, and protect the natural environment; and
- **promote a green culture** by developing healthy, active travel connections to open spaces, supporting environmentally responsible behaviours and an appreciation for natural environments.

Mississauga's Strategic Plan sets out a detailed vision for all aspects of the city. Transportation does not just exist for its own sake. It plays a role in supporting all five pillars of the Strategic Plan, and can help further many of the aims under each pillar. The Transportation Master Plan describes how this will happen, furthering Mississauga's broader objectives.

2

MISSISSAUGA TODAY

Shaped by past choices, Mississauga's transportation system influences our lives today and our decisions tomorrow.

Strengths, Weaknesses, Opportunities, and Challenges

History

Shape of the City

Travel Patterns and Behaviours

Economy and Jobs

Tourism and Entertainment

Changing Environment

Evolving Transportation Future

Overview

Mississauga is a dynamic, fast-growing city experiencing a range of strengths, weaknesses, opportunities, and challenges as it enters a new phase of growth.



Strengths

- Part of the wider, successful Greater Toronto and Hamilton Area
- Strong employment base
- Attractive residential areas
- Continued growth
- Growing range of amenities



Weaknesses

- Legacy road networks
- Over-reliance on cars
- Reduced access because of increasing travel times



Opportunities

- Re-thinking transportation priorities
- Managing public rights-of-way
- Smart management of traffic and parking
- Investing in walking, cycling, and transit
- Embracing new technologies
- Enhancing quality of life for all
- Growing within the urban area



Challenges

- Accommodating continued population and employment growth
- Adjusting to changing demographics
- Developing better transportation choices
- Supporting economic development
- Securing funding
- Balancing competing interests
- Reducing negative environmental effects

Strengths

Part of the wider, successful Greater Toronto and Hamilton Area

Mississaugans have access to a wide range of jobs and amenities within and outside the city. The surrounding areas provide jobs for 145,000 Mississaugans, yet nearly twice as many people commute into Mississauga each day than commute out. The City is intricately tied to the wider Greater Toronto and Hamilton Area.

Strong employment base

Mississauga has the most jobs per capita of any municipality in the Greater Toronto and Hamilton Area (GTHA). The city has a range of jobs, including manufacturing/industry, warehousing/logistics, and professional/scientific/technical services. These jobs draw 234,000 commuters into Mississauga each day.

Attractive residential areas

More than 100,000 Mississaugans have moved to the city in the last five years. The city is attractive for families - it has a greater proportion of households with children than the averages for the GTHA, province, or country. Currently, 60% of the land in Mississauga is dedicated to residential or mixed-use, with a range of housing types and price points.

Continued growth

Mississauga's population is forecast to grow 22% to 878,000 by 2041, which includes a 14% increase in its youth population. It is expected that job growth will match population growth, with employment forecast to grow to 552,000 jobs by 2041 meaning 104,000 more jobs and a 23% increase. New homes and jobs are planned to be primarily along major roads and at key nodes close to transit, with existing residential areas largely unchanged.

Growing range of amenities

Mississauga has recently gained a new post-secondary institution, Sheridan College, which opened its Mississauga campus in 2011 and expanded it in 2017. The City has an ever-growing range of entertainment and cultural amenities. It has also added access points and amenities along its river valleys and waterfront.

Weaknesses

Legacy road networks

The city's historical growth was primarily based on greenfield development. This approach was supported by a grid of major roads linked to the provincial highway network. Local road networks within neighbourhoods were often designed to be curvy or to prevent straight-line travel. This design creates longer trips for drivers and inhibits walking and transit use.

Over-reliance on cars

Car travel is the dominant mode of transportation, used for 85% of weekday trips to, from, or within Mississauga. It includes 489,000 car trips during a typical weekday peak period and creates significant congestion on roads as well as associated air-quality issues and greenhouse gas emissions. Congestion generates negative effects on businesses, the city's transit network, and people's quality of life.

Reduced access because of increasing travel times

Mississauga's roads are sometimes congested during peak travel periods, and travellers to and from the city also suffer from wider regional congestion issues. Higher travel times limit the number of jobs and amenities people can reach in a reasonable time. Similarly, they limit the number of potential employees and customers for businesses. Increased road capacity will not provide an effective or efficient solution to higher travel demand. Future transportation will not be like its past.

Opportunities

Re-thinking transportation priorities

Mississauga's expected future growth and its existing traffic issues can provide the motivation to increase people's travel options. Policymakers can take a fresh look at how transportation is provided across the city, with new ideas on how to address over-reliance on the car.

Managing public rights-of-way

Mississauga owns and controls most roads in the city (excluding Regional roads and provincial highways). This position means the City can re-imagine how roads are managed and can potentially re-allocate space between modes where beneficial. More generally, the focus of the City's planning and investment can shift from moving vehicles to moving people.

Smart management of traffic and parking

Mississauga's new Advanced Transportation Management System (ATMS) is being used to improve the performance of the road network through dynamic signalling and signage. The ATMS will enable the road network to work smarter, not harder. Transportation Demand Management policies and initiatives can also support smarter use of the existing network. Similarly, because parking consumes land, reducing demand and sharing space can provide a smarter way to manage parking.

Investing in walking, cycling, and transit

New pedestrian walkways and crossings, combined with better maintenance, can bring more destinations within walking distance and make walking more attractive. People's existing desire to cycle can be translated into active choices through a safe, comfortable, connected and convenient bicycle network. All aspects of a transit journey can be enhanced, including trip planning, travel to and from transit facilities, the waiting environment, fares, frequency, average vehicle speed, reliability, ride quality, safety, and transfers between services.

A full range of transit options can be utilized, including specialized transit, local bus services, express bus services, Bus Rapid Transit (BRT), Light Rail Transit (LRT), and regional bus and rail services.

Embracing new technologies

Social media, new transportation apps, car-pooling, bike and scooter share programs, and Transportation Network Companies (TNCs) can create new travel options and new ways of understanding the needs and priorities of travellers. Advances in technology such as autonomous, connected, electric, and shared vehicles can improve the costs and benefits of available travel choices. Better data availability, collection, and analysis can help inform better decision-making.

Enhancing quality of life for all

Transportation improvements can enhance everyone's quality of life, by providing people with better access to education, jobs, services, and other people. People then have more options in their life choices, or are able to use travel time more effectively.

Growing within the urban area

Mississauga's urban area has expanded to its boundaries as people and businesses have come to the city. There is only a small amount of greenfield land available (along Hwy 407). The City can grow within the existing urban area, and the new travel demand can be met within the existing transportation system. Mississauga's future growth and transportation can be different to from the past.

Challenges

Accommodating continued population and employment growth

Mississauga needs to accommodate substantial growth to continue its ongoing success. Such growth will be within the existing urban area, not at its periphery, and will include multi-storey residential buildings and townhouses. Growth will also be occurring in surrounding municipalities, affecting Mississauga. A lack of investment in the right type of transportation improvement projects will lead to further congestion and greater costs for the city, its businesses, and its people.

Adjusting to changing demographics

The increases forecast for both youth and older adult populations will significantly decrease the percentage of Mississaugans of working age. The transportation system needs to provide access for users of all ages; in particular, it needs to support active, independent lifestyles by Mississauga's older adults. It also needs to provide transportation options that work for youth and attract young adults who may be less interested in traditional car ownership.

Developing better transportation choices

New development needs to be matched with investment in transit and active modes. Existing development needs better choices to help change travel behaviours. Transit, walking, cycling, and car-sharing need to provide superior travel choices for users and sufficient capacity for the city to enable travel habits to shift away from driving. The solutions need to vary by location across the city, as industrial areas, mature residential neighbourhoods, and the growing downtown all require different measures.

Supporting economic development

The movement of people and goods is a critical part of the economy. Employees need to reach jobs, customers need to reach businesses, and goods have to move from producer to consumer. The transportation system must fulfil these needs to enable a broad range of economic activity.

Securing funding

All levels of government serving Mississauga have a desire for better transportation. This desire needs to be matched with appropriate funding from each level. It will need to create partnership arrangements with other levels of government, the private sector, and other stakeholders.

Balancing competing interests

Transportation rights-of-way will always have a finite amount space available for transportation infrastructure such as travel lanes, transit-only lanes, bikeways, sidewalks, medians, and protective barriers. There will always be need or desire to use same space for other infrastructure, such as drainage, hydro poles, street lighting, trees, public art, and seating. The City needs to balance the needs of different modes and non-transportation infrastructure. It will need to engage with stakeholders and the public in making changes.

Reducing negative environmental effects

Transportation is Mississauga's largest source of greenhouse gas emissions. It is also the source of a wide range of air pollutants and other negative effects on the natural environment. Changes in travel habits, advances in technology, and improvements government policy will help decrease and mitigate those negative effects.

History

Mississauga past growth and transportation system have shaped each other, creating the city we know today.

The construction of railways in the 1840s through what is now Mississauga led to the founding of farming towns and villages near railway stations. Several of these places, such as Clarkson, Erindale, and Port Credit, remain centres of community life. Mississauga's urban growth has continued, closely linked to the development of its transportation infrastructure. Five new highway corridors were added from the 1930s to the 1990s, and three GO Rail corridors through the city were added from the 1960s to the 1980s. Significant new

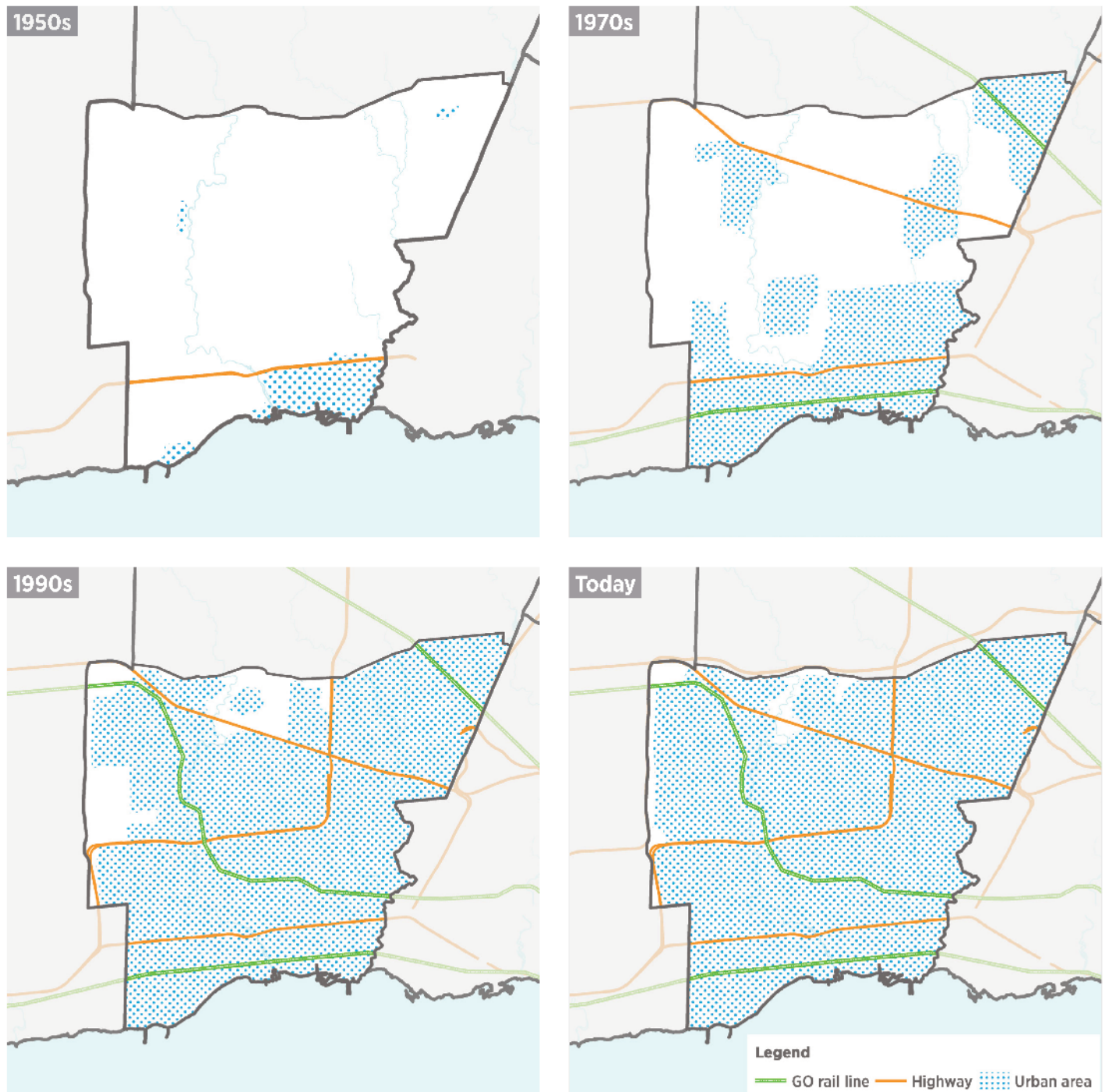
commercial and industrial growth took place from the 1960s onward, especially in the land surrounding the airport. New transport capacity both enabled growth and was required by it.

In 1974, the City of Mississauga was incorporated as a local municipality in the Region of Peel, making it the City's responsibility to oversee the development of a system of local roads, sidewalks, trails, and transit to knit together the local settlements, businesses, highways, railways, and roads provided by other governments.



The streetcar service from Port Credit to downtown Toronto was the first transportation infrastructure in Mississauga to serve only the movement of people.

The evolution of Mississauga's urban area and transportation infrastructure



Mississauga's urban area expanded from historic centres like Port Credit, Streetsville and Malton. Transportation infrastructure both enabled the growth, and was required by it.

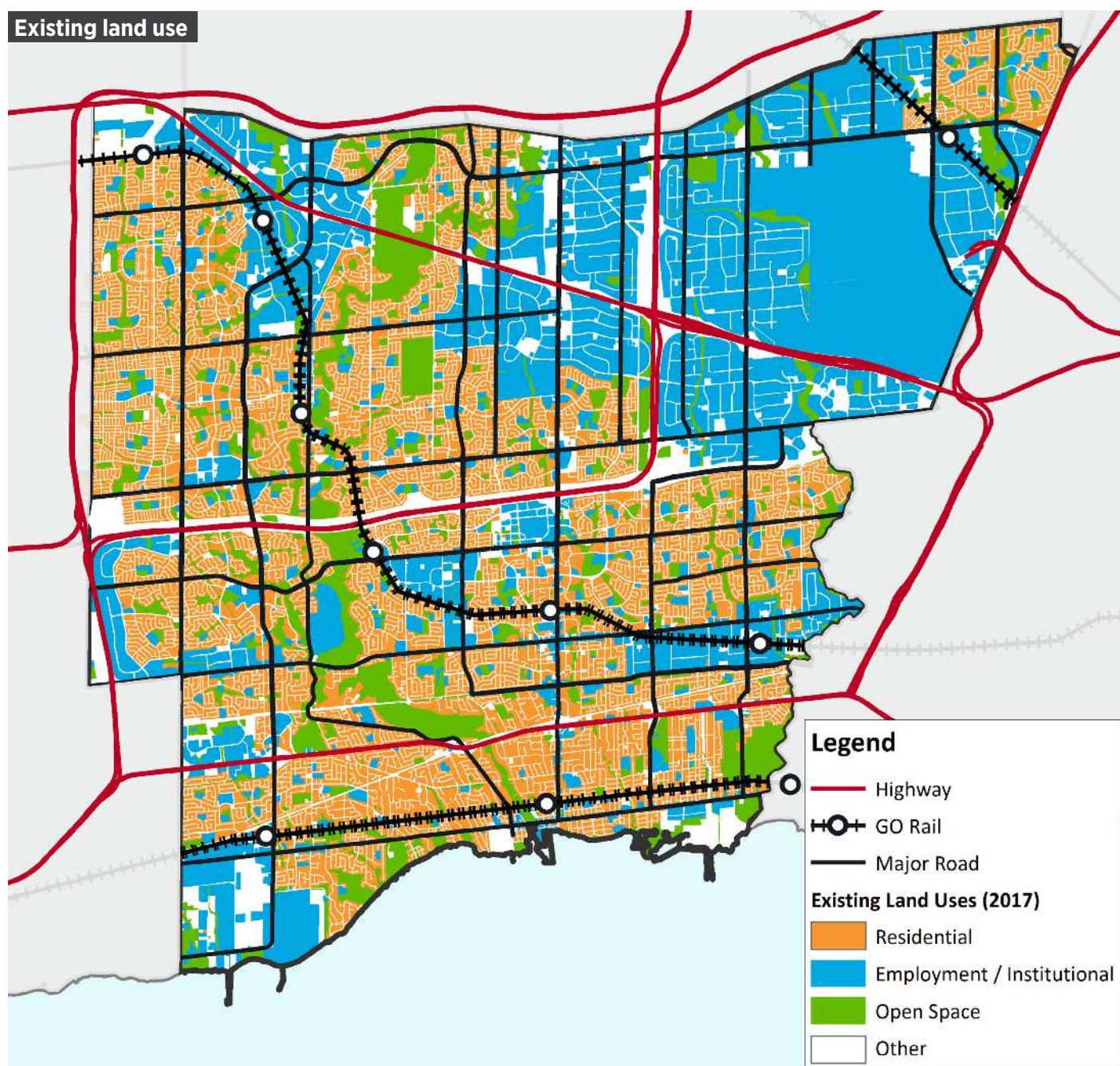
Shape of the City

The locations of homes, businesses, amenities, and natural features within the city and beyond have all influenced Mississauga's transportation system.

Mississauga is built around a grid of major roads, with some breaks in the grid where highways, rail corridors, or river valleys pass through. Major roads are often the prime locations for shops, small businesses, and services such as healthcare or banking. Major roads are the natural place to focus transit service, offering routes that are direct, fast, and serve many destinations. They also serve the highest number of car users, providing routes across the city and connections to the highway network and adjacent municipalities.

Areas away from major roads are typically dedicated to a single purpose, such as housing, office parks, or industrial uses. Some newer developments feature a greater mix of uses. Many Mississauga residents were attracted to the city's Neighbourhoods that were zoned for residential use to provide quiet, fresh air, and privacy. The benefits come at the cost of transportation. In Neighbourhoods, for example, road networks are often circuitous and may feature cul-de-sacs. The success of deterring through-traffic comes at the cost of long journeys between residents or employees and the goods and services they need on a day-to-day basis, such as food, transit, convenience shopping, childcare, and medical offices. Circuitous local roads are also difficult to serve efficiently by transit. Mixed-use developments are often concentrated nearer to major roads and benefit from easier access to transit and amenities.

The City plans and directs land use through the Mississauga Official Plan. Based on current and intended future land use, the Official Plan defines a high-level urban structure and the detailed zoning that governs what type of development is acceptable where. The Official Plan primarily directs growth to areas with a mix of uses, near major roads, or close to major transit stations. The Downtown Core is designated to have the most growth in both population and employment. The city's growth will generate additional travel demand, but also bring people, jobs, and amenities closer together. The Transportation Master Plan will inform future changes to the Official Plan.



Employment uses dominate northeast Mississauga. Pockets of mixed-use and employment are present throughout the rest of the city, with the rest being residential uses.

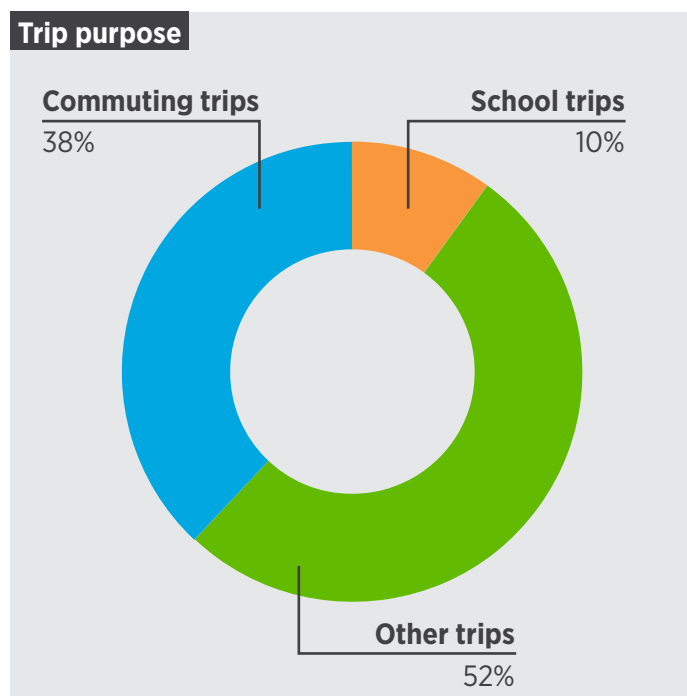
Source: City of Mississauga 2017 Existing Land Use

Travel Patterns and Behaviours

People travel to, from, and within Mississauga for a variety of reasons throughout the day, using various modes of transportation.

Where and why Mississaugans travel

For many people, trips to and from work are their most common trip; however, such trips account for only a third of trips starting or ending in Mississauga. The majority of travel in Mississauga relates to the business of life—such as shopping, leisure, school, errands, healthcare, or visiting family.



More than half of weekday trips are for the business of life beyond travel to/from work and school.

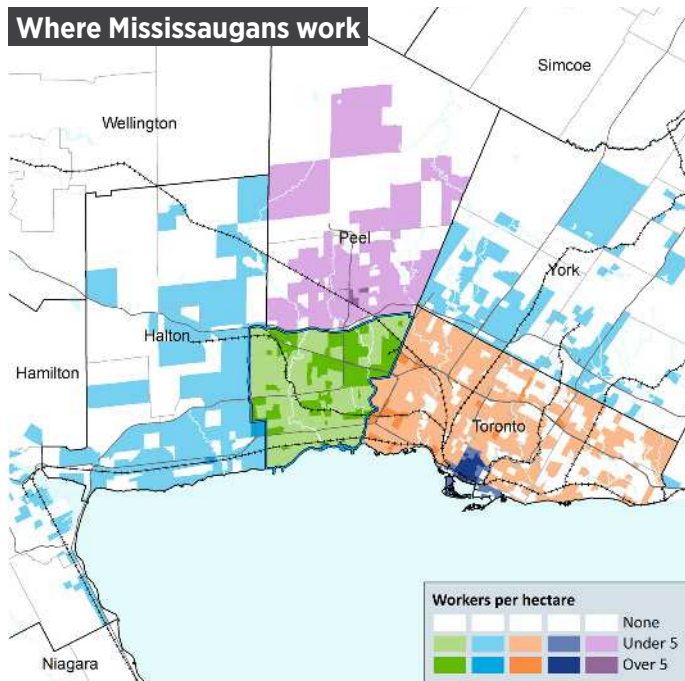
Source: *Transportation Tomorrow Survey 2011 (all day, weekday trips)*

Commuting for work

Every day, 190,000 Mississaugans travel to work within the city, and another 234,000 people travel to Mississauga's workplaces from homes outside the city. People commuting into Mississauga live across the GTHA and beyond, with Toronto, Brampton, and Caledon being the most common. Further, 145,000 Mississaugans travel to workplaces outside the city. Toronto is the most common place outside the city for Mississaugans to work, particularly its downtown. Another 20,000 Mississaugans have no fixed place of work, travelling to different clients or worksites each day. Employment is expected to grow faster than population between now and 2041, which is likely to further increase the number of people commuting into the city.

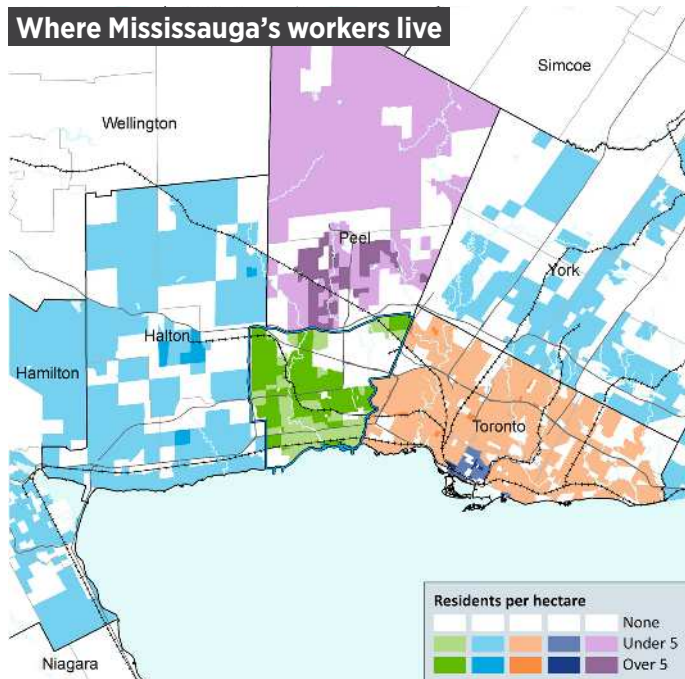
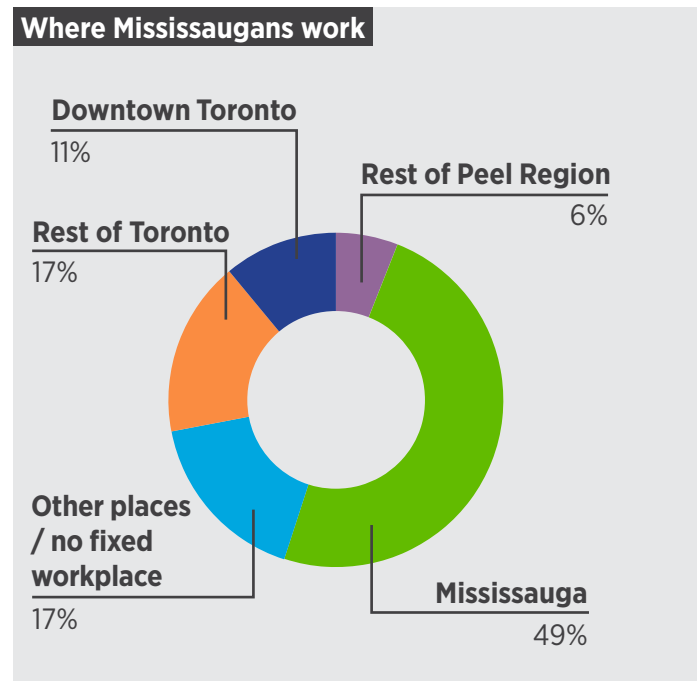
Currently, driving is the most common choice for travelling to work; 81% of Mississauga's residents and 89% of its workers drive to and from work. The number of people driving results in significant congestion on the highways and major roads serving Mississauga. Further growth requires additional transport capacity; however, opportunities to add road capacity are limited. Transit can potentially provide a space-efficient way to increase transportation capacity.

Smart Commute provides transportation demand management service to employees in Mississauga and the rest of the GTHA. Its programs reach over 36,000 commuters working near Pearson Airport, plus 60,000 commuters working elsewhere in Mississauga. Their work in Peel Region in 2017 resulted in a reduction of 29 million vehicle-km driven by commuters, saving over \$18 million and 6,200 tonnes of emissions.



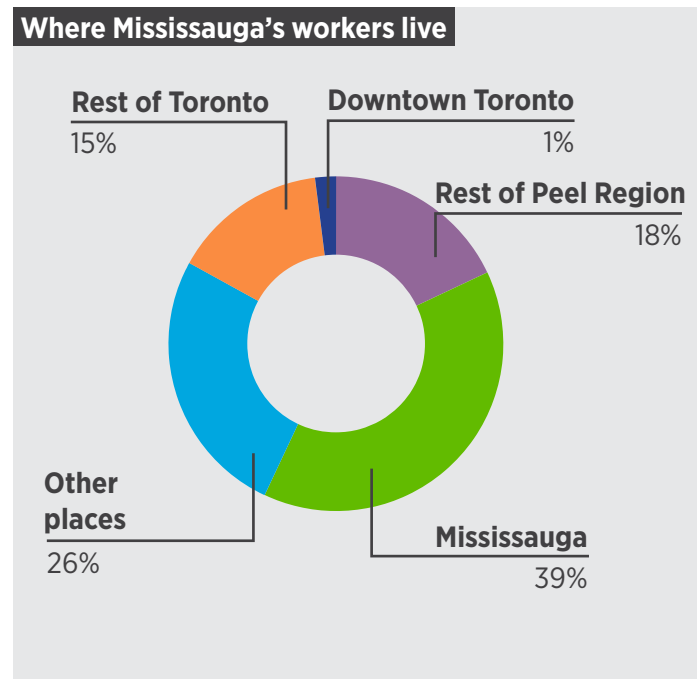
Work locations highlight Mississauga's role as a regional employment hub and its place within the wider economic area.

Source: Transportation Tomorrow Survey 2011



Residential locations highlight Mississauga's role as a regional employment hub and its place within the wider economic area.

Source: Transportation Tomorrow Survey 2011



School travel

There are approximately 130,000 school-aged children living in Mississauga, and almost all must travel to and from their school every day. The number of Mississaugans aged under 19 is expected to increase 14% between 2016 and 2041. School travel will be an enduring and increasing part of Mississauga's travel market.

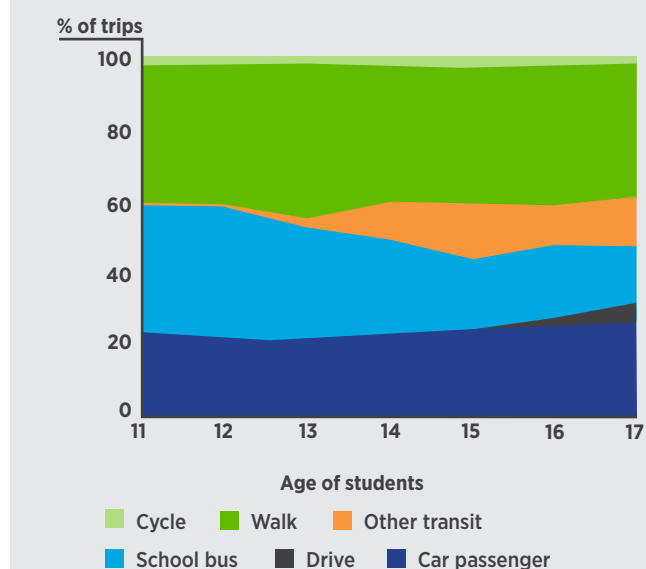
Of school students aged 11 and older, around 40% walk to school and around 30% arrive by car. The rest almost all use public transit or school bus services provided free of charge by school boards.

School buses are only available to students living more than a certain distance from their school.

This threshold is set by the school board and varies by age. For English-language high school students the threshold is 3.8km; consequently, some students live beyond a reasonable walking distance, but without access to school buses. Their parents are compelled to either pay for public transit or drive them to and from school.

Households with children are concentrated in north and west Mississauga. As children grow into adults and new young families move to Mississauga, the locations of these concentrations will change. Long-term transportation plans must be flexible to accommodate these changes.

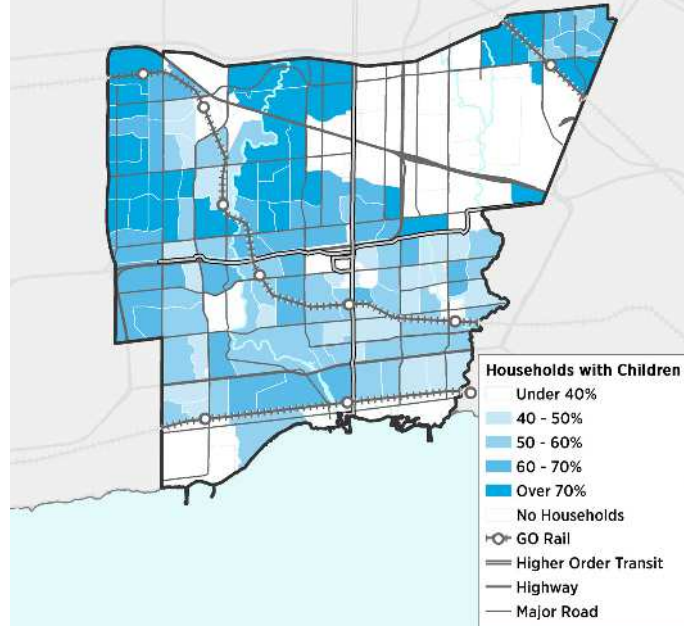
School travel mode by age



The split between walking, transit, and car-based travels does not vary significantly by age – but many students switch from school bus to MiWay when they enter high school.

Source: *Transportation Tomorrow Survey 2011*

Households with children



Households in newer urban areas in the north of the city are currently the most likely to have children. However, this is likely to change as those children grow up.

Source: *Statistics Canada, Census of Canada 2016*

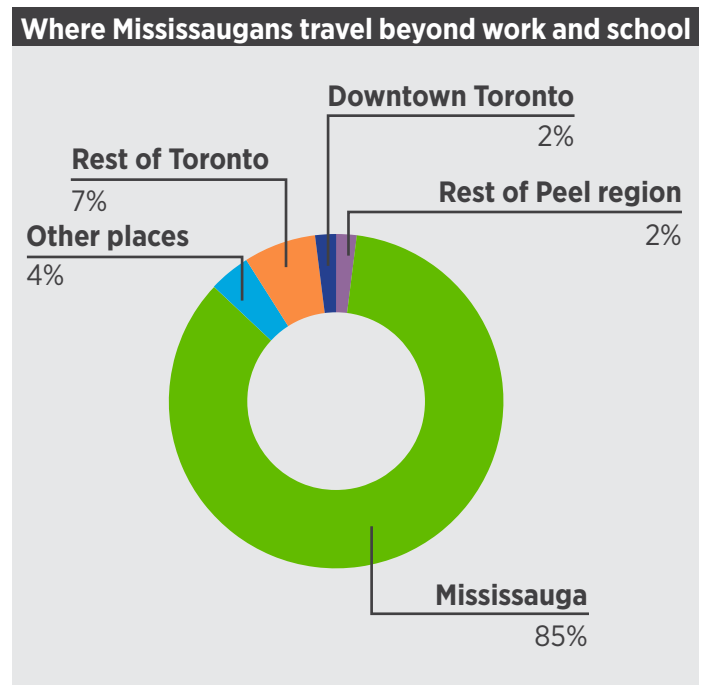
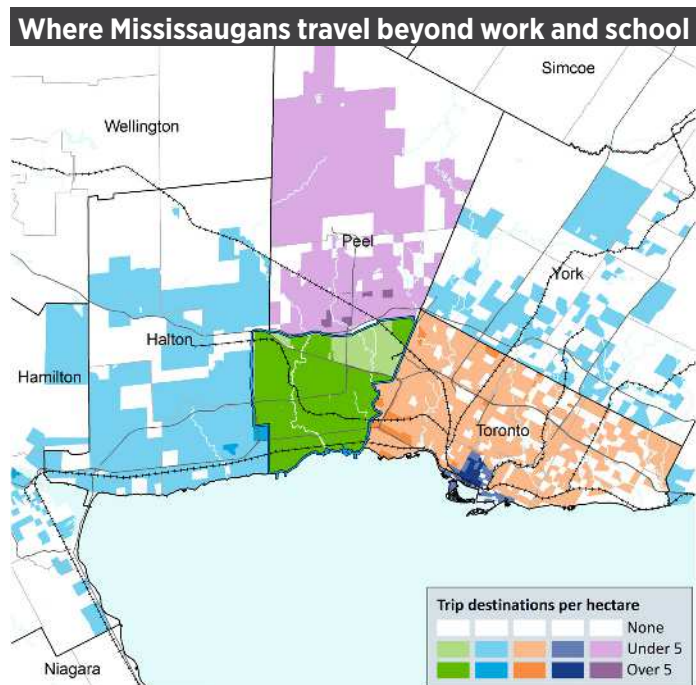
Trips beyond work and school

People travel to and from many locations other than their place of work or education. The detailed data sources available on travel patterns only separate out trip purposes for travel to and from people's places of work or education. This creates a challenge for policymakers in understanding the associated nuances; for example, people's travel needs for shopping will differ significantly from their travel needs for healthcare.

The available data shows that Mississauga residents make around 840,000 non-work trips per day. Mississauga is a large city offering a full range of services to its residents, which is the main reason why 85% (716,000) of these trips are within the city.

These trips often involve multiple destinations, a practice known as "trip chaining." A person might travel from home and stop at several shops before returning home, for example, which accentuates any differences in travel time between people's choices of mode (e.g. transit or driving).

As mentioned in the previous chapter, Mississauga's future growth in homes, jobs, and other amenities will focus on key nodes and corridors. The mix of uses will make non work trips easier, as they will tend to reduce travel distance and make alternatives to car use more attractive.



A full range of amenities are available within Mississauga, and most trips beyond work and school made by residents are within the city.

Source: *Transportation Tomorrow Survey 2011 (all day, weekday trips)*

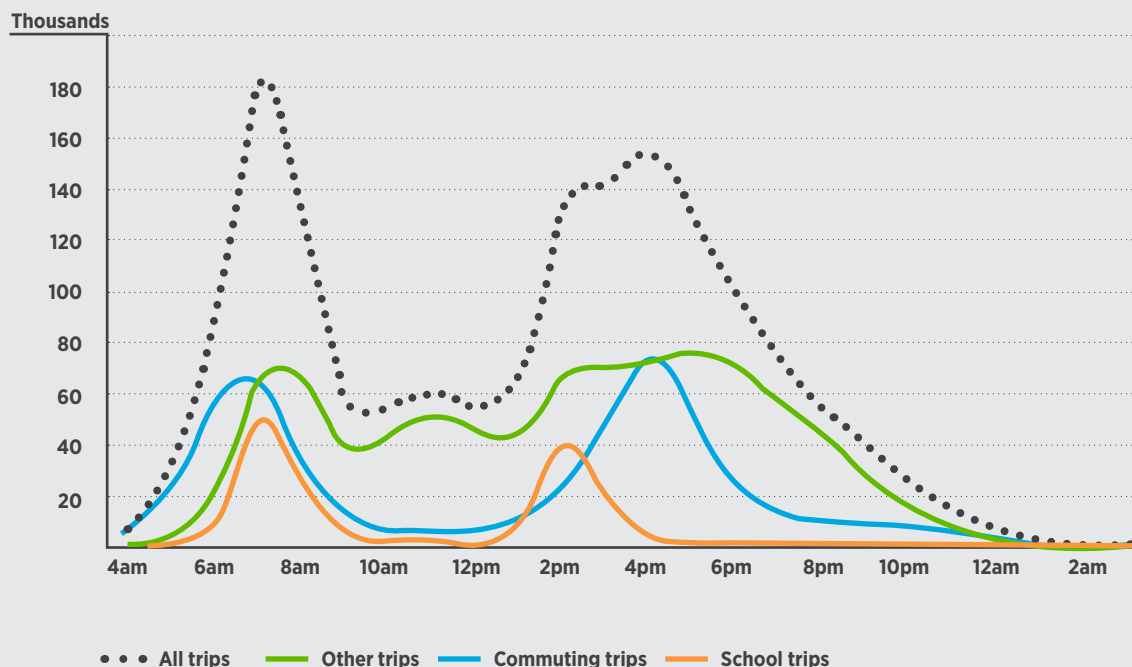
When Mississauga travels

People and goods travel throughout the day in Mississauga. Approximately half of all trips (and two-thirds of commutes) start either in the morning peak (6–9am) or evening peak (4–7pm). Commuting between home and work is the reason for a third of trips in the peak periods and throughout the day.

Over time, peak travel times have become more spread out, primarily because the number of trips has grown faster than the available capacity. Some

employers offer flexible working hours or set work hours other than the traditional “9–5.” Manufacturing, goods movement, retail, healthcare, hospitality, and restaurants all include extended work hours. Some businesses, particularly those in warehousing and logistics industry, operate 24/7. These factors create travel demand at all times of the day.

Trip start time

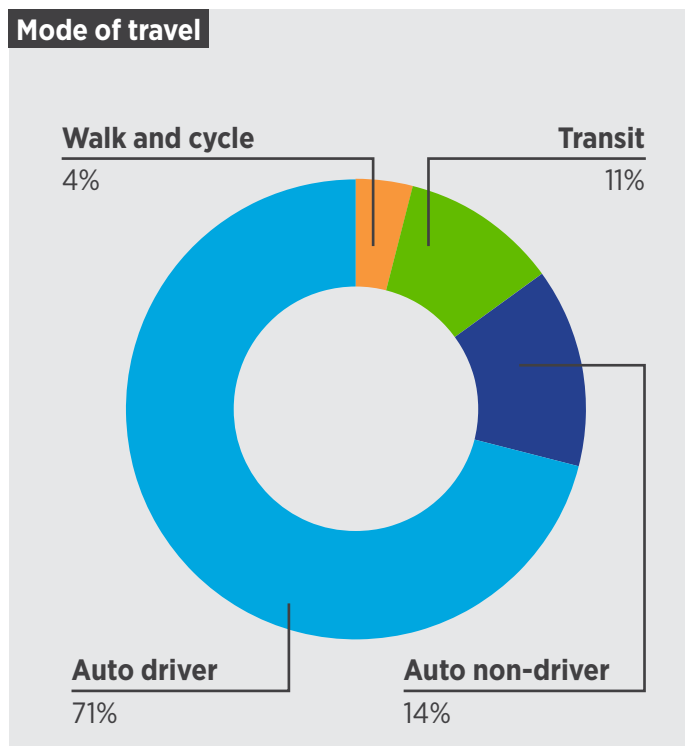


The busiest travel time is the morning, but the afternoon peak lasts much longer. Work and school trips have distinct peaks, whereas trips for other purposes take place throughout the day. Even at peak times, the majority of trips are for purposes other than work and school.

Source: *Transportation Tomorrow Survey 2011 (weekday trips)*

How Mississauga travels

Mobility in Mississauga is currently heavily dependent on the personal car. Today, 85% of trips taken to, from, or within Mississauga on the average weekday are by car. Yet Mississauga shows signs of lower automobile dependence than other municipalities in the GTHA. It has fewer cars per household (1.6) than any municipality in the GTHA (except Toronto), and 8.2% of Mississauga households live without owning a car at all. Information from the public and stakeholders indicate people want additional mobility options and will use them when they are high quality.



This chart covers weekday trips to, from, and within Mississauga made by people aged 11 and up. “Auto driver” just includes people who drive their own vehicle (71%), and “auto non-driver” includes passengers in a personal vehicle (13%), taxi use (0.5%), and paid rideshare (0.3%). “Transit” includes trips using GO Train services (1.3%), other transit services (7.4%), or both (0.7%). It also includes school bus trips (1.5%). “Walk and cycle” includes walking (3.8%) and cycling (0.4%).

Source: *Transportation Tomorrow Survey 2016 (all day, weekday trips)*

Driving or riding a personal vehicle

Reliance on personal vehicles is expected to decrease in the future, although driving or riding in a personal vehicle will remain an essential mobility option in Mississauga for the term of this Plan, until 2041. The City’s Advanced Transportation Management System (ATMS) creates new possibilities for centralized traffic signal control, which enables traffic management that is safer, more efficient, and more resilient to disruption.

Personal decisions about car ownership are expected to change as the cost and convenience of driving changes compared to other options. New mobility alternatives breaking into the market are directly competing with the personal vehicle ownership model and are expected to grow in the coming decades. With a view to expansion, two major car share companies operate today in downtown Mississauga and the University of Toronto’s Mississauga campus. The availability of by-the-hour car rentals located on-street makes it possible for some households to live with fewer (or zero) cars. For those buying a car, electric vehicles are increasing in popularity, with implications for supporting charging infrastructure.

Every car trip starts and ends at a parking spot. The City’s forthcoming Parking Master Plan will guide future provision and management of parking. The plan will ensure a more flexible approach to managing parking and balancing the requirements of drivers, land-owners, and other city policies.

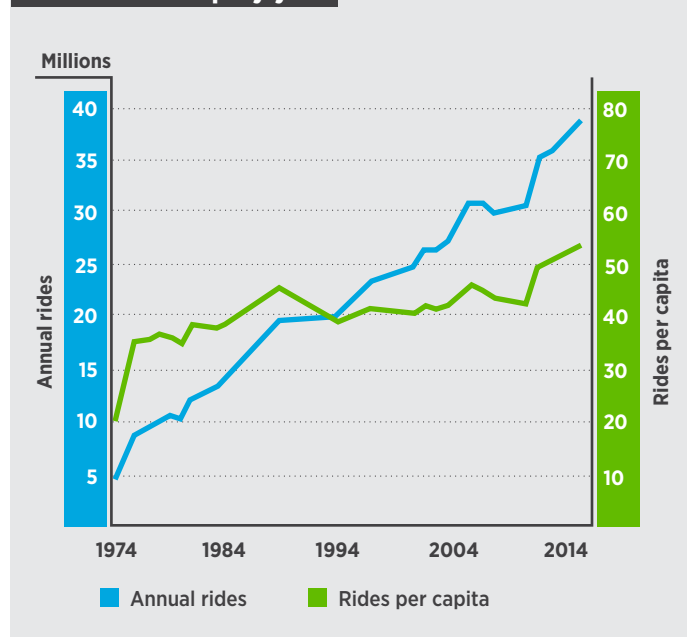
Travel in a personal vehicle is not limited to driving. Non-drivers account for one sixth of trips made in a car. Almost all of these are informal arrangements, made with family or friends. Adding passengers to an existing car trip offers much of the convenience of driving at minimal marginal costs. Taxis and paid rideshare make up a small proportion of trips, but fulfil a valuable role.

Riding transit

In just five years (from 2011 to 2016), MiWay ridership grew by more than 15%. Mississauga has the second highest local transit ridership per capita in the GTHA (after Toronto). Excluding Union Station, Mississauga also generates the most GO Train ridership of any municipality, with 21,000 passengers per day. Most of this ridership is in the AM peak hours, moving the equivalent of a six-lane highway. The Square One GO Bus terminal in Mississauga is the busiest bus terminal in the GO Transit network, with more weekday bus departures than any other terminal including Union Station.

The recently-opened Mississauga Transitway beside Hwy 403 provides a fast, congestion-free, east-west corridor across the city for bus services. Higher vehicle speeds also create more efficient service, with lower operating costs per passenger. Initial trends indicate the Transitway has been successful at increasing ridership, with MiWay needing to add capacity to accommodate the extra demand.

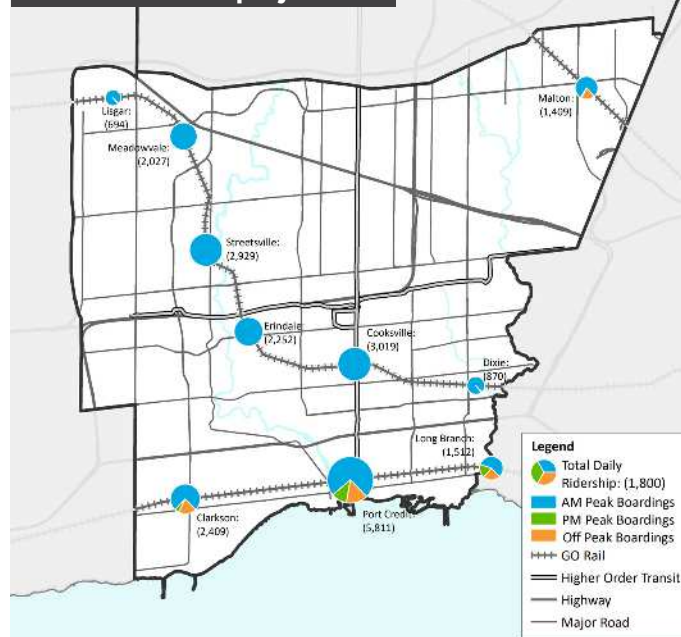
Transit ridership by year



Local transit ridership has risen steadily over the years, fuelled by population growth and service improvements.

Source: City of Mississauga

GO Train ridership by station



Strong GO Train ridership can be found throughout Mississauga, and is currently dominated by AM peak travel.

Source: GO Transit 2015

The Hurontario LRT is set to open in the early 2020s. It will complement the Transitway by providing a north-south, high-quality transit service with capacity to accommodate the growth along Hurontario Street. GO Transit's Lakeshore West and Kitchener lines are planned to have two-way all-day service every 15 minutes. This service increase will help more people use the GO Train to travel into and out of Mississauga. Planned improvements to the Milton GO line are limited to increases to peak period, peak direction service. There are about 80,000 jobs along this corridor (Meadowvale, Streetsville, Einrdale, Cooksville, and Dixie & Dundas areas). Two-way all-day service would benefit both the employers and the people working in these areas.

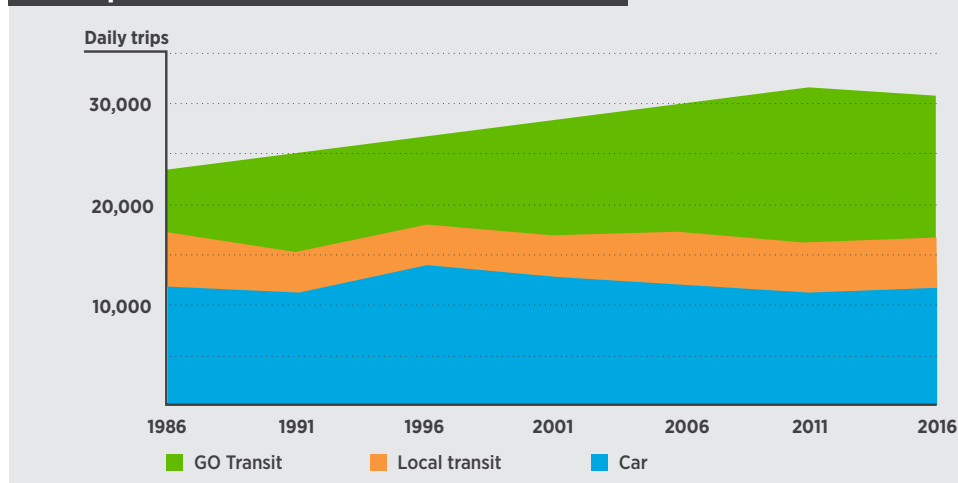
For longer trips, regional-level transit is the most effective way to increase transportation capacity. For example, the Lakeshore West GO line has enabled the number of commuters from Mississauga to downtown Toronto to grow from 23,000 in 1986 to 31,000 in 2016 with no significant increase in the number of trips by car.

Transit ridership is expected to grow further as major barriers to transit use are addressed. Some of the most significant barriers are known to be:

- travel times being significantly longer than car-based travel
- limited service on off-peak times (midday, evenings, and weekends)
- missing sidewalks and road-crossing points for the walk to and from bus stops
- double fare for those using both MiWay and TTC services

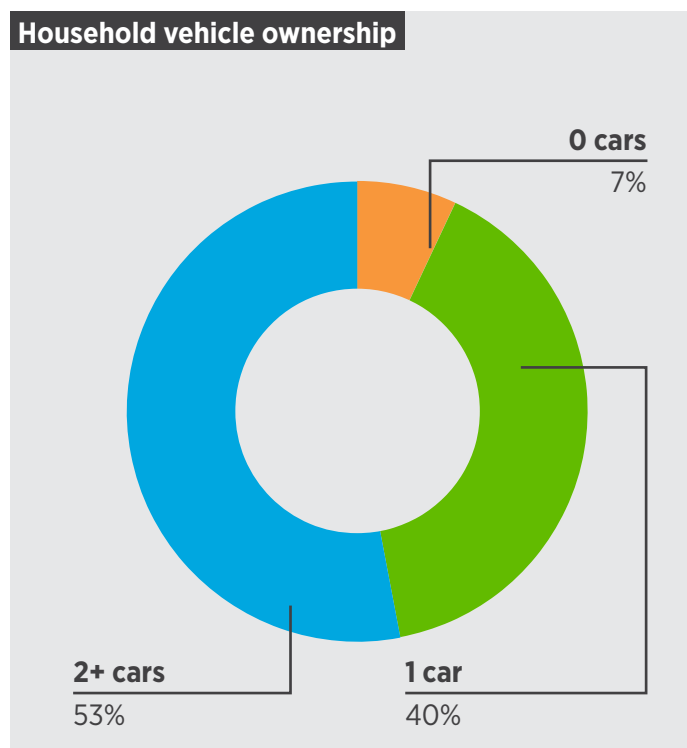
Many of these barriers are being addressed through the MiWay Five: 2016–2020 Service Plan, and through Metrolinx's 2041 Regional Transportation Plan (published in 2018). These barriers will also be among the considerations in the forthcoming MiWay Five: 2021–2025 Service Plan and the forthcoming MiWay Infrastructure Growth Plan.

Mode split for commutes to downtown Toronto



The number of weekday trips from Mississauga to downtown Toronto has risen steadily for the last 30 years, yet the number of car trips has not changed since 1986. More than 5,000 additional trips per day have been accommodated by growth in GO Train ridership rather than car travel.

Source: *Transportation Tomorrow Survey 2011 (all day, weekday trips)*



Most Mississauga households own at least one car, with more than half owning two or more. A small but significant proportion live their daily lives without owning a car.

Source: *Transportation Tomorrow Survey 2016*

Ridehailing

Ridehailing has grown in recent years, whether hiring a taxi or ordering a ride with an app from a Transportation Network Company (TNC) such as Uber or Lyft. The City initiated a TNC pilot study that will conclude in late 2018, with a report to Council planned for early 2019. As part of the pilot, TNCs are providing data that assists in enforcement. The City will use the pilot study to determine whether the regulatory framework for TNCs is appropriate and whether regulations for other types of vehicles-for-hire should be amended. A new regulatory framework would provide an opportunity for the City to negotiate access to trip data to support transportation planning work.

The growth in TNCs creates accessibility issues for people with disabilities, particularly people who use wheelchairs or similar mobility devices. Licensing fees for accessible taxis in Mississauga are lower to encourage their provision. Because TNCs use a fleet of privately-owned vehicles, there is currently no means for the City to control the portion of accessible vehicles in the TNC fleet. Accessible vehicles are available only at the owner-driver's discretion. The City is currently studying how to address the need for accessible on-demand options. In other cities, TNCs make payments to the city government, which are then used to support accessible service.

The City is currently investigating options for ensuring accessible vehicles are available for hire on demand in Mississauga. Staff are expected to report back in 2019.

Cycling

There are more than 620,000 trips of less than 5km taken in Mississauga each day. This distance is considered suitable for cycling (under 20 minutes by bicycle), and yet only 1% of these trips are by bike. Approximately 3,000 people cycle to work, out of 98,000 living within 5km of their workplace. Mississauga residents have indicated that the most significant barrier to cycling is feeling unsafe or uncomfortable. A lack of cycling facilities, such as bike lanes or trails, in some parts of the city has contributed to such issues.

The recently-approved Mississauga Cycling Master Plan includes research on how people feel about their cycling abilities. The majority (61%) are “interested but concerned,” meaning they are curious about cycling and would like to cycle more often but have significant concerns. The most common concern is fear of sharing the roadway with motor vehicles. The research also shows that 96% of survey participants would increase or continue their cycling use if more comfortable cycling facilities were in place. The Plan establishes priorities for the advancement of cycling in Mississauga, including:

- expanding the network of cycling facilities, such as cycle tracks, multi-use trails, and separated bike lanes
- establishing a city-wide bike parking program
- offering cycling education, often in partnership with other agencies

Walking

Only a third of walkable trips (under 1km) are taken on foot; about 100,000 walkable trips per day are taken by car or by transit. Some 2,000 people walk to work in Mississauga, yet 32,000 people live within 1km of their place of work (excluding people working at home). People in Mississauga are discouraged from walking when:

- a short-distance trip requires a long walk
- sidewalks are narrow, missing, or in disrepair
- routes across parking areas have no designated walkway
- snow is piled up
- intersections are unsafe or intimidating to cross
- the walk environment is unpleasant
- there are perceived or actual public safety issues

Increased walking offers diverse benefits such as health gains, stronger bonds between people and the places they live near, negligible emissions, and negligible cost to travellers.

Road safety

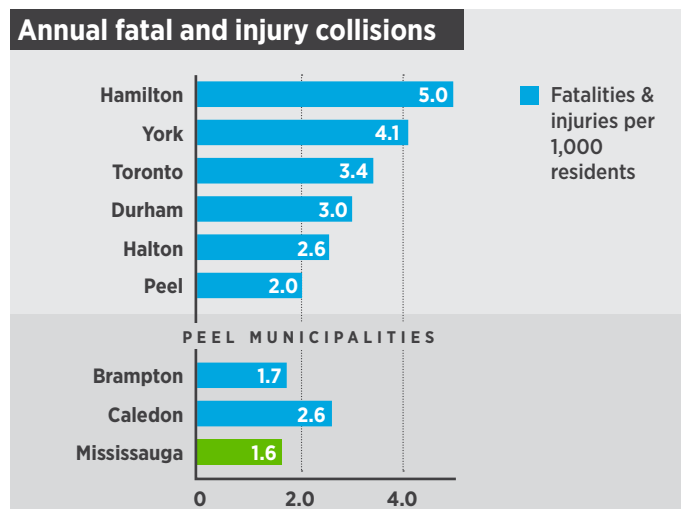
Mississauga has recently adopted Vision Zero, which sets a vision of zero fatal and injury-causing collisions each year. The Region of Peel has also adopted Vision Zero, and published its Vision Zero Road Safety Strategic Plan in 2018. Today, Mississauga has the second lowest rate of fatalities and injuries on its roads of municipalities of the GTHA, and collision rates in Mississauga are similar to its peers. The overwhelming majority of collisions and personal injuries occur on Mississauga's arterial and major collector roadways, outside of neighbourhood areas. Intersections account for the most serious conflicts between vehicles and pedestrians, cyclists, or other vulnerable road users. Aggressive, impaired, and distracted driving are significant concerns. Safety while walking, cycling, or taking the bus to school is also a concern for parents.

Road safety is not only a concern for people who are travelling; it is a barrier that prevents people from travelling by their preferred mode. In a survey associated with the City's recently updated Cycling Master Plan, 61% of respondents characterised themselves as "interested, but concerned", meaning they wished to cycle more than they currently do, but are prevented from cycling due to concern for their safety. Public input for the Transportation Master Plan, indicated people avoid walking trips that cross a major intersection. This is especially true of slower walkers, such as older adults, families with children, those using a mobility device or those travelling with luggage. Residents also highlighted traffic in neighbourhoods as an emerging road safety concern.

Future travel choices

Population and employment growth will lead to an increase in the number of trips to, from, and within the city. By 2041, Mississauga's transportation system will have to accommodate an extra 300,000 trips per day if new residents travel like current residents. With existing travel habits, this projected growth will mean an extra 110,000 cars on the road.

If these extra trips are accommodated by transit, far fewer vehicles will be required to carry the same number of people. Transit vehicles also take up less road space per passenger, allowing for more efficient use of the finite road space available. Walking and cycling also require less road space per person than a car. The result is that efficiently accommodating the growth in demand requires different travel choices.



Mississauga's roads perform well compared to its peers in the GTHA.

Source: Ontario Road Safety Annual Report, 2014

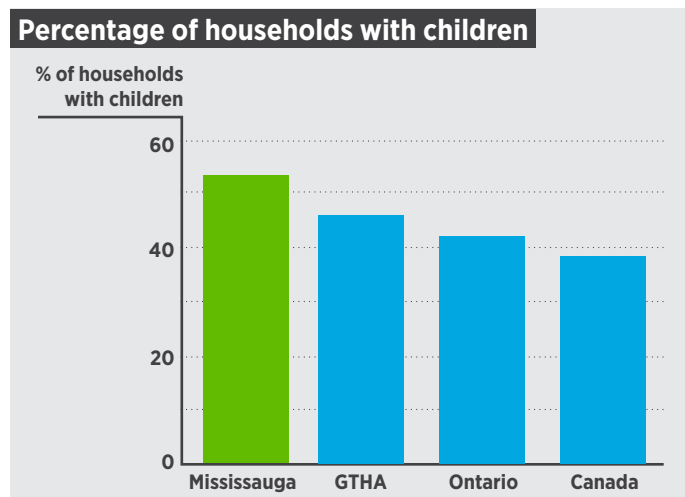
Homes and Families

Mississauga is a place where people want to be now and will want to be in the future.

Homes

Mississauga is home to 722,000 people in 248,000 households. The population is expected to grow at a rate of approximately 6,300 people per year, to 878,000 people by 2041. Single-family houses and other forms of low-density housing cover nearly a quarter of all land in Mississauga and are home to about half of Mississauga households. The other half of households live in medium- or high-density housing, such as multi-storey buildings and townhouses.

Nearly all new homes in Mississauga will be in medium- or high-density housing concentrated along major roads, in the downtown area, or close to major transit facilities. These new homes will lead to more travel demand in these areas. To serve this demand, these areas will have a variety of travel options available.



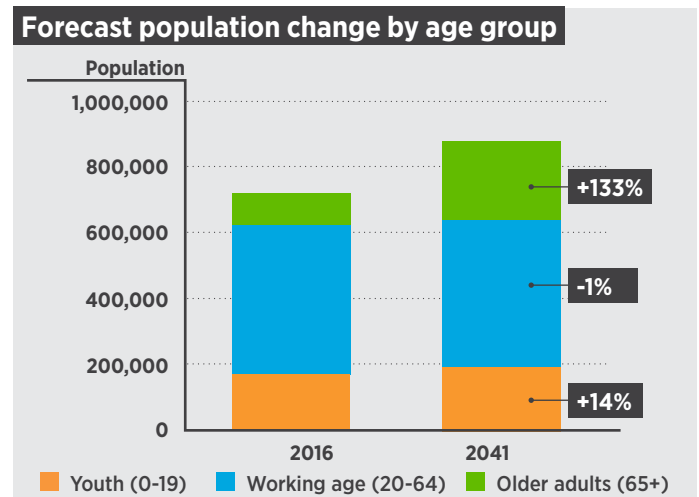
A high proportion of households in Mississauga have children, showing it is a preferred place to raise a family.

Source: Statistics Canada. 2016 Census of Canada

Families

Mississauga was recently awarded platinum status from Play Works as a “Youth Friendly Community.” About 54% of households in Mississauga include children, which is more than the regional, provincial, or national average. The number and proportion of both children and older adults (aged over 65) is expected to grow. As a result, the working-age population (19–64) is expected to decrease from 62% of the population in 2016 to 51% in 2041.

Although some youth drive, few own their own vehicle. Most older adults maintain a driver's licence well into their senior years, but may lose confidence driving at night, in heavy traffic, in poor weather, or on highways. Children and older adults who do not drive and who have limited access to independent transportation options rely on others for their travel needs. Otherwise, they are confined to their home or neighbourhood, which compromises their quality of life. Future transportation options should be designed with group and family travel in mind to ensure the unique needs of vulnerable populations are considered.



Much of Mississauga's forecast population growth will be from an increase in the number of people aged over 65.

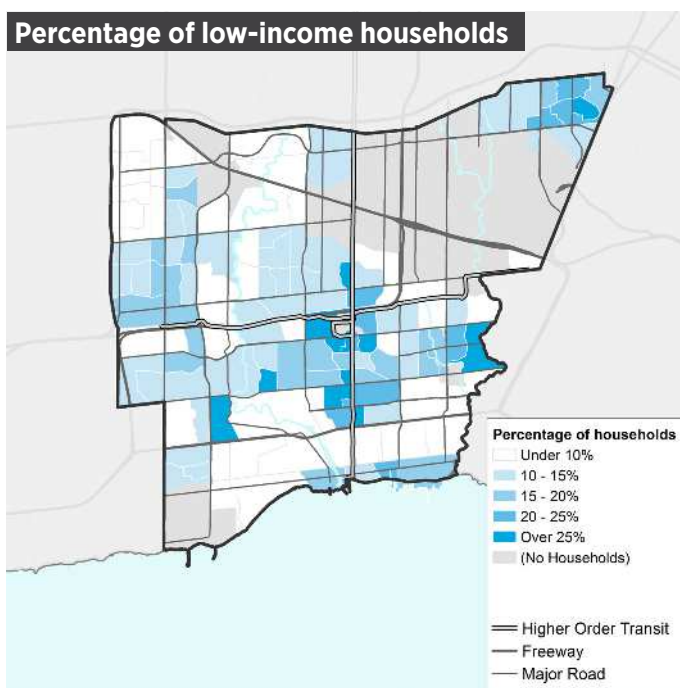
Source: City of Mississauga Growth Forecast 2013

Household income

Low-income households are present throughout the city; transportation improvements in any part of Mississauga can potentially help low-income households. Where transportation costs are a significant barrier, people are unable to travel and may be denied access to potential jobs or education opportunities, medical appointments, or the necessities of life.

The cost of transportation options can be a significant factor in people's decisions about transportation. The overall costs of owning a car (including insurance, depreciation, maintenance, repairs, fuel, and taxes) are much higher than using transit. In fact, the average monthly cost for car insurance alone in Mississauga is more than a monthly MiWay pass. Car costs can vary but are unlikely to be less than transit unless used by multiple people.

An effective transit system can help reduce people's travel costs. It can also improve people's access to opportunities and potentially help increase their income.



Low-income households can be found throughout the city, but are much more prevalent in certain areas.

Source: Statistics Canada. Census of Canada 2016: Profile Data at the Census Tract level.

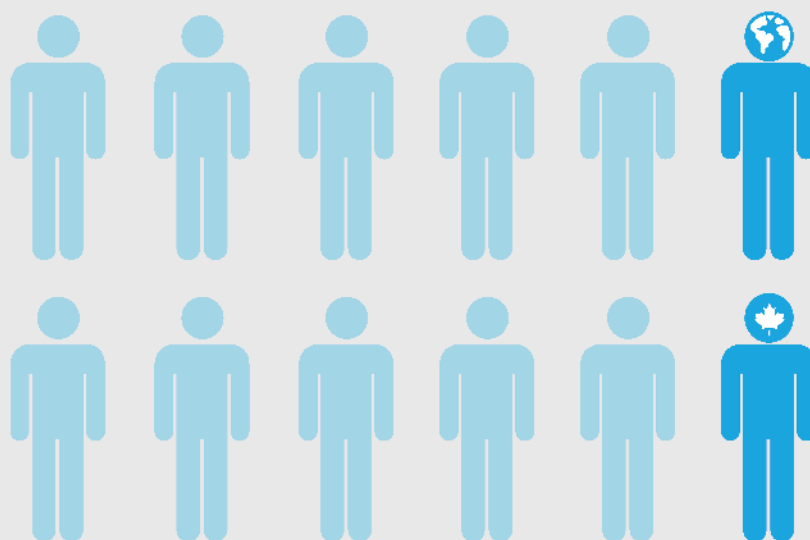
Newcomers

Mississauga is a city where people want to live now and will want to come and live in the future. Newcomers to Mississauga may have moved from elsewhere in the GTHA, from other parts of Canada, or from other countries in the world. They bring their own ideas, ambitions, and travel habits to Mississauga, enriching the fabric of society. In the past five years over 110,000 people—from all parts of Canada and beyond—have moved to Mississauga.

Newcomers generally will not have knowledge of local transport or amenities. They need information about the city's transportation system to move around the city and to travel to and from other areas.

Much of this information is available online, but internet access is not universal; further, newcomers need information about the location and range of available destinations.

The number of Mississaugans who speak English as their mother tongue is roughly equal to those who do not; however, 96% of Mississaugans have a working knowledge of English. Information relating to transportation will be understood by most Mississaugans if provided only in English; the high proportion of second-language users emphasizes the need for clarity in written information and other communications.



1 in 6
Mississaugans
moved here in
the last 5 years;
they are equally
likely to have
come from inside
and outside
of Canada

Source: Statistics Canada.
2016 Census of Canada

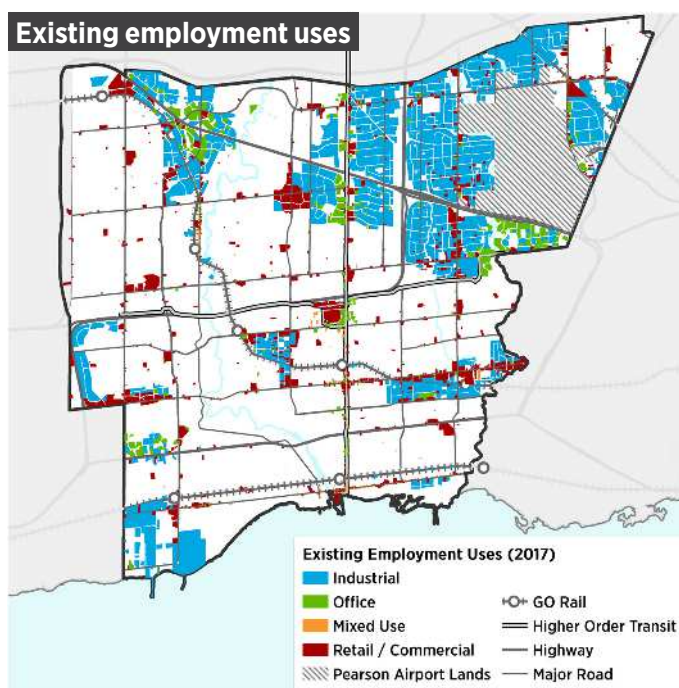
Economy and Jobs

Mississauga is a place where businesses want to be now and will want to be in the future.

Mississauga is a place where businesses want to be now and will want to be in the future. Warehousing and logistics jobs are concentrated in the northeast of the city around Pearson Airport, along with manufacturing and industrial jobs. Improvements in aircraft design and ongoing work by the GTAA are both expected to reduce the noise associated with Pearson Airport. However the noise impacts of the airport, strategic business advantages, and current City planning policy together mean these areas are unlikely to shift to other uses.

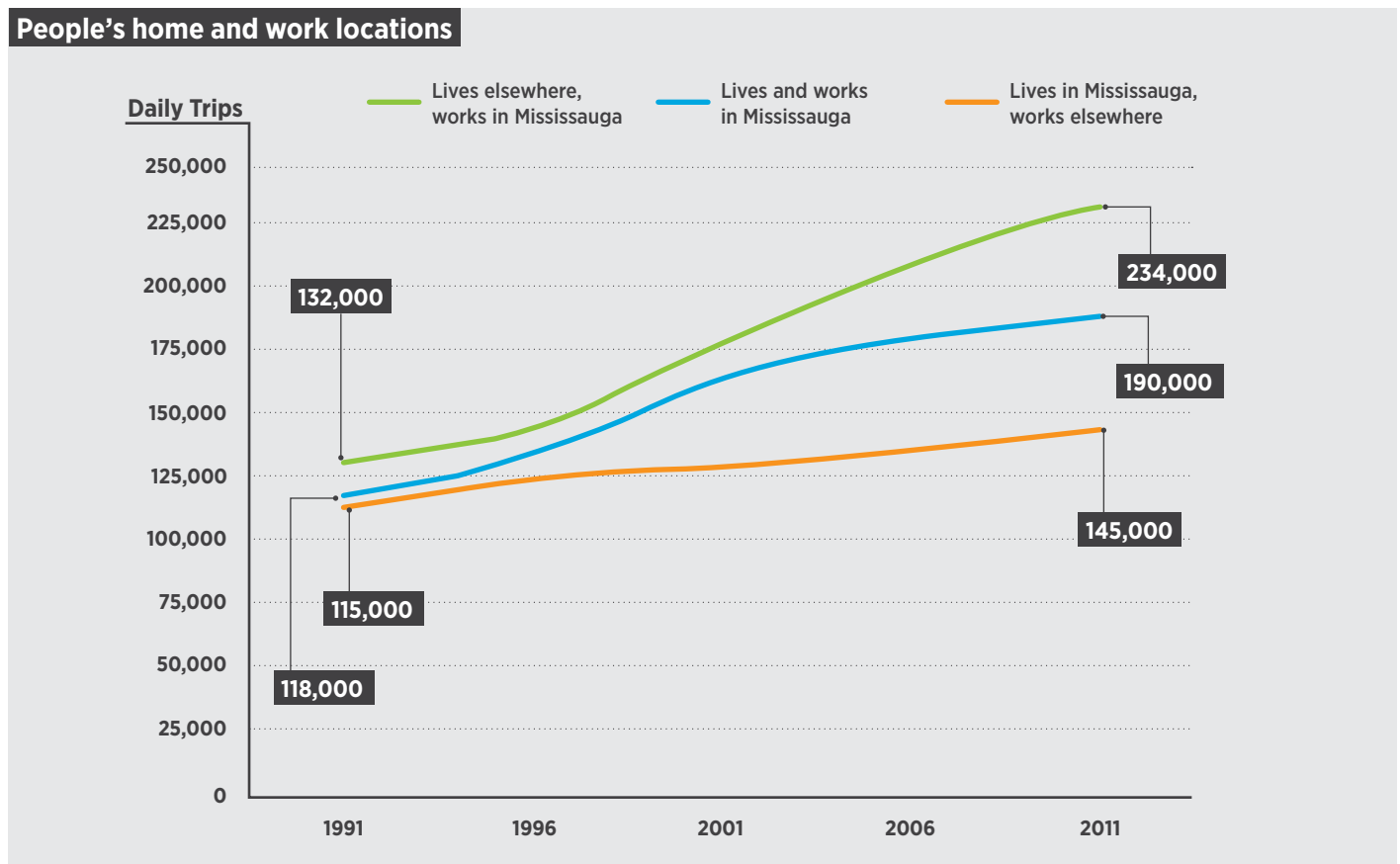
Office-based jobs with larger employers are found in the various Corporate Centres, such as in Meadowvale, or south of the airport. Mississauga also has a high concentration of companies offering professional, scientific, and technical services. Small businesses and local retail jobs can be found on some of the city's major roads such as Dundas St or Hurontario St. The airport and the highway network support the logistics industry in the northeast of the city. Mississauga acts as a goods movement hub for the GTHA and beyond.

Today, Mississauga has more jobs per resident than any other municipality in the GTHA, including Toronto. They bring talent from across the area to work in Mississauga every day.



Employment lands are clustered in multiple distinct areas across the city.

Source: City of Mississauga. 2017 Existing Land Uses

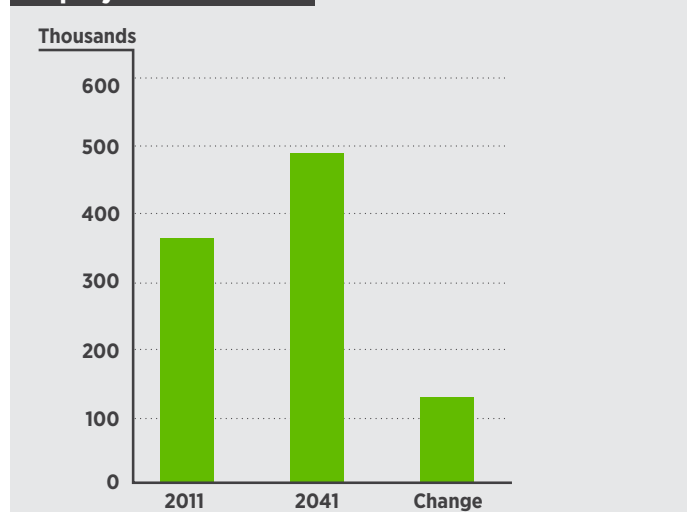


Mississauga has more people commuting into the city than commuting out of it. The gap between the two has widened significantly over the last 30 years.

Source: *Transportation Tomorrow Surveys (1991, 1996, 2001, 2006, 2011)*

Currently, driving is the most common choice for travelling to work; 81% of Mississauga's residents and 89% of its workers drive to and from work. This proportion has fallen slightly in recent years as MiWay and other transit agencies have increased service levels. The number of people driving results in significant congestion on the highways and major roads serving Mississauga. Employment growth requires additional transport capacity, while opportunities to add road capacity are limited.

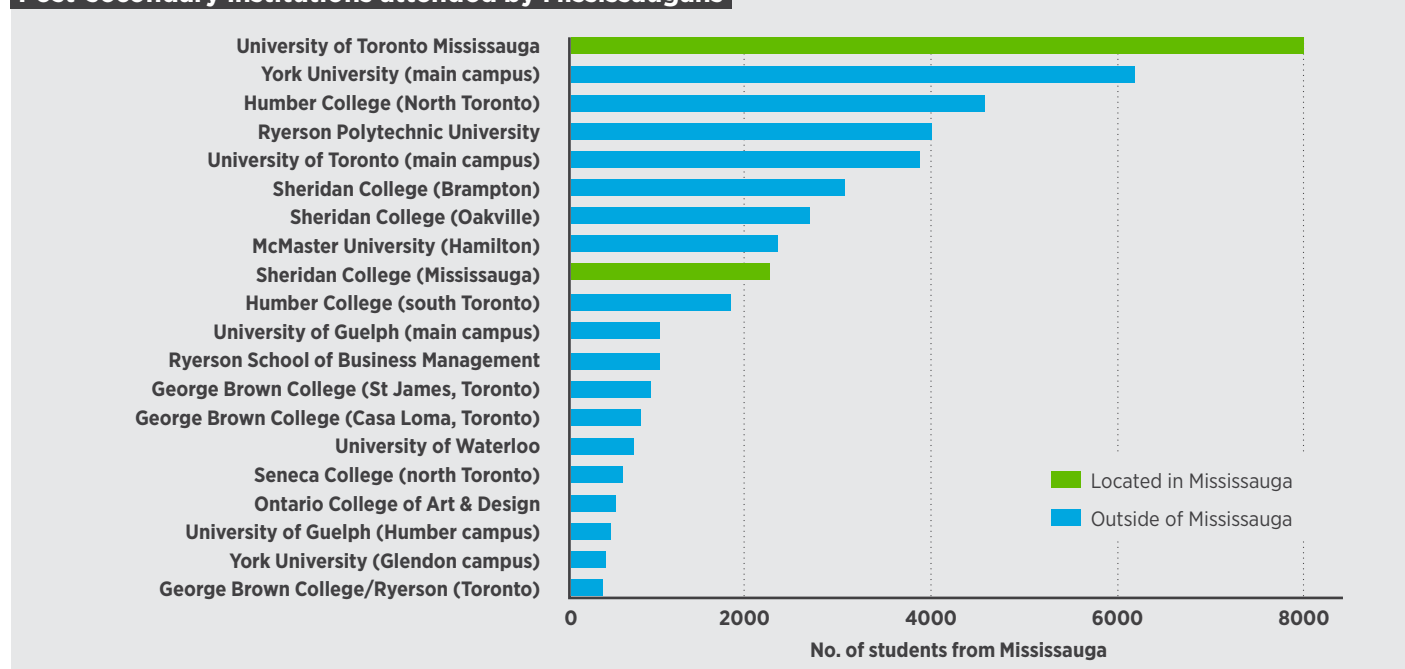
Mississauga's role as an employment centre has a durable advantage because of the city's location, transport connections, and available labour force. The city's employment is expected to grow 23%, from 448,000 jobs today to 552,000 in 2041. Employment is expected to become more concentrated in Downtown and other existing office centres. Population-related jobs such as retail, healthcare, and education will grow, but office-based jobs are expected to provide the majority of employment growth.

Employment forecasts

Mississauga also attracts and cultivates talent within education. The City is home to two major post-secondary institutions: the University of Toronto's Mississauga campus (UTM), and Sheridan College's Hazel McCallion campus. These campuses attract students from Mississauga and beyond. The rest of the GTHA and the surrounding areas offer a large number of post-secondary institutions, and Mississauga students travel to many of them every day.

Employment growth is expected to be primarily in office-based jobs.

Source: City of Mississauga Growth Forecast 2013

Post-secondary institutions attended by Mississaugans

The people of Mississauga use many of post-secondary institutions available to them, aided by effective transport links.

Source: Transportation Tomorrow Survey 2011

Mississauga is at the epicentre of the area's goods distribution network. These goods include the essentials of life, items for retailers, supplies for manufacturers, the products they create, and much more. More than \$1.8 billion worth of commodities travel to, from, or through the Region of Peel every day. Much of this activity is concentrated in the northeast of Mississauga, in the area around Pearson Airport.

Goods movement depends on the extensive transport network serving Mississauga. Multiple long-distance road corridors and rail yards link the area with the rest of North America, including seaports that serve the entire world. Mississauga is home to Canada's busiest airport, which provides air freight connections around the globe.

The logistics and warehousing industry supports Mississauga's businesses by providing them with good connections to their supply chain and their customers. The truck traffic it generates requires sufficient road capacity to operate effectively. Intersections on major roads may need to be

designed around the needs of trucks rather than other road users. However, roads designed primarily for trucks will create issues for other travellers, particularly people who walk, cycle or ride transit.

Congestion on the highways has resulted in truck operators preferring to travel outside peak times, including at night. This creates 24-hour truck traffic on roads and 24-hour work patterns at facilities they serve.

The volume of goods and the complexity of the goods distribution system are expected to grow further as technology advances and the GTHA's urban area matures. Employment in the warehousing sector will also be affected by changes to operational practices that increase efficiency. The City is an active member of the Peel Goods Movement Task Force, which works to advance strategies and initiatives that will help the goods movement system evolve with the times.



Tourism and Entertainment

Mississauga offers a host of attractions for residents and non-residents alike to visit and enjoy.

Life is not only about the daily necessities; it is also about leisure, free-time and social activities. Attractions in Mississauga range from parks and recreation centres that primarily attract locals to special events and venues that attract visitors from farther afield. Whether here for business or pleasure, visitors also require services, such as hotels and restaurants.

Residents

Mississauga residents have a wealth of opportunities for their free time. They can go shopping at Ontario's largest shopping mall, visit recreation centres, and visit parks and historical sites. Indeed, Mississauga residents tend to stay local for their non-commute daily journeys, with Downtown, Community Nodes, and Major Nodes being the focal points of these trips.

Mississauga's future growth in jobs, homes, and amenities will focus on key nodes and corridors. With this mix of uses, non-commute trips will become easier and will tend to reduce travel distance between homes and attractions. Options other than using a car will then become more attractive.



Visitors

People visit Mississauga for a variety of reasons. People from the surrounding area come to Mississauga to visit the city's variety of attractions, including Square One. Other malls and unique shops also attract people from beyond the city. Mississauga boasts some unique cultural attractions, including the Living Arts Centre and SportZone Campus at the Paramount Fine Foods Centre (formerly Hershey Centre). It also has high-quality convention facilities. Mississauga's Credit River and waterfront connect people with the natural world and draw enthusiasts from around the area.

Visitors to Mississauga also come from further away to visit friends or family or visit local attractions. These visitors need more services, such as hotels, to make their visit possible. Visits to Mississauga are likely to increase as the population grows, requiring more services and improved connections to make accessing these services easier and more pleasant.

As a major employment hub, Mississauga also attracts business travel. These travellers also require local amenities, such as restaurants and hotels. Indeed, Mississauga hotels are mostly used for business purposes, and hotel demand is likely to increase as employment in the city increases.

Pearson Airport is an international aviation hub, with around one-third of passengers using the airport to connect to other flights. Increases in airport traffic and stopovers have led to more passengers exploring the surrounding area, including Mississauga. Airport travel is expected to increase in the future, which in turn will increase visitor numbers. Often, those on stopover visits do not have a car, creating a need for quick and reliable transit connections to and from the airport.

Special events

Special events, including the Bollywood Monster Mash, the Carassauga Festival, and the Mississauga Waterfront Festival, as well as various parades, appeal to locals and visitors alike. These events present unique transportation challenges with increased traffic and travel diversions. Providing and improving ways to travel to these events without a car can help visitors from Mississauga and further away reach these events more efficiently.

Changing Environment

The negative effects of transportation and the natural environment on each other can be reduced or mitigated through intelligent choices.

Transportation is a major source of greenhouse gas emissions in Mississauga, accounting for 32% of emissions in the city and contributing to climate change. Transportation emissions are also a major source of such air pollutants as nitrous oxides and particulate matter.

The changing climate means the transportation system must cope with weather events outside its original design parameters. These events include ice storms, rainstorms, and extreme wind. They will result in more frequent disruptions to service and the accelerated deterioration of infrastructure. The City is developing a Climate Change Action Plan that will provide the roadmap to significantly reduce greenhouse gas emissions and improve the city's resilience to the impacts of climate change.

Other air pollutants affect people's health and contribute problems such as ground level ozone and acid rain. Traffic-related emissions in the GTHA are estimated to be responsible for up to 1,000 premature deaths each year.

Mississauga's transportation system is a major consumer of land. Roads cover approximately 20% of the land in Mississauga and parking areas consume another 15%. Taken together, it means transportation uses more than a third of land in the city. This accentuates the urban heat island effect and creates issues for stormwater run-off. It also means that reducing the land used by transportation will free up space for other purposes. Streets and the wider right-of-way also provide an opportunity to enhance the city's natural environment through trees or other natural elements.



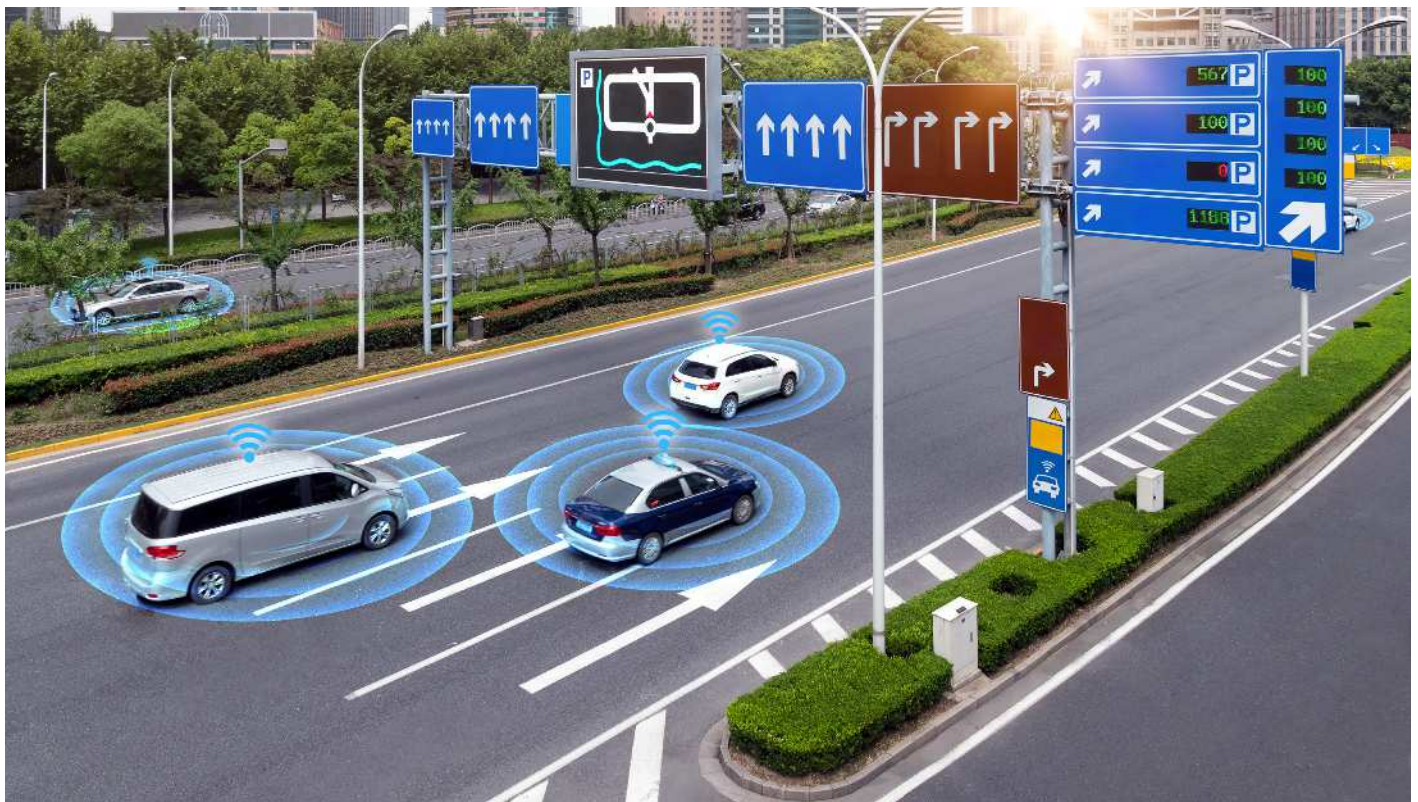
Evolving Transportation Future

Advancing technology will potentially change all aspects of transportation, including whether people travel in the first place.

The internet, smartphones, big data, and advanced computing are causing massive and rapid changes in the field of transportation. Vehicle technology is also going through a period of widespread innovation. Features like assisted parking, adaptive cruise control, and blind-spot warnings are successes along the path to self-driving cars and trucks. Advances in fuel technology require the City to explore how to support electric and hydrogen vehicles. Future vehicles could also ‘talk’ to each other and to the municipal infrastructure.

Technology is also changing where, when, and how often people meet in person, regardless of why. It is also changing how goods reach people’s homes.

Changes in technology and society will almost certainly change how people plan their travel, the way they travel, where they travel, and whether they need to travel. These changes can bring new opportunities that benefit Mississauga and its people. Regardless of what the future transportation system looks like, it must always enable the freedom for all people to travel safely where and when they want.



3

PEOPLE MOVING FORWARD

Providing people in Mississauga
with better options for travel.

Living in Mississauga

Raising Children in Mississauga

Aging in Mississauga

Studying in Mississauga

Working in Mississauga

Running a Business in Mississauga

Advancing Logistics in Mississauga

Visiting Mississauga

People types

Transportation exists to move people and the goods people need. People's transportation needs depend on why they are travelling and their broader life circumstances. An individual's transportation needs will vary – traveling to work, going shopping, and taking a child to a recreational activity can all happen in the same day, yet have different requirements.

This chapter describes how the Transportation Master Plan will benefit people, depending on their needs and activities. Each section summarizes the benefits for the following activities:

- **Living:** Mississauga residents live in a city where a wide array of homes, shopping centres and plazas, healthcare facilities, community centres, parks, libraries, recreation facilities, and places of worship are available. Residents want the essentials of life to be easy to find and easy to get to.
- **Raising children:** Excellent access to schools, parks, community centres, extra-curricular programs, and other facilities makes Mississauga a great place to raise children. Safeguarding and improving access will ensure Mississauga remains a great place to grow up.
- **Aging:** Older adults have new priorities, new interests, and new healthcare needs, and they want to meet them without needing a new home. It is better for everyone when it is easy to make lifestyle choices other than '9-to-5-and-drive' and when it is easy for caregivers to reach people they care for.
- **Studying:** Mississauga's residents enjoy access to the many post-secondary education institutions and training programs in the city and wider GTHA. The institutions in Mississauga also attract students from across the region.
- **Working:** Mississauga offers an unparalleled number of opportunities for employment. Employees want it to be easy to move between work, study, and home at any time.
- **Running a business:** Getting employees, clients, customers, materials, products, and information in and out is the essence of running a business. It must remain easy for businesses to run smoothly as the City grows and commerce evolves in the internet age.
- **Advancing logistics:** Mississauga is home to Pearson Airport, five 400-series highways, and several major distribution centres. It is located between current and future sites of major rail-to-truck transfer facilities. The city will embrace its role as a pivotal hub for logistics at the national scale.
- **Visiting:** People come from all over the world to do business and visit loved ones in Mississauga. Sports and entertainment facilities, and cultural sites and festivals, are a rapidly increasing draw. It must become easy for visitors to discover everything Mississauga has to offer.



Living in Mississauga

Mississauga residents live in a city where a wide array of homes, shopping centres and plazas, healthcare facilities, community centres, parks, libraries, recreation facilities, and places of worship are available. Residents want the essentials of life to be easy to find and easy to get to.

Today

Most residents enjoy walking to destinations in their neighbourhood, especially when the weather is pleasant, but find it off-putting to walk when their trip involves an arterial road. Crossing a major intersection can be daunting, especially for people using a mobility device, pushing a stroller, carrying luggage, or walking slowly. Day-to-day needs, like grocery stores and pharmacies, are usually located on the nearest arterial or major roads. Some destinations, like a major mall or a medical facility, draw people further from their home.

Mississaugans living near major roads may find it easy to access the things they need or the public transit that can get them there. Those living within a neighbourhood may find it confusing or time-consuming to get to their destination on foot or by bike because neighbourhood streets are often curvy

and indirect. Residents who can access a car to travel beyond their neighbourhood typically do; otherwise, they choose to take transit, hire a ride, or ride a bike to get around the city. Public feedback indicates many people would be happy to avoid the cost and effort of driving if viable alternatives were available.

All the essentials of life can be found in Mississauga, but residents head out of town on a regular basis to get to friends, family, jobs, post-secondary education, specialized healthcare services, favourite stores or restaurants, major festivals and events, and more. Residents find it time-consuming to make these trips by transit, especially if they are headed to places other than Toronto, or if they are using TransHelp. Some residents live further than they would like from their favourite destinations because of the cost of housing.



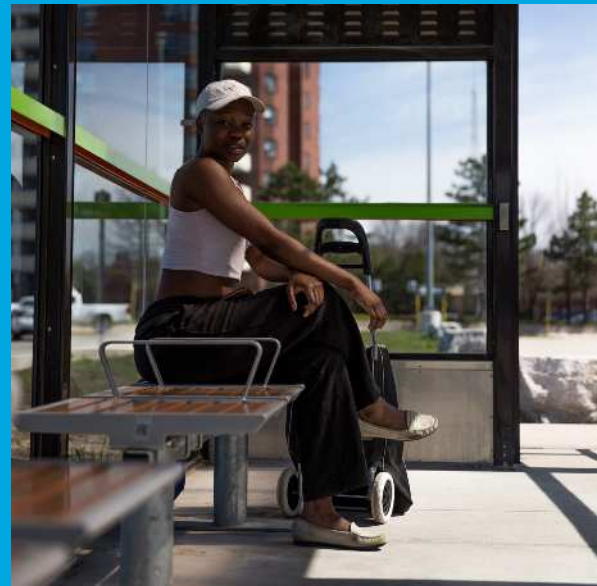
Mississaugans have access to all the essentials of life within the city.

Vision for 2041

Homes in Mississauga will be available in a variety of sizes and price points, making it possible for many individuals and families to live close to the things they need most and to have the option of staying in their homes as they age. Most new homes will be located in areas where all the essentials are an easy walk from home. These areas will be anchored by transit facilities such as GO Stations and MiWay terminals, or they will be located along major roads that are served by high-frequency, round-the-clock transit service—making taking transit a natural choice. Transit will be especially preferable on routes that are separated from traffic, enabling passengers to travel the same distance in less time than a car. Transportation alternatives will be available on-demand for those whose barriers to accessibility cannot be overcome by standard transit service.

Streets in both new and old neighbourhoods will be designed and operated thoughtfully so they are safe and pleasant for pedestrians, cyclists, and drivers. New connections will be made in the pedestrian and cycling networks to close gaps or offer shorter alternatives to long and winding routes along neighbourhood streets. The design of buildings will also evolve, so that it's as easy to arrive from a bus stop, sidewalk, or bike trail as it is to arrive from the parking lot.

New and growing internet-integrated businesses will make it increasingly common for residents to order goods and services brought to their homes instead of going out to run errands. This change will also alter traffic patterns; there may be more delivery vehicles and work vans on neighbourhood streets and less competition for parking spots at plazas and shopping centres. However, the noise and pollution generated by vehicle traffic will decrease as alternatives to internal combustion engines become commonplace. These alternatives will also pose less of a danger to others as the City's speed management program evolves.



Marie Erindale GO

I mostly take transit or the train to get around the city but sometimes Uber too when I need to. I like going to Square One, and if I take the #20 bus from here, it's usually only a 15 to 20 minute ride. I'm into fitness and also a rapper, so I like to be active in my community when I can. Mississauga is beautiful, and transit is a great way to get around the city.

Raising Children in Mississauga

Excellent access to schools, parks, community centres, extra-curricular programs, and other facilities makes Mississauga a great place to raise children. Safeguarding and improving access will ensure Mississauga remains a great place to grow up.

Today

Schools are the focal point of life for children, which makes them a big part of parents' lives, too. Parental decisions on how their children travel to and from school or other places will shape their children's daily routines and lifestyles. These decisions will affect how these children feel about travel choices, both as children and as adults.

Approximately half of students aged 11 or older live within walking distance (less than 1km) of their local school, but only about 38% walk to school. Some children who live further away have the option of riding the school bus, depending on their grade and school board. Families in certain parts of the city rely more heavily on school buses than others, especially families living in the downtown area. Some students live further than a reasonable walking distance but less than the bus threshold. Their parents must pay to get their children to school, whether by car or by public transit.

Many parents consider taking their child to school by car to be a natural choice, despite the negative effects driving has on air quality and children's health and the safety issues generated by traffic conditions near schools. However, many parents feel that driving their child to school is the only practical option, or they have concerns about road safety and other public safety issues.

After school and on weekends Mississauga's children have a huge variety of options for learning and having fun. Sports programs, art classes, and other hobbies are offered in community centres, parks, private studios, and places of worship. Teenagers may also work part-time jobs at shopping centres or in their neighbourhoods.



The availability of safe walking routes to schools enables better choices for students.

Most children have access to a bicycle, yet rarely use it to travel. Many parents feel there are no safe routes to get to their most common destinations, and they spend a large amount of time chauffeuring their children in a car. This results in children being familiar only with car-based travel options.

Vision for 2041

Trips between school and home will typically be a manageable distance because schools and daycares will be located where families live and because affordable family housing will be available near schools. Children who live further than a reasonable walking distance will have access to a no-cost option for travelling to and from school, such as a school bus. New and existing walkways will provide shortcuts between roads for students walking to and from school. Elementary school students in Mississauga will keep each other company on their journeys, either riding the school bus together or walking in supervised groups to address public safety concerns. High school students will develop confidence walking unsupervised, cycling and riding public transit, and practicing the safe travel habits they have learned throughout their childhood. School travel habits will extend to after school and evening activities. It will be easy for families to do their errands or get to sports games and lessons on bicycles, using carefully designed bike routes and bike-friendly parking lots and building entrances.



Young father Credit Meadows

I moved here from Toronto and I have a 4 year old so I mostly drive around. I used to walk a lot while living in Toronto because it was easy to do but when we wanted more property we moved our family here. I'd say our favourite place to go is the tennis school by the 403, which is easy to get to at certain times, but depends on traffic. I think the culture needs to change for transportation to work because there's not really a unified strategy for integrated transportation.

Aging in Mississauga

Older adults have new priorities, new interests, and new healthcare needs, and they want to meet them without needing a new home. It is better for everyone when it is easy to make lifestyle choices other than ‘9-to-5-and-drive’ and when it is easy for caregivers to reach people they care for.

Today

The number and proportion of older adults in Mississauga is forecast to increase, a result of increasing life expectancy and aging baby boomers. This demographic shift will cause numerous changes to society and to government services, including the use and planning of transportation. Improvements in public health mean that older adults continue to enjoy a full range of capabilities. Consequently transportation planning must regard this group as simply being in a different life stage than working-age adults, with different personal needs generating different priorities for transportation.

The concept of ‘aging in place’ aims to allow older adults to live comfortably and independently where they wish—particularly in their existing homes. Good transportation plays a vital part, as it enables people remaining in their homes to travel to the places and people they need.

It is not uncommon for older adults to lose their driver’s licence or to decide that driving is no longer a reasonable option for their travel needs. The lack of suitable alternatives to car travel makes some older adults dependent on others to drive them around. This situation can hinder their access to amenities, such as healthcare and groceries, and may cause them to move into residential care facilities solely to reduce the need to travel.

Older adults are typically not employed but still need access to all the places that support the business of life, which includes shops, healthcare, and recreational facilities. Older adults also visit and are visited by family and friends from Mississauga and beyond.



Vision for 2041

Mississauga's transportation system will support to those who lose mobility options as they age, whether through physical infirmities or through lack of a driver's licence. Older adults will have transportation choices that let them remain in their homes. New development will also provide older adults with the option to live in mixed-use areas. It will also provide the opportunity to live in new seniors-orientated housing with amenities integrated into the development. Older adults that remain in their existing homes will benefit from new development on nearby nodes and corridors, which will offer a range of services to residents.

The pedestrian network will accommodate people who have issues walking or who use mobility devices. New walkways and road crossing points will help reduce walking distances to amenities. Frequent transit service on major roads will be complemented by neighbourhood services that reduce the required walk to transit.



Jean Celebration Square

I moved to Canada recently from Lebanon because my sons live here and I wanted to be closer to them. They're already in their 30s but they like their lives here. I'm not really taking the bus, but it took me only 10 minutes to walk here, and I really like it, there are many people around.

Studying in Mississauga

Mississauga's residents enjoy access to the many post-secondary education institutions and training programs in the city and wider GTHA. The institutions in Mississauga also attract students from across the region.

Today

Post-secondary education is a key component of starting or building a career for many people in Mississauga. Like workers, students commute from across the city and beyond. They study at the University of Toronto's Mississauga campus (UTM), Sheridan College's Hazel McCallion campus in the Downtown Core, Collège Boréal, and dozens of specialist training institutes across the city. Post-secondary students in the GTHA typically commute to their campus, and Mississauga's students are no exception.

UTM students benefit from a "U-Pass", which provides unlimited transit use as part of their standard student fees. Sheridan students do not have a U-Pass program in place, but do benefit from the Square One bus terminal. This provides excellent access to the college from Mississauga and a large portion of the GTHA. Some students may also live on campus or close by – UTM has its own student housing, and Sheridan students take advantage of the large number of condos in downtown Mississauga.

The 56,000 students residing in Mississauga also commute to post-secondary educational institutions across the GTHA and beyond. Depending on the institution, anywhere from 40% to 80% of Mississauga-based students commute by car. Students' choice of educational institution is often influenced by the availability of direct transit between Mississauga and their campus.

Sheridan College and the University of Toronto both have campuses in Mississauga and in other municipalities. Both institutions provide different courses at each location and offer free inter-campus shuttles. Mississauga students attend campuses in other municipalities, and students living close to those other campuses will come to Mississauga.



Vision for 2041

Mississauga will continue to draw post-secondary students from across the GTHA. Diverse housing options will give people the choice to move closer to school. Downtown Mississauga's walkability will support students who live close to Sheridan College; the LRT, local transit, and regional bus connections will provide more people with access to the college from elsewhere. UTM's unique needs will be supported through the results of a local network study. All students in Mississauga will enjoy comparable transit costs, such as through the U-Pass or other measures.

Following the completion of their studies, Mississauga's students will have easy access to their jobs, their recreational activities and the essentials of life. This will result in a greater proportion choosing to remain in the city after graduation, contributing their skills to Mississauga's diverse economy.



Four students Lambton College

Mississauga is a beautiful place, but in this area there are problems with a lack of footpaths. We're new here from India, so we walk around mostly to and from school. Unfortunately, there is private property blocking the way, so it's not very connected at times. The lakeshore is probably a favourite to visit, and if we take the bus it's about 40 minutes; that would be my best tip, to take the bus if you're going anywhere far.

Working in Mississauga

Mississauga offers an unparalleled number of opportunities for employment. Employees want it to be easy to move between work and home at any time.

Today

Mississauga offers an abundance of employment opportunities in a variety of sectors. The area around Pearson Airport has the second largest concentration of jobs in the country. Jobs in Mississauga are filled by people living throughout the GTHA and beyond. More people commute into Mississauga each day than commute within the city, and both groups are larger than the number of people commuting from Mississauga to elsewhere. Commuters into Mississauga are also the fastest growing of these three groups. Residential growth in Brampton and Milton is especially expected to fuel this growth.

Transit is used less for inter-municipal commutes than for trips within Mississauga, and it is not seen as a viable option for many inter-municipal commuters. Long journey times and the double fare for using MiWay and TTC are the main reasons for this view. At peak times commuters overwhelm the highways and road network, making the trip to and from work an unpleasant part of the day for many workers in Mississauga. Carpool programs, flex hours, and working from home make a big difference for people who have such options.

The poor quality of the commute deters some people from seeking or accepting jobs in Mississauga, which in turn can undermine the city's position as an employment hub.



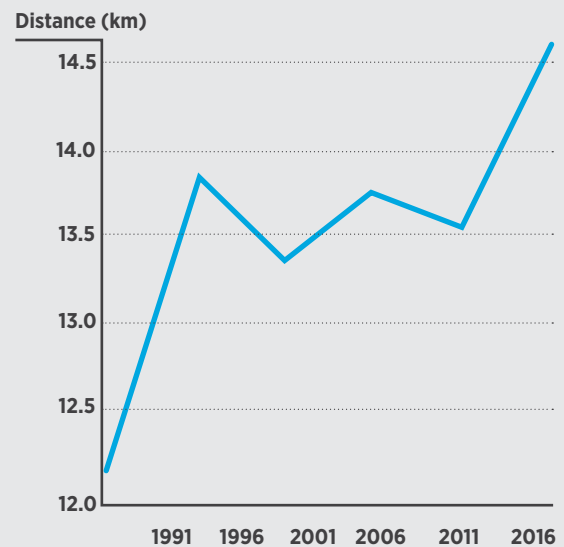
Vision for 2041

Mississauga will continue to be a pivotal economic hub in the GTHA, drawing thousands of workers from across the area. Diverse housing options will give people the choice to move closer to work either temporarily or for the long term. Short commutes will be easily accommodated by walking or biking on well-maintained sidewalks, trails, and cycling facilities.

Long-distance commuters will have the choice to ride transit—enjoying ‘me time’ free from the responsibilities of driving—thanks to investments in regional transit. Following successful advocacy efforts by the City and others, two-way all-day service on the Milton GO line will make it quicker and easier to commute into and within Mississauga. High-frequency GO Bus service will make highways function as transit corridors. Passengers arriving at stations or carpool lots will choose from MiWay buses, shared bikes, and rides-for-hire to get to their destination. For many it will be a short walk to a mixed-use building near the transit station.

Enhanced transit, flex hours, and work-from-home programs will relieve pressure on highways and arterial roads for those who drive. Ride-matching apps will make it simple for drivers to find people to share their ride with, creating opportunities to recover costs and access dedicated high-occupancy vehicle (HOV) lanes.

Average commute distance



Source: Transportation Tomorrow Survey 1991-2016

Over the years, the average commute distance for people working in Mississauga has tended to increase. This reflects the growth in the size of the GTHA's urban area and population, as well as the attractiveness of Mississauga as a place to work. Improvements to the transportation system can help commutes of all distances, cementing Mississauga's place as a key employment hub in the region.

Running a Business in Mississauga

Getting employees, clients, customers, materials, products, and information in and out is the essence of running a business. It must remain easy for businesses to run smoothly as the City grows and commerce evolves in the internet age.

Today

It is a challenging time to be running a business. Web-based technology and innovation are changing the way things are done in every sector and at every scale. Clients, customers, and employees have new ideas and ambitions about how their routines can evolve with the times, which changes their expectations and demands. The supply chain of materials is also evolving, which adds further complexity. Keeping up comes at a cost, a risk, or both. For emerging new businesses, technology and innovation may be more familiar and manageable, but finding space to start and grow a business in Mississauga may not be.

In changing times, transportation remains as critical as ever. For large businesses, highway access may not be as important to employees, clients, and customers who prefer to commute by transit or bicycle, but it remains essential for getting supplies in and getting products out. For small businesses, customers may discover them online before coming to their stores, but foot traffic will remain an important driver of sales. Many businesses bear the cost to provide parking for customers and employees who drive there.

Mississauga has a diverse range of businesses of all sizes. Regardless of the size or nature of businesses, the transportation system forms a vital part of its access to employees, suppliers and customers.



Vision for 2041

Existing employment-focused areas will remain 'business first' parts of the city. Office parks and industrial neighbourhoods will make room for small businesses alongside big ones, making them more pleasant places to work. The growing population in Mississauga and the GTHA will provide new customers, supporting existing and new businesses alike.

The transportation system will enhance access to supplies, employees, and customers. The City's Advanced Transportation Management System will help reduce traffic jams and vehicle travel times, which will benefit all three groups. Improvements to goods movement will help speed up delivery times and reduce costs, whether for supplies coming into a business or products going out to customers. The City and the Region of Peel will also target suitable measures to improve deliveries to areas with stores and residents.

Employees will be able to use transit to get to work at any time of day. Improvements to transit will quicken people's journeys and bring more potential employees within a reasonable commute. Greater transit use will also relieve pressure on roads in Mississauga. The City will help businesses educate their employees on making new travel choices, especially outside of the typical '9-5' workday. These changes will help businesses retain their valued employees and make it easier for customers to reach businesses. Customers will be able to use a variety of modes efficiently and easily to reach businesses. Reduced car trips by customers and employees, combined with changes to City parking policies, will reduce the amount of parking businesses pay to provide. Reduced parking will also free up land for new or expanded businesses.



Input from local business leaders

Compared to the mid-2000s, we are having more difficulty accessing the workers we need to be successful. Increasing traffic congestion and commute times means either our employees are getting home later, or we are restricted to employees who live closer. Neither of those are good for businesses, workers, or the city.

Advancing Logistics in Mississauga

Mississauga is home to Pearson Airport, five 400-series highways, and several major distribution centres. It is located between current and future sites of major rail-to-truck transfer facilities. The city will embrace its role as a pivotal hub for logistics at the national scale.

Today

Goods movement is the lifeblood of the economy. About \$1.8 billion worth of commodities travel to, from, or through the Region of Peel every day, and four out of every nine jobs in Peel are related to these shipments. The area around Pearson Airport is a critical link in the national goods movement network, partly because of the presence of the airport. The presence of several 400-series highways and proximity to the CN and CP railyards that move goods between train and truck also make Mississauga a strategic location for the logistics industry. The proposed development of an additional intermodal facility in Milton will further embed goods movement in the region.

In recent years, road congestion has added cost, complexity, and uncertainty, with ripple effects down the supply chain and increased costs for businesses and consumers. The logistics industry needs support to operate efficiently. Regulations that permit larger trucks will change how other road users interact with truck traffic and will require stronger enforcement of existing road rules to help mitigate the risks.

Several logistics companies already operate around the clock, but road restrictions and lack of transit options for shift workers put strain on companies.



Vision for 2041

The importance of the Region of Peel as a logistics hub will be recognized nationwide. Investment at every level of government will ensure that smooth operation of the national supply chain does not rest too heavily on local infrastructure investment. Warehouses and freight companies will be located where it makes the most sense. Trucking will be optimized to avoid travelling in peak commute hours whenever possible. Priority truck routes will be clearly defined and designed to mitigate the risks of driving trucks in mixed traffic.

Distribution within the city will be split into smaller deliveries in smaller vehicles. This approach will be usual for deliveries of online shopping that go directly from warehouse to customer and will diminish the role of 'big box' stores. Local pick-up points will become commonplace in convenient locations.



The changing role of deliveries

The GTHA's population is growing, which means demand for people's everyday goods needs will also grow. The rise of online shopping means more home deliveries. Truck traffic is an inescapable part of both. It's in everyone's interest to ensure goods movement can operate safely and efficiently within Mississauga.

PHOTO: MICHAEL GIL

Visiting Mississauga

People come from all over the world to do business and visit loved ones in Mississauga. Sports and entertainment facilities, cultural sites and festivals are a rapidly increasing draw. It must become easier for visitors to discover everything Mississauga has to offer.

Today

Overnight visitors to Mississauga come for a variety of reasons, including business, friends, family, and tourist attractions. They may stay in hotels, short-term rentals, or with people they know. Why they visit and where they stay will influence their travel choices while they are in Mississauga. Pearson Airport brings 47 million people through Mississauga each year. Hotels serving air travellers are concentrated in the industrial areas around the airport, making it difficult for travellers to access the city's amenities.

Festivals, parks, natural areas, and cultural facilities all attract visitors from the surrounding area, and Mississauga's waterfront attracts visitors to enjoy the natural beauty as well as the nearby shops and services. The proximity of GO Transit's Lakeshore West rail service provides a major opportunity for more people to enjoy the waterfront without increasing car traffic.

The Paramount Fine Foods Centre (formerly the Hershey Centre) is home to the Raptors 905 basketball team, the Mississauga Steelheads hockey team, and regular concerts and events. This centre, other private entertainment facilities, and city-owned facilities such as the Living Arts Centre draw in people from further away. Such trips are irregular and outside peak travel times. The quality of information provision and late-night services influence whether people will choose transit.

The Square One Shopping Centre's 200,000m² of retail space makes it Mississauga's headline shopping destination, attracting both locals and people from the surrounding area. The city also supports a diverse range of independent retailers who offer unique attractions to residents and visitors alike. Mississaugans use car-based modes for more than 95% of their trips to and from shops. Those who travel to shops by transit also favour taxis to get home with their purchases.



Vision for 2041

As the City grows and changes its nodes, neighbourhoods, business districts, and major tourist sites will develop diverse and distinct personalities that draw a growing number of visitors from across the city and from out of town, for work and for leisure and for short and long term stays. Visitors will be confident they can navigate the city with or without their own car. There will be desirable amenities within walking distance of hotels and short term accommodations. Discovering parts of the city further away will be intuitive, with easy-to-understand public transit options, reliable ridehailing options and safe, comfortable, convenient bicycle infrastructure and rental services. Ongoing investment in public transit will continue to improve visitors' travel to, from and within Mississauga.

The City's wayfinding system will make it easy to find major attractions, through a combination of web-based resources, signs, and other features. Major attractions will promote transit options to reach their site, mitigating the traffic and parking pressures that can be associated with major events and festivals. People will discover local attractions and hidden gems by taking pleasant strolls in nodes and neighbourhoods or following trails that connect the city with its green spaces.

The waterfront will stand out as a unique place to enjoy both the natural and built environment. Lake Ontario and the creeks and rivers that feed it will frame new green spaces, neighbourhoods, and cultural hubs offering amusement in every season.



George Clarkson GO

Today, I just biked 19 miles from Old Mill in Toronto, and what's nice is that I don't have to bike all the way back, I can just take the train and then the bus from Exhibition. My favourite places to ride down here are on the Lakeshore bike trails and there's a really nice restaurant in Port Credit where I go for an ice cream when I come down. I used to be a physician and I'm 82 now, so the best advice I can give to anyone is to stay fit and keep social contact with others.

4

PLACES MOVING FORWARD

Building a city with better transportation will make Mississauga a place where people choose to be

Downtown Core

The heart of Mississauga

Major Nodes and Community Nodes

The focal points for a mix of residential and employment uses

Neighbourhoods

Places focused on housing

Employment Areas and Corporate Centres

Places focused on jobs

Corridors

Lands adjacent to major roads

Connection Points

Places linking the city with itself and the wider world

Place types

Places are destinations where we need or want to be. Transportation is about getting to these places effectively. The nature of trips to these places is influenced not only by the transportation infrastructure and services available, but also by the types of activities these places support. Travel choices are profoundly influenced by the urban form of a destination: what uses are there; the shape and size of buildings; and the way roads, sidewalks, cycling facilities, transit routes, and other transportation infrastructure is laid out.

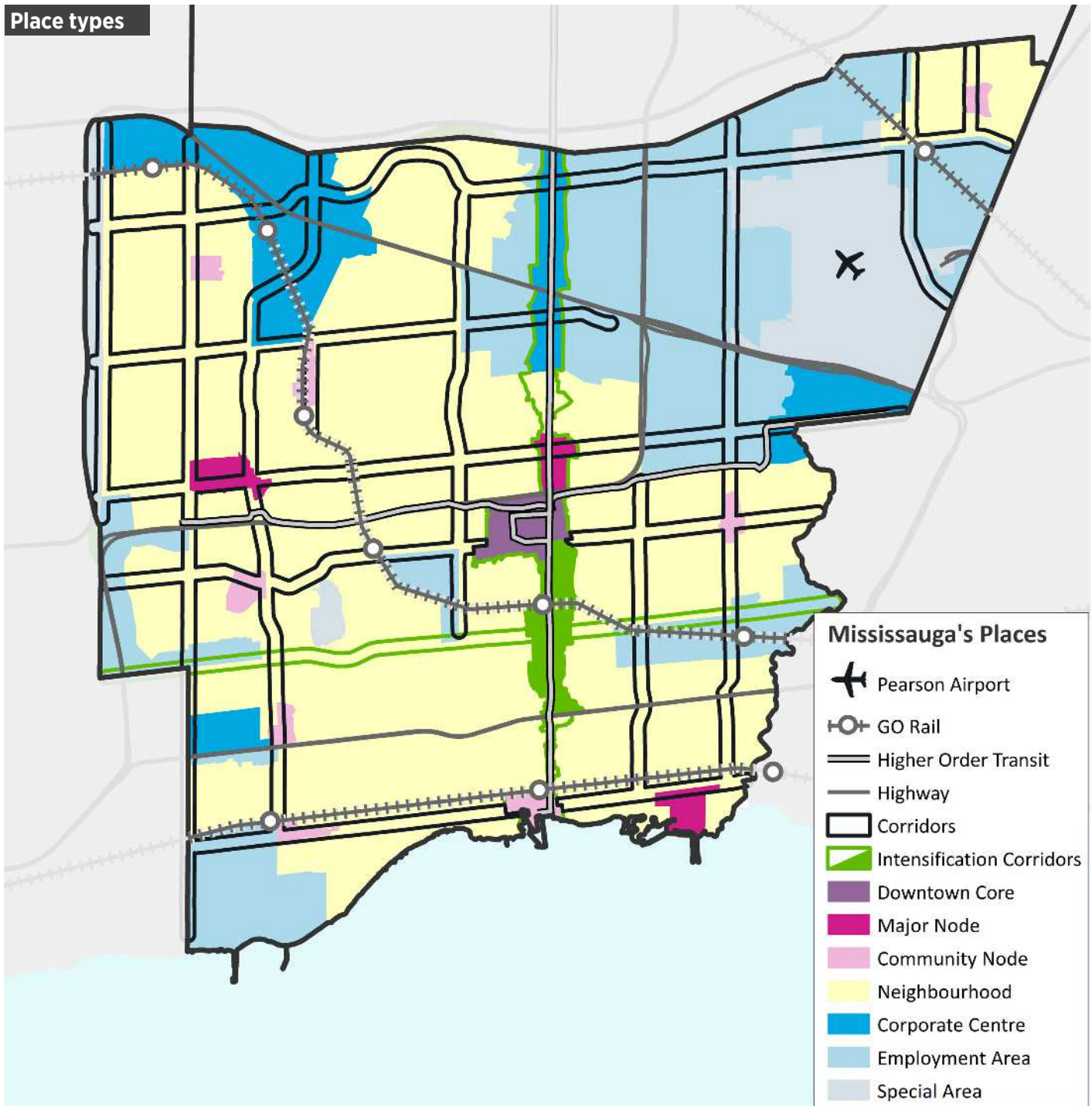
The Mississauga Official Plan guides land use and development, influencing the urban form of places throughout Mississauga. The Official Plan's Urban System lays out the different roles land plays in the city, and identifies which land should be guided to fill which role. Recognizing the importance of the Urban System in guiding the development of Mississauga's places, this chapter is organized around the Urban System's elements and corridors:

- **Downtown Core:** Central area with high-density residential development, office buildings, mixed use, parks, post-secondary institutional and cultural facilities, civic uses (including Mississauga's Civic Centre), and recreational and entertainment uses.
- **Major Nodes and Community Nodes:** Focal points for a mix of residential and employment uses. They function as local centres of civic life for their community, and are often the location for community centres, libraries, and places of worship, as well as transit service. They also have locally-significant retail facilities. Central Erin Mills is an example of a Major Node and Streetsville is an example of a Community Node.
- **Neighbourhoods:** Primarily residential areas. Neighbourhoods cover just over half of the city's land. They include almost all of Mississauga's detached and semi-detached housing, as well as townhouses, apartment blocks, and towers. Examples include Mississauga Valley and Churchill Meadows.
- **Employment Areas and Corporate Centres:** Employment Areas are focused on low-density employment, such as warehouses and industrial activities. An example of an Employment Area is the city's northwest around Pearson Airport. Corporate Centres are focused on high-density employment, such as office towers. An example of a Corporate Centre is Meadowvale. Corporate Centres have high concentrations of jobs but often lack amenities for workers. Each employment-focused area has its own unique set of conditions affecting transportation and land use.
- **Corridors:** Corridors are the grid of major roads in Mississauga and the land adjacent to those roads. Examples include Lakeshore Rd and Winston Churchill Blvd. Corridors are influenced by the places they intersect, and are intended to have a higher concentration of uses.

This chapter also discusses an additional category that is not yet a formal part of the Urban System:

- **Connection points:** Connection points are places that serve an important transportation function. They include Pearson Airport, GO Train stations, MiWay terminals, and on-street bus stops. They also include highway interchanges and points where the road network meets Mississauga's boundaries.

Taken together, these categories provide a structured way to understand how the Transportation Master Plan will help shape the evolution of different places throughout Mississauga.



Source: City of Mississauga Official Plan, Schedule 1b (Urban Structure)

Downtown Core

Mississauga has a truly unique downtown, where thousands of families make their home alongside a major shopping centre, civic buildings, a college, and local and regional transit terminals. Connections with downtown will be strengthened by the introduction of the Hurontario LRT, enabling downtown to continue growing and diversifying.

Today

Mississauga's Downtown Core has all the functions of a typical downtown in ways that are unique to the city. The Square One Shopping Centre is now encircled by the Central Library, the Civic Centre, the Living Arts Centre, Sheridan College, bars and restaurants, other retail stores, residential towers, and several office buildings. Celebration Square in front of the Civic Centre comes alive in the evenings with hundreds of families who live in one of the many residential towers in the area. Downtown has the highest density of people, jobs, and amenities in the city.

The prevalence of surface parking makes it clear that driving is still a popular choice for reaching downtown, although walking and transit are also common choices. The MiWay Terminal at Square One is MiWay's busiest, and GO Transit's Square One Bus Terminal has more weekday bus departures than any other GO terminal including Union Station. They generate high volumes of pedestrian traffic in their local area.



Vision for 2041

Mississauga's Downtown Core will go from a local focal point to a regional centre when the Hurontario LRT begins operation, connecting it with the rest of the Hurontario corridor from Port Credit in the south to Brampton in the north. By 2041 there will be 70,000 people living Downtown. Their homes will be in new towers and townhouses that expand on the Mississauga skyline.

Employment growth will expand the Downtown Core's role as the pre-eminent job centre within the city. The Hurontario LRT and Mississauga Transitway will connect businesses with employees and customers from across Mississauga and beyond. A focal point for transit services, it will encourage growth in a range of amenities. It will also bring many travellers through the area, benefitting local businesses.

Sheridan College students will have unlimited access to local transit with their student card, and most will use it to come and go from class. Students and residents of the area will walk or bike most places Downtown. Square One will remain a regional attraction, and more people will come and go by transit with easy connections between modes and service providers.



**Downtown will be
home to 70,000
people by 2041**



Mississauga's downtown skyline will continue to change and grow

Major Nodes and Community Nodes

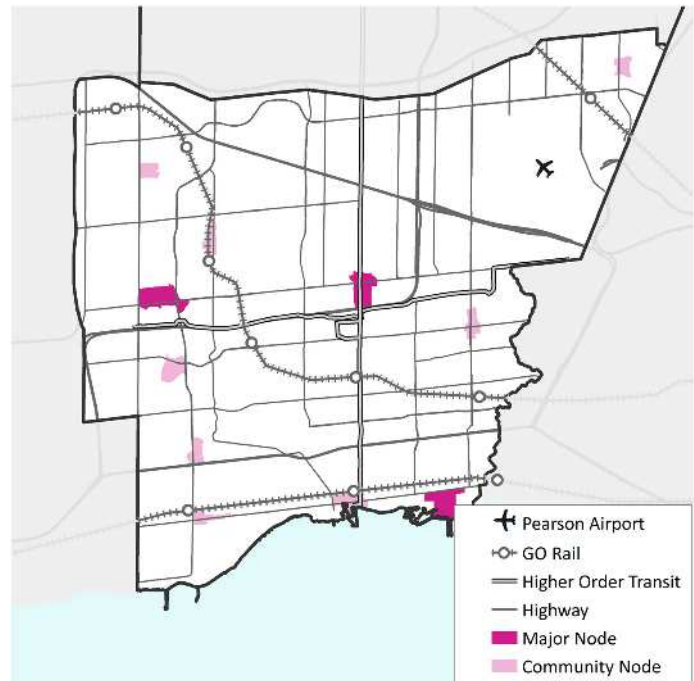
Nodes are the places in Mississauga where people find the things they want and need, seek entertainment, and run into friends and neighbours. Nodes are great places to live and work and are preferred locations for new development and transit hubs.

Today

Major Nodes and Community Nodes are focal points for a mix of residential and employment uses. They function as local centres of civic life for their community. When people shop for housing, look for work, give directions, plan an errand, or attend an event, nodes are their frame of reference. Most nodes already feature a mix of housing, shopping centres, offices, and civic buildings like libraries, schools, and hospitals, all within walking distance of each other at the intersections of major roads.

MiWay service is oriented around nodes, often with a local bus terminal at the centre of these areas. Although driving is the most common access mode, trips to and from these areas are less likely to be taken by car compared with the rest of the city. Most nodes developed in the last 60 years include large amounts of surface parking, facilitating car travel but inhibiting walking. These nodes are typically anchored by malls that strongly influence local travel patterns. The City is currently studying how these areas can adapt to changing shopping habits and travel needs through its 'Reimagining the Mall' project. By contrast, parking in historic nodes such as Streetsville and Port Credit is mainly provided on-street.

Traffic volumes on major roads in these areas can be a hazard to other road users, particularly when turning into or out of unsignalized driveways. Sharing the road with cyclists is challenging for all road users when cycling space is not clearly dedicated



and marked. When cycling facilities are available, they often end at the property line and bicycle parking is scarce or difficult to access. Ongoing efforts by the City to examine the areas around major transit stations will benefit many nodes.

A significant amount of Mississauga's large-scale development is happening at nodes. This will create opportunities to improve these areas and capitalize on the diverse set of land uses.

Vision for 2041

Two-thirds of new residents and workers in Mississauga will be centred at nodes. Nodes will flourish, creating new homes in a range of sizes and prices together with new jobs in diverse industries. They will also support a range of local shops, businesses, and services. Their roles as hubs for local activity will grow, drawing in people from surrounding neighbourhoods and beyond.

People will be as likely to arrive in the node by transit as by car. Within the node, people will walk and cycle as a first choice. Better provision of road-crossing points will make it easier to walk within the node, and new walkways will provide access to the node's amenities for residents in surrounding neighbourhoods.

Driving and cycling will be less stressful, with clearly defined space for all vehicle types and smart signals that adapt to the flow of traffic.

Parking supply will be better matched to demand as travel patterns change. It will include spots for bicycles, electric car charging, carpooling, motorcycles, and other vehicles. Trucks bringing shipments into stores and businesses will mostly come and go overnight to minimize disruption. Nodes will be as active in the evenings as they are in the day, with restaurants and entertainment venues animating the neighbourhood after working hours.



**Nodes will be
home to two-thirds
of Mississauga's
new residents and
workers**



Nodes provide amenities to local residents, such as shops and entertainment.

Neighbourhoods

Mississauga's neighbourhoods are places where home life comes first: houses and apartment buildings make up most of the landscape that features parks, libraries, community centres, places of worship, and schools as focal points for neighbourhood life. Neighbourhoods will benefit from stronger connections to the amenities that make them great places to live.

Today

Neighbourhoods are the areas where people live that are not the Downtown, Major Nodes, or Community Nodes. They cover just over half of the city's land. They include almost all of Mississauga's low-density housing (detached and semi-detached houses), as well as some of its high-density housing (townhouses, apartment blocks, and towers). Regardless of the building shape, local residents still need to access the same type of places as part of their daily lives.

About half of Mississauga's households are in detached or semi-detached houses, typically found on quiet streets. This form of housing accounts for over 80% of residential land in the city. Residents can live far from amenities, such as shops, schools, or playgrounds. The design of Mississauga's Neighbourhoods can make walking difficult. Some streets do not have sidewalks, and walking routes are not direct. Walkways that would provide short-cuts between roads for local residents are rare. Busier roads may also lack good crossing points. These difficulties deter transit use. If walking to destinations takes a long time, then walking to a transit stop will too. Some older towers in these areas suffer from the same problems.

Neighbourhoods are the starting point for 57% of trips in the city. Changes to transportation in Neighbourhoods have a significant effect on people's travel.



Vision for 2041

Neighbourhoods are expected to have limited growth in population. However, they will remain a significant part of the city and a key determinant of how Mississaugans travel. Growth will typically be at the periphery of Neighbourhoods and will include a mix of uses. Existing Neighbourhood residents will benefit from this increase in amenities. New and existing walkways will connect them to nearby shops and community activities, and transit stops will give people new ways to travel. In winter, walking will be safe and easy, with sidewalks cleared of snow, especially around bus stops.

Major roads serving Neighbourhoods will typically have high-frequency transit service throughout the day. Residents will also be able to cycle with ease and confidence with new cycling facilities. A complete cycling network will be developed, letting people travel to anywhere in their neighbourhood and the wider city. The City will also coordinate affordable housing and transportation provision to ensure residents have good access.



**Neighbourhoods are
the starting point
for 57% of trips in
Mississauga**



Land use in Neighbourhoods is planned to remain largely unchanged.

Employment Areas and Corporate Centres

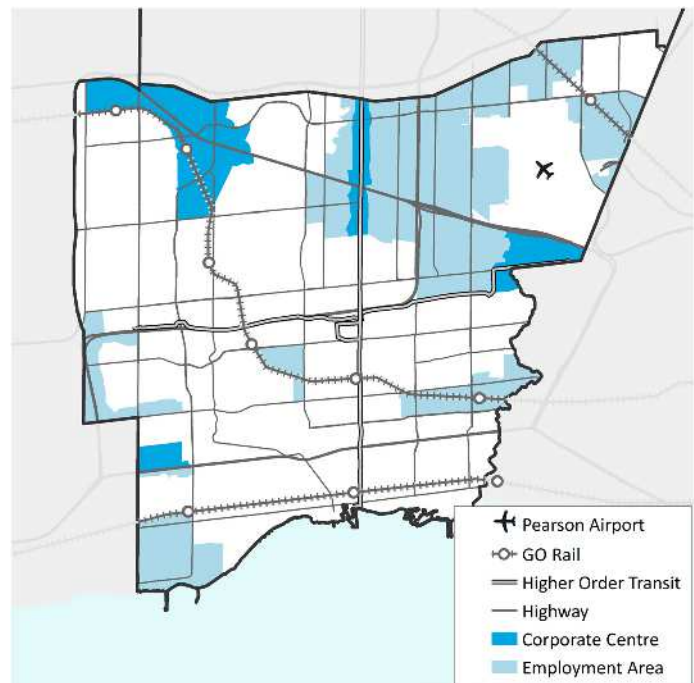
Employment Areas and Corporate Centres are strategically located near the highway network, regional transit corridors, and Pearson Airport. Diversifying transportation options for commuters and integrating lifestyle amenities into the areas will ensure these locations remain top choices for world class businesses.

Today

Industrial, commercial, and institutional buildings in Mississauga's Employment Areas and Corporate Centres have grown on the strength of highway access, large vacant parcels, and access to talent. Shift work is common for industrial and logistics jobs, creating commuting trips at all times of day.

The road network is designed with heavy vehicles in mind, with long straight roads, large blocks, and intersections that can easily handle wide-turning trucks. The same attributes make these streets unappealing for pedestrians, which also deters transit use. The volume of traffic and high proportion of trucks deters cyclists. Low density in Employment Areas makes it difficult for transit to serve them efficiently, which results in low service frequencies and low transit use.

Industrial buildings and warehouses that are highly customized to be fit-for-purpose have a strong preference to stay in the same location, making industrial neighbourhoods quite stable. Office parks are more dynamic, with tenants moving in and out more frequently. In recent years, technological advancements have made the office-based workforce more mobile, changing what is needed in and around an office building and creating new demand for satellite worksites both near to and far from the head office. As employees have more flexibility on how to allocate their time, there is demand for more amenities in and near office buildings so people can run personal errands during the workday.



Vision for 2041

World class companies will continue to choose to locate their facilities in Mississauga, knowing they have stable access to a goods movement network and to talent pools that are evolving with the times. Office buildings will be clustered near transit hubs where there are places to live, eat, and shop alongside other amenities people need to run errands during the workday. Following successful advocacy efforts by the City and others, two-way all-day service on the Milton GO line will make it quicker and easier to access many of these areas from outside Mississauga. Transit hubs will gain additional access options, such as shuttles or ridehailing services. Civic buildings, like libraries and community centres, will provide internet connections and quiet work spaces to support people with no fixed workplace.

Industrial neighbourhoods will offer the stability companies need to confidently expand operations. Industrial streets will be designed to balance the current and future needs of trucks and heavy vehicles with those of other potential road users. These streets will potentially include smart signals that will 'talk' to heavy vehicles and make it safer for them to drive in mixed traffic. The City will continue to work with the Region of Peel through the Goods Movement Task Force, ensuring a coordinated approach to goods movement.



**The areas along
the Milton GO
line corridor have
about 80,000 jobs**



The city's Employment Areas and Corporate Centres draw in workers from across the city and beyond.

Corridors

Mississauga's network of Corridors serves dual functions as vital transport arteries and as places for people to live, work, and shop. Enhancing how people can move to, from, within, and through them will benefit people in the Corridors and in adjacent areas.

Today

Corridors are the grid of major roads in Mississauga and the land adjacent to those roads. They carry high volumes of people and vehicles, and are a key part of the transportation system for all modes. They are the locations where road congestion affects the most people and the most trips.

Each Corridor has its own unique character, reflecting historical development along both the main road and the surrounding areas. Many of Mississauga's local shops and small service-sector businesses can be found along Corridors. High-density housing is typically found on or near Corridors. The resulting mix of uses makes these Corridors attractive places to live, which generates a lot of personal travel to and from the Corridors. However, the shops on Corridors generate truck traffic in close proximity to housing, which creates safety concerns for people.

Some Corridors function primarily to move vehicles and have relatively few connections with adjacent areas. This use makes it difficult for people living or working in adjacent areas to access the Corridor, whether to use its shops and other amenities, take transit, or drive.

Corridors are one of the focus areas for new development in Mississauga. It is expected that new development will include a mix of uses, with higher densities than currently exist. This focus will create a need for investment in walking (to support local trips) and transit (to add capacity for longer trips). Enhancements to the transportation system on Corridors will benefit a range of travellers, including those travelling along the Corridor.



Vision for 2041

The City will create specific land use and transportation plans for Corridors in partnership with local residents and businesses, by conducting studies similar to previous studies such as 'Dundas Connects' or 'Lakeshore Connecting Communities'.

Corridors will have better sidewalks and road crossing points and new walkway connections with adjacent areas. It will be easier to walk to, from, and around the available amenities. The City will work in partnership with site owners to improve safety and access. There will be better connections between the street and the front door of destinations, whether those destinations are owned by the City, the private sector, or GO Transit. Shops will have fewer trucks in peak times, as the City helps encourage deliveries at other times. There will also be changes to intersections that enhance safety for all road users.

The City's Advanced Transportation Management System will help with safer vehicle travel and smoother traffic flow on Corridors and elsewhere. It will speed emergency response to any incidents and allow quicker return to normal operations after any disruption. The data it provides will inform road planning in support of the City's wider aims. Automation will increase the efficiency of the City's traffic management operations.

Corridors will be the focus for high-frequency transit service, giving people a shorter wait at transit stops. They will also be the focus of efforts to allow transit to by-pass congestion and decrease transit travel times. The Hurontario LRT and supporting transit network will showcase this work. Changes to parking regulations will result in rightsizing of parking lots, which may free up land for other uses.



**64% of
Mississauga's shops
are within 200m of
a Corridor**



Mississauga's Corridors support a broad mix of uses alongside their role of moving people.

Connection Points

Mississauga's connection points link people with many places in the city, the region, and beyond. Pearson Airport, transit stops / stations / terminals, and points on the road where people enter the city or exit a highway all serve as points of entry welcoming people into Mississauga or a special part of the city. These places must be pleasant, safe, comfortable, and convenient for all travellers.

Today

Connection points include Pearson Airport, GO Train stations, MiWay terminals, and on-street bus stops. They also include highway interchanges and points where the road network meets Mississauga's boundaries. These connection points are rarely people's final destination, but the number of travellers passing through them means they strongly influence people's travel experiences and choices.

One of Mississauga's key strengths is its place within a much larger urban area. This provides Mississaugans with access to more destinations than can be found in the city alone. It also provides people from outside the city with access to Mississauga's employers, businesses, and amenities. As a result, Mississaugans make 420,000 trips per day across the city boundary; people living outside Mississauga make 670,000 trips per day to and from the city. Connection points form a vital part of these inter-municipal trips.

Within Mississauga, one-third of MiWay's daily boardings happen at bus terminals, making them a significant part of the transit user experience. The remainder happen at Mississauga's 4,000+ local bus stops. GO Train stations in Mississauga connect the city with the rest of the region. Finite space for parking, coupled with growing GO Train ridership, has increased the need to improve access by modes other than park-and-ride. Planned service improvements on the Lakeshore West and Kitchener lines are expected to increase GO Train travel into Mississauga, which will increase the need for effective ways for riders to reach their final destination.



Highways serve inter-municipal trips by car drivers and passengers, and highway interchanges are points that connect the local and long-distance road networks. While they are critical for regional travel, interchanges generally interrupt the local streetscape and create an unwelcoming environment.

Pearson Airport connects Mississauga and the wider region with the world. This provides access for the region's people and businesses to a wide range of destinations. Conversely, it connects people and businesses around the world with the region. This global connectivity depends on effective links between the airport and all parts of the wider region. Connections between the airport and the rest of Mississauga form a vital part of this.

Vision for 2041

Trips through all forms of connection points will be easy to navigate. All travellers will have access to suitable information when planning their trip, during their journey, and at their destination. The City will work in partnership with other organizations to deliver this information where appropriate.

All transit stops will have accessible waiting areas, with connections to the wider pedestrian network. Transit terminals and stations will be comfortable places for boarding and transferring between services. They will include bike parking facilities and will support cycle trips to and from the station or terminal. GO Stations will have better connections with the surrounding areas, which will have additional housing options. More generally, the City will support additional housing, shops, and other attractions that can be found near transit hubs. People will be close to more of the places they need and to the infrastructure they use to travel elsewhere.

The City will advocate for more HOV lanes on the GTHA's highway network to speed the journeys of people sharing a ride with family, friends, or colleagues. The City will work in partnership with the Province to enhance the streetscape around highway interchanges.

Pearson Airport will be better connected to the surrounding areas through a variety of transit modes, from bus to high speed rail. The City will work with the GTAA as they develop their planned Regional Transit and Passenger Centre hub at Pearson Airport.



**Mississaugans
make 420,000 trips
per day across its
boundaries**



Transit stops and terminals may not be people's origin or destination, but are integral part of all transit trips.

5

GOALS

Advancing Mississauga's freedom to move by pursuing six goals for transportation.

**Safety: Freedom from Harm**

Safe conditions for all travellers, advancing Vision Zero by supporting hazard-free travel and striving for zero fatalities.

**Inclusion: Freedom from Barriers**

An accessible network, where moving is easy regardless of a person's age, ability, income, or familiarity with the city.

**Integration: Freedom of Choice**

An integrated network, where people and goods have viable options for moving within and beyond the city.

**Connectivity: Freedom of Access**

Simple and pleasant connections between people and the places and things they need to prosper.

**Health: Freedom to Flourish**

Support for the health of people and the planet, with more people-powered trips, lower vehicle emissions, and better stewardship of the natural environment.

**Resilience: Freedom to Evolve**

Leadership in adapting to changes that reshape the transportation system and how it is used.

Safety:

Freedom from Harm

Safe conditions for all travellers, advancing Vision Zero by supporting hazard-free travel and striving for zero fatalities.



In a Vision Zero city, people can travel any way they choose without fear of injury or death. Risks will be proactively mitigated with the five 'Es' of road safety:

Engineering: prioritizing the safety of pedestrians, cyclists, and other vulnerable users when designing and operating streets

Education: enabling travellers to learn and follow best practices through road signs, social media, formal training, and other creative outreach and education tactics

Enforcement: ensuring there are consequences for breaking rules or taking unnecessary risks while travelling

Empathy: fostering concern for community members who are at risk or have been harmed while travelling

Evaluation: tracking and monitoring incidents, learning from the past to improve conditions in the future

People will be more conscious of their travel habits and the potential impact of making mistakes or poor choices. Mississauga will be committed to the Vision Zero principle: no loss of life is acceptable on roads in Mississauga.

Objectives

- Roads, sidewalks, and trails are designed to prioritize the safety of pedestrians, cyclists, and other vulnerable travellers.
- People feel safe and secure when travelling in Mississauga by any mode.
- Speed limits are well-matched with the types of activity happening in the roadway and along the street.
- Tracking and monitoring systems are in place to learn from past incidents to better inform future decisions.
- All travellers understand and obey the rules of the road, regardless of how they travel.
- People feel the consequences of breaking rules of the road, including for impaired, distracted, and aggressive driving.
- The City and other organizations promote and encourage good habits for pedestrians, cyclists, drivers, and passengers to reduce unnecessary or unintended risk-taking behaviour.
- Injuries and losses can be acknowledged and remembered.
- Hazards related to trucks travelling in mixed traffic are identified and mitigated.
- Non-motorized means of travelling to school, perceived to be safe by students and parents, are available to all.
- Safety of all travellers is a priority during extreme weather events.
- Support for personal security is easy to access for anyone who feels threatened while walking, cycling, riding transit, hiring a ride, or driving.

Key actions

Vision Zero road safety infrastructure enhancements:

Safer roads require identifying and addressing a range of issues using hard and soft measures. The City will invest in hard measures by developing and implementing a suite of infrastructure enhancements to support Vision Zero, such as red light cameras, automated speed enforcement, and traffic calming design interventions (see Action 43).

Vision Zero education program: All road users have a responsibility to use the road safely. The City will establish road user education programming designed to promote best safety practices for travellers by any mode, using road signs, social media, formal training, and other creative outreach and education tactics (see Action 45).

Speed management program: Higher vehicle speeds increase both the likelihood of collisions and the severity of their effects. The City will address both through the creation of a speed management program that includes both location-specific and Mississauga-wide actions (see Action 46).

Road safety enforcement program: Collisions are often caused by people breaking the rules of the road. The City will work with Peel Regional Police to advance efforts to catch and penalize rule breaking behaviour on the road, including aggressive, impaired, and distracted driving (see Action 48).


Vision Zero memorial program: Friends, families, and loved ones need ways to acknowledge and remember losses that take place on the road. The City will work with the Road Safety Committee to introduce a program by which a loss of life on the road can be formally recognized (see Action 44).

Enhanced road safety monitoring program: The future will be better if people learn from past mistakes. The City will modernize the way that collisions are tracked and monitored, enabling staff to more effectively analyze trends and identify hot spots to inform future priorities and decisions in road design and traffic management (see Action 47).

Complete Streets design guidelines: Not all streets serve the same function. The Complete Streets design guidelines will describe what elements should be prioritized in different types of streets to support safe travel (see Action 1).

School Walking Routes program: Parents' choices about how their children travel to and from school are dominated by safety concerns. The Mississauga School Walking Routes program has been helping to address these concerns. The City will support enhancements to the program, such as expanding existing activities and introducing new activities to encourage more walking and cycling by students (see Action 57).

Emergency preparedness for extreme weather: Extreme weather and flash flooding can disrupt the normal operations of a transportation system and create safety issues. The City will identify vulnerable portions of its transportation system and will develop a plan for suitable safe egress routes, warning systems, and alternative route information, in conjunction with the development of Emergency Response Protocols (see Action 35).

For the complete list of actions that work toward Safety, look for the  symbol next to items in the Action Plan (Chapter 6).

Inclusion: Freedom from Barriers

An accessible network, where moving is easy regardless of a person's age, ability, income, or familiarity with the city.



The freedom to move must be accessible to all travellers in Mississauga, so that no one is denied the opportunity to go places where others can go. Barriers can exist because of a person's age, ability, income, or familiarity with the city. In a fully inclusive transportation system, these differences will be acknowledged, respected, and addressed. Travellers who experience barriers will be empowered to participate in identifying those barriers and planning for solutions to confront them.

Objectives

- It is easy for anyone to learn what travel options are available to reach amenities and attractions in Mississauga.
- Comprehensive information about all aspects of the transportation system is available via appropriate channels and locations. In particular, transit users have access to suitable information available throughout their journey.
- Outreach and education regarding transportation options are designed to serve people who are forming new travel routines, such as newcomers, students, new parents, new employees, recovering patients, recent retirees, and new businesses.
- Travel options are available at all times of the day and throughout the year.
- Pedestrian infrastructure (including sidewalks, crossings points, and intersections) is navigable by any traveller.
- A range of housing options are available and affordable in neighbourhoods that are walkable and well-served by transit.
- Households beyond a reasonable walking distance from their child's school have access to a school bus or other no-cost option for student travel to and from school.
- Transit stops, stations, and terminals can be navigated by people with disabilities or mobility restrictions.
- Door-to-door transportation options are available for people unable to use the MiWay local and express networks.
- All travellers in Mississauga have access to affordable travel options for both short- and long-distance trips.

Key actions

Pedestrian network plan: Walking or rolling is the simplest and cheapest way to travel and is often the quickest. Mississauga's pedestrian network is known to have barriers that affect people who have disabilities, walk slowly, or walk with difficulty. The Pedestrian network plan will identify accessibility issues in the pedestrian network, create safe solutions, and prioritize implementation (see Action 14).

TransHelp strategic plan: TransHelp provides specialized transit services throughout the Region of Peel (including Mississauga) to people unable to use conventional public transit (such as MiWay). The City will work with TransHelp to prepare a long term strategic plan for accessible transit and will help integrate TransHelp's services with those of MiWay where feasible (see Action 75).

Walking/cycling construction mitigation: The City will ensure that accessible transit stops, pedestrian routes, and cycling routes are available through construction sites that might otherwise block people's access to their usual transportation facilities (see Action 63).


Wayfinding review: Newcomers, visitors, and long-term residents all require effective signage and information to navigate the city by any mode. The City will review existing wayfinding within Mississauga, identify gaps in provision and opportunities for improved coordination and address these issues (see Action 29).

Housing affordability near transit: The City is working to ensure housing is affordable in Mississauga and to ensure new housing is not located in places with poor transit access. The City will identify measures to improve housing affordability close to high-quality transit (see Action 33).

Car-free travel: City sites: The City's design guidelines ensure accessibility is provided in its facilities (such as libraries and community centres). The City will update its guidelines to include current and best practices for building and pedestrian infrastructure design standards (see Action 38).

On-demand transit: Overnight service, first-mile/last-mile connections, and some other travel markets are not well suited for conventional fixed-route transit. The City will evaluate opportunities, costs, and benefits for on-demand transit service in Mississauga (see Action 19).

Winter maintenance service standards: Establish protocol to review winter maintenance service levels for snow clearance on sidewalks, transit stops, cycling facilities, and trails concurrent with winter maintenance contract renewals, with aim of raising service levels for pedestrians, transit riders, and cyclists where technically, operationally, and fiscally feasible (see Action 62).

For the complete list of actions that work toward Inclusion, look for the  symbol next to items in the Action Plan (Chapter 6).

Integration: Freedom of Choice

An integrated network, where people and goods have viable options for moving within and beyond the city.



Any trip will be a smooth trip in an integrated transportation system, regardless of whether a traveller has crossed a municipal boundary or switched between modes of travel. Coherent networks of roadways, transit services, cycling facilities, pedestrian facilities, multi-use trails, and associated infrastructure will be planned to give travellers viable choices within a multi-modal transportation system. Streets will be designed to balance the needs of travellers and manage demands of infrastructure installed along or underneath roadways. Unique needs of delivery and service vehicles will be addressed to enable goods and mobile businesses to flow in mixed traffic. Meaningful data will be collected, analyzed, and interpreted to adaptively manage traffic and transportation services. Integration requires collaboration; the City and its partner agencies will work together to eliminate confusion or inconvenience of travelling to, from, and within Mississauga.

Objectives

- Half of trips to, from, and within Mississauga are taken by sustainable modes (those other than driving a car, such as walking, cycling, transit, ridesharing, and ridehailing in a taxi or TNC).
- Growth in sustainable modes results from more short trips being taken by active modes (such as walking and cycling), and more long trips being taken in shared vehicles, especially by transit, whether it be GO Transit, MiWay, or other local transit providers.
- Sustainable modes are more attractive for travelling within and beyond Mississauga for all journey purposes.
- All-day high-frequency transit is available throughout Mississauga.
- Transit travel times are reduced by decreasing the time spent on the various parts of a transit journey.
- Switching between walking, cycling, transit services, hiring a ride, or driving is pleasant and straightforward.
- Most homes and businesses have access to the cycling network and facilities.
- City policies define transportation capacity by the movement of people and goods, rather than by the number of vehicles.
- People and businesses enjoy access to an efficient and effective goods movement system, especially in Mississauga's densest areas.
- Businesses have access to more potential customers through the provision of better transportation connections.
- Travelling across the city's borders is simple and easy, regardless of why or how people travel.

Key actions

Long-term transit network plan: Investment in transit needs to be planned to ensure it is consistent with the City's overall aims for transportation. The City will create a long-term transit network plan, including a potential high-frequency network, and incorporate relevant components into the Mississauga Official Plan (see Action 15).

Long-term road network plan: Investment in roads needs to be planned to ensure it is consistent with the City's overall aims for transportation. The City will create a long-term road network plan and incorporate relevant components into the Mississauga Official Plan (see Action 16).

Pedestrian network plan: Investment in sidewalks, crossings, and walkways needs to be planned to ensure it is consistent with the City's overall aims for transportation, including support for easy access to transit. The City will create a pedestrian network plan and incorporate relevant components into the Mississauga Official Plan (see Action 14).

Long term cycling network: Through Mississauga recent Cycling Master Plan, there is a long-term plan for a network of cycling facilities in the city. Implementing this network will support cycling use (see Action 59).


Complete Streets design guidelines: Appropriate design will enable Mississauga's streets to become places that share space among all road users, whether cars, buses, trucks, cyclists, or pedestrians. The Complete Streets design guidelines will describe what elements should be prioritized in different types of streets and what design features and specifications should be built to meet the needs of users (see Action 1).

Road classification system: The way streets and roads are labelled shapes the way they are built and operated. Mississauga's current road classification system is based on the role of roads in moving vehicles. The City will revise the system to consider a road's role in moving people and their role as places in the urban fabric, which will directly influence how they are designed and used (see Action 2).

Milton GO Line two-way all-day service: The Milton GO Line connects many major employment areas within Mississauga with each other, Toronto, and Milton. Two-way service would dramatically increase travel options for these areas. The City will advocate and support efforts to bring two-way all-day service to the Milton GO line (see Action 73).

TTC/MiWay fare integration: MiWay users receive discounted fares when transferring to or from GO Transit's bus and rail services. They also enjoy free transfers to and from most local transit agencies (including Brampton Transit and Oakville Transit), but not TTC services. The City will work with TTC to develop comparable transfer agreements (see Action 84).

Traffic Management Plan: Roads are only effective if the traffic on them is well-managed. The City will develop a Traffic Management Plan that will help improve safety, efficiency, and effectiveness of traffic flow within Mississauga. The results will help all road users, whether in cars, trucks, or transit (see Action 26).

For the complete list of actions that work toward Integration, look for the  symbol next to items in the Action Plan (Chapter 6).

Connectivity: Freedom of Access

Simple and pleasant connections between people and the places and things they need to prosper.



In a connected city, residents will have the option to live close to their jobs, family, and other people, places, and events that matter to them. Neighbourhood amenities will be an easy walk or bike ride from their door. Workers will feel ‘at home’ in the neighbourhood where they work, with flexible access to their workplace and amenities throughout the day. Visitors will find it easy and desirable to come to Mississauga. New or improved links to the networks of roads, sidewalks, cycling facilities, and transit will provide shorter, easier routes between origin and destination. People will be able to go where they want to go and when they need to be there. It will be easy for the things they need to come to them through delivery-based shopping and home-based services.

Objectives

- High-density growth in Mississauga includes effective walking and cycling connections to surrounding areas.
- Land use policies encourage further growth in neighbourhood-level amenities.
- Public amenities are located in places that are easy to access by transit.
- More housing, shops, and other attractions are located near transit hubs, including GO stations.
- Publicly-accessible places are easy and pleasant to arrive at and depart from by walking, cycling, riding transit, driving, or being picked-up or dropped-off.
- It is easy to work, study, and socialize in publicly-accessible neighbourhood spaces.
- Transit terminals and stations are pleasant places to wait and transfer between services. All bus stops have accessible waiting areas, with connections to the wider pedestrian network.
- Walking and cycling are easy and pleasant travel choices at all times of the day and throughout the year.
- Roads, sidewalks, trails, and transit stops are maintained and replaced, consistently meeting approved service levels.
- People and businesses have effective access to the goods they need.

Key actions

Traffic Impact Study Guidelines: Traffic Impact Study Guidelines: When new buildings are being planned, the developer must complete a Traffic Impact Study to show how it will affect vehicle movement in the surrounding area. To consider the movement of people and goods by all modes, the City will review and update the guidelines for these studies (see Action 5).

Neighbourhood hub pilot: Places where frequent transit routes intersect have the potential to become a focus for low-intensity retail and neighbourhood-level community services, with strong walking and cycling connections. The City will test this concept of ‘neighbourhood hubs’ by piloting one or more sites (see Action 34).

Major Transit Station Areas: The Province has mandated municipalities like Mississauga to plan for higher densities around their GO Train, LRT, and Mississauga Transitway stations. The planning will need to consider access between those transit stations, the surrounding local area, and places further away. The City will work with the Region of Peel to complete a detailed study of how to achieve these densities while reflecting the needs of local areas and of Mississauga as a whole. This will then be incorporated into the Official Plan (see Action 6).

Land use/transportation corridor studies: The City has identified certain corridors for significant transit enhancements and as focal areas for new development. Future land use and multi-modal transportation have been studied in detail on certain corridors, such as Hurontario, Dundas, and Lakeshore. The City will conduct similar studies on the other major corridors (see Action 31).

Parking provision policies: Every car trip begins and ends at a parking spot. Parking supply has a significant effect on how land is used in Mississauga. The City will review and update city-wide parking policies in line with the recommendations of the Parking Master Plan and the Transportation Demand Management Strategy and Implementation Plan (see Action 7).

Bicycle parking supply: Every bike trip begins and ends at a place to park a bike. The lack of bike parking at destinations deters people from travelling by bike. The City will expand bicycle parking on City-owned, commercial, and residential properties in line with the recommendations in the Cycling Master Plan (see Action 56).

For the complete list of actions that work toward Connectivity, look for the  symbol next to items in the Action Plan (Chapter 6).

Health: Freedom to Flourish

Support for the health of people and the planet, with more people-powered trips, lower vehicle emissions, and better stewardship of the natural environment.



People's transportation choices affect their health and the health of other people and the wider environment. The City's transportation system shapes both choices and the extent of their impact. The health of people and the planet will improve as more people choose to take more trips by active modes of travel such as walking and cycling. People will gain physical and mental health and will foster deeper connections with other people and places in the city. A shift toward multi-passenger vehicles, such as transit or rideshare, and an uptake of zero-emission vehicles (ZEVs) will reduce the impact of transportation on air quality and climate change. The transportation system will have a better relationship with the natural environment, integrating stormwater management and the urban forest and other natural elements into the design of streets and other transportation facilities.

Objectives

- Greenhouse gas and other emissions relating to transportation are significantly reduced.
- Growing numbers of people are choosing to walk or cycle for short trips and to take transit for long trips.
- Trees and street furnishings, such as planters and benches, are included in the design of streets, parking lots, and buildings wherever possible.
- Stormwater run-off from roads and parking lots is managed in an environmentally-responsible way.
- Property owners have options to reclaim space by rightsizing parking lots.
- Zero emissions vehicles will become a better alternative to internal combustion vehicles for a wide range of trip types.
- The proportion of trips made by single-occupant vehicles will decline in line with target set under 'Integration'.
- The negative effects of the transportation system on the natural environment will decline and its positive effects will increase.

Key actions

Complete Streets design guidelines: Streets are not simply routes for travellers—they can also provide elements that enhance the quality of the natural and urban environment. These elements include trees, stormwater management infrastructure, street lighting, and seating. The Complete Streets design guidelines will guide decisions on what elements are prioritized in different types of streets (see Action 1).


Zero-emission vehicle (ZEV) strategy: The ZEV strategy will examine measures to encourage and support vehicle owners who choose low-emission vehicles. These measures will include regulations for new buildings, retrofits for existing public and private buildings, and charging infrastructure in public parking lots (see Action 23).

Zero-emission City vehicle fleet: The City's vehicle fleet helps Mississauga to run smoothly. The vehicle fleet performs functions as diverse as cutting grass, clearing snow, repairing roads, and carrying transit passengers. The City will work to reduce emissions from the vehicle fleet by converting it to zero-emission technology when technically, operationally, and fiscally feasible, through end-of-life replacement or otherwise (see Action 58).

Pedestrian network plan: Walking provides extensive health benefits and is a no-cost, flexible means of travel. The pedestrian network plan will identify gaps and inconsistencies in pedestrian networks, create solutions, and prioritize their implementation to make it safe, easy, and comfortable for people to make short trips on foot (see Action 14).

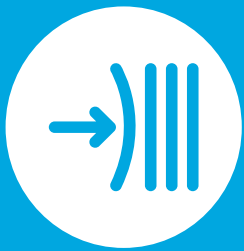
Long-term cycling network: The City's Cycling Master Plan has identified a suitable network, using both existing and new cycling facilities. Implementing the new facilities will give cyclists safe, connected, comfortable, and convenient routes to cycle in Mississauga (see Action 59).

Cycling outreach, education, and promotion: Education efforts will give cyclists of all ages the skills they need to travel around the city. Communication efforts will draw attention to new and improved cycling facilities and will support strong relationships between the City and existing or potential cyclists (see Action 55).

For the complete list of actions that work toward Health, look for the  symbol next to items in the Action Plan (Chapter 6).

Resilience: Freedom to Evolve

Leadership in adapting to changes that reshape the transportation system and how it is used.



Advances in technology and other fields will bring new abilities, opportunities, and challenges for individuals, society, and transportation. In recent years, smartphone apps have changed how people plan routes, weigh options, hail rides, and spend their time and focus their attention in transit. The distribution of people, jobs, and amenities within and beyond Mississauga will also change as the city evolves and grows. A shift toward office-based employment and new high density neighbourhoods in Mississauga will change demands on the transportation system. Changes in transportation and city building take place against a backdrop of social, economic, and environmental change, including climate change and a shifting natural environment. Resilience in a transportation system means it can and will adapt to these changes by maximizing their benefits and helping mitigate their challenges. The City will lead and guide the transportation system through these changes with proactive planning and execution. Resilience also provides future-proofing to ensure that all aspects of the Vision can continue to be achieved in the future.

Objectives

- Mississauga's unique role as a centre for logistics and warehousing at the national level remains a strength, even as distribution methods evolve with new technology and e-commerce.
- The City participates in regional, provincial, and national initiatives and programs aimed at responsible governance of new transportation businesses and vehicular technologies.
- Emerging transportation businesses and the City work collaboratively to offer alternatives to personal car ownership, while ensuring appropriate government oversight and regulation is in place.
- New technology and methods that improve effectiveness and efficiency of transportation services are evaluated by the City and implemented where appropriate.
- The City leverages new data collection and interpretation methods and new technologies to continually improve traffic flow.
- The City proactively monitors traffic and travel behaviour, investigating changes and adapting policies and practices accordingly.
- The effects of changing climate and severe weather events on all parts of the transportation system are minimized through appropriate infrastructure design and operational practices.
- Maintenance standards and service levels are continually reviewed and updated, adapting to changes in technology, climate and society.

Key actions

Peel Region Goods Movement Task Force:

Mississauga will optimize its role at the centre of Ontario's goods movement and logistics hub, anchored by Pearson Airport. Continued participation in the Peel Region Goods Movement Task Force will enable the City to work effectively with its neighbours to keep goods flowing through Mississauga and beyond (see Action 80).

Ridehailing and ridesharing policy development:

The City will learn from the current pilot project to assess the use of Transportation Network Companies in Mississauga and will recommend changes to applicable regulation if warranted (see Action 20).

Autonomous vehicles assessment: By 2041 it is possible that autonomous vehicles could be used for many purposes by the City, ranging from cutting the grass beside roads to being part of public transit. The City will assess the infrastructure changes, other costs, and benefits associated with the use of autonomous vehicles in Mississauga (see Action 41).

Autonomous vehicle collaboration: The City will collaborate with the Province in its work to develop appropriate licensing for self-driving cars to ensure the regulatory environment provides Mississauga with the ability to maximize benefits and mitigate negative effects (see Action 90).

Emergency preparedness for extreme weather:

Extreme weather and flash flooding can disrupt the normal operations of a transportation system and create safety issues. The City will identify vulnerable portions of its transportation system and will develop a plan for suitable safe egress routes, warning systems, and alternative route information, in conjunction with the development of Emergency Response Protocols (see Action 35).

Corporate Asset Management Plan coordination:

Keeping pace with an evolving future requires infrastructure needs to be routinely reassessed and for infrastructure to be maintained to the latest standards. The City will ensure the goals and objectives of the Transportation Master Plan guide the development of the forthcoming Mississauga Corporate Asset Management Plan that will set service levels for the City's transportation infrastructure and establish the plan for responsible investment in maintenance (see Action 70).

Smart/connected vehicles and infrastructure:

As the vehicles used to transport people and good become smarter, there is potential for smart infrastructure to complement their abilities. The City will assess the potential benefits and costs of upgrading transportation infrastructure in Mississauga accordingly (see Action 42).

Micromobility policy framework:

Micromobility includes services as bike-share and e-bike/e-scooter rentals. Private companies elsewhere in the world have offered these services in cities without municipal subsidy. The City will investigate policy options to determine how it can best work with and regulate such companies (see Action 22).

For the complete list of actions that work toward Resilience, look for the  symbol next to items in the Action Plan (Chapter 6).

6

ACTION PLAN

Detailed steps that will take
Mississauga toward the Vision.

Policies, Guidelines, and Standards

Plans and Studies

Programs

Procedures

Partnerships

It will take decisive action by the City and its partners to realize the goals of the Transportation Master Plan. The Action Plan lays out steps that can be taken in the short, medium, and long term.

There are many ways the City can affect change for Mississauga as a whole. The Action Plan recognizes five main ways the City leads change, and it groups each Action according to the most impactful approach the City can take.

The five approaches to change are:

- **Policies, Guidelines, and Standards:** Establish or update the rules and regulations that govern Mississauga’s transportation system at the local municipal level.
- **Plans and Studies:** Conduct research or strategic planning projects to establish clear, well-informed direction on new transportation projects and initiatives in the public interest.
- **Programs:** Invest in new programs or improved levels of service for City work in planning, design, construction, operation, and maintenance of the transportation system.
- **Procedures:** Implement new ways of doing business or adapt existing business practices and standard operating procedures to align with evolving transportation priorities.
- **Partnerships:** Collaborate with allies, stakeholders, and partner agencies in the transportation field to help realize Mississauga’s transportation aims.

























Changes Happen on Different Timescales		
Timescale	Years	Completed in
Short	1 – 5 years	2020 – 2024
Medium	5 – 15 years	2025 – 2034
Long	15+ years	2035 and after



Policies, Guidelines, and Standards

Actions to establish or update the rules and regulations that govern Mississauga's transportation system at the local municipal level.

Documenting intentions and best practices makes it possible for them to be consistently applied in practice. Policies in the Mississauga Official Plan govern how Mississauga grows and develops. Standards direct the design and performance of roads, sidewalks, trails, cycling facilities, and transit facilities. Embedding transportation aims in these documents will put the Transportation Master Plan into practice.

Action	Division	Timeline	Goals
1 Complete Streets design guidelines Create and apply Complete Streets design guidelines and implementation plan that specify the types of infrastructure and streetscape elements that may be suitable for different classes of road.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
2 Road classification system Revise the City's Road Classification system to recognize movement and placemaking function of streets, incorporate into City's transportation planning practices, and update Mississauga Official Plan accordingly.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
3 Engineering design standards Review and update engineering design standards, such as intersection design standards and sidewalk standards, to prioritize safety of vulnerable road users and remove barriers to accessibility.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
4 Closure of walkways Review and update policies concerning Closure of Walkways and Noise Attenuation Barriers on Major Roads, to require an evaluation of impacts of a proposed change on walking distance to transit and nearby destinations, and an assessment of available alternate routes and mitigation measures.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     

Action	Division	Timeline	Goals
5 Traffic Impact Study Guidelines Review and update Traffic Impact Study Guidelines to refocus studies on all movements of people and goods by any mode, rather than primarily focusing on vehicular movements.	Infrastructure Planning & Engineering Services		
6 Major Transit Station Areas Complete ongoing planning work by City and Region of Peel for Major Transit Station Areas (MTSAs) and add to Mississauga's Official Plan.	City Planning Strategies		
7 Parking provision policies Review and update City-wide parking provision policies and related requirements in line with the recommendations of the Parking Matters study and Transportation Demand Management Strategy and Implementation Plan.	City Planning Strategies		
8 Transportation demand management for new development Develop transportation demand management requirements for new developments in line with recommendation #4 in City's 'Transportation Demand Management Strategy and Implementation Plan'.	Infrastructure Planning & Engineering Services		
9 Transport facilities in Greenlands policy Establish what active transportation and transit facilities are appropriate in Greenlands by reviewing Mississauga Official Plan sections 11.2.1.1 and 11.2.3.2 and amending if warranted.	City Planning Strategies		
10 Warehousing and logistics land use Investigate land use planning strategies that optimize location of warehousing/logistics usage near suitable transportation facilities, including consideration of a distance land use category. Implement findings through Official Plan policies.	City Planning Strategies		



Safety



Inclusion



Integration



Connectivity



Health

































Resilience

















































Action	Division	Timeline	Goals
11 Mode share study Investigate merits of translating city-wide sustainable travel mode share target into set of more specific targets by mode, geographic area, land use type or other segments, and establish effects on other City policies and practices.	Infrastructure Planning & Engineering Services		
12 Curbside management study Assess current and future competing demands on curb space and curb lane space, including taxis, pick-up/drop off, new mobility options, goods movement and deliveries, mobile businesses, cycling facilities, transit stops and on-street parking, and develop strategies for meeting competing needs.	Infrastructure Planning & Engineering Services		
13 Location of new community infrastructure Prioritize sustainable mode access in the location choice and designs for new community infrastructure and City buildings by adding suitable criteria to the Official Plan and other guiding documents.	City Planning Strategies / Facilities and Property Management		

















































Plans and Studies

















































Actions to conduct research and strategic planning projects to establish clear, well-informed direction on new transportation projects and initiatives in the public interest.

In the rapidly evolving field of transportation, there are some topics Mississauga needs to learn more about before making decisive changes for the better. There are also parts of the city that are growing and evolving that need to be looked at closely and thought about carefully to make the best decisions for their next chapter.

Action	Division	Timeline	Goals
14 Pedestrian network plan Identify and address gaps and inconsistencies in the pedestrian network, with special attention to connectivity and accessibility standards, by conducting a detailed audit.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
15 Long-term transit network plan Complete a comprehensive review of the City's long-term transit network, including a potential high-frequency network, and update the associated schedule that appears in the Mississauga Official Plan.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
16 Long-term road network plan Complete a comprehensive review of the City's long-term road network, and update the associated schedule that appears in the Mississauga Official Plan.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
17 Transit priority measures Examine potential locations, costs, and benefits for transit priority measures (such as signal priority, queue jump lanes, HOV lanes, transit-only lanes) to reduce transit journey time and increase reliability, taking advantage of City's Advanced Transportation Management System, as part of the MiWay Infrastructure Growth Plan.	MiWay	<div><div></div><div></div><div></div></div>	     
18 Bus stop and terminal evaluation Include evaluation of the status of bus terminals as pleasant places to wait and transfer between services in the MiWay Infrastructure Growth Plan, using a detailed assessment of their existing facilities and pressures.	MiWay	<div><div></div><div></div><div></div></div>	     

Action	Division	Timeline	Goals
19 On-demand transit Evaluate opportunities, costs, and benefits for on-demand transit service in Mississauga to complement existing fixed-route services, including overnight service, first-mile/last-mile connections, and other travel markets.	MiWay	<div><div></div><div></div><div></div></div>	     
20 Ridehailing and ridesharing policy development Facilitate ridehailing and ridesharing in Mississauga through comprehensive review and update of the Mobile Licensing Bylaw, drawing on outcomes of Transportation Network Company (TNC) Pilot study.	Enforcement	<div><div></div><div></div><div></div></div>	     
21 Accessible ridehailing Determine and implement best means to ensure that accessible ridehailing (such as taxicabs and TNCs) is available on-demand throughout Mississauga.	Enforcement	<div><div></div><div></div><div></div></div>	     
22 Micromobility policy framework Investigate policy options to determine how the City can best work with and regulate micromobility technologies and vendors, including but not limited to bike share systems, e-bike systems, and e-scooter systems.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
23 Zero-emission vehicle strategy Develop a zero-emission vehicle (ZEV) strategy that examines incentives to increase use of ZEVs and the infrastructure needs of ZEVs in Mississauga, including those related to new developments, retrofits of existing developments, public buildings, and public parking lots.	Environment	<div><div></div><div></div><div></div></div>	     
24 Electric vehicle charging stations Investigate requirements for electric vehicle charging stations in new developments as part of zoning by-law's parking requirements review.	City Planning Strategies	<div><div></div><div></div><div></div></div>	     
25 Strategic data management plan Create a City-wide strategic data management plan that includes strategy for leveraging emerging big data technology for collection and maintenance of transportation and traffic data.	IT	<div><div></div><div></div><div></div></div>	     
26 Traffic management plan Develop a five year plan to guide the application of traffic management tools and resources to effectively facilitate a shift from simply moving vehicular traffic to moving people and goods by any mode, including implementation planning for the Advanced Transportation Management System and other aspects of advancing Intelligent Transportation Systems in Mississauga.	Traffic Management & Municipal Parking	<div><div></div><div></div><div></div></div>	     

Action	Division	Timeline	Goals
27 Highway interchange safety and streetscape Create strategy to address safety issues and improve streetscape on municipal roads around 400-series highway interchanges, in collaboration with MTO.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
28 Off-road trail lighting Examine feasibility of extending street lighting program to serve off-road components of cycling and pedestrian networks through amendment of the Park Trail Lighting policy or otherwise.	Parks & Forestry Infrastructure Planning & Engineering Services	<div><div></div></div>	     
29 Wayfinding review Develop plan to consolidate and/or complement local and regional directional signage programs with a comprehensive, city-wide wayfinding system for all modes.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
30 Public feedback channels Conduct an end-to-end audit of channels for public feedback on the transportation system to identify and address opportunities for improving efficiency and efficacy.	Strategic communications	<div><div></div></div>	     
31 Land use/transportation corridor studies Conduct comprehensive land use/transportation corridor studies on Transit Priority Corridors not already studied, such as Erin Mills Parkway, Derry Road, Dixie Road, Eglinton Avenue, Airport Road, and on other corridors as needed.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
32 Local network studies Conduct local network studies to assess transportation and land use on Major Nodes, Community Nodes, Corporate Centres and Special Purpose Areas not generally covered by corridor studies, such as the Airport Corporate Centre, Meadowvale Corporate Centre, Central Erin Mills Major Node, and UTM.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
33 Housing affordability near transit Identify measures to proactively manage the affordability of housing close to high-quality transit.	City Planning Strategies	<div><div></div></div>	     
34 Neighbourhood hub pilot Test the concept of 'neighbourhood hubs' that would be a local-area focus for transit service, walking and cycling connections, low-intensity retail, and neighbourhood-level community services by piloting one or more sites.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     














Action	Division	Timeline	Goals
35 Emergency preparedness for extreme weather Identify parts of the transportation system vulnerable to flash flooding or extreme weather events, and develop a plan for suitable safe egress routes, warning systems, and alternative route information, in conjunction with development of Emergency Response Protocols.	Office of Emergency Management	<div><div></div></div>	     
36 Designated trucking routes Investigate designated truck routes designed to accommodate high volumes of truck traffic and long combination vehicles (LCVs) alongside other modes.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
37 Bike share system Examine the feasibility of a bike share system in Mississauga, in line with recommendations in the Cycling Master Plan.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
38 Car-free travel: City sites Create site-specific plans to support and encourage greater sustainable mode use for trips to City-owned facilities such as libraries, community centres, and recreational facilities by users of those facilities.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
39 Multi-modal access audits: City sites Develop an audit tool to evaluate site access by non-car modes and recommend improvements, applying it to City-owned sites (such as libraries and recreation centres) to make recommendations.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
40 Transit promotion for special events and major attractions Build on MiWay's existing support for special events and major attractions by reviewing those destinations, and identifying potential improvements such as changes to regular service or the introduction of event-specific services.	MiWay	<div><div></div></div>	     
41 Autonomous vehicles assessment Explore the possibilities and implications of autonomous vehicles in Mississauga, including an assessment of require infrastructure changes, other costs, and benefits associated with their use.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
42 Smart/connected vehicles and infrastructure Study the potential benefits and costs associated with smart/connected vehicles and transport infrastructure.	Traffic Management & Municipal Parking	<div><div></div></div>	     

Programs

Actions to invest in new programs or improved levels of service for City work in planning, design, construction, operation, and maintenance of the transportation system.

Many parts of the transportation system are delivered or affected by City services. Changes to those services will help provide Mississauga with what it wants and needs from its transportation system. The City must find ways to direct appropriate resources to these aspects of City work for the goals to be fully realized.

Action	Division	Timeline	Goals
43 Vision Zero road safety infrastructure enhancements Develop and implement a suite of infrastructure enhancements to support Vision Zero, such as red light cameras, automated speed enforcement, traffic calming measures.	Traffic Management & Municipal Parking		
44 Vision Zero memorial program Develop and implement a program by which a loss of life on the road can be formally recognized.	Traffic Management & Municipal Parking		
45 Vision Zero education program Establish road user education programming designed to promote best safety practices for travellers of every mode, by using road signs, social media, formal training, and other creative outreach and education tactics.	Infrastructure Planning & Engineering Services		
46 Speed management program Address unlawful and undesirable vehicle speeds through creation of a speed management program that includes both location-specific and city-wide actions.	Traffic Management & Municipal Parking		
47 Enhanced road safety monitoring program Modernize the way that collisions are tracked and monitored, enabling the City to more effectively analyze trends and identify hot spots to inform future priorities and decisions.	Traffic Management & Municipal Parking		

Action	Division	Timeline	Goals
48 Road safety enforcement program Work with Peel Regional Police to advance efforts to catch and penalize rule breaking behaviour on the road, including aggressive, impaired, and distracted driving.	Traffic Management & Municipal Parking	<div><div></div><div></div><div></div></div>	     
49 Mid-block crossings Establish program to provide mid-block crossings, including creation of design standards and protocol for identifying appropriate locations (such as where off-road trails intersect roads), drawing on road safety and accessibility work.	Traffic Management & Municipal Parking	<div><div></div><div></div><div></div></div>	     
50 Targeted education and outreach Develop and implement targeted education and outreach campaigns and programs tailored to traveller groups with distinct needs and opportunities, including newcomers, new parents, post-secondary students, and those benefitting from recent transportation improvements.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
51 Transit stop/terminal service information Develop and implement program to provide access to comprehensive service information at transit stops/stations/terminals, with dynamic information at select locations.	MiWay	<div><div></div><div></div><div></div></div>	     
52 Multi-agency transit information Enhance information about transit services in Mississauga to incorporate all transit agencies serving the city, and provide that information through city-wide channels and at transit stations/terminals.	MiWay	<div><div></div><div></div><div></div></div>	     
53 Major attraction transit information Establish a routine practice of identifying major attractions accessible by MiWay and a communication protocol to suggest initial web-ready 'reach us by MiWay' directions for each site as well as subsequent updates in the event of route changes.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
54 Car-free travel: privately-owned sites Standardize, streamline, and promote mechanism for property owners/managers seeking help from City understanding, enhancing, and promoting car-free ways to access their site.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
55 Cycling outreach, education and promotion Establish cycling outreach, skills training, and promotion programming, in line with recommendations of Cycling Master Plan.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     

ACTION PLAN

Action	Division	Timeline	Goals
56 Bicycle parking supply Expand supply of short-term and long-term bicycle parking supply city-wide, in line with the Cycling Master Plan.	Infrastructure Planning & Engineering Services		
57 School Walking Routes program Seek opportunities to support enhancements to the Mississauga School Walking Routes program, with the aim of formalizing and expanding existing activities or introducing new activities to encourage active transportation options for students.	Infrastructure Planning & Engineering Services		
58 Zero-emission City vehicle fleet Convert City's vehicle fleet (buses and corporate) to zero-emission vehicles, when technically, operationally and fiscally feasible, through end-of-life replacement, or otherwise.	MiWay Works, Operations & Maintenance		
59 Long-term cycling network Establish implementation program for long term Cycling Network, as it appears in the Cycling Master Plan.	Infrastructure Planning & Engineering Services		
60 Multi-modal access audits: private sites Introduce a program to offer multi-modal access audits to privately-owned, publicly accessible sites (such as shopping centres and fitness centres), using tool developed for City sites (see Action 40).	Infrastructure Planning & Engineering Services		



Safety



Inclusion



Integration



Connectivity



Health

































Resilience

Procedures

Actions to implement new ways of doing business or adapt existing business practices and standard operating procedures to align with evolving transportation priorities.

As transportation priorities change, technology advances and best practices evolve. It is critical that the City adapts the way City business gets done. Some of these actions require investment in tools and training, some require new people to bring new knowledge and skills to the organization, and some simply require staff to approach their work in new ways.

Action	Division	Timeline	Goals
61 Vision Zero working group Establish an interdepartmental working group tasked with advancing Vision Zero-related goals, objectives, and action items in the Transportation Master Plan.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
62 Winter maintenance service standards Establish protocol to review winter maintenance service levels for snow clearance on sidewalks, transit stops, cycling facilities, and trails concurrent with winter maintenance contract renewals, with aim of raising service levels for pedestrians, transit riders, and cyclists where technically, operationally, and fiscally feasible.	Works, Operations & Maintenance	<div><div></div><div></div><div></div></div>	     
63 Walking/cycling construction mitigation Ensure accessible transit stops, pedestrian routes, and cycling routes through construction sites that obstruct normal routes by developing and enforcing suitable standards and procedures.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
64 Transit service construction mitigation Enable timely service changes or other mitigation measures in response to planned on-street construction by formalizing protocol for notifying MiWay and other transit agencies operating in Mississauga, drawing on existing work.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
65 Non-MiWay transit infrastructure Establish inventories and service agreements concerning maintenance of information and infrastructure assets associated with transit service provided in Mississauga city limits, but operated by other transit agencies.	MiWay	<div><div></div><div></div><div></div></div>	     

ACTION PLAN

Action	Division	Timeline	Goals
66 Transportation data working group Establish an interdepartmental working group tasked with advancing the evolution of transportation and traffic data collection, maintenance, analysis, and interpretation, using emerging big data technology.	Infrastructure Planning & Engineering Services		
67 Public perception monitoring Gain insight on public perception of the Transportation Master Plan's Goals and the progress toward them by revising transportation question(s) in a citizen satisfaction survey.	Strategic Communications		
68 Third-party grants Dedicate suitable staff resources to researching and applying for third-party grants that can help advance the aims of the Transportation Master Plan.	Infrastructure Planning & Engineering Services		
69 Official Plan coordination Establish protocols to ensure an editorial review of proposed updates and amendments to the Mississauga Official Plan includes verification that proposed policies advance the goals and objectives of the Transportation Master Plan.	City Planning Strategies		
70 Corporate Asset Management Plan coordination Establish protocol to ensure Transportation Master Plan is used as a major input to the development of the Mississauga Corporate Asset Management Plan (forthcoming), to ensure planned service levels for the City's transportation infrastructure supports the goals and objectives of the Transportation Master Plan.	Finance		
71 New mobility and transportation innovation Monitor innovation and change in the transportation and transit sectors, summarize trends in an annual review, and identify issues and opportunities that need to be proactively addressed.	Infrastructure Planning & Engineering Services		
72 Transportation planning information hub Establish a transportation planning information hub that routinely collects and maintains data, information, and map layers commonly used in transportation planning.	Infrastructure Planning & Engineering Services		



Safety



Inclusion



Integration



Connectivity



Health










































































Resilience

Partnerships

Actions to collaborate with allies, stakeholders, and partner agencies in the transportation field.

Collaboration is an essential part of realizing Mississauga's transportation goals. Several key parts of the transportation system, such as the GO Transit network, TransHelp paratransit service, highways, regional roads, intercity trails, and the airport are owned and operated by other levels of government and partner agencies. The City can help partners understand what they can do to affect the change needed in Mississauga. The City must also continue to listen to and work with allies and stakeholders who are in a position to help determine and achieve Mississauga's transportation goals.

Action	Division	Timeline	Goals
73 Milton GO line two-way all-day service Continue to advocate for the introduction of an all-day two-way GO train service on the Milton GO line, supporting and advancing associated research and analysis as required.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
74 GO station land study Work with Metrolinx and the Region of Peel to ensure potential for future development on Metrolinx-owned land around GO Stations is considered during the City's and Region's joint projects on Major Transit Station Areas.	City Planning Strategies	<div><div></div><div></div><div></div></div>	     
75 TransHelp strategic plan Work with TransHelp to prepare a long term strategic plan for accessible transit in Mississauga/ Brampton and to advance work to integrate TransHelp services with those of MiWay and Brampton Transit.	MiWay	<div><div></div><div></div><div></div></div>	     
76 Multi-modal access audits: schools Offer multi-modal access audits to schools, using tool developed for City sites (see Action 40).	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     

Action	Division	Timeline	Goals
77 Healthcare providers Strengthen relationships with Local Health Integration Networks and Hospitals to support efforts to expand options for non-driving access to healthcare.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
78 Transportation investment coordination Establish protocols to be used by all transportation-related groups in the city for engaging with neighbouring municipalities to coordinate the timing and nature of transportation investment.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
79 TDM changes to Planning Act and Municipal Act Advocate for changes to the Planning Act and Municipal Act that would allow municipalities to require transportation demand management practices be designed into new developments, in line with recommendation #5 in the Transportation Demand Management Strategy and Implementation Plan.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
80 Peel Region Goods Movement Task Force Continue to serve as an active member of Peel Region Goods Movement Task Force, advancing recommendations to improve the goods movement system in Mississauga.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
81 Peel Region Vision Zero Task Force Continue to serve as an active member of Peel Region Vision Zero Task Force, advancing recommendations to improve the safety of transportation in Mississauga.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
82 24-hour GO Transit service Advocate for 24-hour GO Transit service in Mississauga.	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
83 Wider Presto support Improve utility of the Presto card by encouraging Presto to support more service providers (such as bikeshare, taxis, car share, and retailers).	Infrastructure Planning & Engineering Services	<div><div></div><div></div><div></div></div>	     
84 TTC/MiWay fare integration Improve service integration between MiWay and TTC by working with the City of Toronto and the TTC to remove restrictions on MiWay boardings in Toronto, and negotiate a service agreement for MiWay-TTC transfers that are free for riders through participation in Metrolinx's work in this area or otherwise.	MiWay	<div><div></div><div></div><div></div></div>	     



Safety



Inclusion



Integration













































Connectivity



Health



Resilience

Action	Division	Timeline	Goals
85 Park-and-ride sites Assess possibility of promoting current and adding new park-and-ride locations in Mississauga targeted at inter-municipal travel, drawing on MiWay's Infrastructure Growth Plan and working in partnership with GO Transit and MTO.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
86 High Occupancy Vehicle (HOV) lanes Advocate for the introduction of HOV lanes on all 400-series highways in and around Mississauga.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
87 GTHA regional ATMS strategy Collaborate with MTO, Metrolinx, and GTHA municipalities to coordinate an inter-regional strategy for Advanced Transportation Management Systems (ATMS).	Traffic Management & Municipal Parking	<div><div></div></div>	     
88 Emergency Detour Routes Work with the MTO and the Region of Peel to establish Emergency Detour Routes for 400-series highways in and around Mississauga.	Emergency Management Office	<div><div></div></div>	     
89 Milton local transit connection Work with the Town of Milton to establish local transit connections as travel demand to and from Mississauga increases.	MiWay Infrastructure Planning & Engineering Services	<div><div></div></div>	     
90 Autonomous vehicles collaboration Collaborate with the Province on autonomous vehicles and associated matters to ensure the regulatory environment provides Mississauga and other municipalities with the ability to maximize benefits and mitigate negative effects.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     
91 Pearson Airport regional transit hub Support the GTAA's initiative to develop a regional transit hub at or near Pearson Airport, ensuring that potential opportunities and risks for Mississauga are understood and addressed.	Infrastructure Planning & Engineering Services	<div><div></div></div>	     

7

PLANNING AND IMPLEMENTATION

This Plan joins a family of plans and policies that govern Mississauga's transportation and related matters. Implementing it involves collaboration and investment within and beyond the Corporation of the City of Mississauga.

Developing the Transportation Master Plan

Implementing the Transportation Master Plan

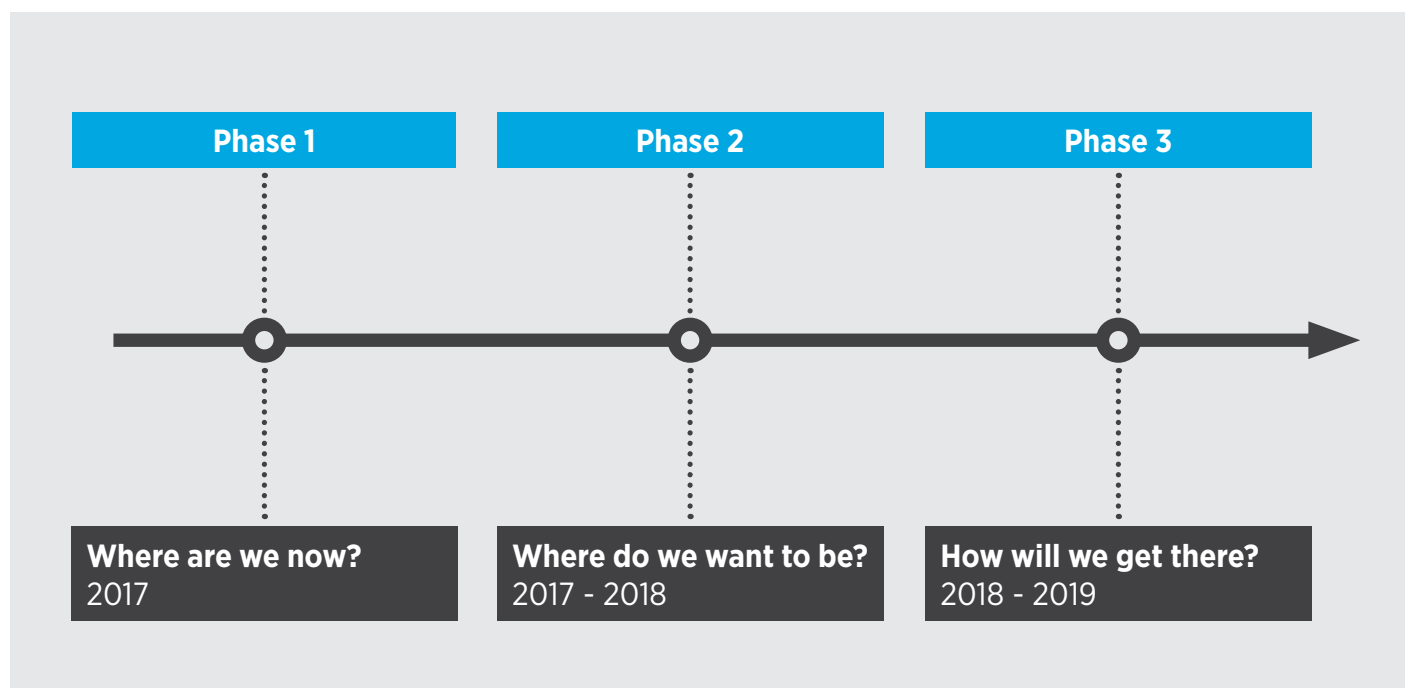
Monitoring the Transportation Master Plan

Updating the Transportation Master Plan

Developing the Transportation Master Plan

The Transportation Master Plan is the result of 'Mississauga Moves', a project involving extensive technical research, staff involvement, and engagement with stakeholders and the public.

The three phases of Mississauga Moves are summarized below, with further details available in Appendix 1: Research Overview and Appendix 2: Engagement Overview.



Phase 1

Where are we now?

The focus of Phase 1 was to understand the following about Mississauga's transportation system:

- how it evolved to its current state
- how people currently use it
- how people wish they could use it
- what the current state of it is
- what the current plans are for it
- how well equipped it is to meet future needs

Phase 1 also examined:

- what innovations are coming in the transportation field
- how other municipalities have responded to innovation
- how policies from the City and other governments currently help or hinder Mississauga's aims for transportation

The result of this phase was a detailed understanding of the strengths, weaknesses, opportunities, and challenges facing Mississauga's transportation system.

Phase 2

Where do we want to be?

The focus of Phase 2 was to synthesize what was learned in Phase 1 and develop:

- a comprehensive Vision for transportation in Mississauga to the year 2041
- a vision statement to succinctly express the Vision
- a set of strategic Goals to focus the City's work
- an understanding of what needs to change to realize the Vision

The result of this phase was the development of the Vision and Goals to guide the Action plan

Phase 3

How will we get there?

The focus of Phase 3 is to affirm the Vision and Goals and determine:

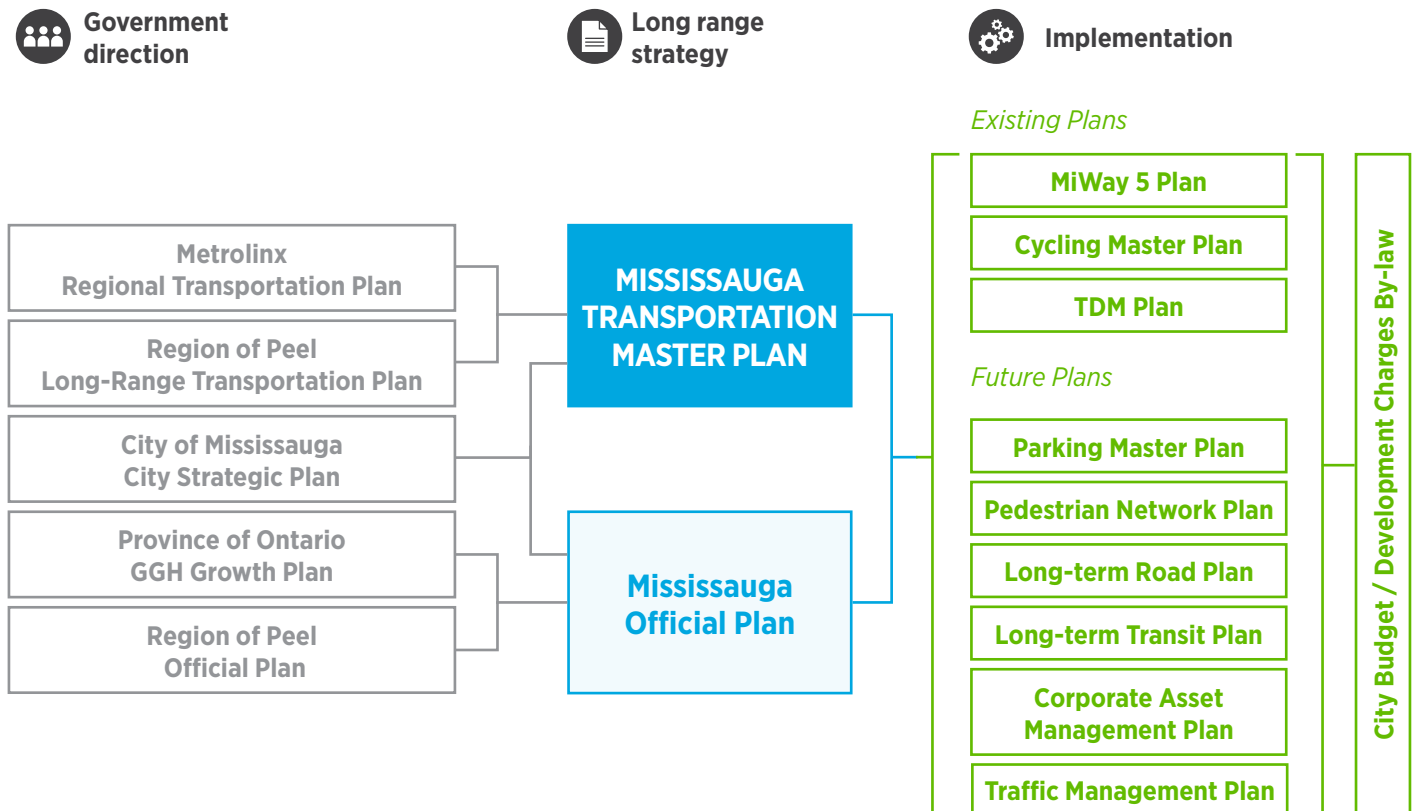
- what Actions must be taken to realize the Goals
- who the City can partner with to undertake the Actions
- how progress toward the Goals can be monitored and managed

The technical work in this phase resulted in the Actions (Chapter 6). The Transportation Master Plan is the final result of this phase.

Implementing the Transportation Master Plan

This Plan establishes the Transportation Master Plan as one of Mississauga's core strategic documents. It plays a critical role in translating provincial, regional, and city-wide policy direction into transportation objectives and into work direction at the staff level. The Transportation Master Plan:

- interprets direction from higher-order policy
- defines Vision, Goals, and Objectives for transportation in Mississauga
- informs the review and update of the Mississauga Official Plan
- guides asset management plan investments, work plans, and business cases at the operational level
- supports the development of the annual Business Plan and Budget, Corporate Asset Management Plans, and Development Charges By-law



Higher order policy

The MTO is expected to release the first transportation plan for the Greater Golden Horseshoe area in 2019, providing a strategic vision for transport in the region over the next 50 years and beyond. The MTO plan will complement and support the Metrolinx 2041 Regional Transportation Plan for the GTHA, which was released in 2018 as an update to The Big Move (2008). The 2041 Regional Transportation Plan aims to provide more people with access to fast, frequent and reliable transit, and to make it easier for travellers to use transit, or travel by bike or on foot.

The Region of Peel is expected to release an update to the 2005 Peel Region Long Range Transportation Plan in 2019. This sets a common vision for the region. It outlines the investment and stewardship the Region of Peel will provide for the transportation network within their jurisdiction. It also provides inspiration and guidance to lower-tier municipal transportation plans like this one.

Provincial land use policies, especially the Growth Plan for the Greater Golden Horseshoe (2018), also provide direction for transportation matters. One imperative is to set a strategic direction toward a more multi-modal transportation system with a focus on transit and active modes. The Growth Plan designates downtown Mississauga as an ‘urban growth centre’, making it a focal point for growth. The Growth Plan also requires municipalities to plan for prescribed population and employment densities around major transit stations, such as GO, LRT, and Mississauga Transitway stations in Mississauga.

The plans also show how Mississauga’s transportation system will interface with those of its neighbours and other organizations in the wider region. This helps the City coordinate any changes, ensuring that inter-municipal travel functions effectively.

Definitive vision and goals

The Transportation Master Plan serves as the primary reference for the City’s strategic position on transportation issues. It will be used by Council and staff to guide decision-making and respond to emerging issues and opportunities. The Vision and Goals in the Transportation Master Plan will be used to evaluate whether new or amended courses of action by the City are compatible with the overall strategic direction for transportation. The Transportation Master Plan will enable Mississauga to engage more effectively with comparable municipalities, showcasing the City’s leadership in transportation.

Mississauga Official Plan

Each municipality in Ontario has an Official Plan which enshrines policies on how land in the municipality should be used. It is the City's main tool for shaping the future development of Mississauga — by directing growth to appropriate areas, and managing the scale and impact of growth. The current version of the Mississauga Official Plan was approved by City Council in September 2010, with several subsequent minor updates. Work is underway on the next major update.

Land use and transportation are strongly interconnected. Land use directly influences travel patterns and behaviours, and transportation enables people to travel to and from different places in the city. Transportation facilities are also a type of land use — roads, airports, transit terminals, and transit stations are important parts of the urban fabric. The Mississauga Official Plan includes sections relating to transportation, which help coordinate the City's approaches to transportation and land use planning. The Transportation Master Plan includes Actions that will provide input for the next Official Plan update. In future, the Transportation Master Plan will shape relevant policies in the Official Plan.

Staff work plans

All the Actions require City staff time to implement. This time could be spent implementing the Action, overseeing its implementation by a third party or working in partnership with other organizations. Each Action has been assigned to a Division within the City that is responsible for its implementation, along with the appropriate timeframe. Actions will be integrated into the annual work plans of City staff, subject to the availability of required resources.

Mississauga Business Plan and Budget

A Council-approved Transportation Master Plan will have the authorization and approval to implement the Actions, subject to funding. The Transportation Master Plan provides the rationale and motivation for the required resources to be allocated as part of the City's annual Business Plan and Budget.

Monitoring the Transportation Master Plan

It is important for City staff, Council, stakeholders, partners, and the public to observe progress being made toward the Goals of the Transportation Master Plan. Progress of this Plan will be monitored through an annual Transportation Master Plan Status Update, and a more fulsome Transportation Master Plan Progress Report approximately every five years.

The annual **Status Update** will list the status of all Actions within the Transportation Master Plan, providing background and contextual information where appropriate. It will keep Council and the public informed about the work the City has been doing and plans to do. The Status update will also be used by staff as an input to annual work planning and budget planning to ensure Actions are being initiated as expected.

The **Progress Report** will include the measurement of a set of Progress Indicators, and a robust discussion of trends in the transportation sector and other factors that influence the freedom to move in Mississauga. It is anticipated that the Progress Report would be prepared as part of the preparation for an update of the Transportation Master Plan, in coordination with the timeline for Official Plan reviews.

The set of Progress Indicators that will be measured are listed on the following page. One Indicator is used for each Goal, with the exception of Health that has an Indicator each for human and environmental health. The Indicators have been chosen to be:

- **Meaningful:** readily understood by any reader, and representative of commonly shared priorities.
- **Timeless:** relevant today and still relevant in 25 years.
- **Manageable:** based on readily available information and data.
- **Purposeful:** easily used to understand the Vision and Goals and to identify areas that need more attention.

The most current measurement of each Indicator is provided on the next page as a baseline against which future Progress Reports will compare.

Goal	Indicators	2019 values
 Safety	Deaths and serious injuries from transportation. The City's Vision Zero approach to transportation sets a vision of zero fatal and injury-causing collisions each year. Measuring deaths and serious injuries from transportation is the essential means of tracking progress toward this Goal.	1.6 deaths and serious injuries per thousand residents
 Inclusion	Residents' satisfaction with ease of mobility, as reported through the City's Citizen Satisfaction Survey. The Survey is designed to gain an understanding of residents' experiences of City services, and the factors that affect the quality of their experience of those services. This tool will be used to assess residents' experiences of using the transportation system and the extent to which they experience barriers to mobility.	applicable question to be added to Citizen Satisfaction Survey starting in 2019
 Integration	Sustainable mode share, where "sustainable" modes are those other than driving a car, such as walking, cycling, transit, ridesharing, and ridehailing in a taxi or TNC. Greater use of these modes demonstrates that the various components of the transportation system are working together to provide viable options for travellers to choose from.	29%
 Connectivity	Average number of jobs within 30 minutes by transit for Mississauga residents. Job access is a proxy for measuring access to a range of amenities – if employees can get to a location, so can customers and suppliers. Job access is a measure that is reliable to define and calculate. It provides insight into how well connected people and businesses are to each other, to other amenities, and to the broader labour market.	82,000 jobs
 Health	Oil-derived fuel sales in Mississauga. Many of the negative environmental effects of transportation result from the use of oil-derived fuels such as gasoline and diesel. Increased vehicle fuel efficiency, increased use of electric vehicles, increased carpooling and increased use of non-car modes will all result in less oil-derived fuel being sold and used, and a reduction in related environmental effects.	1,017 million litres
 Resilience	Percentage of short trips done by active transportation. Using active modes of travel, such as walking and cycling, has a significant and direct positive effect on individuals' health. It is often impractical to take long trips by active transportation; the proportion of short trips taken by active modes is a strong indicator of whether people are choosing active modes when they can.	23%
	Car ownership per household, measured by the percentages of multi-car, single-car, and car-free households in Mississauga. High dependence on cars for travel implies the transportation system is inflexible and not diverse, indicating low resilience. As Mississauga's transportation system offers more viable options for travel, the system as a whole becomes more resilient and more households will be able to choose to live with fewer or no cars.	0 cars 7% 1 car 40% 2+ cars 53%

Data sources and notes

Covers deaths and serious injuries on municipal roads in Mississauga, whether operated by the Region of Peel or the City. Data sourced from Ontario Road Safety Annual Report, or Peel Region Police data if that report is unavailable.

Data sourced from City's bi-annual
Citizenship Satisfaction Survey.

Covers trips to, from and with Mississauga, at all times of day, and for all trip purposes. Sustainable modes are those other driving a car. Data sourced from the latest Transportation Tomorrow Survey.

Number of jobs (to nearest hundred) inside and outside Mississauga; average is taken over all Mississauga residents. Transit travel time assumes weekday trip starting at 8:30; travel limited to two legs (one transfer); includes non-Mississauga transit agencies. Population and job data sourced from Census or most recent City estimates. Transit schedule data sourced from agencies' GTFS data feeds.

Includes commercial sales of gasoline (all grades) and diesel. Data sourced from industry; 2019 value sourced from Kent Group Ltd.

Covers trips to, from and with Mississauga, at all times of day, and for all trip purposes. Short trips are those 2km or less (straight-line distance). Data sourced from the latest Transportation Tomorrow Survey.

Covers all households in Mississauga. Grouped into zero, one, and two or more cars. Data sourced from the latest Transportation Tomorrow Survey.

Updating the Transportation Master Plan

The Transportation Master Plan will be reviewed and updated approximately every five years. Two events will typically serve as triggers for a review of the Transportation Master Plan:

- **Transportation Master Plan Progress Report:** The Progress Report described in the previous section will be used to gauge how the Plan is performing and how extensive a review is needed.
- **Mississauga Official Plan Review:** The Mississauga Official Plan is required by legislation to be reviewed every five years. Updates to the Transportation Master Plan will be coordinated such that the latest update to the Transportation Master Plan will be an input to the Official Plan update.

8

CONCLUSION

The Transportation Master Plan delivers the Vision for Mississauga's transportation.

Conclusion

This plan

The Plan draws on a robust evidence base from a range of sources and on extensive engagement with stakeholders and the public. It includes a detailed set of Actions that provide the next steps along the City's path to its future transportation system. The Plan will be used by City staff in policy development and business planning relating to transportation.

The Transportation Master Plan will guide investment in and stewardship of Mississauga's transportation system from now until 2041.

Turning point

Mississauga's urban area has fully grown into the municipal boundaries over the last 50 years, supported by significant investment in major transportation infrastructure, including provincial highways, GO Rail, and an intricate network of regional and local roads. The next phase of growth will be focused on key nodes and corridors within the existing urban area. This new type of city building demands new types of transportation investment such as transit, smart traffic management systems, new mobility technologies, and cycling and pedestrian networks that are safe, comfortable, connected, and convenient.

Mississauga next phase of growth will be supported by sound investment in the future transportation system.

Freedom to move

People need to be free to travel to, from, and within Mississauga knowing they are safe and free from barriers, regardless of their age, ability, income, familiarity with the city, or preferred mode of travel. They need to be free to access the people, places, and things that contribute to their quality of life. They need to be free to make travel choices, so their mobility doesn't depend on the ability and inclination to drive. They need to feel confident making choices that help the health of people and the planet to flourish. These qualities of mobility have to endure, remaining resilient while technology, culture, and conditions change.

Mississauga's transportation system will provide people with the freedom to move.

In Mississauga, everyone
and everything will have the
freedom to move
safely, easily, and efficiently
to anywhere at any time.

APPENDIX 1

RESEARCH OVERVIEW

Introduction

The Transportation Master Plan is the result of nearly two years of research, technical analysis, and engagement with Council, stakeholders, and the public by the Mississauga Moves project team. The research and analysis are described here in Appendix 1, and the engagement work is described in Appendix 2.

The Mississauga Moves research team drew on a range of plans, policies, documents, and datasets from the City of Mississauga, the Province of Ontario, the Region of Peel, Metrolinx, and other partner organizations and agencies. The project relied on the professional knowledge and experience of a team comprising transportation planners and engineers, analysts, technicians from the City of Mississauga, and Steer, a consulting partner. The results of this research directly informed development of the Plan. The principal sources of information and the key team members relied upon for this research are found in this appendix. The team:

- Examined the history and context of Mississauga's development and transportation initiatives. This provided background information on the development of Mississauga's urban area, transportation network, travel patterns, and associated topics. The work increased the understanding of Mississauga's present situation by placing it in context.
- Identified learning points from emerging transportation directions and comparator cities. This provided an overview of the existing situation, identified the ongoing and possible future trends, and described how the trend could or will apply to Mississauga. It also examined comparable municipalities for the key lessons for Mississauga.

- Analyzed Mississauga's transportation patterns for various user groups and destinations. These included destinations (where people travel), modes (how people travel), and user groups (why people travel). It also examines the specialized needs of certain users, such as people with disabilities and newcomers.
- Assessed the current transportation network serving the city. This included to infrastructure (permanent transportation-related physical elements), services and programs (including transit, maintenance, and parking), regulation (from the City and other levels of government), and safety.
- Evaluated the integration of transportation and city building in Mississauga. This work examined statutes and policies affecting land use and transportation planning from all levels of government and evaluated examines how transportation should serve the goals in the City's Strategic Plan. It then identified the major gaps between the City's aspirations for its transportation system and the effects of its policy suite.

The results of this research directly informed development of the Plan. The principal sources of information and the key team members relied upon for this research are found in the following section.

City of Mississauga

Plans, Policies, and Reports

- Mississauga Strategic Plan (2009)
- Advanced Transportation Management System Project Overview and Implementation Plan (2012)
- Annual Accessibility Report (2017)
- Britannia Farm Master Plan (2016)
- Culture Master Plan (2009)
- Cycling Master Plan (2010, 2018)
- Dundas Connects land use and corridor study (2017)
- Economic Development Strategy (2009)
- Facility Accessibility Design Standards (2015)
- Hurontario/Main Street Corridor Master Plan (2010)
- Inspiration Lakeview: Lakeview Village Development Master Plan (2014)
- MiWay 5 (2015)
- MiWay 2017-20 business plan (2016)
- Mississauga Official Plan (2010, as amended)
- Moving Mississauga (Interim Strategy) (2011)
- Multi-Year Accessibility Plan 2018-2022 (2017)
- Parking Master Plan (in progress)
- Parks and Forestry 2017-21 Business Plan (2017)
- Parks and Forestry Master Plan (2014)
- Shaping Ninth Line land use and corridor study (2018)
- Transportation Network Company Regulations Study (2016)
- Tourism Master Plan (2017)
- Traffic Impact Study Guidelines (As Of 2018)
- Transportation Demand Management Strategy and Implementation Plan (2017)

Datasets

- Long Range Growth Forecasts City of Mississauga 2011 – 2051 (2013)
- Mississauga Employment Database (2016)
- MiWay routes and schedules (2018)
- MiWay boardings and alightings by stop (2014, 2016)
- Road traffic volumes (various years)
- Mississauga travel demand model (as of 2017)
- Parking locations (2018)
- GIS data on sites/locations for active recreation, childcare, landmarks, post-secondary institutions, K12 schools, roads, sidewalks, watercourses, woodlands, Official Plan and zoning designations, places of worship, transit stops/terminals/stations, and transit routes.
- Historical land use (1967, 1985, 1988, 1991)
- Historical employment (1967, 1977-87, 1996)

Province of Ontario

Plans, Policies, and Reports

- Ontario road safety annual report (2014)
- Growth Plan for Greater Golden Horseshoe (2017)
- Niagara Escarpment Plan (2017)
- Oak Ridges Plan (2017)
- Greenbelt Plan (2017)

Datasets

- Latest available

Region of Peel

Plans, Policies, and Reports

- Long-Range Transportation Plan (2012, 2017)
- Strategic Goods Movement Network Study (2013)
- Goods Movement Strategic Plan 2017-2021 (2017)

Datasets

- Latest available

Metrolinx

Plans, Policies, and Reports

- The Big Move (2008)
- Development Potential Adjacent to GO Rail Transit Stations (2016)
- Regional Transport Plan (2018)
- GO Station Access Plan (2016)

Datasets

- GO bus boardings by route (2015/16)
- GO station usage (various years)

Other Bodies

Plans, Policies, and Reports

- City of Melbourne: Melbourne Walking Plan 2014-17 (2014)
- Orange County: Complete Streets Design Handbook (2016)
- City of Toronto: Complete Street Guidelines (2017)
- Toronto Region Board of Trade: Report on Goods Movement (2017)
- Elliott Martin and Susan Shaheen: Impacts of car2go On Vehicle Ownership, Modal Shift, Vehicle Miles Traveled, and Greenhouse Gas Emissions (2016)
- David Hulchanski: Peel Income Trend Analysis 1980-2012 (2015)
- David Ticolli: Driving Changes: Automated Vehicles in Toronto (2015)
- Medical Officers of Health in the Greater Toronto Hamilton Area: Improving Health By Design (2014)
- GTAA: Toronto Pearson 2017-2037 Master Plan (2017)

Datasets

- Census (2011, 2016)
- Transportation Tomorrow Survey (1986, 1991, 1996, 2001, 2006, 2011, 2016)
- Cycling usage patterns from Strava (2016)
- GTAA groundside passenger survey (2016)

Principal team members

City of Mississauga

Steering Committee

- Director of Infrastructure Planning & Engineering Services
- Director of Hurontario LRT Project Office
- Director of MiWay
- Director of Works Operations & Maintenance
- Director of City Planning Strategies
- Director of Development & Design
- Director of Parks & Forestry
- Director of Environment
- Director of Strategic Communications

Core Work Team

- Manager of Transportation Planning
- Project Leader, Transportation Planning
- Transportation Modelling Specialist, Transportation Planning
- Manager of Traffic Management
- Manager of Service Development, MiWay
- Supervisor of Transit Infrastructure Management, MiWay
- Manager of Rapid Transit, Hurontario LRT Project Office
- Manager of Active Transportation Office
- Manager of Municipal Parking
- Project Leader, Parking Master Plan
- Manager of Urban Design
- Planner, City Planning Strategies
- Planner, Parks Planning
- Supervisor of Environmental Initiatives, Environment
- Senior Communications Advisor, Strategic Communications

Extended Work Team

- Manager of Mobile Licensing and Enforcement
- Planner, Culture

Consulting Team

Steer

Infrastructure, cities, and transport are constantly evolving to meet new demands, new ideas, and new technologies. Mixing rigour and technical expertise with an open-minded, imaginative approach, Steer helps their clients maximize opportunity and realise value within this rapidly-changing landscape. www.steergroup.com

- Project Director: Dennis Fletcher
- Project Manager: Tom Willis
- Project team members: Steven Bishop, Charlie Draycott, Alan Jones, Alex Legrain*, Jose Ongpin, Harold Sich*, Sarah Yuksel, Carolina Zabas Roelandt*

Lura Consulting

Lura Consulting are a Canadian leader in collaborative planning – by bringing people together, getting them engaged, and having meaningful conversations that help shape plans and projects that improve our communities and environment. www.lura.ca

- Engagement Director: Liz McHardy
- Project Manager: James Knott
- Project team members: Melissa Gallina, Jeff Garkowski*, Alex Lavasidis, Christine Yachouh

* Now with a different organization

APPENDIX 2

ENGAGEMENT OVERVIEW

Introduction

The engagement in developing the Mississauga Transportation Master Plan was an integral part of the project. The information gathered through the engagement activities was used as inputs into the development of the plan alongside the technical analysis. As the various components of the Plan were developed, public and stakeholder feedback was used to refine and improve those components. To achieve this, the engagement was designed with the following key objectives:

- Raise awareness and understanding of the current transportation system and the pressures it faces over the next twenty-five years
- Enable people to engage in interesting, meaningful and impactful discussion about mobility and the future of transportation in Mississauga, in a wide variety of ways
- Determine community values and interests as they relate to transportation
- Collect information on current transportation behaviours and potential motivators for future behaviour change (especially reduced tendency to single-occupant vehicle trips)
- Understand actual and perceived barriers to using a variety of transportation modes
- Encourage and inspire community members to think about the travel options available to them now and in the future
- Increase capacity of City staff to understand and apply customer experience thinking to service design and provision
- Strengthen the City's relationships with key stakeholders and potential partners in implementation

The engagement program was delivered in three distinct phases in alignment with the overall project workplan. **Phase One** focused on building an understanding of how the current transportation network is experienced and perceived, and how people want the transportation network to look in the future. The aims within this phase were to:

- Inform and educate about the Transportation Master Plan process
- Understand experiences and perceptions
- Explore how people want to move
- Explore barriers and motivators to movement

Phase Two focused on further refining the direction of the future transportation network and the various proposed components.

The aims within this phase were to:

- Define and then confirm the Vision and Principles
- Obtain feedback on the initial Transportation Master Plan components

Phase Three included the presentation of the draft Transportation Master Plan and the move into implementation. The aims within this phase were to:

- Outline and then refine Transportation Master Plan components
- Educate and inspire staff, stakeholders, Councillors and the public

Detailed reports on each phase of engagement were prepared by the project team and are available on the project's website.

Key statistics

2 open houses, with **190** participants

30 stakeholder interviews with **21** organizations

38 pop-up events, with **2,210** people spoken to, **1,838** people providing comments, and **2,762** promotional items given away

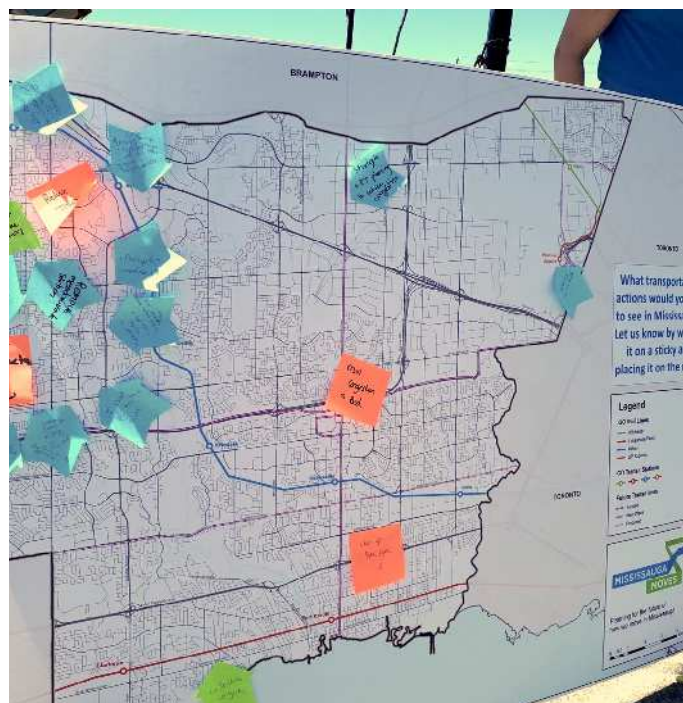
6,600 website visitors, making approximately **1,000** comments across the various online surveys and feedback tools.

How we engaged

Pop-ups

At pop-up events, the project team had a booth or table at busy public location, typically as part of larger public event. The project team ran 23 pop-up events during Phase One, covering every Council ward in Mississauga. Two discussion boards were provided, where participants could respond to a question (on one) and put ideas on the map (on another). During Phase Two, another 15 pop-up community conversations were held, again covering every Council Ward in Mississauga. Two discussion boards were displayed, where participants could review the draft Vision and Goals, and put their ideas for action items on the map.

During the pop-up events, the project team spoke to 2,210 people, recorded comments from 1,838 people, and gave up away 2,762 promotional items to increase awareness of the project.



Open houses

The public open houses provided in-depth information on the project, using display panels and offering an opportunity for attendees to discuss issues with the project team. Open house events were held in November 2017 (for Phase One) and January 2019 (for Phase Three) at the Mississauga Civic Centre. The two open houses attracted around 190 participants, with some form feedback received from almost all participants.

The Phase One open house included information for attendees to learn about the history of Mississauga; discover how residents live, work, play and travel in Mississauga today; and share how they move around Mississauga. The Phase Three open house mirrored the structure of the Transportation Master Plan, and the display panels remained available for a week afterwards to maximize the available time for public review and input.



Project website

The project website was active throughout the study. It provided dates for events, the project timeline, published reports, and a project-specific email address for general project feedback and inquiries. The website also provided a 'question and answer' feature throughout the study. Visitors could pose questions that were answered by project staff, as well as read the questions and answers from other visitors. The project website also included specific online surveys and other activities specific to each phase.

During Phase One, the online survey captured participants' perceptions about moving in Mississauga. The survey included a variety of short-answer questions, as well as an opportunity to indicate how often one uses various modes of transportation. The website also included an ideas forum that allowed participants to submit their ideas on 'what would improve how Mississauga moves?', as well as view and vote on ideas submitted by others. The website also included a 'hotspots tool' that allowed participants to mark areas of interest across the city, and whether they were easy or difficult to travel to.

For Phase Two, the online survey focused on the draft Vision and Goals. Participants were provided with the draft versions of the six Goals, asked to rank their importance, and show how they would allocate funding to the six different goal areas. Participants were also provided with the draft Vision and asked to provide feedback. The hotspots tool used in Phase One remained available during Phase Two.

During Phase Three, the online survey provided a channel for feedback on the draft version of the Transportation Master Plan. Participants were asked aspects they liked or felt could be improved, and what Actions they would like to see added, changed, or removed. They were also asked what influence they thought the Transportation Master Plan would have on Mississauga's transportation system and the ease of travel in 2041.

Across the three phases, the website attracted over 6,600 visitors, who made roughly 1,000 comments across the various online surveys and feedback tools.

Social media

The City of Mississauga has accounts with Twitter, Facebook and LinkedIn. It uses these in a coordinated fashion for communicating with the public. The City's social media tools were used to direct people to the project website and online activities, advertise in-person engagement events, increase public participation; and collect feedback and comments. In addition, in Phase One, the social media tools were used to introduce the project, and in Phase Two they were used to introduce the draft Vision and Goals. In Phase Three, they were used to announce the publication of the Draft Transportation Master Plan.

Across the City's social media accounts, the project's posts had approximately 65,000 impressions and over 1,800 engagements.

Community panel

The community feedback panel consisted of about 50 members of the public that were representative of the Mississauga population. Members were encouraged to act as champions for engagement by sharing information and by promoting awareness of the project.

During Phase One, panel members were provided with an orientation session and a preview of the Phase One open house materials. All members were encouraged to act as champions for engagement by sharing information and getting the word out to their networks and constituencies to participate in this important city-building project. An orientation session was held for panel members in November 2017.

In November 2017, Mississauga Moves Community Panel Members were invited to take part in an online survey. A mix of quantitative and qualitative questions were used.

In January 2019, Panelists were invited to take part in a focus group to preview and provide constructive input on the Transportation Master Plan and the display panels for the final open house.

Stakeholder interviews

Interviews with a range of stakeholders provided the project team with an in-depth understanding of their issues, opportunities and opportunities relating to Mississauga's transportation system. The interviews included all neighbouring municipalities and their transit agencies, MiWay, TransHelp, Peel Region, Peel Housing Corporation, school boards, a post-secondary institution, the local health integration networks (LHINs), hotel industry associations, property companies, and social advocacy organizations.

Some stakeholders were grouped together, to bring the number of interviews to 15 in each of Phase One and Phase Two. The Phase One interviews took place in November and December 2017, and provided valuable knowledge of specific issues to the project team. The Phase Two interviews took place in June 2018. These offered an opportunity to discuss specific draft Actions with stakeholders and how they related to the issues identified in the Phase One interviews. Interviewees' input was then used to refine the draft Actions.

Stakeholder workshops

Workshops provided a way to present information and discuss issues with small groups of people. They were used during Phase One to gather information from various external organizations. A total of five workshops were held at various community locations around Mississauga. The workshops focused on businesses and employers (two workshops), transportation service providers and transportation related industry, community and institutional organizations, and building and development organizations. Each workshop included information about the study, small group discussions, a visual preference survey, and, a plenary discussion. The workshops had a total of 56 attendees.

Council and Councillors

The project offered one-on-one discussions with each Councillor and the Mayor during Phase 1. This provided each elected official an opportunity to share with project team the concerns of their constituents. The project team also introduced them to the scope of work, and asked for any other insights that may be valuable to the project. Discussions were held with six Councillors and the Mayor's office.

City staff also provided a deputation at the General Committee of Council once in each Phase of the project to provide information updates or receive endorsement.



What we heard

Phase 1: Where Are We Now?

The engagement in Phase One was focused on gathering information on Mississauga's transportation system from the public and stakeholders. This complemented the information gathered from the technical analysis (described in Appendix I). The engagement gathered information on the issues people face moving around the city, and between the city and other destinations. It also gathered information from organizations on the issues their employees, customers, and goods face in moving to, from, and within the city. The information issues were not limited to existing problems, but also included opportunities for the city and its transportation system. This included opportunities harnessing solutions that are currently available, as well opportunities to capitalize on expected future solutions.

From the public, there were comments on all aspects of the transportation system. The project team heard that:

- Personal vehicles are popular because they are easier to use, more flexible and faster than other modes, particularly during off-peak times.
- People are willing to carpool, but find it difficult to implement.
- Further driver education would improve attitudes towards cyclists, pedestrians, and transit.
- The quality of local transit in Mississauga is perceived to be good, but higher service frequencies and other measures to decrease travel times are wanted.
- Regional transit should have lower fares and better non-car access options.
- Walking is seen primarily as a leisure activity or form of exercise rather than a mode of travel.
- Safety concerns are present for all modes.
- More sidewalks and a good mix of land uses would encourage more walking.

- The highways are barriers to cycling and walking.
- Use of ridehailing was rare, but regarded as convenient with few safety concerns.

From stakeholders, there was a general recognition of the need to support and encourage use of non-car modes. Stakeholders were highly supportive of the City's aims for dense, mixed-use intensification around transit nodes and corridors. The project team also heard:

- There is more potential for transportation demand management (TDM) programs such as Smart Commute to continue to help change people's travel habits.
- The lack of 24-hour transit makes it difficult to find employees for late-night shifts.
- Crossing municipal boundaries creates unique issues for transit users, in contrast to other modes.
- Goods movement is important, given its role in the local economy and supplying people's everyday needs, but there is a need to balance the movement of people and goods.
- Technology offers many opportunities for transportation, but many details are currently unknown.

Stakeholders also identified many issues and barriers within the current transportation system for people with accessibility issues. Finally, there was no consensus view on parking supply among stakeholders, with some stating there is too much parking, and some that there isn't enough.

The issues from the engagement activities was compiled and combined with those identified from the technical analysis. Both sources of information were then subject to the same process through the next steps of the study. The list of issues was used to develop the first draft of the Actions. This ensured the Actions was closely tailored to Mississauga's specific issues.

Phase Two: Where do we want to be?

The engagement in Phase Two was focused on obtaining detailed feedback on the draft Vision and Goals (from the public) and the draft list of Actions (from stakeholders).

Through the online survey, members of the public were asked to prioritize and comment on the draft Goals for the future of transportation in Mississauga. Survey participants rated “safety” as the most important Goal, followed by “connectivity” and “health”. Participants were also able to comment on each of the goals, and suggest potential Actions they would like to see.

The online survey was also used to gather feedback on the draft Vision statement. In general, participants were supportive of the proposed Vision, however, some felt it was overly ambitious given current condition. Participants wanted more clarity on how the vision would be achieved. Many participants felt strongly that affordability and the ability to complete trips safely should be included in the Vision. They also felt that the Vision should highlight multi-modal transportation, encourage a shift away from personal vehicles, and address environmental issues. Finally, participants felt that travel times and the health benefits associated with active transportation should be incorporated into the Vision.

Stakeholder feedback was broadly supportive of the draft list of Action. Stakeholders identified a large number of specific changes to improve the list, including new items for the list, changes to items already on the list, and items that could be merged. Stakeholders also provided general feedback on the Goals, and identified some broad strategies the City should consider.

As a result of the public feedback, the order and presentation of the Goals within the Transportation Master Plan was changed to place Safety first in the document. Feedback from both the public and from stakeholders on the Vision, Goals and Actions was used to expand, refine and consolidate the list of Actions.

Phase Three: How will we get there?

The engagement in Phase Three was focused on obtaining detailed feedback on the draft Transportation Master Plan. The primary channels for this feedback was the online survey and public open house.

The overall feedback was generally positive. People like that the draft Plan included all different modes of transportation and that it provided a detailed set of Actions to achieve the Vision and Goals. People felt the Plan’s assessment of the current state of Mississauga’s transportation system was fair, and that the Plan has the potential to have a positive and strong influence on the future of transportation in the city. In general, people felt that implementing the Actions would result in greater use of sustainable modes. However, people wanted solutions implemented more quickly than the timescales indicated in the Plan. They also expressed a desire that the city’s growth be matched by investment in its transportation system.

Participants were asked to provide input on potential measures the City should use in tracking progress against the Transportation Master Plan. Responses included a zero-carbon goal, enforcement of traffic laws (specifically speeding), and tracking the number of reserved car-share spots at new development sites. Feedback on the goals, objectives and actions was typically very specific. Other comments from participants requested that the city incorporate alignment with other existing plans (such as the Climate Plan) and to continue to involve the community.

The feedback received during Phase Three was used to refine the text in the draft Transportation Master Plan and clarify the language in some places. Some minor changes to the list of Actions was made in response to stakeholder feedback.

GLOSSARY

Term	Definition
Active transportation	Any form of self-propelled transportation that relies on human energy, plus mobility-assisted devices such as walkers, wheelchairs and scooters. Active transportation modes include walking, jogging, cycling, and in-line skating and others.
Advanced Transportation Management System	An integrated and centralized computer-based system for managing traffic signals and flow.
Community Node	An Official Plan term for areas that will provide for a mix of residential and employment uses, with lower densities and heights than Major Nodes or the Downtown.
Corporate Centre	An Official Plan term for areas that will provide for employment uses at densities and heights similar to Major Nodes or Community Nodes.
Corridor	Within the Official Plan, lands adjacent to and framing certain rights-of-way (shown in Official Plan Schedule 1 and Schedule 1c).
Downtown	An Official Plan term for the area in central Mississauga that will contain the highest densities, tallest buildings and greatest mix of uses.
Employment Area	An Official Plan term for areas that will accommodate a diverse mix of employment uses, but will not permit residential uses. These areas will accommodate the lowest densities and building heights.
High-Occupancy Vehicle (HOV)	A vehicle carrying more than one passenger.
Intensification corridor	Within the Official Plan, lands within approximately 200 to 300 metres of the centre line of roads identified as having the potential for higher density mixed use development consistent with planned transit service levels.
Major Node	An Official Plan term for areas that will provide for a mix of residential and employment uses at densities and heights less than the Downtown, but greater than elsewhere in the city.
Major Transit Station Areas	A term in the Growth Plan for Greater Golden Horseshoe for the area including and around any existing or planned higher order transit stations. Within Mississauga, these include stations for GO Rail services, the Hurontario LRT, and the Mississauga Transitway. Station areas are generally defined as the area within an approximate 500m radius of a transit station, measured from the station building, representing about a 10-minute walk.
Neighbourhood	An Official Plan term for areas that will focus on residential uses and associated services and facilities, and that will accommodate the lowest densities and building heights.
Official Plan	A document that describes the City of Mississauga's policies on how land in the city should be used. It has a formal legal status, and must be updated periodically.
Pedestrian network	Infrastructure elements used by pedestrians, such as sidewalks, crossings and crosswalks at intersections and elsewhere, walkways between roads, and multi-use trails.

Term	Definition
Ridehailing	The paid use of vehicle by one or more people (excluding the driver) to be transported to a destination. Includes taxis and Transportation Network Companies.
Ridesharing	The use of a personal vehicle by multiple people (including the driver) to travel to a common destination. Includes both formal carpooling arrangements and informal transport of family and friends.
Right-of-way	Linear piece of land set aside for transportation purposes. Typically extends beyond the paved roadway.
Strategic Plan	The City of Mississauga's highest-level policy document, created to shape and direct strategic decision-making.
Transportation Network Company (TNC)	An organization that facilitates a request for transportation services from a passenger to a driver via an app (or similar process), excluding taxis. As of 2018, the only TNCs operating in Mississauga are Uber, Lyft and Facedrive.

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In Mississauga, everyone and everything will have the freedom to move safely, easily, and efficiently to anywhere at any time.



Safety: Freedom from Harm

Safe conditions for all travellers, advancing Vision Zero by supporting hazard-free travel and striving for zero fatalities.



Inclusion: Freedom from Barriers

An accessible network, where moving is easy regardless of a person's age, ability, income, or familiarity with the city.



Integration: Freedom of Choice

An integrated network, where people and goods have viable options for moving within and beyond the city.



Connectivity: Freedom of Access

Simple and pleasant connections between people and the places and things they need to prosper.



Health: Freedom to Flourish

Support for the health of people and the planet, with more people-powered trips, lower vehicle emissions, and better stewardship of the natural environment.



Resilience: Freedom to Evolve

Leadership in adapting to changes that reshape the transportation system and how it is used.

City of Mississauga

Corporate Report



Date: 2019/04/04

To: Chair and Members of General Committee

From: Paul Mitcham, P. Eng, MBA, Commissioner of
Community Services

Originator's files:

Meeting date:
2019/05/01

Subject

Mississauga Digital Gateway Signage Community Partnership Program with Van Horne Outdoor LP - Proposed Extended Signage Inventory

Recommendation

1. That a by-law be enacted to authorize the Commissioner of Community Services and the City Clerk or their respective designate, on behalf of The Corporation of the City of Mississauga, to execute an amendment to the current Master Outdoor Advertising Agreement with Van Horne Outdoor LP (VHO) to add the two new proposed locations for digital signs to the existing agreement, with the condition that VHO has obtained all required permits or approvals from the respective owner of each locations to construct such digital signs including all necessary agreements and documents ancillary thereto, in a form satisfactory to Legal Services.
2. That all necessary by-law(s) be enacted.

Report Highlights

- VHO has presented to the City a proposal to extend the existing Master Outdoor Advertising Agreement entered into on March 13, 2018 between the City and VHO to include an additional four (4) digital signs at two (2) new locations on CP Rail corridors operated by Metrolinx, not under the City's jurisdiction.
- VHO and Metrolinx have secured Provincial Approval for both locations and a Ministerial Order by the Minister of Transportation has been issued.
- VHO will follow the City's Corporate Policy 03-09-01 "Placing Advertisement with the City." The allotted screen time to the City in the current agreement will be extended to these additional signs to be used for community messaging.

General Committee	2019/04/02	2
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Background

Canadian Pacific Railway (“CP”) and All Vision entered into a Limited Partnership, VHO, to develop digital signs along CP’s federally regulated right-of-way. The City currently has a Master Outdoor Advertising Agreement with VHO in which VHO will install up to sixteen (16) digital screens at eight (8) locations. VHO is currently in construction phase with the first 10 overpass bridge facings scheduled for completion by June 2019.

VHO has offered to provide the City of Mississauga with additional benefits by including 4 more digital signs at 2 new locations into the existing Master Outdoor Advertising Agreement by including permanent City branding as well as advertising time for City messaging.

Proposed extended signage locations are at: (1) Highway 407 South of Highway 401 (Ward 9) and (2) Highway 403 west of Creditview Road (Ward 6).

Comments

This extension to the partnership continues to benefit the City by increasing communication channels with residents and visitors and providing additional exposure for the City brand in the community. The time allotment to the City time on the digital signs will allow for general community updates; promotion of City services, programs and events; transit updates; and emergency messaging.

Financial Impact

VHO continues to be responsible for all capital and operating costs related to this program. This extension has no direct financial impact to the City. The indirect financial impacts include potential revenue from increased participation in City offerings due to advertising and increased sponsorship revenue with these additional advertising tactics.

Conclusion

Stakeholder considerations have been satisfactorily addressed by VHO. The proposed extended signage will further benefit the City by increasing communication channels with residents and visitors and increasing City branding. These benefits will help the City further its Strategic Plan through supporting the pillars of Move, Belong, and Connect.



Paul Mitcham, P. Eng, MBA, Commissioner of Community Services

Prepared by: Tim Sullivan, Manager, Business & Marketing Solutions, Recreation

City of Mississauga

Corporate Report



Date: 2019/04/10

Originator's files:

To: Chair and Members of General Committee

From: Gary Kent, CPA, CGA, ICD.D,
Commissioner of Corporate Services and Chief
Financial Officer

Meeting date:
2019/05/01

Subject

2019 Tax Ratios, Rates and Due Dates

Recommendation

1. That the report of the Commissioner of Corporate Services and Chief Financial Officer dated April 10, 2019 entitled "2019 Tax Ratios, Rates and Due Dates" be received.
2. That the 2019 net operating municipal property tax levy be approved at \$510,906,789.
3. That the 2019 tax ratios for the City of Mississauga be approved as follows:

Residential	1.000000
Commercial	1.500745
Industrial	1.626610
Multi-residential	1.346114
New multi-residential	1.000000
Pipeline	1.275769
Farmland	0.250000
Managed Forest	0.250000
4. That 2019 tax rates for the City of Mississauga be established as outlined in Appendix 1 of this report.
5. That the 2019 residential property tax due dates be set for July 4th, August 1st, and September 5th, 2019.
6. That the 2019 non-residential property tax due date be set for August 1st, 2019.
7. That the 2019 due dates for properties enrolled in the City's Pre-authorized Tax Payment Plan be set based on their chosen withdrawal date.

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8. That the 2019 budgets of the Clarkson, Port Credit, Streetsville, and Malton Business Improvement Areas (BIAs) as set out in Appendix 2 requiring tax levies of \$73,000, \$856,533, \$387,313 and \$146,140 respectively, be approved as submitted, and that the necessary budget adjustments be made.
9. That the rates to levy the 2019 taxes for the Clarkson, Port Credit, Streetsville, and Malton BIAs be established as set out in Appendix 3 to this report.
10. That the 2019 operating budget be adjusted to reflect a transfer to the Capital Reserve Fund (#33121) in the amount of \$292,059.
11. And that the necessary by-laws be enacted.

Report Highlights

- Approval is being sought for the City's 2019 net levy, tax ratios, tax rates, tax due dates and budgets submitted by the Clarkson, Port Credit, Streetsville and Malton BIA's.
- Revenue neutral tax ratios are proposed to offset the shifts in tax burden between the property classes resulting from the third year phase-in of the 2016 Provincial reassessment.
- A Budget adjustment of \$292,059 is proposed to reflect final growth compared to estimated growth, to be allocated to the Capital Reserve Fund.
- The 2019 tax rebate amount for the low-income seniors and low-income persons with disabilities be adjusted to \$423 reflecting the increase based on the blended tax impact.
- 2019 taxes on the average single family detached residential dwelling will increase by \$51.57 due to phase-in of the reassessment or \$202.51 including tax increases.
- Tax due dates consistent with previous years in number and timing are being proposed.

Background

City Council approved the 2019 budget on February 6, 2019 which provided for a 4.5% average tax increase on the City's portion of the tax bill and equates to an average 1.6% increase on the total residential tax bill. The Region of Peel Council approved its 2019 budget with a 2.7% average tax levy increase for residents in Peel. The combined average blended tax impact for City and Regional services is 2.9% on the total residential tax bill.

The Province of Ontario prescribes the education tax rates by regulation. There is one Province-wide rate for residential taxpayers. While the Province has indicated that it reduced the residential education rate to offset the increase in assessment, the impact can be felt differently across the Province depending on whether assessment increases are above or below the provincial average assessment change. On average, Mississauga's residential taxpayers will see an increase in their education tax of 0.1% on the total tax bill as a result of the phase-in

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assessment increase. Assessment values in Mississauga have increased more than the provincial average residential assessment increase.

The Province has also introduced legislation to phase out the tax reduction for the education portion of taxes on commercial and industrial vacant and excess lands. The tax reduction will be phased out over two years beginning in 2019. For municipalities with a common tax reduction for both commercial and industrial properties, the reduction in 2019 will be half the amount it otherwise would have been. Therefore the tax reduction for the education portion on commercial and industrial vacant and excess lands in Mississauga will be 15%, reduced from 30%.

The Clarkson, Port Credit, Streetsville, and Malton BIAs have submitted their 2019 budget requests. In accordance with section 205 of the Municipal Act, S.O. 2001, c. 25, Council must approve the BIA budgets annually. Section 208 of the Municipal Act, S.O. 2001, c. 25, requires a special charge to be levied upon the BIA members to provide the revenues as identified in each of the BIA budgets.

This report outlines the decisions necessary by Council to establish tax ratios and tax rates for 2019 and authorize the final tax levy.

Comments

Property Assessment

All properties in Ontario were reassessed by MPAC in 2016 to determine a value based on January 1, 2016 property values. The previous valuation date was January 1, 2012. To smooth the impact of valuation changes, properties are reassessed every four years with a phase-in of increases over the four-year period. Assessment values for the 2019 taxation year represent the third year phase-in of the 2016 reassessment.

For non-residential properties, the existing capping regime continues. Properties that have reached Current Value Assessment (CVA) taxes in 2018 or that would cross over from being a capped property in 2018 to a claw back property in 2019 or vice versa are taxed at CVA thereby reducing the number of capped and claw back properties.

In addition, the Region adopted additional capping tools introduced by the Province in 2017 which phases-out capping over four years for a property class where all properties within the class, excluding vacant land, are within 50 per cent of CVA taxes. In 2017, phase-out of capping was initiated for the industrial and multi-residential classes. In 2019, the preliminary capping calculations indicate that all multi-residential and industrial properties in the Region will be at CVA taxes.

It is also estimated that of the approximately 10,000 non-residential properties in Mississauga, 3 commercial properties remain capped and 31 will be clawed back in 2019 to fund the cap. The remainder of the commercial properties will pay taxes at CVA.

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Property values change over time at different rates. Valuation changes cause a shift in tax burden between properties within a class. Properties with assessment increases above the average increase for the class will experience a tax increase. Properties with assessment increases below the average increase for the class will experience a tax decrease.

The chart below provides the average total assessment increase for each of the property classes being phased in for 2019.

Property Class	2019 Phased-In Assessment
Residential	5.8%
Multi-Residential	14.1%
Commercial	4.1%
Industrial	4.9%

On average, the phase-in assessment increase for 2019 for residential properties is 5.8%.

In addition to shifts in tax burden within classes, there are also shifts in tax burden between classes. This is because the different classes change in value at different rates. The chart below identifies the changes between classes.

Tax Class	Tax Change	Percentage Change
Residential	\$ 635,222	0.1%
Multi-Residential	\$ 4,132,942	9.54%
Commercial	\$ (4,242,391)	(1.67%)
Industrial	\$ (488,505)	(1.02%)

Tax Ratios and Rates

Section 310 of the Municipal Act, S.O. 2001, c. 25, requires Council to establish tax ratios for property classes annually.

To address shifts in tax burden resulting from the phase-in of the 2016 reassessment, the Province allows municipalities to reset their ratios to be revenue-neutral thereby eliminating tax shifts between classes. It is proposed that changes be made to the tax ratios for 2019 in order to be revenue-neutral so the relative tax burden for each class remains the same as it was prior to reassessment. These changes will offset the tax shift to the multi-residential class resulting from the significant increase in assessment values being phased-in.

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Attached as Appendix 1 are the tax rates based upon these ratios. Education tax rates are set by the Province through regulation and are included in Appendix 1 for information purposes. The Financial Impact section of this report shows the tax impact of reassessment on the average single family detached residential dwelling to be \$51.57 or 1.0%.

Levy Due Dates

It is proposed that the 2019 final levy for residential properties with regular instalment due dates be payable in three (3) instalments on July 4th, August 1st and September 5th, 2019 and that the 2019 final levy for commercial, industrial, and multi-residential properties on the regular instalment plan be payable in a single instalment on August 1st, 2019. The final levy due dates recommended are consistent in time and number of instalments with the previous year.

The 2019 final levy for properties enrolled in the City's Pre-authorized Tax Payment Plan will be payable based on their chosen withdrawal date. The Pre-authorized Tax Payment Plan is available to all taxpayers.

Levy Adjustment

When the 2019 budget was prepared in the Fall of 2018, assessment growth for 2018 was projected at 0.751%. With receipt of the 2019 assessment roll, final assessment growth has been determined at 0.811%. The previous year's assessment forms the base for the current year's tax levy. Because the budget was approved before the final growth numbers were calculated, it is necessary to amend the budget and the 2019 levy by \$292,059 to reflect the final assessment growth. It is proposed that the additional funds be allocated to the Capital Reserve Fund.

2019 BIA Budgets and Levy

The Clarkson, Port Credit, Streetsville, and Malton BIA 2019 budget submissions are summarized in Appendix 2. Staff has reviewed the submissions to ensure that adequate provisions have been made for audit fees. In keeping with past practice, other elements of the budgets have not been reviewed in detail. The BIA tax rates have been calculated as indicated in Appendix 2 using the CVA provided by the Municipal Property Assessment Corporation for the 2019 taxation year for the properties within each of the BIA boundaries in order to raise the required revenues.

Financial Impact

Adjusting the 2019 operating budget to reflect the final assessment growth will result in an increase of \$292,059. It is proposed that the additional funds be allocated to the Capital Reserve Fund.

The tax levy changes affecting the typical single family home are as follows:

2018 taxes on \$645,000 assessment	\$5,311.42
Reassessment change – City and Region	45.41
Reassessment change - Education	6.16
City tax increase	81.60
Region tax increase	69.33
2019 taxes on \$688,000 assessment	<u>\$5,513.93</u>

Conclusion

The 2019 tax rates have been calculated as shown in Appendix 1. The proposed final levy due dates are consistent with the previous year. It is proposed that revenue neutral tax ratios be adopted to eliminate the tax shifts between classes resulting from the third year phase-in of the 2016 reassessment.

The 2019 budgets submitted by the Clarkson, Port Credit, Streetsville, and Malton BIAs provide sufficient funds for audit fees. 2019 BIA tax rates have been calculated as shown in Appendix 3 to raise the required revenue for the purposes of the BIA Boards of Management specified in Appendix 2.

Attachments

Appendix 1: 2019 Final Tax Rates

Appendix 2: 2019 Business Improvement Area Budget Submissions

Appendix 3: 2019 Business Improvement Area Tax Rates



Gary Kent, CPA, CGA, ICD.D, Commissioner of Corporate Services and Chief Financial Officer

Prepared by: Louise Cooke, Manager, Revenue & Taxation

Appendix 1

**The Corporation of the City of Mississauga
2019 Final Tax Rates**

Description	Tax Class	2019 Final Tax Rate
Residential	RT	0.801443%
Residential Shared (PIL for Ed)	RH	0.801443%
Residential Farm Awaiting Development I	R1	0.240433%
Residential Farm Awaiting Development II	R4	0.801443%
Residential - Education Only	RD	0.161000%
Multi-Residential	MT	1.023110%
Multi-Residential Farm Awaiting Development I	M1	0.240433%
Multi-Residential Farm Awaiting Development II	M4	1.023110%
New Multi-Residential	NT	0.801443%
Commercial	CT	1.942736%
Commercial Shared (PIL for Ed)	CH	1.942736%
Commercial Taxable (No Ed)	CM	0.961142%
Commercial Excess Land (PIL for Ed)	CK	1.507154%
Commercial Farm Awaiting Development I	C1	0.240433%
Commercial Farm Awaiting Development II	C4	1.942736%
Commercial Excess Land	CU	1.507154%
Commercial Vacant Land (PIL for Ed)	CJ	1.507154%
Commercial Vacant Land	CX	1.507154%
Commercial New Construction - Lower Tier and Education Only	XC	1.406895%
Commercial New Construction - Education Only	XD	0.981594%
Commercial New Construction Shared (PIL for Ed)	XH	1.942736%
Commercial New Construction Vacant Land (PIL for Ed)	XJ	1.507154%
Commercial New Construction Excess Land (PIL for Ed)	XK	1.507154%
Commercial New Construction - Upper Tier and Education Only	XL	1.517435%
Commercial New Construction	XT	1.942736%
Commercial New Construction Excess Land	XU	1.507154%
Commercial New Construction Vacant Land	XX	1.507154%
Office Building	DT	1.942736%
Office Building Shared (PIL for Ed)	DH	1.942736%
Office Building Excess Land	DU	1.507154%
Office Building Excess Land (PIL for Ed)	DK	1.507154%
Office Building New Construction - Lower Tier and Education Only	YC	1.406895%
Office Building New Construction - Education Only	YD	0.981594%
Office Building New Construction Shared (PIL for Ed)	YH	1.942736%
Office Building New Construction Excess Land (PIL for Ed)	YK	1.507154%
Office Building New Construction - Upper Tier and Education Only	YL	1.517435%
Office Building New Construction	YT	1.942736%
Office Building New Construction Excess Land	YU	1.507154%
Shopping Centre	ST	1.942736%
Shopping Centre Excess Land	SU	1.507154%
Shopping Centre New Construction - Lower Tier and Education Only	ZC	1.406895%
Shopping Centre New Construction - Education Only	ZD	0.981594%
Shopping Centre New Construction Shared (PIL for Ed)	ZH	1.942736%
Shopping Centre New Construction Excess Land (PIL for Ed)	ZK	1.507154%
Shopping Centre New Construction - Upper Tier and Education Only	ZL	1.517435%
Shopping Centre New Construction	ZT	1.942736%

Description	Tax Class	2019 Final Tax Rate
Shopping Centre New Construction Excess Land	ZU	1.507154%
Parking Lot	GT	1.942736%
Industrial	IT	2.159047%
Industrial Shared (PIL for Ed)	IH	2.159047%
Industrial Farm Awaiting Development I	I1	0.240433%
Industrial Farm Awaiting Development II	I4	2.159047%
Industrial Excess Land	IU	1.678927%
Industrial Vacant Land	IX	1.678927%
Industrial - Water Intake System	II	2.159047%
Industrial Vacant Land (PIL for Ed)	IJ	1.678927%
Industrial Excess Land (PIL for Ed)	IK	1.678927%
Industrial New Construction Shared (PIL for Ed)	JH	2.071751%
Industrial New Construction - Water Intake System (PIL for Ed)	JI	2.071751%
Industrial New Construction Vacant Land (PIL for Ed)	JJ	1.604726%
Industrial New Construction Excess Land (PIL for Ed)	JK	1.604726%
Industrial New Construction - Non-Generating Station (PIL for Ed)	JN	2.071751%
Industrial New Construction - Generating Station (PIL for Ed)	JS	2.071751%
Industrial New Construction	JT	2.071751%
Industrial New Construction Excess Land	JU	1.604726%
Industrial New Construction Vacant Land	JX	1.604726%
Large Industrial	LT	2.159047%
Large Industrial Shared (PIL for Ed)	LH	2.159047%
Large Industrial Vacant Land (PIL for Ed)	LJ	1.678927%
Large Industrial Excess Land (PIL for Ed)	LK	1.678927%
Large Industrial Excess Land	LU	1.678927%
Large Industrial New Construction Shared (PIL for Ed)	KH	2.071751%
Large Industrial New Construction - Water Intake System (PIL for Ed)	KI	2.071751%
Large Industrial New Construction Excess Land (PIL for Ed)	KK	1.604726%
Large Industrial New Construction - Non-Generating Station (PIL for Ed)	KN	2.071751%
Large Industrial New Construction - Generating Station (PIL for Ed)	KS	2.071751%
Large Industrial New Construction	KT	2.071751%
Large Industrial New Construction Excess Land	KU	1.604726%
Large Industrial New Construction Vacant Land	KX	1.604726%
Pipeline	PT	2.037396%
Farm	FT	0.200361%
Managed Forests	TT	0.200361%

Business Improvement Associations Budget Submissions

Appendix 2

2019 Budget

	Clarkson	Port Credit	Streetsville	Malton	Total
Revenues:					
Taxation	73,000	856,533	387,313	146,140	1,462,986
Membership Fees	4,000	4,500	4,000	0	12,500
Sponsorship	4,000	15,000	35,000	65,200	119,200
Donation			10,000	0	10,000
Marketing Income		13,500		0	13,500
Miscellaneous Income		20,000		41,250	61,250
Transfer from Reserves	0	10,000		39,924	49,924
Under/Over Levy				0	0
Total Revenues	81,000	919,533	436,313	292,514	1,729,360

Expenses:

Deficit Adjustment (Prior Yr)		0			0
Salaries	0	232,403	91,066	35,500	358,969
Office Administration	11,570	58,600	56,328	11,250	137,748
Finance Expenses	130	500	3,200	250	4,080
Audit	1,300	4,000	1,200	1,200	7,700
Bookkeeping Services	1,700	9,600		2,500	13,800
Contracted Services			1,000	0	1,000
Beautification and Maintenance	33,000	330,817	126,469	17,000	507,286
Marketing and Promotions	11,300	82,426	37,000	12,000	142,726
Project/Event Expenses	22,000	111,500	107,550	133,500	374,550
Sponsorship		64,500		5,000	69,500
Capital		10,000		60,000	70,000
Transfer to Reserves			7,500	0	7,500
Underlevies		15,187	5,000	14,314	34,501
Total Expenses	81,000	919,533	436,313	292,514	1,729,360

2018 Budget

	Clarkson	Port Credit	Streetsville	Malton	Total
Revenues:					
Taxation	73,000	856,533	324,353	146,140	1,400,026
Membership Fees	4,000	3,000	4,500	300	11,800
Interest Income					
Sponsorship	7,000	40,000	33,500	64,300	144,800
Donation			27,500		27,500
Marketing Income		45,000	3,000		48,000
Miscellaneous Income		84,200	5,000	43,000	132,200
Transfer from Reserves	12,000	10,000		20,000	42,000
Under/Over Levy					0
Total Revenues	96,000	1,038,733	397,853	273,740	1,806,326

Expenses:

Deficit Adjustment (Prior Yr)					0
Tax Write-offs/Adjustments					
Salaries		211,080	96,795	47,750	355,625
Office Administration	4,300	50,181	50,365	12,910	117,756
Finance Expenses	500	400	3,200	300	4,400
Audit	1,200	4,000	1,200	1,200	7,600
Bookkeeping Services	2,000	9,600		600	12,200
Contracted Services			1,000		1,000
Board Meeting Expenses					
Beautification and Maintenance	44,250	250,000	107,544	25,000	426,794
Marketing and Promotions	18,250	140,675	23,250	17,700	199,875
Project/Event Expenses	25,500	247,500	102,000	98,800	473,800
Sponsorship		79,000		10,000	89,000
Capital		1,600		36,000	37,600
Business Development					
Transfer to Reserves			7,500	5,000	12,500
Underlevies		44,697	5,000	18,480	68,177
Total Expenses	96,000	1,038,733	397,853	273,740	1,806,326

**Clarkson Business Improvement Area
2019 Final Tax Rates and Levy**

Appendix 3

	Description	Returned Assessment for 2019	Tax Rate	Tax \$
CT	Commercial	87,075,597	0.075401%	65,655
CH	Commercial Shared (PIL for Ed)		0.075401%	0
CM	Commercial Taxable (No Ed)		0.075401%	0
CK	Commercial Excess Land (PIL for Ed)		0.052780%	0
C4	Commercial Farm Awaiting Development II		0.075401%	0
CU	Commercial Excess Land		0.052780%	0
CJ	Commercial Vacant Land (PIL for Ed)		0.052780%	0
CX	Commercial Vacant Land		0.052780%	0
XC	Commercial New Construction - Lower Tier and Education Only		0.075401%	0
XH	Commercial New Construction Shared (PIL for Ed)		0.075401%	0
XJ	Commercial New Construction Vacant Land (PIL for Ed)		0.052780%	0
XK	Commercial New Construction Excess Land (PIL for Ed)		0.052780%	0
XT	Commercial New Construction		0.075401%	0
XU	Commercial New Construction Excess Land		0.052780%	0
XX	Commercial New Construction Vacant Land		0.052780%	0
DT	Office Building		0.075401%	0
DH	Office Building Shared (PIL for Ed)		0.075401%	0
DU	Office Building Excess Land		0.052780%	0
DK	Office Building Excess Land (PIL for Ed)		0.052780%	0
YC	Office Building New Construction - Lower Tier and Education Only		0.075401%	0
YH	Office Building New Construction Shared (PIL for Ed)		0.075401%	0
YK	Office Building New Construction Excess Land (PIL for Ed)		0.052780%	0
YT	Office Building New Construction		0.075401%	0
YU	Office Building New Construction Excess Land		0.052780%	0
ST	Shopping Centre	9,740,686	0.075401%	7,345
SU	Shopping Centre Excess Land		0.052780%	0
ZC	Shopping Centre New Construction - Lower Tier and Education Only		0.075401%	0
ZH	Shopping Centre New Construction Shared (PIL for Ed)		0.075401%	0
ZK	Shopping Centre New Construction Excess Land (PIL for Ed)		0.052780%	0
ZT	Shopping Centre New Construction		0.075401%	0
ZU	Shopping Centre New Construction Excess Land		0.052780%	0
GT	Parking Lot		0.075401%	0
IT	Industrial		0.075401%	0
IH	Industrial Shared (PIL for Ed)		0.075401%	0
I4	Industrial Farm Awaiting Development II		0.075401%	0
IU	Industrial Excess Land		0.052780%	0
IX	Industrial Vacant Land		0.052780%	0
II	Industrial - Water Intake System (PIL for Ed)		0.075401%	0
IJ	Industrial Vacant Land (PIL for Ed)		0.052780%	0
IK	Industrial Excess Land (PIL for Ed)		0.052780%	0
JH	Industrial New Construction Shared (PIL for Ed)		0.075401%	0
JI	Industrial New Construction - Water Intake System (PIL for Ed)		0.075401%	0
JJ	Industrial New Construction Vacant Land (PIL for Ed)		0.052780%	0
JK	Industrial New Construction Excess Land (PIL for Ed)		0.052780%	0
JN	Industrial New Construction - Non-Generating Station (PIL for Ed)		0.075401%	0
JS	Industrial New Construction - Generating Station (PIL for Ed)		0.075401%	0
JT	Industrial New Construction		0.075401%	0
JU	Industrial New Construction Excess Land		0.052780%	0
JX	Industrial New Construction Vacant Land		0.052780%	0
LT	Large Industrial		0.075401%	0
LH	Large Industrial Shared (PIL for Ed)		0.075401%	0
LJ	Large Industrial Vacant Land (PIL for Ed)		0.052780%	0
LK	Large Industrial Excess Land (PIL for Ed)		0.052780%	0
LU	Large Industrial Excess Land		0.052780%	0
KH	Large Industrial New Construction Shared (PIL for Ed)		0.075401%	0
KI	Large Industrial New Construction - Water Intake System (PIL for Ed)		0.075401%	0
KK	Large Industrial New Construction Excess Land (PIL for Ed)		0.052780%	0
KN	Large Industrial New Construction - Non-Generating Station (PIL for Ed)		0.075401%	0
KS	Large Industrial New Construction - Generating Station (PIL for Ed)		0.075401%	0
KT	Large Industrial New Construction		0.075401%	0
KU	Large Industrial New Construction Excess Land		0.052780%	0
KX	Large Industrial New Construction Vacant Land		0.052780%	0
Total Returned Assessment		96,816,283		73,000

**Port Credit Business Improvement Area
2019 Final Tax Rates and Levy**

Appendix 3

	Description	Returned Assessment for 2019	Tax Rate	Tax \$
CT	Commercial	268,677,517	0.228966%	615,180
CH	Commercial Shared (PIL for Ed)		0.228966%	0
CM	Commercial Taxable (No Ed)		0.228966%	0
CK	Commercial Excess Land (PIL for Ed)		0.160276%	0
C4	Comm Farm Awaiting Development II		0.228966%	0
CU	Commercial Vacant Units		0.160276%	0
CJ	Commercial Vacant (PIL for Ed)		0.160276%	0
CX	Commercial Vacant Land	1,470,831	0.160276%	2,357
XC	Commercial New Construction - Lower Tier and Education Only		0.228966%	0
XH	Commercial New Construction Shared (PIL for Ed)		0.228966%	0
XJ	Commercial New Construction Vacant Land (PIL for Ed)		0.160276%	0
XK	Commercial New Construction Excess Land (PIL for Ed)		0.160276%	0
XT	Commercial New Construction	31,438,904	0.228966%	71,984
XU	Commercial New Construction Excess Land		0.160276%	0
XX	Commercial New Construction Vacant Land		0.160276%	0
DT	Office Building		0.228966%	0
DH	Office Building Shared (PIL for Ed)		0.228966%	0
DU	Office Building Vacant Units		0.160276%	0
DK	Office Building Excess Land (PIL for Ed)		0.160276%	0
YC	Office Building New Construction - Lower Tier and Education Only		0.228966%	0
YH	Office Building New Construction Shared (PIL for Ed)		0.228966%	0
YK	Office Building New Construction Excess Land (PIL for Ed)		0.160276%	0
YT	Office Building New Construction	3,959,521	0.228966%	9,066
YU	Office Building New Construction Excess Land		0.160276%	0
ST	Shopping Centre	16,245,218	0.228966%	37,196
SU	Shopping Centre Vacant Units		0.160276%	0
ZC	Shopping Centre New Construction - Lower Tier and Education Only		0.228966%	0
ZH	Shopping Centre New Construction Shared (PIL for Ed)		0.228966%	0
ZK	Shopping Centre New Construction Excess Land (PIL for Ed)		0.160276%	0
ZT	Shopping Centre New Construction	45,718,845	0.228966%	104,681
ZU	Shopping Centre New Construction Excess Land		0.160276%	0
GT	Parking Lot	6,588,159	0.228966%	15,085
IT	Industrial		0.228966%	0
IH	Industrial Shared (PIL for educ)		0.228966%	0
I4	Industrial Farm Awaiting Development II		0.228966%	0
IU	Industrial Vacant Units		0.160276%	0
IX	Industrial Vacant Land	614,250	0.160276%	984
II	Industrial - Water Intake System (PIL for Ed)		0.228966%	0
IJ	Industrial Vacant (PIL for Ed)		0.160276%	0
IK	Industrial Excess Land (PIL for Ed)		0.160276%	0
JH	Industrial New Construction Shared (PIL for Ed)		0.228966%	0
JI	Industrial New Construction - Water Intake System (PIL for Ed)		0.228966%	0
JJ	Industrial New Construction Vacant Land (PIL for Ed)		0.160276%	0
JK	Industrial New Construction Excess Land (PIL for Ed)		0.160276%	0
JN	Industrial New Construction - Non-Generating Station (PIL for Ed)		0.228966%	0
JS	Industrial New Construction - Generating Station (PIL for Ed)		0.228966%	0
JT	Industrial New Construction		0.228966%	0
JU	Industrial New Construction Excess Land		0.160276%	0
JX	Industrial New Construction Vacant Land		0.160276%	0
LT	Large Industrial		0.228966%	0
LH	Large Industrial Shared (PIL for Ed)		0.228966%	0
LJ	Large Industrial Vacant (PIL for Ed)		0.160276%	0
LK	Large Industrial Excess Land (PIL for Ed)		0.160276%	0
LU	Large Industrial Vacant Units		0.160276%	0
KH	Large Industrial New Construction Shared (PIL for Ed)		0.228966%	0
KI	Large Industrial New Construction - Water Intake System (PIL for Ed)		0.228966%	0
KK	Large Industrial New Construction Excess Land (PIL for Ed)		0.160276%	0
KN	Large Industrial New Construction - Non-Generating Station (PIL for Ed)		0.228966%	0
KS	Large Industrial New Construction - Generating Station (PIL for Ed)		0.228966%	0
KT	Large Industrial New Construction		0.228966%	0
KU	Large Industrial New Construction Excess Land		0.160276%	0
KX	Large Industrial New Construction Vacant Land		0.160276%	0
	Total Returned Assessment	374,713,245		856,533

**Streetsville Business Improvement Area
2019 Final Tax Rates and Levy**

Appendix 3

	Description	Returned Assessment for 2019	Tax Rate	Tax \$
CT	Commercial	118,968,797	0.262861%	312,722
CH	Commercial Shared (PIL for Ed)		0.262861%	0
CM	Commercial Taxable (No Ed)		0.262861%	0
CK	Commercial Excess Land (PIL for Ed)		0.184003%	0
C4	Commercial Farm Awaiting Development II		0.262861%	0
CU	Commercial Excess Land		0.184003%	0
CJ	Commercial Vacant Land (PIL for Ed)		0.184003%	0
CX	Commercial Vacant Land	3,049,000	0.184003%	5,610
XC	Commercial New Construction - Lower Tier and Education Only		0.262861%	0
XH	Commercial New Construction Shared (PIL for Ed)		0.262861%	0
XJ	Commercial New Construction Vacant Land (PIL for Ed)		0.184003%	0
XK	Commercial New Construction Excess Land (PIL for Ed)		0.184003%	0
XT	Commercial New Construction	4,590,317	0.262861%	12,066
XU	Commercial New Construction Excess Land		0.184003%	0
XX	Commercial New Construction Vacant Land		0.184003%	0
DT	Office Building		0.262861%	0
DH	Office Building Shared (PIL for Ed)		0.262861%	0
DU	Office Building Excess Land		0.184003%	0
DK	Office Building Excess Land (PIL for Ed)		0.184003%	0
YC	Office Building New Construction - Lower Tier and Education Only		0.262861%	0
YH	Office Building New Construction Shared (PIL for Ed)		0.262861%	0
YK	Office Building New Construction Excess Land (PIL for Ed)		0.184003%	0
YT	Office Building New Construction		0.262861%	0
YU	Office Building New Construction Excess Land		0.184003%	0
ST	Shopping Centre	21,164,750	0.262861%	55,634
SU	Shopping Centre Excess Land		0.184003%	0
ZC	Shopping Centre New Construction - Lower Tier and Education Only		0.262861%	0
ZH	Shopping Centre New Construction Shared (PIL for Ed)		0.262861%	0
ZK	Shopping Centre New Construction Excess Land (PIL for Ed)		0.184003%	0
ZT	Shopping Centre New Construction		0.262861%	0
ZU	Shopping Centre New Construction Excess Land		0.184003%	0
GT	Parking Lot	487,250	0.262861%	1,281
IT	Industrial		0.262861%	0
IH	Industrial Shared (PIL for Ed)		0.262861%	0
I4	Industrial Farm Awaiting Development II		0.262861%	0
IU	Industrial Excess Land		0.184003%	0
IX	Industrial Vacant Land		0.184003%	0
II	Industrial - Water Intake System (PIL for Ed)		0.262861%	0
IJ	Industrial Vacant Land (PIL for Ed)		0.184003%	0
IK	Industrial Excess Land (PIL for Ed)		0.184003%	0
JH	Industrial New Construction Shared (PIL for Ed)		0.262861%	0
JI	Industrial New Construction - Water Intake System (PIL for Ed)		0.262861%	0
JJ	Industrial New Construction Vacant Land (PIL for Ed)		0.184003%	0
JK	Industrial New Construction Excess Land (PIL for Ed)		0.184003%	0
JN	Industrial New Construction - Non-Generating Station (PIL for Ed)		0.262861%	0
JS	Industrial New Construction - Generating Station (PIL for Ed)		0.262861%	0
JT	Industrial New Construction		0.262861%	0
JU	Industrial New Construction Excess Land		0.184003%	0
JX	Industrial New Construction Vacant Land		0.184003%	0
LT	Large Industrial		0.262861%	0
LH	Large Industrial Shared (PIL for Ed)		0.262861%	0
LJ	Large Industrial Vacant Land (PIL for Ed)		0.184003%	0
LK	Large Industrial Excess Land (PIL for Ed)		0.184003%	0
LU	Large Industrial Excess Land		0.184003%	0
KH	Large Industrial New Construction Shared (PIL for Ed)		0.262861%	0
KI	Large Industrial New Construction - Water Intake System (PIL for Ed)		0.262861%	0
KK	Large Industrial New Construction Excess Land (PIL for Ed)		0.184003%	0
KN	Large Industrial New Construction - Non-Generating Station (PIL for Ed)		0.262861%	0
KS	Large Industrial New Construction - Generating Station (PIL for Ed)		0.262861%	0
KT	Large Industrial New Construction		0.262861%	0
KU	Large Industrial New Construction Excess Land		0.184003%	0
KX	Large Industrial New Construction Vacant Land		0.184003%	0
	Total Returned Assessment	148,260,114		387,313

**Malton Business Improvement Area
2019 Final Tax Rates and Levy**

Appendix 3

	Description	Returned Assessment for 2019	Tax Rate	Tax \$
CT	Commercial	210,057,680	0.046617%	97,922
CH	Commercial Shared (PIL for Ed)		0.046617%	0
CM	Commercial Taxable (No Ed)		0.046617%	0
CK	Commercial Excess Land (PIL for Ed)		0.032632%	0
C4	Commercial Farm Awaiting Development II		0.046617%	0
CU	Commercial Excess Land	196,480	0.032632%	64
CJ	Commercial Vacant Land (PIL for Ed)		0.032632%	0
CX	Commercial Vacant Land	1,313,000	0.032632%	428
XC	Commercial New Construction - Lower Tier and Education Only		0.046617%	0
XH	Commercial New Construction Shared (PIL for Ed)		0.046617%	0
XJ	Commercial New Construction Vacant Land (PIL for Ed)		0.032632%	0
XK	Commercial New Construction Excess Land (PIL for Ed)		0.032632%	0
XT	Commercial New Construction	3,083,000	0.046617%	1,437
XU	Commercial New Construction Excess Land		0.032632%	0
XX	Commercial New Construction Vacant Land		0.032632%	0
DT	Office Building	1,541,725	0.046617%	719
DH	Office Building Shared (PIL for Ed)		0.046617%	0
DU	Office Building Excess Land		0.032632%	0
DK	Office Building Excess Land (PIL for Ed)		0.032632%	0
YC	Office Building New Construction - Lower Tier and Education Only		0.046617%	0
YH	Office Building New Construction Shared (PIL for Ed)		0.046617%	0
YK	Office Building New Construction Excess Land (PIL for Ed)		0.032632%	0
YT	Office Building New Construction		0.046617%	0
YU	Office Building New Construction Excess Land		0.032632%	0
ST	Shopping Centre	90,691,799	0.046617%	42,278
SU	Shopping Centre Excess Land		0.032632%	0
ZC	Shopping Centre New Construction - Lower Tier and Education Only		0.046617%	0
ZH	Shopping Centre New Construction Shared (PIL for Ed)		0.046617%	0
ZK	Shopping Centre New Construction Excess Land (PIL for Ed)		0.032632%	0
ZT	Shopping Centre New Construction		0.046617%	0
ZU	Shopping Centre New Construction Excess Land		0.032632%	0
GT	Parking Lot		0.046617%	0
IT	Industrial	6,573,778	0.046617%	3,064
IH	Industrial Shared (PIL for Ed)		0.046617%	0
I4	Industrial Farm Awaiting Development II		0.046617%	0
IU	Industrial Excess Land		0.032632%	0
IX	Industrial Vacant Land	696,250	0.032632%	227
II	Industrial - Water Intake System (PIL for Ed)		0.046617%	0
IJ	Industrial Vacant Land (PIL for Ed)		0.032632%	0
IK	Industrial Excess Land (PIL for Ed)		0.032632%	0
JH	Industrial New Construction Shared (PIL for Ed)		0.046617%	0
JI	Industrial New Construction - Water Intake System (PIL for Ed)		0.046617%	0
JJ	Industrial New Construction Vacant Land (PIL for Ed)		0.032632%	0
JK	Industrial New Construction Excess Land (PIL for Ed)		0.032632%	0
JN	Industrial New Construction - Non-Generating Station (PIL for Ed)		0.046617%	0
JS	Industrial New Construction - Generating Station (PIL for Ed)		0.046617%	0
JT	Industrial New Construction		0.046617%	0
JU	Industrial New Construction Excess Land		0.032632%	0
JX	Industrial New Construction Vacant Land		0.032632%	0
LT	Large Industrial		0.046617%	0
LH	Large Industrial Shared (PIL for Ed)		0.046617%	0
LJ	Large Industrial Vacant Land (PIL for Ed)		0.032632%	0
LK	Large Industrial Excess Land (PIL for Ed)		0.032632%	0
LU	Large Industrial Excess Land		0.032632%	0
KH	Large Industrial New Construction Shared (PIL for Ed)		0.046617%	0
KI	Large Industrial New Construction - Water Intake System (PIL for Ed)		0.046617%	0
KK	Large Industrial New Construction Excess Land (PIL for Ed)		0.032632%	0
KN	Large Industrial New Construction - Non-Generating Station (PIL for Ed)		0.046617%	0
KS	Large Industrial New Construction - Generating Station (PIL for Ed)		0.046617%	0
KT	Large Industrial New Construction		0.046617%	0
KU	Large Industrial New Construction Excess Land		0.032632%	0
KX	Large Industrial New Construction Vacant Land		0.032632%	0
	Total Returned Assessment	314,153,712		146,140

City of Mississauga

Corporate Report



Date: 2019/04/08

To: Chair and Members of General Committee

From: Gary Kent, CPA, CGA, ICD.D,
Commissioner of Corporate Services and Chief
Financial Officer

Originator's files:
PO.11.SIR

Meeting date:
2019/05/01

Subject

Surplus Declaration of City lands adjacent to 731 Sir Richard's Road (Ward 7)

Recommendation

1. That the Corporate Report titled "Surplus Declaration of City lands adjacent to 731 Sir Richard's Road" dated April 8, 2019 from the Commissioner of Corporate Services & Chief Financial Officer, be received.
2. That City lands adjacent to 731 Sir Richard's Road, located south of The Queensway between Oneida Crescent and Pineneedle Row, containing an area of approximately 370 square meters (3,983 square feet), be declared surplus to the City's requirements for the purpose of sale to the abutting owner of 731 Sir Richard's Road, legally described under the *Land Titles Act* as PIN #s 13359-2465 (LT), 13359-2459 (LT) and 13359-2462 (LT), in the City of Mississauga, Regional Municipality of Peel, in Ward 7.
3. That Realty Services staff be authorized to proceed to dispose of the subject lands to be declared surplus, at fair market value.
4. That all steps necessary to comply with the requirements of Section 2.(1) of the City Notice by-law 215-08 be taken, including giving notice to the public by posting a notice on the City of Mississauga's website for a two week period, where the expiry of the two week period will be at least one week prior to the execution of an agreement for the sale of the subject lands.

Background

The City is the registered owner of the following parcels of land adjoining 731 Sir Richard's Road:

1. PIN 13359-2465: Block G, Plan M-12, being a one-foot reserve, save and except Parts 5 & 6, Plan 43R-33350, City of Mississauga

General Committee	2019/04/08	2
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Originators files: PO.11.SIR

2. PIN 13359-2459: Block B, Plan M-12, save and except Parts 3 & 4, 43R-33350, City of Mississauga
3. PIN 13359-2464: Part Lot 8, Range 3, CIR, as in RO868679 save and except Parts 1 & 2, 43R-33350, City of Mississauga

The above parcels were transferred to the City of Mississauga from The Regional Municipality of Peel under authority of Regional Resolution 88-239 on October 25, 1988. This occurred after The Queensway, west of Mavis Road, was transferred from a Regional road to a municipal road. These lands are located adjacent to the hydro corridor along The Queensway between Pineneedle Row and Oneida Crescent.

By its adoption of Recommendation GC-0392-210 on May 10, 2010, the City declared the lands adjacent to 2281 Oneida Crescent, 739 Sir Richard's Road and 747 Sir Richard's Road surplus to the City's requirements and subsequent sale to the adjacent owners. The lands are shown as Parts 1, 2 and 3 on Appendix 2. To date, the owner of 2285 Sir Richard's Road has not expressed an interest in acquiring the City lands, shown as Part 2 on Appendix 2.

Comments

The property owner of 731 Sir Richard's Road approached the City to purchase the City's adjoining lands. The property owner executed a Land Lease dated March 17, 1981 with the Region of Peel for the continued use and enjoyment of these lands, as long as the party owned the adjoining lands. According to the terms of the agreement, once the adjoining lands changed ownership, the lease would terminate. Although the Region of Peel has files concerning this matter, the agreement was never approved or executed by the Region.

Realty Services has completed its circulation and received confirmation that there are no concerns with the lands being declared surplus to the City's requirements and sold.

The lands have been circulated to external utility companies and no easement protection is required.

Prior to the sale of the subject lands, public notice will have been given by the posting of a notice of proposed sale on the City of Mississauga's website for a two week period, where the expiry of the two week period will be at least one week before the execution of the agreement for the sale of the said lands. This notice satisfied the requirements of the City Notice By-law 0215-2008, as amended by by-law 0376-2008.

An Agreement of Purchase and Sale to convey the subject property to the abutting owner will be processed pursuant to Delegated Authority By-Law 0148-2018.

Financial Impact

There is no financial impact from declaring the lands surplus. There will, however, be revenue generated to the City by the subsequent sale.

Conclusion

As the City parcels identified in this report are not required for municipal purposes, it is reasonable to declare these parcels surplus to the City needs. The subject lands do not require any easement protection as a result of the disposition.

Attachments

Appendix 1: Approximate location of lands to be declared surplus

Appendix 2: Sketch showing the parcel of land to be declared surplus



Gary Kent, CPA, CGA, ICD.D, Commissioner of Corporate Services and Chief Financial Officer

Prepared by: Susy Costa, Project Leader, Realty Services, Facilities & Property Management





Parts 1, 3 & 4 - Lands disposed of to adjacent owners

Part 2 - City owned lands

Part 5 - Subject lands to be declared surplus



Appendix 2

Realty Services

Sketch showing lands subject to be declared surplus
731 SIR RICHARD'S ROAD
CITY OF MISSISSAUGA
PO-13-SIR



City of Mississauga
Corporate Report



Date: 4/8/2019

Originator's files:

To: Chair and Members of General Committee

From: Gary Kent, CPA, CGA, ICD.D,
 Commissioner of Corporate Services and Chief
 Financial Officer

Meeting date:
 2019/05/01

Subject

Contract Renewals for HLP, Inc. (Chameleon, Animal Licenses) and Enghouse Transportation Ltd. (Interactive Voice Response to Hastus System)

Recommendation

1. That the Purchasing Agent be authorized to execute all contracts and related ancillary documents with respect to the purchase between the City and HLP, Inc. for the supply of Chameleon software maintenance and support at an estimated cost of \$72,000 USD exclusive of taxes, based on a three year contract term with an option to extend for two additional one year renewal terms as detailed in the Contract Renewals for HLP, Inc. (Chameleon, Animal Licenses) and Enghouse Transportation Ltd. (Interactive Voice Response to Hastus System) Corporate Report Dated April 8, 2019, by the Commissioner of Corporate Services and Chief Financial Officer, in accordance with the City's Purchasing By-law 374-06, as amended.
2. That the Purchasing Agent be authorized to execute all contracts and related ancillary documents with respect to the purchase between the City and Enghouse Transportation Ltd. for professional services and the supply of Busline Interactive Voice Response software maintenance and support at an estimated cost of \$177,952 CAD exclusive of taxes, based on a three year contract term with an option to extend for two additional one year renewal terms as detailed in the Contract Renewals for HLP, Inc. (Chameleon, Animal Licenses) and Enghouse Transportation Ltd. (Interactive Voice Response to Hastus System) Corporate Report Dated April 8, 2019, by the Commissioner of Corporate Services and Chief Financial Officer, in accordance with the City's Purchasing By-law 374-06, as amended.
3. That Council approve HLP, Inc. (Chameleon, Animal Licenses) and Enghouse Transportation Ltd. (Interactive Voice Response to Hastus System) as a "City Standard" for the next five years in accordance with the City's Purchasing By-law 374-06 as amended.

General Committee	2019/04/08	2
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Background

The following two systems are key to the operations of the Transportation & Works Department:

1. HLP, Inc. (Chameleon, Animal Licenses)
2. Enghouse Transportation (Interactive Voice Response to Hastus System)

The systems have been maintained and kept current to meet the objectives of the business.

There is an opportunity to renew these and put in place longer term contracts to provide some certainty for business operations.

In 1994, the City procured the HLP, Inc. (Chameleon, Animal Licenses) system to manage animal licensing in the Animal Services business area. The City started with one server plus three workstation licenses and subsequently upgraded to six workstations, nine workstations and then in 2012, upgraded to one server with unlimited workstations and more than 25 field services licenses. This reflected the best value for the City to meet its business requirements.

The Enghouse Transportation (Interactive Voice Response to Hastus) application was originally procured from Ontira Communications Inc. through a competitive RFP process in 2007, under FA.49.159-07. The application was implemented in 2009 and we started paying maintenance in 2010 until present, with a 5% increase each year. Through amalgamation, the vendor name changed to Enghouse Transportation Ltd. in 2012.

Comments

In 2019, the licenses are being renewed for three more years until 2022 for both systems with HLP, Inc. (Chameleon, Animal Licenses) and Enghouse Transportation (Interactive Voice Response to Hastus). Throughout the three year period, HLP, Inc. and Enghouse Transportation Ltd. are required to provide professional services for minor upgrades and anticipated future integrations.

After discussions with area leads in each of the business groups, City staff are confident that the HLP, Inc. and Enghouse Transportation systems can meet business needs for the next three years with an option to extend for two additional one year renewal terms.

Throughout the next three years, IT and Materiel Management will form a long term strategy to replace both systems either through a competitive procurement process or develop the systems with internal resources.

These term contracts for IT system maintenance and support need Council approval as per purchasing By-law 374-06, Schedule "A" for High Value Non-competitive purchase(s) over \$100,000.

General Committee	2019/04/08	3
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Purchasing By-law Authorization

The recommendation in this report is made in accordance with Schedule A of the Purchasing By-law #374-06, items 1(b)(xi), which states that a single source procurement method may be applied when, “a need exists for compatibility with or for the maintenance and support of a City Standard and there are no reasonable alternatives, substitutes or accommodations.”

Information Technology, Material Management and Legal Services staff will collaborate to establish the detailed requirements, negotiate the final arrangements and prepare the requisite forms including the contract agreements.

Financial Impact

HLP, Inc. (Chameleon, Animal Licenses)

The normal annual renewal on maintenance for three years is \$81,800 USD or more, subject to yearly invoicing and Chameleon Public Access License. The new negotiated three year renewal contract is \$72,000 USD (\$24,000 USD per year for 2019, 2020, 2021) with no increase, resulting in a cost savings of \$9,800 USD. Sufficient funding is in the Information Technology Maintenance Operating Budget, with future increases subject to budget approval.

Enghouse Transportation Ltd. (Interactive Voice Response to Hastus)

The negotiated three year renewal contract is \$77,952 CAD (\$25,984 CAD per year for 2019, 2020, 2021); and \$100,000 CAD for professional services is forecasted at contract rate, totalling \$177,952 CAD. Sufficient funding is in the Information Technology Maintenance Operating Budget, with future increases subject to budget approval. Professional Services engagement will be covered through future capital budget requests, subject to the annual budget planning and approval process.

Conclusion

It is recommended that the existing maintenance contracts for HLP, Inc. and Enghouse Transportation Ltd. be renewed, in addition to the **Interactive Voice Response** to Hastus provision for professional services, as per the above listed cost outline.

Attachments

Appendix 1: Statement of Work Summary

A handwritten signature in black ink that reads "G. Kent." The signature is written in a cursive, flowing style.

Gary Kent, CPA, CGA, ICD.D, Commissioner of Corporate Services and Chief Financial Officer

Prepared by: Susan Petri, Manager, IT - Project Portfolio & Development, Transportation & Works

Statement of Work Summary

The following represents the key deliverables from each of the two vendors.

1. HLP, Inc. – Ongoing annual maintenance and support for Chameleon:

- Limited to one server, unlimited workstations and unlimited field service units.
- Chameleon Public Access License.

a) Chameleon/CMS Annual Support & Maintenance – 11/1/2019 – 10/31/2020 \$ 24,000.00

b) Chameleon/CMS Annual Support & Maintenance – 11/1/2020 – 10/31/2021 \$ 24,000.00

c) Chameleon/CMS Annual Support & Maintenance – 11/1/2021 – 10/31/2022 \$ 24,000.00

Total: \$ 72,000.00 USD

There are no maintenance cost increases through to October 31, 2022

2. Enghouse Transportation – Ongoing annual maintenance and support for Busline IVR:

a) Busline IVR Maintenance & Support – 8/1/2019 – 7/31/2020 \$ 25,984.00

b) Busline IVR Maintenance & Support – 8/1/2020 – 7/31/2021 \$ 25,984.00

c) Busline IVR Maintenance & Support – 8/1/2021 – 7/31/2022 \$ 25,984.00

d) Professional Services to support future integrations \$ 100,000.00

Total: \$ 177,952.00 CAD

There are no maintenance cost increases through to June 31, 2022

REPORT 2 – 2019

To: CHAIR AND MEMBERS OF GENERAL COMMITTEE

The Environmental Action Committee presents its second report for 2019 and recommends:

EAC-0006-2019

That Councillor Matt Mahoney be appointed Chair of the Environmental Action Committee for the term ending November 14, 2022 or until a successor is appointed.

(EAC-0006-2019)

EAC-0007-2019

That Councillor Stephen Dasko be appointed Vice-Chair of the Environmental Action Committee for the term ending November 14, 2022 or until a successor is appointed.

(EAC-0007-2019)

EAC-0008-2019

That the deputation by Brad Butt, Vice-President, Government & Stakeholder Relations, Mississauga Board of Trade (MBOT) to speak on the Overview of Climate Smart Business Program be received.

(EAC-0008-2019)

EAC-0009-2019

That the deputation and associated presentation by Natalie Adams, Sustainable Procurement Coordinator to present on the Sustainable Procurement Policy be received.

(EAC-0009-2019)

EAC-0010-2019

That the deputation and associated presentation by Anthea Foyer, Project Leader Smart Cities to present on the Smart City Master Plan be received.

(EAC-0010-2019)

EAC-0011-2019

That the Group Member Appointments to Environmental Action Committee be deferred to the next EAC meeting for further discussion.

(EAC-0011-2019)

REPORT 2 – 2019

To: CHAIR AND MEMBERS OF GENERAL COMMITTEE

The Towing Industry Advisory Committee presents its second report for 2019 and recommends:

TIAC-0002-2019

That Councillor Starr be appointed as Chair of the Towing Industry Advisory Committee for a term ending November 14, 2022 or until a successor is appointed.

(TIAC-0002-2019)

TIAC-0003-2019

That Councillor Carlson be appointed as the Vice-Chair of the Towing Industry Advisory Committee for a term ending November 14, 2022 or until a successor is appointed.

(TIAC-0003-2019)

TIAC-0004-2019

That the report from the Commissioner of Transportation and Works dated April 11, 2019 entitled "Update Report on Tow Truck Chasing in the City of Mississauga", be received for information.

(TIAC-0004-2019)

TIAC-0005-2019

That the amended 2019 Towing Industry Advisory Committee Action List be received.

(TIAC-0005-2019)

REPORT 2 - 2019

To: CHAIR AND MEMBERS OF GENERAL COMMITTEE

The Traffic Safety Council presents its second report for 2019 and recommends:

TSC-0018-2019

That Peter Westbrook be appointed as Chair of the Traffic Safety Council for the term ending in November 14, 2022 or until a successor is appointed.

(TSC-0018-2019)

TSC-0019-2019

That Louise Goegan be appointed as Vice-Chair of the Traffic Safety Council for the term ending in November 14, 2022 or until a successor is appointed.

(TSC-0019-2019)

TSC-0020-2019

1. That the request for the placement of a crossing guard at the intersection of Artesian Drive and Fullwell Road, for the students attending Artesian Drive Public School, be denied as the warrants are not met.
2. That Transportation and Works be requested to review the signage and to replace faded signage on Artesian Drive, Dunoon Drive and Fullwell Road.
3. That Parking Enforcement be requested to enforce "No Stopping" zones on Artesian Drive, Dunoon Drive and Fullwell Road once signage in place.
4. That Transportation and Works road safety be requested to review the intersection of Fullwell Road and Artesian Drive for consideration of suitability for the implementation of a crossover.
5. That the principal of Artesian Drive Public School be requested to remind parents to use the kiss and ride in the morning instead of parking on Fullwell Road and Dunoon Drive.

(Ward 8)

(TSC-0020-2019)

TSC-0021-2019

That the request for the placement of a crossing guard at the intersection of Rathburn Road and Confederation Parkway, for the students attending Corpus Christi Catholic Elementary School, be denied as the warrants are not met.

(Ward 4)

(TSC-0021-2019)

TSC-0022-2019

1. That the request for the placement of a crossing guard at the intersection of Kelly Road and Constable Road for the students attending Hillside Public school, be denied as the warrants have not been met.
2. That Transportation and Works be requested to install a speed board on Kelly Road in the area of Hillside Public School.

(Ward 2)

(TSC-0022-2019)

TSC-0023-2019

That the warrants have been met for the placement of a school crossing guard at the intersection of Kelly Road and Truscott Drive for the students attending Hillside Public School.

(Ward 2)

(TSC-0023-2019)

TSC-0024-2019

1. That the request for the placement of a crossing guard located at the intersection of Daralea Heights and Mississauga Valley Boulevard for the students attending Canadian Martyrs Catholic Elementary School and Briarwood Public School, be denied as the warrants are not met.
2. That Transportation and Works be requested to paint zebra markings on the north and east legs and paint stop bars on all three legs at the intersection of Daralea Heights and Mississauga Valley Boulevard, for the students attending Canadian Martyrs Catholic Elementary School and Briarwood Public School.
3. That Transportation and Works be requested to review and replace faded signage at the intersection of Daralea Heights and Mississauga Valley Boulevard.

(Ward 4)

(TSC-0024-2019)

TSC-0025-2019

1. That the request for the placement of a crossing guard at the intersection of Confederation Parkway and Prince of Wales Drive for the students attending Corpus Christi Catholic Elementary School, be denied as the warrants are not met.
2. That Transportation and Works be requested to review and replace faded signage at the intersection of Confederation Parkway and Prince of Wales Drive.

(Ward 4)

(TSC-0025-2019)

TSC-0026-2019

That Sushil Kumra, Citizen Member of Traffic Safety Council be appointed to the Road Safety Committee as the representative for the Traffic Safety Council.

(TSC-0026-2019)

TSC-0027-2019

That the Transportation and Works Action Items List for March 2019 be received for information.
(TSC-0027-2019)

TSC-0028-2019

That the Traffic Safety Council Site Inspections Statistics Report up to April 24, 2019, be received for information.
(TSC-0028-2019)

TSC-0029-2019

1. That the Principal of St. Timothy Catholic Elementary School be requested to remind parents not to stop to drop off students in the "No Stopping" zone on Florian Road in front of and near the walkway at the rear of St. Timothy Catholic Elementary School and instead park on Florian Road where it is legal to park.
2. That the Dufferin-Peel Catholic District School Board be requested to review the operation of the kiss and ride in front of St. Timothy Catholic Elementary School.
(Ward 7)
(TSC-0029-2019)

TSC-0030-2019

That the Parking Enforcement in School Zone Report for March 2019 be received for information.
(TSC-0030-2019)

TSC-0031-2019

1. That the crossing guard located at the intersection of Truscott Drive and Buckby Road for the students attending St. Helen Catholic Elementary School and Hillside Public School be removed effective June 29, 2019, as the warrants are not met for the retention of the crossing guard.
2. That the Principals of St. Helen Catholic Elementary School and Hillside Public School be requested to notify the parents and students prior to June 1, 2019, that the crossing guard located at Truscott Drive and Buckby Road will be removed.
3. That the Principal of Hillside Public School be requested to remind students and parents to cross Truscott Drive with the new school crossing guard at Kelly Road and Truscott Drive.
4. That Transportation and Works be requested to paint crosswalk lines on the south leg of the intersection across Buckby Road, for the students attending St. Helen Catholic Elementary School and Hillside Public School.
5. That Traffic Safety Council be requested to re-inspect the intersection of Truscott Drive and Buckby Road in October 2019, for the students attending St. Helen Catholic Elementary School and Hillside Public School.
(Ward 2)
(TSC-0031-2019)



RECOMMENDATION GC-0262-2019
Approved by General Committee on May 1, 2019

GC-0262-2019

That the closed session report dated April 30, 2019 from Mary Ellen Bench, City Solicitor entitled Region of Peel Purchasing By-law and contracts with Deloitte LLP and Watson & Associates Economists Ltd. be made public.

City of Mississauga Corporate Report



Closed Session - This report was made public by
General Committee as per GC Recommendation
GC-0262-2019

Originator's files:

Date: 4/30/2019

To: Chair and Members of General Committee

From: Mary Ellen Bench, BA, JD, CS, CIC.C, City Solicitor

Meeting date:

5/1/2019

Subject

Region of Peel Purchasing By-law and contracts with Deloitte LLP and Watson & Associates Economists Ltd.

Recommendation

That Council receive the report of the City Solicitor dated April 30, 2019 concerning the Peel Region Purchasing By-law and contracts with Deloitte LLP and Watson & Associates Economists Ltd.

Report Highlights

- City legal staff was requested to retain external counsel to provide a legal opinion on whether the Region of Peel contravened its Procurement By-law when contracts were issued to Deloitte and Watson & Associates regarding the regional governance review analysis
- External legal counsel have rendered their legal opinion, concluding that there is good reason to believe that the Region of Peel did contravene its Procurement By-law

Background

At the Peel Regional Council meeting of April 11, 2019, it was revealed that the Peel report on regional governance was prepared based on advice acquired through two directly negotiated contracts with Deloitte (\$225,000) and Watson & Associates (approx. \$100,000) which exceeded the \$250,000 maximum as set out in the Region of Peel Procurement By-law.

Councillor Parrish questioned whether Peel had engaged in contract splitting at the Region of Peel Council meeting and advice was provided by the Regional Solicitor's representative that it was not.

The issue was raised under the heading Region of Peel at the next City General Committee meeting. Staff were directed to obtain an external legal opinion regarding whether there was a breach of the Region's By-law.

Comments

The firm of Cassels Brock was retained to provide an independent legal opinion on the matter of whether the Region of Peel contravened its Procurement By-law when the Region entered into contracts with Deloitte and Watson & Associates. Cassels Brock is on the list of external legal counsel retainers with Legal Services to provide legal services to the City.

Cassels Brock was requested to carry out a legal analysis with respect to the application of section 7.2 of the Region of Peel Procurement By-law 30-2018 in regards to the procurement of professional services by the Region to provide for the Region a financial analysis related to the Regional Government Review being undertaken by the Province.

Cassels Brock has now provided their detailed legal analysis, a copy of which is attached to this report for Council's reference and consideration. External legal counsel have opined there is a good basis to conclude that the procurement by the Region of Peel of the contracts with Deloitte and Watson & Associates did contravene section 7.2 of the Region of Peel Procurement By-law.

Financial Impact

N/A

Conclusion

External legal counsel retained by the City have carried out an independent review of the question whether the Region of Peel acted contrary to its Procurement By-law when the Region entered into contracts with Deloitte LLP and Watson & Associates Economists Ltd. Concerning the regional governance review project. External legal counsel have concluded as follows:

Based on the interpretation of the By-law set out above, there is a good basis to conclude that the procurement for the financial impact analysis resulting in the Report in relation to the Regional Government Review contravened section 7.2 of the By-law.

Attachments

Appendix 1: Legal opinion from Cassels Brock dated April 29, 2019



Mary Ellen Bench, BA, JD, CS, CIC.C, City Solicitor

Prepared by: Michal Minkowski, BA, JD, DTS, CS

April 29, 2019

Privileged and Confidential
By E-mail

cstorto@casselsbrock.com
tel: 416.869.5747
fax: 416.640.3151
file: 39360-73

Graham Walsh
Deputy City Solicitor
Legal Services Department
City of Mississauga
300 City Centre Drive
Mississauga, ON L5B 3C1

Dear Graham:

Re: Peel Region Procurement of the Deloitte Report entitled "Financial Impact Analysis of Service Delivery Models"

We have been requested to provide an opinion with respect to an interpretation of the Region of Peel Procurement By-law 30-2018. In particular, we have been asked to examine the application of section 7.2 as it applies to the procurement of professional services for the purpose of providing a financial analysis related to the Regional Government Review being undertaken by the Province. As such, this opinion is limited to the analysis of the application of section 7.2 and we give no opinion respecting the balance of the By-law.

BACKGROUND

In late January and early February 2019, the Region of Peel ("Region") directly negotiated a contract with Deloitte LLP ("Deloitte"). The Region also directly negotiated a contract with Watson & Associates Economists Ltd. ("Watson"). It is unknown when Watson was retained. The final product was a report from Deloitte entitled "Financial Impact Analysis of Service Delivery Models" dated March 19, 2019 (the "Report"). Watson is acknowledged as having provided input to the Report. The separate contracts were for approximately \$225,000 and \$100,000 respectively. On March 26, 2019, Deloitte also provided an analysis of the Day & Day report prepared for the City of Mississauga, increasing its scope of work by approximately \$15,000.

It is understood that both Deloitte and Watson were retained by the Region of Peel's Chief Administrative Officer and Chief Financial Officer. The procurement was not directed by Regional Council. It was identified at the Regional Council meeting on April 25, 2019 that Deloitte had asked the Region for certain information which was subsequently supplied by Watson, presumably being the inputs related to the review of arbitration decisions involving municipal restructurings and development charges identified as Appendices E and F to the Report. Upon further questioning at the Regional Council meeting, Deloitte stated that they did not think they could have done the work Watson did.

PROCUREMENT BY-LAW 30-2018

Part V – Procurement Authorities and Procurement Methods

Section 5.1 of the Region's Procurement By-law (the "By-law") states that unless otherwise set out in the By-law, all goods and services shall be authorized in accordance with the provisions of Schedule "B". Schedule "B" provides the Chief Financial Officer with the authority to procure services by way of direct negotiation where the value of the procurement is between \$100,000 and \$250,000. Any procurements greater than \$250,000 are to be authorized by Regional Council.

Part VII - Prohibitions and Compliance

A concern has arisen as to whether the procurement for the financial analysis related to the Regional Government Review may be considered to be contract splitting. Contract splitting is contemplated in Part VII of the By-law. The relevant provisions state:

7.1 All persons involved in the acquisition of goods and services provided for in this By-law shall act in a manner consistent with the requirements and objectives of this By-law.

7.2 No procurement of goods and services or any arrangements with respect to the procurement shall be made where quantity or delivery is divided or in any other manner arranged so that the price or value of goods and services to be acquired or the individual estimated value of goods to be disposed is artificially reduced. Without limiting the foregoing, where goods and services of the same kind or type are required in connection with one project, all of those goods and services shall be included in determining the price or value for the purposes of this By-law.

The language in section 7.2 prohibits contract splitting with respect to a procurement. In this case, the Region procured professional services for the purposes of completing a financial impact analysis relating to the Regional Government Review, resulting in the Report. There was a singular purpose and sole outcome, albeit with input from more than one entity. The last sentence of section 7.2 is not an exception but rather, a clarification or example whereby goods and services of the same kind or type in connection with one project shall be combined for the purposes of determining the value.

At the Regional Council meeting of April 11, 2019, Regional staff distinguished the two consultants by identifying Deloitte as having accounting and auditing expertise while Watson are economists with expertise in development charges and thus, do not offer the same kind or type of service. It may be argued that Deloitte's comments that it could not have done Watson's work support the position that the work was not the same kind or type. However, it remains that all of the work in completing the financial analysis was required for the same project, being one report. In my view, it is also reasonable to identify their services as similar or the same type in that they both provide municipal finance consulting advice. In this case, their advice was provided for the purpose of producing the Report, a single product.

There is no language in section 7.2 to suggest that the inverse is true, being that where goods and services are not of the same kind or type, they may be split. If they are related to the same procurement or project, the values are to be combined as part of the overall project cost. By referring to goods and services in the plural form, it is my view that the section expressly contemplates that there may be various inputs to a procurement or project, which are used in the singular form. In my view, the intent is to ensure that single projects are priced as a whole and, where there may be multiple components, not split or "artificially reduced". On this basis, section 7.2 explicitly requires that the values for the work done by Deloitte and Watson should have been combined.

It should be noted that section 2.1.31 defines "procure". It states:

2.1.31 "procure" or "purchase" includes the acquisition of any legal or equitable interest, right or title in goods and services or the making of any contract or offer for goods and services and includes the lease of goods and services; and "procured" "procuring" "purchased" and "purchasing" shall have similar meanings.

This definition does not limit a procurement as being a single contract and thus, section 7.2 should not distinguish a procurement based on single contracts alone. One cannot overlook references such as "in any other manner arranged", "artificially reduced" and "one project" which, when considered together with the overall intent and objective of the By-law as specifically required by section 7.1, necessitates a broader interpretation of section 7.2.

One of the guiding principles of the By-law is that in the interpretation and application of the By-law, regard shall be had to the principle of maintaining trust and confidence in the stewardship of public funds through objective, fair, transparent and efficient procurement processes. The prohibition against contract splitting is intended to uphold this principle.

PRECEDENTS

There is limited case law on the issue of contract splitting. The case of *Weinmann Electric Ltd. v. Niagara (Regional Municipality)* involved a situation whereby Niagara staff were authorized to issue simple purchase orders for procurements of less than \$10,000. Consecutive contracts were awarded to a single contractor to perform electrical and traffic signalization work on a day labour basis. Weinmann, a competing contractor who was on the list of pre-qualified contractors, challenged the Region, alleging that it breached its purchasing by-laws and engaged in a pervasive practice of contract splitting. The Superior Court found that the by-laws did not restrict the amount of work that could be procured from a single supplier and did not impose any restrictions on the use of day labour.

In this case, the purchasing by-laws at issue specifically stated that "[n]o Contract for Goods and Services may be divided into two (2) or more parts to avoid the requirements of this by-law." Moreover, "Contract" was defined in the purchasing by-laws as "a binding agreement between two or more parties that creates an obligation to provide Goods or perform Services." As a result, the Superior Court held that a distinction must be made between splitting a task (which

was not prohibited) and splitting a Contract (which was prohibited)¹. Specifically, the Court found that the by-law did not restrict the amount of work procured from a single supplier.

On appeal, the appellant argued that the prohibition on contract splitting required the total project or annual requirement to be considered, particularly given that the value of work performed on an annual basis was approximately \$750,000. The Ontario Court of Appeal noted that this submission was not put before the trial judge and that it relied on language in a previous by-law that was deleted from successor by-laws. The Court of Appeal upheld the lower court's decision although the panel of judges noted that they were "mindful of the concern that the prohibition on contract-splitting should not be circumvented by subterfuge"². This case is distinct from the current circumstances, both on the unique facts and the terms of the by-laws at issue. This case demonstrates the importance of interpreting the precise terms of the applicable by-law. In the By-law, reference is made to "one project" and not limited to one "contract".

One of the guiding principles in the By-law includes the promotion of procurement processes and decisions that are in compliance with applicable legislation and trade agreements. While this procurement is not subject to specific requirements or restrictions in the trade agreements applicable to municipal procurement, one may consider the trade agreements for guidance as related to contract splitting. For instance, the Canadian Free Trade Agreement states in Article 503:

A procuring entity shall not prepare, design, or otherwise structure a procurement, select a valuation method, or divide procurement requirements in order to avoid the obligations of this Agreement. This includes actions such as dividing required quantities of the goods or services to be procured, or diverting funds to entities not covered by this Chapter or to buying groups in a manner designed to avoid the obligations of this Chapter³.

CONCLUSION

Regional staff has interpreted the Watson contract as a separate procurement, basing the analysis on a differentiation of the vendors involved. This interpretation relies on defining the work done by Deloitte and Watson as not being the same kind or type. It is arguable that the municipal finance advice provided by these consultants should be distinguished. However, one must also consider the fact that the services were provided with a singular purpose. Watson's services were provided to assist Deloitte in completing the Report that was commissioned by the Region. The Region's objective was to obtain a comprehensive report assessing the financial implications related to the Regional Governance Review. This was one project. As

¹ *Weinmann Electric Ltd. v. Niagara (Regional Municipality)*, 2015 ONSC 4970 at para. 172.

² *Weinmann Electric Ltd. v. Niagara (Regional Municipality)*, 2016 ONCA 990 at para. 13.

³ The Canadian Free Trade Agreement (2017) Article 503, at pg. 37. <https://www.cfta-alec.ca/wp-content/uploads/2017/06/CFTA-Consolidated-Text-Final-Print-Text-English.pdf>



such, in my view, one cannot ignore the language in section 7.2 that identifies the consideration of the procurement or project itself. In addition, the broader intent and objectives of the By-law should be considered – specifically that contract splitting is prohibited and that procurement should be objective, fair and transparent.

Based on the interpretation of the By-law set out above, there is a good basis to conclude that the procurement for the financial impact analysis resulting in the Report in relation to the Regional Government Review contravened section 7.2 of the By-law.

We would be happy to discuss the above or answer any questions that may arise.

Yours truly,

Cassels Brock & Blackwell LLP

A handwritten signature in blue ink, appearing to read "C. Storto", written over a horizontal line.

Claudia A. Storto
Counsel
CS/cas

cc. Mary Ellen Bench, City Solicitor