Growth Management and Phasing Plan

Town of Caledon

Final Report

Watson & Associates Economists Ltd.
905-272-3600
info@watsonecon.ca

November 12, 2024

In association with: HDR GEI Consultants, MERIDIAN PLANNING

Table of Contents

Page

Table of Contents (Cont'd)

Page

Table of Contents (Cont'd)

Page

List of Acronyms and Abbreviations

B.U.A.	Built-Up Area
D.G.A.	Designated Greenfield Area
G.G.H.	Greater Golden Horseshoe
G.I.S.	Geographic Information System
M.C.R.	Municipal Comprehensive Review
M.T.S.A.	Major Transit Station Area
M.O.F.	Ministry of Finance
M.M.A.H.	Minister of Municipal Affairs and Housing
O.P.	Official Plan
P.P.S.	Provincial Planning Statement
P.S.	Pumping Station
R.O.P.	Peel Region Official Plan
R.O.P.A.	Region of Peel Amendment
S.A.B.E.	Settlement Area Boundary Expansion
S.G.U.	Small Geographic Unit
S.P.S.	Sewage Pumping Station

Executive Summary

Executive Summary

Introduction

Under the Peel Region Official Plan (R.O.P.) (April 2022), the Town of Caledon is forecast to experience unprecedented growth over the next 30 years, increasing to 300,000 people and 125,000 jobs by 2051. Accordingly, a settlement area boundary expansion (S.A.B.E.) of approximately 3,780 hectares of Community Area land and 1,930 hectares of Employment Area land will be required to accommodate forecast growth over the next three decades.

A "Made in Caledon" S.A.B.E. phasing plan identifies the forecast progression of Community Area and Employment Area growth. While virtually all the development interests affected by this decision will want to see their lands developed first, that is simply not possible given the scale of development proposed. In this regard, the Town needs to establish a forward-looking phasing plan that identifies priority locations for development and establishes a logical sequence for development over the next 25 to 30 years. This sequencing plan will be primarily informed by the desire to ensure that employment and residential growth occur in lockstep with each other to support the development of complete communities. Another significant factor is the timing and cost of providing both hard and soft infrastructure in a manner that is financially viable and sustainable. The goal of the phasing plan is to assist the Town in making the best decisions that are in the overall public interest.

Phasing Plan Criteria

Based on provincial and regional guidance and the planning policy framework in Caledon, the criteria that assist in assessing where priority areas should be identified should deal with:

1. The development of complete communities;

2. The optimization of infrastructure; and

3. The minimization of impacts to agriculture.

As previously noted, the Town of Caledon is projected to experience significant growth over the next 30 years, requiring new urban lands to accommodate a population

increase to 300,000 people and 125,000 jobs by 2051. The Town faces pressure to strategically plan for this growth, prioritizing development in a phased manner that optimizes infrastructure use, integrates with existing communities, and supports the efficient extension of services. Key criteria for prioritization include logical extensions of existing urban areas, support for complete communities, and the early establishment of the Caledon GO Station. The plan emphasizes completing existing urban areas and ensuring feasible short-term employment opportunities while balancing infrastructure and transportation network efficiency.

Seven phasing criteria were established to guide the "Made in Caledon" Phasing Plan. The criteria of the highest importance are below:

1. Is the priority area a logical extension of the current built-up area?

2. Will the selection of the priority area provide for the completion of an existing urban area in the Town of Caledon?

5. Does the location of the priority area support the early establishment of the Caledon GO Station?

7. Is it feasible for new employment uses to develop in the short term?

The criteria of moderate importance are below:

3. Will the selected priority area be serviced efficiently by existing and planned water and wastewater infrastructure?

4. Will the selected priority area be serviced efficiently by the existing and planned Regional and Town transportation network?

The one remaining criterion is considered to be of low importance:

6. Does the location of the priority area minimize impacts on active agriculture?

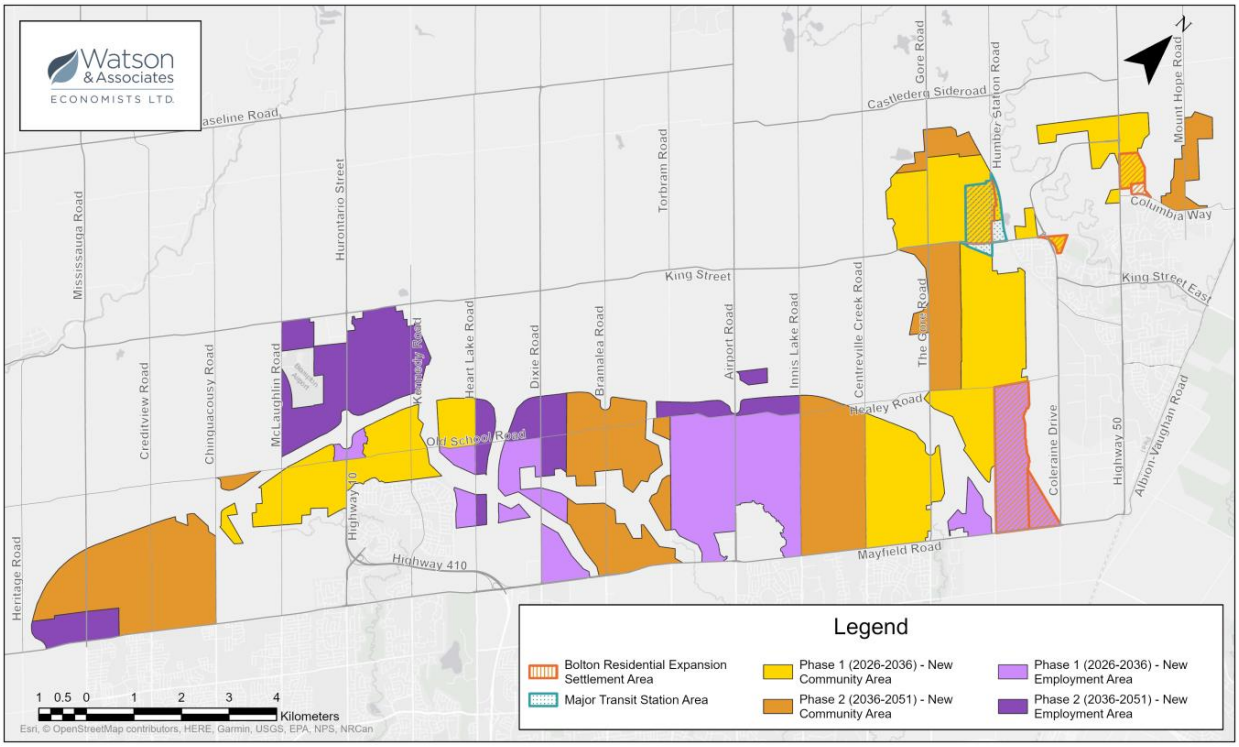
Town of Caledon Residential and Non-Residential Phasing Plan, 2021 to 2051

Under the revised 2024 Town of Caledon forecast allocation developed through this study, the overall Town-wide growth outlook to 2051 has been maintained but the forecast assumes that growth will be faster to materialize than identified through the regional allocation. In planning for a sizeable share of growth in the last ten years of the planning horizon through the R.O.P. allocation, the Town runs the risk of not achieving the expected growth outlook. The 2024 Caledon forecast accelerates the timing of growth within the S.A.B.E. lands, which encourages a greater amount of land to be developed sooner than through the R.O.P. allocation.

For this Phasing Plan, two periods of development have been established: lands categorized as Phase 1 are permitted to begin development between 2026 and 2036 while lands that are categorized in Phase 2 are permitted to begin development between 2036 and 2051. The Consultant Team assessed each small geographic unit (S.G.U.) in the Caledon S.A.B.E. based on the phasing criteria established in Chapter 2 and the infrastructure considerations assessed in Chapters 4 and 5.

With these phasing criteria considerations all assessed, the resulting Phase 1 and Phase 2 distribution is shown in ES-1 for both new Community Areas and new Employment Areas. Each phase represents when development is forecast to begin. It is important to recognize that the planning process preceding development can be started before the timing identified in Figure ES-1.

Figure ES-1
Town of Caledon S.A.B.E. Phase 1 and Phase 2 Lands



Together, this Phasing Plan represents the prioritization of completing existing Caledon communities (Bolton, Mayfield West, and Tullamore), the early establishment of the Caledon GO Station, and complete communities. The Phasing Plan balances the goals of building out existing communities while balancing residential and non-residential growth in lockstep, to ensure that growth is appropriately concentrated and phased. Building on this, consideration was also given to the efficiency of water, wastewater, and transportation infrastructure, to support south-to-north servicing plans where the core criteria have already been met.

Water and Wastewater Servicing Analysis

This work reviews the "Made in Caledon" growth forecast and identifies the impacts on Regional water and wastewater infrastructure. Specifically, the impacts to the existing and planned water and wastewater system, along with any additional projects necessary to provide adequate water and wastewater servicing to the alternative S.A.B.E. options put forward by the Town. High-level cost estimates have been prepared for the additional water and wastewater infrastructure needs.

In total, the water system to service growth for the Town of Caledon is forecast to cost approximately $793 million. This is broken down by Phase 1 costs ($286 million) and Phase 2 costs ($507 million). The impacts to the west and central water system in Caledon will be moderate, partially due to existing and planned upgrades within these areas and partially due to the modest population growth increases proposed in these areas. The impacts on the east water system in Caledon will be significant due to additional growth being proposed north of the existing PZ6, thereby necessitating significant infrastructure to create a PZ7.

Similar to the water system, the impacts to the west and central wastewater systems in Caledon will also be moderate, while the impacts to the east wastewater system in Caledon will be significant, for the reasons previously stated. For wastewater, approximately $206 million and $662 million of infrastructure costs were identified for Phase 1 and Phase 2, respectively. In total, the combined water and wastewater costs to service growth in Caledon are estimated at $1.66 billion.

Transportation and Transit Analysis

This analysis explores the “Made in Caledon” Phasing Plan within the context of roads and associated roadway infrastructure as well as transit services and transit-related infrastructure.

To support growth through 2051, significant investments in road and transit infrastructure are essential. The plan outlines the development of approximately 83 km of new or widened Town roads and 45 km of widened regional roads, designed as four-lane complete streets, at an estimated capital cost of $1.145 billion. Over the 28-year planning period, the total infrastructure needs for roads are projected at $3.851 billion, which includes $2.706 billion for lifecycle and maintenance. Continuing the current transit service arrangement with Brampton Transit is deemed fiscally prudent, with estimated transit costs reaching $236 million over the same period. Altogether, the plan calls for an approximate $4.087 billion investment in transportation infrastructure, with recommended coordination with Peel Region on regional road improvements to address future transportation and active transportation needs.

Phasing Plan Policy Recommendations

Bill 185, the *Cutting Red Tape to Build More Homes Act, 2024*, received Royal Assent on June 6, 2024, and takes effect on July 1, 2024. This legislation removes planning

policy and approval duties from several upper-tier municipalities, including Peel Region, shifting these responsibilities under the *Planning Act* to the Province. Given that the Region is no longer the approval authority for the Town of Caledon, it is unclear how a determination will be made about how the coordination between the Region and the Town unfolds. It is also unclear how a determination will be made about the validity of a specific secondary-plan phasing strategy and how "satisfaction of the Region" is ultimately evaluated under this new planning framework in Peel. As the R.O.P. becomes part of Caledon's Official Plan (O.P.), the Town will need to review and potentially adjust the language of these requirements to ensure they fit within the framework of the "Made in Caledon" growth management strategy. As noted previously, this would require the Town to initiate an O.P. amendment, in which the Province would act as the approval authority.

Regarding the Town's Phasing Policy in particular, it is recognized that there may be a desire to be flexible with respect to the delineation of Phase 2 areas such that certain Phase 2 areas may be able to proceed earlier to support a number of policy objectives, or perhaps more importantly, because lands in Phase 1 are not proceeding to development in an expeditious manner. Below is a recommended policy framework that would allow for some flexibility in this regard.

<u>Development of Priority Areas</u>

- Schedule ____ identifies development priority areas for the 2021 - 2036 time period. These areas have been prioritized because they best support the continuing evolution of Caledon into a more complete community.
- Notwithstanding the above, public infrastructure such as roads, parks, fire halls, schools and servicing facilities may proceed at any time in the New Community Areas and New Employment Areas, subject to the availability of servicing infrastructure and other requirements of the Town and the Region.
- Notwithstanding the above, in no case will one owner or group of owners be permitted to unreasonably delay the normal progression of development contemplated by this Plan. Where unreasonable delay is occurring as determined at the Town's sole discretion, the identification of priority areas may be re-evaluated to the satisfaction of the Town in consultation with Peel Region. In such circumstances, an Amendment to this Plan will be required and in support of such an Amendment, it must be demonstrated that there are no

unacceptable impacts on the Town as determined by Council in consultation with Peel Region.

Fiscal Impact Analysis (FIA)

The FIA has considered the impact of the growth over the 2024 to 2051 period within the Town on the Town's annual operating expenditures, growth-related capital expenditures (including future lifecycle replacement costs) and funding sources, and tax and non-tax revenues to understand the impacts on the Town's net financial position.

Over the forecast period, development would generate annual operating deficits at current tax rates between 2024 and 2029. These annual deficits would total $34.5 million by 2029. Operating surpluses would be generated after 2029 that would repay the accumulated deficit by 2034. Annual surpluses would continue to increase with new development between 2034 to 2035, however fiscal deficits would occur in 2036 and 2037 with the introduction of municipal transit. After 2037, annual surpluses would be generated over the remainder of the forecast period..

Alternative approaches would be required to address the fiscal shortfalls generated over the 2024 to 2029 period (i.e., $34.5 million). This could include election to defer the capital lifecycle contributions included in the analysis until later in the forecast period as the 2024 to 2029 lifecycle costs contributions total $73.4 million. This approach would be reasonable as there would be minimal lifecycle interventions required for the newly constructed infrastructure and the surpluses generated in future years would compensate for the deferred contributions.

Table ES-1 summarizes the annual Town fiscal impact at 2036 and 2051. Annual impacts for each year of the forecast period are presented in the full FIA report.

At 2036 annual tax revenues would be $115.1 million compared to an incremental tax levy requirement of $116.8 million (with the introduction of transit). By 2051, annual incremental tax revenue would increase to $299.9 million, more than $41 million greater than annual net levy requirements. By 2036 the forecast development would have generated cumulative net surpluses of $17.6 million at current tax rates after accounting for all operating costs and the total cost of ownership of new assets. These cumulative surpluses would increase to $375.3 million by 2051. These surpluses would contribute towards the financial sustainability of the Town by assisting to close the Town's current infrastructure funding gap identified in the 2024 AMP related to existing assets,

improving service levels, or mitigating tax rate increases that would otherwise be required.

Table ES-1
Annual Fiscal Impacts at 2036 and 2051

	2036	2051
Net Operating Costs		
Gross Operating Expenditures	82,043,787	229,698,964
Less: Non-Tax Revenues	(36,591,289)	(103,520,884)
D.C. and C.B.C. Exemptions/Reductions	10,648,280	11,889,199
Net Operating Expenditures	56,100,777	138,067,279
Capital Related Operating Costs		
Incremental Lifcecylce Costs (Growth-Related Infrastructure)	50,611,292	111,727,227
Non-D.C./C.B.C. Funded Growth-Related Infrastructure (Annual Debt Payments)	10,085,068	8,501,352
Total Capital Related Operating Costs	60,696,360	120,228,578
Incremental Tax Levy Requirement	116,797,137	258,295,857
Annual Weighted Property Assessment (000's)	26,919,761	70,112,160
Current Residential (RT) Tax Rate	0.4277%	0.4277%
Annual Tax Revenue	115,135,816	299,869,708
Annual Surplus (Deficit)	(1,661,321)	41,573,851
Cumulative Surplus/Deficit	17,629,509	375,269,165

Key assumptions/risks that should be noted in the financial plan include that could reduce the positive fiscal impacts include:

- **Pace of growth.** If growth does not occur at the pace anticipated in the G.M.P.P. and infrastructure is constructed to facilitate that growth occurring, there will be reduced capital funding sources (i.e., D.C.s) to pay for the initial construction of the infrastructure and reduced operating revenue (i.e., taxes) to pay for the ongoing operating and maintenance/renewal. This would create financing pressures in the near, negatively impacting the fiscal impact of new development in the Town.
- **Average assessment per residential unit and non-residential sq.ft. of G.F.A.** These assumptions support the forecast weighted assessment and property tax revenue forecast. If development occurs at a lower assessed value on average than the assumptions used herein, this will reduce the operating revenues available on an annual basis from new development.

- **Future capital needs including assumptions on average annual costs post 2036.** Assumptions on growth-related infrastructure beyond 2036 have been made based on the average cost of capital per capita in the 2024 D.C. Background Study. If the timing/amount of these costs are required earlier in the forecast period, additional interim funding requirements could result until growth occurs and D.C. revenue is collected later in the forecast period.
- **Operating cost increases including maintaining current per capita and per employee non-tax revenues.** Assumptions have been made regarding the operating costs and revenues per capita/employee that incorporate certain economies of scale as growth occurs. If this does not materialize, the fiscal impacts would worsen due to the additional costs or reduced operating revenues.
- **Total cost of ownership assumptions.** If the total cost of ownership is greater that forecast herein (i.e., operating and maintenance costs and capital renewal and rehabilitation costs) increase beyond the levels anticipated herein and within the Town's 20224 asset management, there would be increases to the annual capital funding provisions.

Conclusions

The Town of Caledon is projected to grow significantly over the next 30 years, with a population reaching 300,000 and 125,000 jobs by 2051. To manage this growth, the Phasing Plan outlined in this report emphasizes strategic, phased development that integrates with existing communities, optimizes infrastructure use, and supports sustainable growth. Prioritizing the completion of areas like Bolton, Mayfield West, and Tullamore, the plan balances residential and non-residential growth while ensuring efficient use of water, wastewater, and transportation networks. A key focus is on logical urban extensions, the early establishment of the Caledon GO Station, and the south-to-north servicing strategy, aligning infrastructure development with the Town's long-term objectives.

This report outlines a "Made in Caledon" phasing plan that ensures that the Town is well-positioned over the next several decades to accommodate and deliver future residential and non-residential development. This phasing plan establishes a faster pace of growth within Caledon which prioritizes the development of complete communities and transit-supportive development. Achieving this growth will have cost implications for both the Region of Peel and the Town of Caledon. As outlined below, the total capital costs for water and wastewater infrastructure are estimated at $1.66

billion and the estimated total capital and operating costs for roads and transit are estimated at $4.430 billion. Combined, the total cost is estimated at $6.091 billion (see Figure ES-2). As shown in Figure ES-3, $3.310 billion of capital and operating costs represent the total fiscal requirement for the Town's transportation infrastructure.

Figure ES-2
Combined Draft Estimated Water, Wastewater, Roads, and Transit Costs

Item	Cost
Water Infrastructure Capital Costs	**$793 million**
Wastewater Infrastructure Capital Costs	**$868 million**
Capital Requirements for Transportation Improvements	**$1.145 billion**
- Roadways under Town Jurisdiction	$757 million
- Roadways under Regional Jurisdiction	$388 million
Operating, Maintenance, and Life Cycle Costs for Transportation Infrastructure	**$3.049 billion**
- Roadways under Town Jurisdiction	$2.317 billion
- Roadways under Regional Jurisdiction	$732 million
Capital and Operating Budget Requirements for Transit	**$236 million**
Total Cost (2024 $ value)	**$6.091 billion**

Figure ES-3
Summary of Regional vs. Town Infrastructure Costs

Item	Cost
Regional Infrastructure Costs	**$2.781 billion**
Town of Caledon Infrastructure Costs	**$3.310 billion**
Total Infrastructure Costs	**$6.091 billion**

The Town's development policy framework emphasizes flexibility in the sequencing of Phase 2 areas, allowing certain areas to proceed earlier to support policy goals or to address delays in Phase 1 development. Priority areas for 2021-2036 have been identified to support Caledon's evolution into a more complete community. Essential public infrastructure in new areas may also advance as needed, provided there is adequate servicing infrastructure. To prevent delays from any one landowner, the Town reserves the right to re-evaluate priority areas in consultation with Peel Region, potentially amending the plan if necessary to avoid adverse impacts. As growth continues, establishing a robust growth monitoring framework through its O.P. will be critical to guiding adjustments and ensuring development aligns with Caledon's long-term vision for sustainable growth toward 2051.

Report

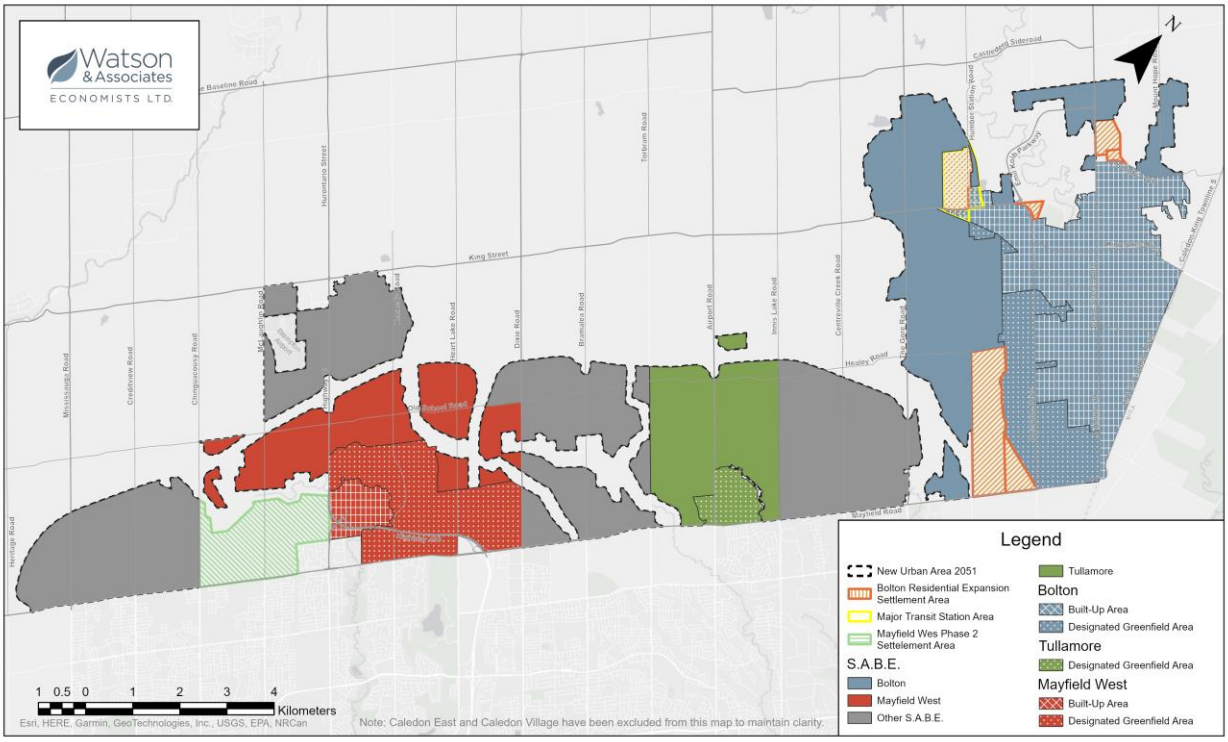
Chapter 1
Introduction

1. Introduction

1.1 Terms of Reference

Under the Peel Region Official Plan (R.O.P.) (April 2022), the Town of Caledon is forecast to experience unprecedented growth over the next 30 years, increasing to 300,000 people and 125,000 jobs by 2051. Accordingly, a settlement area boundary expansion (S.A.B.E.) of approximately 3,780 hectares of Community Area land and 1,930 hectares of Employment Area land will be required to accommodate forecast growth over the next three decades. Schedule E-1 of the R.O.P. identifies the new urban area for the Town of Caledon to 2051, with Schedules E-3 and E-4 identifying the Community Area and Employment Area lands. Figure 1-1 provides a map which displays these distinctions.

Figure 1-1
Town of Caledon Community Area and Employment Area S.A.B.E.



While this growth and the recommended S.A.B.E. have been determined at the Regional level, the Town of Caledon desires the ability to create a “Made in Caledon”

approach to the phasing of the S.A.B.E location options. A considerable amount of land will be brought into the urban boundary to satisfy population and employment needs to the year 2051. The "Made in Caledon" S.A.B.E. phasing plan will identify an approach to the forecast progression of Community Area and Employment Area growth. While virtually all the development interests affected by this decision will want to see their lands developed first, that is simply not possible given the scale of development proposed.

In this regard, the Town needs to establish a forward-looking phasing plan that identifies priority locations for development and establishes a logical sequence for development over the next 25 to 30 years. This sequencing plan will be primarily informed by the desire to ensure that employment and residential growth occur in lockstep with each other to support the development of complete communities. Another significant factor is the timing and cost of providing both hard and soft infrastructure in a manner that is financially viable and sustainable. The goal of the phasing plan is to assist the Town in making the best decisions that are in the overall public interest.

The following report provides a detailed phasing plan with a supporting background analysis. Chapter 1 provides the policy context which this exercise functions within. Chapter 2 establishes criteria utilized to inform the phasing plan. Chapter 3 establishes the revised Town of Caledon growth forecast timing, a reimagining of growth concepts in select locations, and the revised Community Area/Employment Area phasing plan to 2051. Chapter 4 provides an analysis of the water and wastewater infrastructure requirements to support the "Made in Caledon" phasing plan and the associated costs. Chapter 5 explores the transportation and transit upgrades which will be required to accommodate growth, from both an up-front and operating cost perspective. Chapter 6 puts forward policy recommendations for the Town of Caledon to implement, which would guide the future phasing of growth. Chapter 7 provides the fiscal impact assessment (FIA) of the new development and Chapter 8 provides a summary of conclusions.

It is important to note that a fiscal impact analysis is also provided in this report. This fiscal impact analysis considers the financial implications of servicing growth related to property taxes, user rates, and debt capacity.

1.2 Province of Ontario Planning Context

This study was prepared under the purview of the Provincial Policy Statement, 2020. On August 20, 2024, the Province of Ontario released a new Provincial Planning Statement (P.P.S.). The P.P.S., 2024 is intended to simplify and integrate existing provincial policies established in A Place to Grow: Growth Plan for the Greater Golden Horseshoe (the Growth Plan) and the P.P.S., 2020, while providing municipalities and the Province with greater flexibility to deliver on housing objectives. A key focus of the P.P.S., 2024 is that recognizes that the approach for achieving housing and employment outcomes will vary by municipality and, as such, it moves away from a prescriptive guideline approach to growth analysis and urban land needs assessments.

The analysis conducted herein was completed before the release of the 2024 P.P.S. The following summarizes key highlights of the P.P.S., 2024:

- Compared to the P.P.S., 2020, the P.P.S., 2024 provides a more flexible horizon for planning for growth by providing a planning horizon with a minimum of 20 years and a maximum of 30 years. Further to this, the P.P.S., 2024 states that "planning for infrastructure, public service facilities, strategic growth areas and Employment Areas may extend beyond this time horizon."[1] Based on our interpretation of the P.P.S., 2024, this would suggest that municipalities are to designate land to accommodate growth over a 20- or 30-year period, with the opportunity to designate additional land beyond the 30-year time horizon for Employment Areas.
- The P.P.S., 2024 notes that "planning authorities shall base population and employment growth forecasts on Ministry of Finance (M.O.F.) 25-year projections and may modify projections, as appropriate." It is our interpretation that municipalities are not required to utilize the M.O.F. forecasts and that they are not meant to replace long-term forecasting by municipalities. It is important to note that the M.O.F. population forecasts are provided at the Census division level only, which typically represents upper-tier municipalities, including separated municipalities and large urban single-tier municipalities. The M.O.F. does not provide forecasts at the area municipal level. It is our interpretation that the use of the M.O.F. forecasts is not meant to replace long-term forecasting by

[1] P.P.S., 2024, policy 2.1.3, p. 6.

municipalities, but the forecasts are to be used as a starting place in establishing forecasts and testing the reasonableness of alternative regional forecasts and area municipal growth allocations, a practice that Watson currently carries out.

- The P.P.S., 2024 includes an updated definition of Employment Area based on the amendment of the *Planning Act* on June 8, 2023. The *Planning Act* was amended under subsection 1 (1) to include a new definition of "area of employment." The amendment to the *Planning Act* received Royal Assent as part of Bill 97 on June 8, 2023. The definition change in the *Planning Act* came into effect on October 20, 2024, in concert with the P.P.S., 2024. In light of the definition change of Employment Area, a key concern for municipalities will be their ability to provide an urban structure that will support employment uses outside of Employment Areas, particularly non-retail commercial and institutional uses (e.g., office uses, training and education, entertainment, wholesale trade and service repair centres). Traditionally, Employment Areas have been regarded as areas protected for key targeted employment sectors, especially those in the export-based sectors.
- Under the P.P.S., 2024, municipalities are provided with greater control over Employment Area conversions (now referred to as Employment Area removals) with the ability to remove lands from Employment Areas at any time. Previously, under the P.P.S., 2020 and the Growth Plan, municipalities were required to review changes to designated Employment Areas during a Municipal Comprehensive Review or Comprehensive Review. Under the P.P.S., 2024, municipalities are required to demonstrate that there is an identified need for the removal and the land is not required for Employment Area uses over the long term.

Following our initial assessment of the P.P.S., 2024 and Bill 185, it is expected that the key conclusions of this report concerning long-term population, housing, and employment growth forecasts, along with the associated phasing plan, will remain unchanged.[1]

[1] It is noted that the key technical findings of this report were developed prior to the release of the P.P.S., 2024.

1.3 Peel Region Planning Context

The R.O.P. was submitted for provincial review, which identified the S.A.B.E. for Caledon. On November 4, 2022, the Province of Ontario accepted the R.O.P. with 44 modifications. Notably, the Province accepted the S.A.B.E. for Caledon and added 330 hectares between Heart Lake Road and Centreville Creek Road, along Old School Road and the location of the proposed Highway 413.

On December 6, 2023, the Minister of Municipal Affairs and Housing (M.M.A.H.) enacted Bill 150, the *Planning Statute Law Amendment Act, 2023*. This bill amended the R.O.P. to reverse most of the original 44 provincial modifications while retaining nine modifications (3, 16 to 18, 21, 30, and 41 to 43). On May 16, 2024, Bill 162, the *Get It Done Act, 2024*, received Royal Assent, reinstating eighteen modifications (1, 5, 19, 22 to 26, 28, 31 to 35, and 37 to 40). This brought the total number of modifications to the adopted R.O.P. to 27. The changes are reflected in the April 2022 R.O.P.

It is important to note that the technical analysis for this Town of Caledon Phasing Plan was conducted before Bill 150 and Bill 162 had been released. Importantly, the analysis herein is based on the R.O.P. which was accepted by the Province on November 4, 2022, with modifications. Bill 162 re-instated the greenfield expansion for Caledon, which reflects the S.A.B.E. configuration established through the November 4, 2022 R.O.P. Beyond this, the technical findings of this report are not considerate of each of the modifications to the R.O.P. through Bill 150 or Bill 162.

1.4 Town of Caledon Planning Context

Bill 185, known as the *Cutting Red Tape to Build More Homes Act, 2024*, was granted Royal Assent on June 6, 2024. This omnibus bill includes changes to the *Planning Act* that were initially introduced in Bill 23, the *More Homes Built Faster Act, 2022*. These changes, effective July 1, 2024, remove planning policy and approval responsibilities from several upper-tier municipalities, including Peel Region. As a result, Peel Region will no longer have these responsibilities under the *Planning Act*. The R.O.P. will now serve as a plan for Brampton, Caledon, and Mississauga, which must implement and ensure applications comply with it. Previously, Peel Region was the approval authority for certain Official Plan (O.P.) reviews and amendments under the *Planning Act*; this authority will now be transferred to the Province. Accordingly, this “Made in Caledon”

Phasing Plan will also aid the Town's growth management decisions within this policy context.

Chapter 2
Phasing Plan Criteria

2. Phasing Plan Criteria

2.1 Background

The Town of Caledon is forecast to experience unprecedented growth over the next 30 years, with its population increasing to 300,000 people and the number of jobs increasing to 125,000 jobs by 2051. New urban lands will be required to accommodate a significant portion of this growth.

On November 4, 2022, the Province made a final decision on where the new urban lands are to be located. Almost all the new urban land is located to the south of Highway 413 and it stretches linearly from Heritage Road on the west to the North Hill area of Bolton to the east, a distance of almost 30 kilometres (km).

Between Heritage Road and The Gore Road, the depth of the new urban area north of Mayfield Road ranges from 2.5 to 3.5 km. The location of the new urban area is dependent on the extension of water and sewer services from the south in most cases and this is why the new urban area is linear and focused in the southern part of the Town of Caledon, adjacent to where the services already exist.

Much of the land to be urbanized is in agricultural use. There are, however, several other land uses as well, including rural residential uses, aggregate-related industrial uses, landscaping businesses, trucking yards, rural public schools (Alloa, James Grieve, Macville and Mayfield Secondary), a number of private schools, the Brampton Fairgrounds and two large golf courses (Banty's Roost and the Mayfield Golf Club). The transition of some of these uses into urban uses will take time.

2.2 Phasing Criteria and Rationale

In anticipation of the lands being urbanized, the Town is in receipt of over 20 development applications for a range of uses in the new urban area, many of which are significant in terms of land area.

Given the decision made by the Province and the focus on the development of new housing in particular, the Town is now under considerable pressure to make decisions on how growth will be staged in this area since it is simply not possible for all the lands to be approved for development at the same time. This is because of the:

- Sheer size of the new urban area;
- Need to optimize the extension of services in a fiscally responsible manner;
- Need to ensure that development occurs logically and incrementally; and
- Desire for new development to be focused rather than scattered to ensure that all elements of a complete community are being developed in lock-step.

In addition to the above, there is also a need to ensure that the lands that are selected for immediate development in a first phase (within 15 or so years) are the lands that have the best ability to develop in a reasonable period. This is because the Province requires that all municipalities take all steps necessary to make the decisions needed to bring lands to a "shovel-ready" state in an expeditious manner to support the development of additional housing in particular.

This means that lands that cannot be serviced in the short term or which require significant road improvements or other major infrastructure investments should not be selected for the first phase of growth. This, however, is not just about the availability and cost of infrastructure, since there is also a need to ensure that the lands selected for the first phase of growth are located in such a way as to optimize the use of public service facilities such as parks, community centres, and schools.

2.3 Policy Review and Developing Prioritization Criteria

A brief review of key provincial policies that have a direct impact on phasing from a location of development perspective. In general, these policies require that:

1. Development in designated greenfield areas (D.G.A.) be planned, designated, zoned and designed in a manner that supports the achievement of complete communities; supports active transportation; and encourages the integration and sustained viability of transit services;
2. Development should be prioritized in areas with existing or planned higher residential or employment densities to optimize return on investment and the efficiency and viability of existing and planned transit service levels;
3. New development taking place in designated growth areas should occur adjacent to the existing built-up area (B.U.A.) and should have a compact form, mix of uses and densities that allow for the efficient use of land, infrastructure, and public service facilities;

4. Sufficient employment lands in appropriate locations should be available for employment growth in the planning period; and
5. Existing infrastructure (sewer, water and roads) should be optimized wherever possible.

The R.O.P. was also reviewed and subsection 5.5.6. indicates that when developing phasing criteria the Town should address and incorporate issues such as:

- The improvement of live-work relationships;
- Unit mix and housing targets;
- A range of employment types;
- The timing and efficient provision and financing of necessary Regional and local municipal services;
- Public service facilities;
- Fiscal impacts on the Region and the local municipalities;
- Staged build-out and logical extensions to development;
- Priority areas for development;
- Prolonging agricultural uses as long as practical; and
- The sustainable rate of employment growth related to population growth.

Based on the above provincial and regional guidance and the emerging policy framework in Caledon, the criteria that assist in assessing where priority areas should be identified should deal with:

1. The development of complete communities;
2. The optimization of infrastructure; and
3. The minimization of impacts to agriculture.

2.4 Phasing Plan Criteria

1. Is the priority area a logical extension of the current built-up area?

Over the next 30 years, the expectation is that most of the S.A.B.E. lands will be developed or under development. Generally, urban area expansions should occur next to existing urban areas in a manner that provides for the seamless integration of the new urban area with the existing urban area. In this regard, subsection 2.3.1.6. of the P.P.S., 2024 is instructive, as it states that “planning authorities should establish and

implement phasing policies, where appropriate, to ensure that development within designated growth areas is orderly and aligns with the timely provision of the infrastructure and public service facilities."

Expanding existing urban areas allows for the seamless continuation of existing development patterns and not the establishment of a new development pattern that may potentially take years to integrate with existing development. As a result, a key consideration would be the ability of the new urban area to integrate with the existing developed area from a development, infrastructure and open space network perspective.

A logical extension of existing development would mean any area that was within 800 metres of the edge of an already developed urban area, which in the case of Caledon would include lands adjacent to already developed areas (or lands under development) within Mayfield West and Bolton and within the neighbouring City of Brampton. Eight hundred metres is reasonable because this would be the most people would walk to access public transit. This criterion is important because a range of public service facilities already generally exist within existing urban areas that can be immediately utilized in most cases and because water and wastewater services exist close by and in most cases can be easily extended to accommodate growth. The length of time and the distance travelled to existing urban areas would be less as well, which supports climate change objectives and enables healthy outcomes.

2. Will the selection of the priority area provide for the completion of an existing urban area in the Town of Caledon?

This criterion is similar to the first criterion above, but it is much more focused on the Town of Caledon and its aspirations to be a complete community that is separate and distinct from other communities. The Town has long focused growth according to a tri-nodal growth strategy that divided growth between Mayfield West, Bolton and Caledon East. The intent of this strategy was to focus growth in the three largest communities in Caledon and to support the development of each as a distinct community that is serviced by the necessary infrastructure and public service facilities to support the evolution of each into a complete community.

Moving forward, the tri-nodal strategy is not proposed to be carried forward, because of the limitations on growth that exist in Caledon East; however, the planning principle

continues to apply when it comes to both Mayfield West and Bolton and the desire for each to evolve into complete communities.

The terms “healthy communities,” “complete communities,” and “sustainable development” are all terms that have recently come to the forefront of land use planning. Each of these terms while different, has at its core the idea that planning authorities should be collectively planning to improve the physical, social and built environments to the extent possible through the land use planning process and other available processes. Both the Growth Plan and the P.P.S. are to a large extent policy-led planning documents that are designed to require municipalities to plan for healthy and complete communities and to incorporate sustainable development goals, objectives, and procedures into their planning processes.

3. Will the selected priority area be serviced efficiently by existing and planned water and wastewater infrastructure?

This criterion is important because of the significant costs associated with extending infrastructure and the desire to make sure that it is extended efficiently and optimally. Factors to consider in establishing priority areas for development include the complexity and cost of the water and sewer infrastructure upgrades, the opportunity the development would potentially provide to supporting the long-term servicing of other growth areas, the opportunities that may exist to benefit or enhance the level of service in the existing service areas and the financial risk to the Region.

4. Will the selected priority area be serviced efficiently by the existing and planned Regional and Town transportation network?

Similar to the above, this criterion is important because of the significant costs associated with improving the Regional and Town transportation network and the time it takes to carry out these improvements. Factors to consider in establishing priority areas for development include the capacity of the existing road network and the planned capacity improvements and the timing of upgrades.

5. Does the location of the priority area support the early establishment of the Caledon GO Station?

The Caledon GO station in Bolton is an integral component of the future urban structure of the Town. The area directly to the west of the Caledon GO Station is already within

the urban area and this criterion has been included since supporting the early development of the Caledon GO station has long been a priority of the Town. It is within this area that higher densities of development will be planned at a minimum density of 150 persons and jobs per hectare.

6. Does the location of the priority area minimize impacts on active agriculture?

Much of the new urban area is currently in use for agricultural purposes. Agricultural activities in the area, however, have been declining in anticipation of development and most if not all of these lands will be converted from agricultural use to urban uses in the next 30 years.

Notwithstanding the above, prolonging agricultural uses as long as possible is in the public interest. Factors to consider in determining where priority areas should be located in relation to this criterion include the level of fragmentation that exists, the extent of non-local ownership, the degree to which agriculture has already declined because of proximity to urban uses, the location of active livestock facilities, the need to potentially comply with the minimum separation distance formula, and the presence of agricultural infrastructure.

7. Is it feasible for new employment uses to develop in the short term?

Ensuring that employment lands in the right locations are included in early development phases ensures that an appropriate balance of residential and non-residential development occurs to support complete community principles. Factors to consider in identifying priority areas for employment uses are whether larger land areas have already been assembled for employment uses and if assembly has not occurred, the level of fragmentation that exists.

2.4.1 Level of Importance Assigned to Each Criteria

The seven criteria above are not equal in terms of their importance. In this regard, a review of each has been carried out to determine if each criterion should be treated equally from an importance perspective. Assigning a level of importance to each of the criteria ensures that matters of high importance can be balanced against other matters that are of moderate to low importance. Based on a review of relevant provincial and regional policy and the long-standing aspirations of the Town to grow its communities, the criteria that best support the continued development and evolution of Caledon's

communities into complete communities are viewed as of the highest importance. The criteria of the highest importance are therefore below:

1. Is the priority area a logical extension of the current built-up area?

2. Will the selection of the priority area provide for the completion of an existing urban area in the Town of Caledon?

5. Does the location of the priority area support the early establishment of the Caledon GO Station?

7. Is it feasible for new employment uses to develop in the short term?

Criterion 2 and 7 above build upon the notion of prioritizing development adjacent to existing communities in Caledon. Criterion 7 supports the notion of supporting the development of employment uses that establish optimal live-work relationships in the Town.

The criteria of moderate importance are below:

3. Will the selected priority area be serviced efficiently by existing and planned water and wastewater infrastructure?

4. Will the selected priority area be serviced efficiently by the existing and planned Regional and Town transportation network?

It is acknowledged that both of the above criteria are important on their own. All the S.A.B.E. lands, however, are expected to be fully serviced by 2051 and as a result, the two criteria above have more to do with ensuring that the areas that best support the development of complete communities can be serviced by existing and planned infrastructure.

The one remaining criterion is considered to be of low importance:

6. Does the location of the priority area minimize impacts on active agriculture?

It is acknowledged that it is in the public interest to minimize impacts on agriculture. It has already been decided, however, that all the S.A.B.E. lands will be retired from agriculture and converted to urban uses. Given the time it takes for new development lands to be brought on-stream, the acquisition and planning of these lands has already

begun and it is anticipated that limited investments will be made in the agricultural sector going forward and that much of the land will be in a holding pattern waiting for development regardless of location. As a result, making decisions on the location of priority areas that depend solely on the retention of agricultural uses is not recommended.

2.5 Conclusions

The Town of Caledon is projected to experience significant growth over the next 30 years, requiring new urban lands to accommodate a population increase to 300,000 people and 125,000 jobs by 2051. The Town faces pressure to strategically plan this growth, prioritizing development in a phased manner that optimizes infrastructure use, integrates with existing communities, and supports the efficient extension of services. Key criteria for prioritization include logical extensions of existing urban areas, support for complete communities, and the early establishment of the Caledon GO Station. The plan emphasizes completing existing urban areas and ensuring feasible short-term employment opportunities while balancing infrastructure and transportation network efficiency.

Chapter 3
Town of Caledon Residential and Non-Residential Phasing Plan, 2021 to 2051

3. Town of Caledon Residential and Non-Residential Phasing Plan, 2021 to 2051

The following chapter builds on the Phasing Plan criteria established in Chapter 2, to identify the phasing of the Caledon S.A.B.E. lands. Accordingly, this chapter establishes two distinct phasing periods for which development can be permitted to begin: Phase 1 (2026 to 2036) and Phase 2 (2036 to 2051). Fundamentally, this phasing plan is informed by a set of established planning principles (Chapter 2) while balancing the soft and hard infrastructure considerations and costs to facilitate growth (Chapters 4 and 5). In accordance with this vision, the following chapter outlines the "Made in Caledon" population and employment phasing plan.

3.1 Town of Caledon Growth Outlook Assumptions

Before establishing the Phasing Plan, changes have been made to the R.O.P. forecast, to create what is referred to as the "Made in Caledon" growth forecast. The following subsection details some of the key changes made to the R.O.P. growth forecast, which ultimately results in the "Made in Caledon" growth forecast to 2051. This involves the following:

- Adjusting the timing of growth established in the R.O.P. forecast for Caledon, to ensure that growth within the Town is not concentrated in the final ten years of the forecast period (2041 to 2051);
- An alteration of the housing unit forecast mix to account for more high-density growth pressure in the Bolton B.U.A.;
- A reallocation of growth to the Bolton B.U.A. to account for growth pressures associated with the high-density units in the development approvals process;
- Adjust the growth forecast to capture the conversion of dry industrial lands to residential uses in the southeast of Macville; and
- Utilize the adjusted timing of the Town-wide "Made in Caledon" growth forecast, to establish the timing of growth in the Caledon S.A.B.E. lands as well as the amount of land available for Phase 1 development.

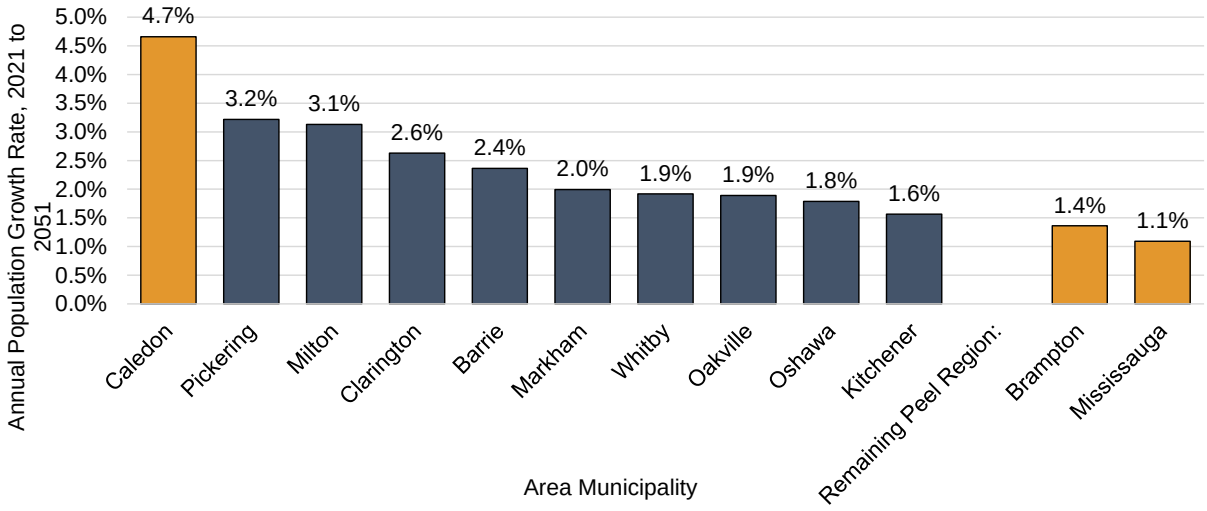
3.1.1 Town-Wide Growth Forecast

Between 2021 and 2051, Caledon is forecast to increase by 220,000 people, 67,000 households, and 93,000 jobs which represents a considerable increase in annual growth compared to historical trends.[1] [2] The Town of Caledon is forecast to be the fastest-growing municipality in the Greater Golden Horseshoe (G.G.H.), which is one of the fastest-growing regions in North America. Figure 3-1 and Figure 3-2 show the forecast growth rates for the Town of Caledon, select municipalities in Southwest Ontario, and the remaining Peel Region. Caledon is identified as having the fastest-growing forecast population among all comparators at a 4.7% annual growth rate between 2021 and 2051. Caledon is also identified as having the third highest forecast employment growth rate among comparators at a 4.1% annual growth rate, behind Markham and Richmond Hill. The Town is forecast to experience immense growth pressure over the next several decades compared to its historical growth rates as well as other comparator municipalities. Accordingly, it will be critical that the Town has a clear vision for how this growth pressure will materialize across Caledon to 2051, with a focus on its S.A.B.E. lands.

[2] Population metrics listed throughout this report include the net Census undercount estimated at 103.54%.

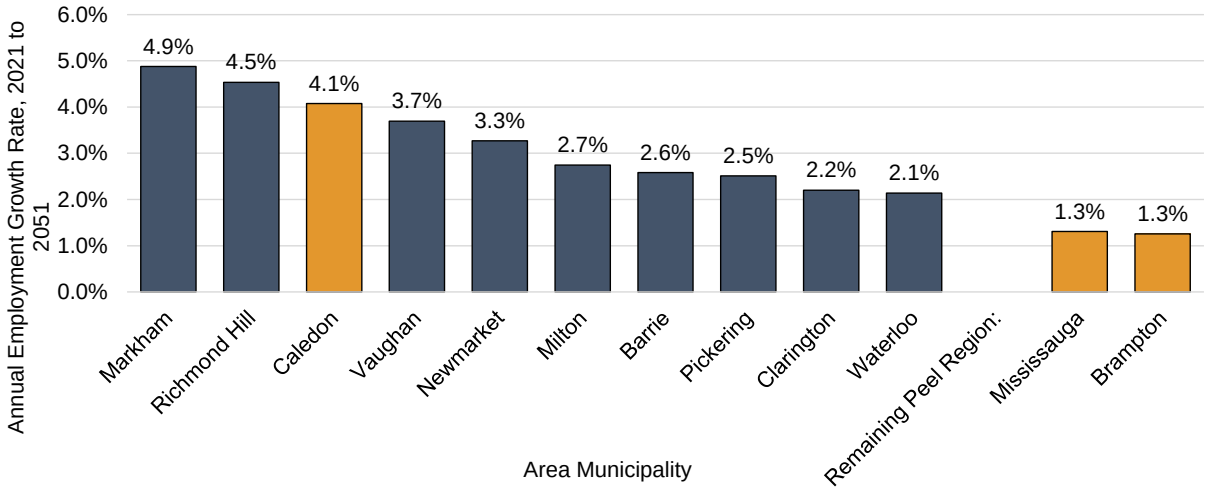
[1] Peel Region has been developing alternative growth forecasts for each local municipality, which differ from the April 2022 O.P. These new forecasts have not been contemplated in this report.

Figure 3-1
Southwest Ontario Municipalities Forecast Population Growth Rate Comparators



Note: The list includes municipalities with the fastest forecast rate of population growth. The list is restricted to municipalities with a Bill 23 housing pledge.
Source: Historical data from Statistics Canada Census, 2011 to 2021. Forecast values calculated from respective Official Plans/Municipal Comprehensive Reviews, by Watson & Associates Economists Ltd.

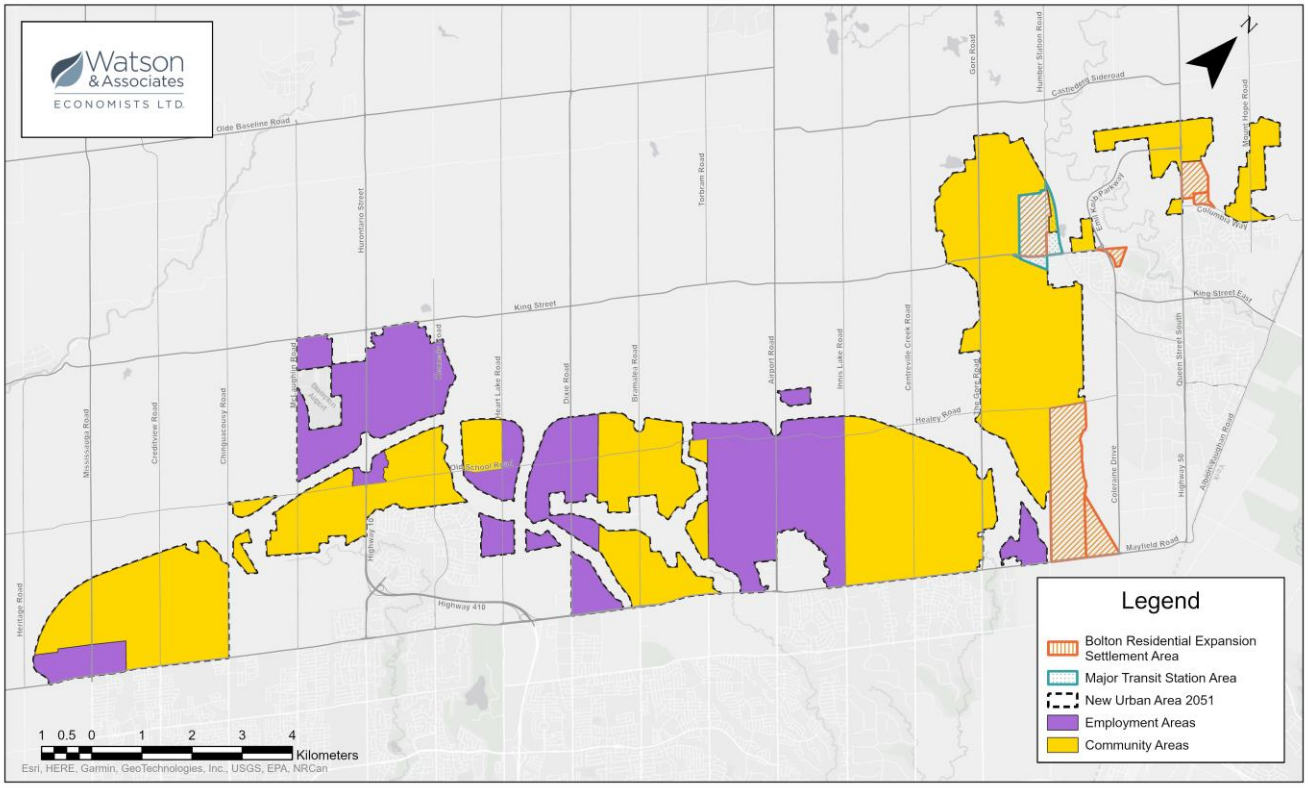
Figure 3-2
Southwest Ontario Municipalities Forecast Employment Growth Rate Comparators



Note: The list includes municipalities with the fastest forecast rate of employment growth between 2021 and 2051. The list is restricted to municipalities with a Bill 23 housing pledge.
Source: Historical data from Statistics Canada Census, 2011 to 2021. Forecast values calculated from respective Official Plans/Municipal Comprehensive Reviews, by Watson & Associates Economists Ltd.

Accommodating growth within the Town of Caledon will require approximately 6,260 developable hectares (ha) of S.A.B.E. lands, as shown in Figure 3-3.[1] These S.A.B.E. lands are required in addition to the buildout of the remaining vacant urban lands within the Town's D.G.A. as well as steady intensification within the Town's B.U.A. over the next 30 years. Over the 2021 to 2051 horizon, the S.A.B.E. lands are forecast to accommodate 175,200 people and 64,300 jobs. To achieve this growth, the Town must be well-positioned with a plan that provides direction on the strategic phasing of growth.

Figure 3-3
Town of Caledon S.A.B.E. Lands



3.1.2 Bolton Growth Forecast Reallocation

A policy area reallocation of the forecast was required to account for recent development application activity within the Bolton B.U.A. accounting for approximately 3,200 apartment units. This reallocation was achieved by shifting growth previously identified for the Caledon S.A.B.E. lands to the Bolton B.U.A. This required examining

[1] Including Region of Peel Amendment (R.O.P.A.) 30 lands.

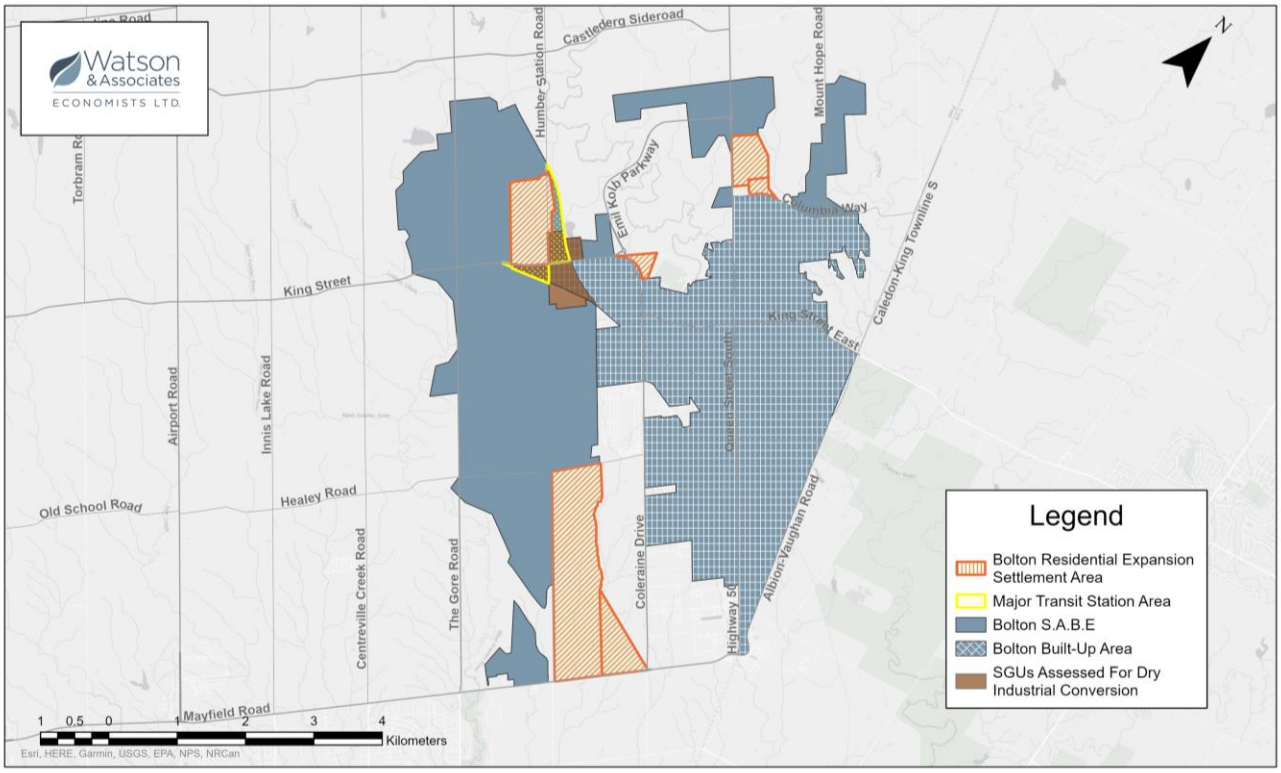
greenfield densities and presumed changes within the existing population base across the S.A.B.E. lands to determine from which locations to allocate population growth. Further to this, the Town-wide housing unit mix forecast was re-examined, because the development applications within the Bolton B.U.A. suggest the development pressures for high-density units will be greater than forecast in the R.O.P. Accordingly, through this exercise, nearly 1,700 units were shifted from the Caledon S.A.B.E. to the Bolton B.U.A.[1]

Further to this exercise, additional analysis was conducted to assess the impacts of a dry industrial conversion to the southeast of Macville within the Bolton B.U.A. (see Figure 3-4).[2] This required redistributing the industrial employment growth originally forecast in the select locations southeast of Macville to other locations across the S.A.B.E. lands, as well as allocating residential growth from the rest of the S.A.B.E. lands to these lands south of Macville. Accordingly, compared to the R.O.P. forecast allocation, 240 industrial jobs were reallocated away from these lands in the Bolton B.U.A. and 330 total housing units were added.

In total, the Bolton B.U.A. forecast increased by nearly 6,200 people, 1,700 units, and 120 jobs. This results in the greenfield density by 2051 to be reduced from 70 people and jobs per hectare (P&J/ha) to 68 P&J/ha.

[2] Approximately 1,040 low-density, 580 medium-density, and 60 high-density units were reallocated from the S.A.B.E. lands to the Bolton B.U.A. The 1,620 ground-oriented dwellings were converted to high-density unit types to reflect the pressure for apartment growth within the Bolton B.U.A. which was not captured in the R.O.P. Adjustments to the population and employment forecast were made accordingly.
[1] S.G.U.s 0444J and 1120.

Figure 3-4
Bolton B.U.A. and S.A.B.E.



3.1.3 Timing of S.A.B.E. Growth, 2021 to 2051

The R.O.P. 2021 to 2051 forecast allocation for the Town of Caledon S.A.B.E. lands estimates that approximately half of all S.A.B.E. population growth would occur during the last decade of the forecast period. Under the revised 2024 Town of Caledon forecast allocation developed through this study, the overall Town-wide growth outlook to 2051 has been maintained but the forecast assumes that growth will be faster to materialize than identified through the regional allocation. As shown in Figure 3-5, approximately 65% of the population forecast is planned to occur before 2041 under the Caledon G.M.P.P. forecast (see Appendix A). Similarly, for employment, the Region of Peel forecast allocation to the Caledon S.A.B.E. lands assumed 45% of employment growth would occur before 2041, whereas the Caledon G.M.P.P. forecast assumes 60% (see Appendix B). In planning for a sizeable share of growth in the last ten years of the planning horizon through the R.O.P. allocation, the Town runs the risk of not achieving the expected growth outlook. The 2024 Caledon forecast accelerates the timing of

growth within the S.A.B.E. lands, which encourages a greater amount of land to be developed sooner than through the R.O.P. allocation.

Figure 3-5
Town of Caledon S.A.B.E. Forecast Comparison

Population Forecast Comparison

	2021-2031	2021-2036	2021-2041	2021-2046	2021-2051
Caledon G.M.P.P.	13,100	54,900	116,000	144,100	175,210
R.O.P.	10,800	47,000	92,400	135,600	181,400

Employment Forecast Comparison

	2021-2031	2021-2036	2021-2041	2021-2046	2021-2051
Caledon G.M.P.P.	10,290	20,470	38,770	55,710	64,330
R.O.P.	5,710	15,590	28,880	45,520	64,450

Note: The difference observed between the 2021 and 2051 forecasts reflects the changes made in accordance with the Bolton B.U.A., as described in subsection 3.1.1.

3.2 Town of Caledon Settlement Area Boundary Expansion Lands Phasing Plan, 2021 to 2051

3.2.1 Phase 1 (2026 to 2036) vs. Phase 2 (2036 to 2051)

For the purposes of this Phasing Plan, two periods of development have been established: lands categorized as Phase 1 are permitted to begin development between 2026 and 2036 while lands that are categorized in Phase 2 are permitted to begin development between 2036 and 2051. As established in Chapter 2, this Phasing Plan is not intended to be a rigid document to constrain growth within Caledon. If the pace of growth forecast for Phase 1 is not materializing in certain areas of the Caledon S.A.B.E. lands, then the Town would have the ability to reassess which lands originally categorized as Phase 2 could be permitted to begin development within Phase 1.

The Consultant Team assessed each small geographic unit (S.G.U.) in the Caledon S.A.B.E. based on the phasing criteria established in Chapter 2 and the infrastructure

considerations assessed in Chapters 4 and 5. Based on an analysis of the above criteria, three development priority areas have been identified as described below:

- **Bolton:** completing the Bolton community has been a long-standing planning objective and it is recommended that the remaining lands between the existing urban boundary and the limits of the Greenbelt Plan to the north and west be included in this priority area. The lands that are recommended to be included comprise 1,820 developable hectares and will support 76,800 people and 17,720 jobs.
- **Mayfield West:** the Mayfield West community extends between Chinguacousy Road on the west and Dixie Road on the east. Extending the Mayfield West community to the north between these two roads best supports the criteria that have been established. In addition, both employment and residential uses will be accommodated. The lands that are recommended to be included comprise 790 developable hectares and will support 27,700 people and 8,230 jobs.
- **Tullamore:** this area has long been planned for employment uses and it is recommended that this area be extended northwards between Torbram Road and Innis Lake Road. The lands that are recommended to be included comprise 775 developable hectares and will support 14,270 jobs.[1]

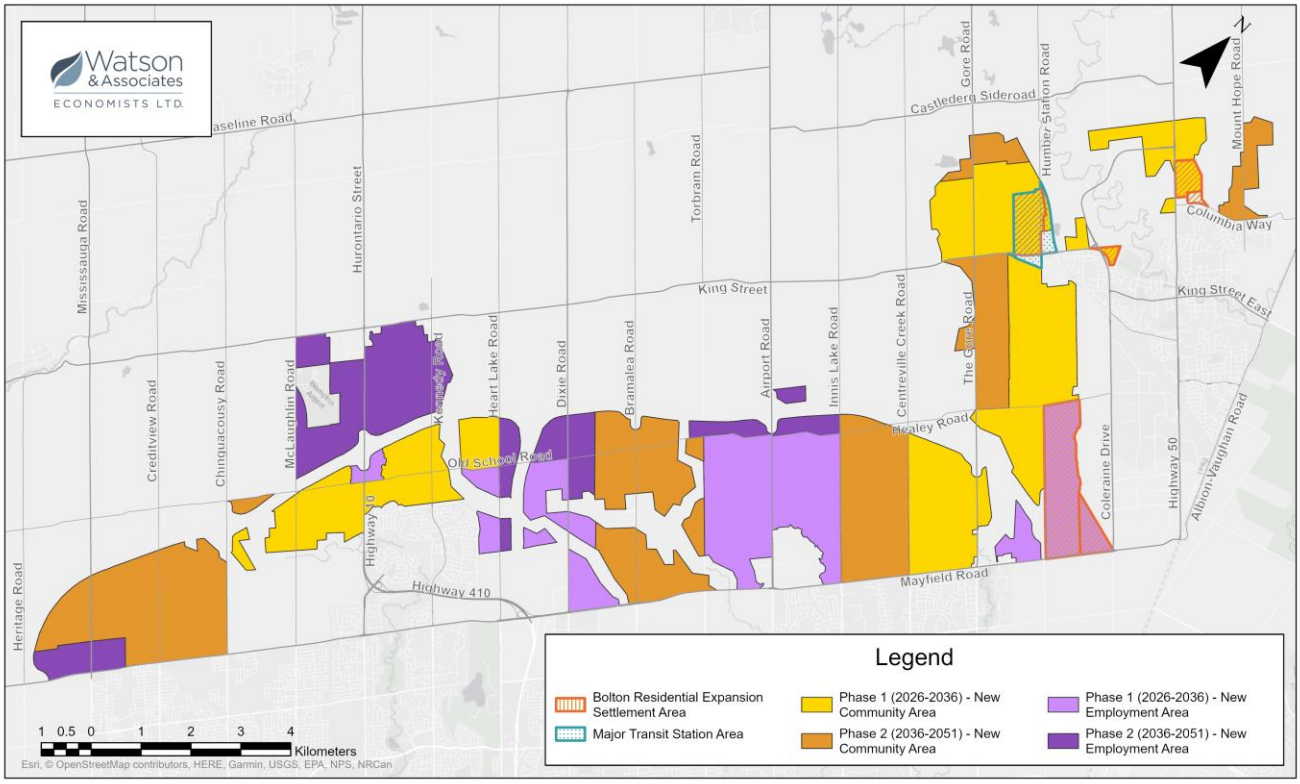
The above priority areas comprise 3,385 developable hectares and would support 97,600 people and this represents 56% of the population planned for the S.A.B.E. lands. Furthermore, these lands are forecast to account for 40,220 jobs, accounting for nearly 70% of forecast job growth. By accelerating population growth to 2036, there was an opportunity to identify additional Community Lands beyond the Phase 1 priority areas already outlined near Bolton, Mayfield West, and Tullamore.

With these considerations all assessed, the resulting Phase 1 and Phase 2 distribution is shown in Figure 3-6 for both new Community Areas and new Employment Areas (see Appendix C for more details). Each phase represents when development is forecast to begin – Phase 1 between 2026 and 2036 and Phase 2 between 2036 and 2051. It is important to recognize that the planning process preceding development can be started before the timing identified in Figure 3-6. Further details regarding this rationale for both

[1] Land areas, population, and employment metrics subject to change due to the provincial reversal of the additional lands included in the Caledon settlement area boundary expansion.

the Community Area and Employment Area phases are provided in the following subsections.

Figure 3-6
Town of Caledon S.A.B.E. Phase 1 and Phase 2 Lands



3.2.2 Population Phasing Plan, 2021 to 2051

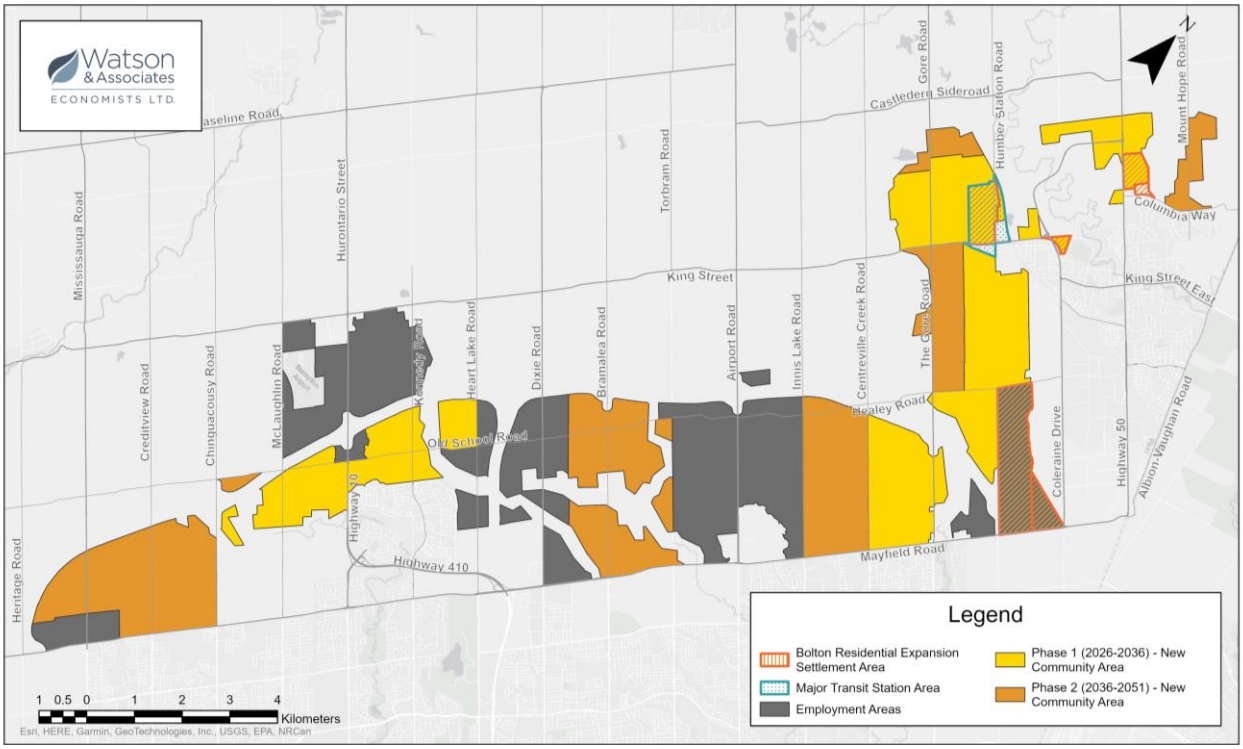
This subsection summarizes the Phasing Plan for the Town of Caledon S.A.B.E Community Areas. These Community Areas represent locations where both residential and population-related employment growth can occur. The following can be observed for the Town of Caledon Community Area Phasing Plan:

- As shown, Phase 1 residential development is largely concentrated in the Planning Areas of Bolton and Mayfield West, in accordance with the planning principles and criteria established in Chapter 2. As emphasized in Chapter 2, the highest priorities for the Town of Caledon are ensuring that growth represents a logical extension of the current Caledon B.U.A. and that the lands represent a logical completion of an existing Caledon urban area. As demonstrated in Figure

3-7, the Phase 1 lands surrounding Bolton and Mayfield West represent logical extensions of existing Caledon urban areas.
    - Further to the above, and specifically for Bolton Phase 1 lands, this plan also supports the prioritizing of growth around the Caledon GO Major Transit Station Area (M.T.S.A.) in the Macville area of Bolton (Criteria 5).
    - While some of these lands are located in the northmost section of the S.A.B.E. boundary, the Phasing Plan has been conceptualized in a way that would facilitate south-to-north development within the Bolton S.A.B.E. along Humber Station Road.
- As noted in subsection 2.1.2, the Consultant Team accelerated the pace of growth within the Caledon S.A.B.E. lands through this exercise compared to the R.O.P. forecast. In doing so, there is a greater opportunity for Phase 1 development beyond the Bolton and Mayfield West extension identified previously.
    - Accordingly, the lands commonly referred to as Wildfield (east of Centreville Creek Road and west of The Gore Road) would also fall within Phase 1. These lands represent a continued expansion west of Bolton and are also easily serviced from south to north as an extension of the serviced areas of Brampton (Criteria 3). Their proximity to the Tullamore Employment Area also represents an opportunity for the Town to continue to engage in the development of complete communities which leverage the efficient development of transportation infrastructure (Criteria 4) and other soft-service delivery such as community centres.

All other areas planned for Community Area development in the Town of Caledon S.A.B.E. lands fall into the Phase 2 planning horizon of 2036 to 2051. As noted previously, if specific lands within Phase 1 are slow to begin development due to developer delays, then the Town can be flexible in its approach to identify lands within Phase 2 to be permitted to begin development before 2036.

Figure 3-7
Town of Caledon S.A.B.E. Community Area Development Phases, 2026 to 2051



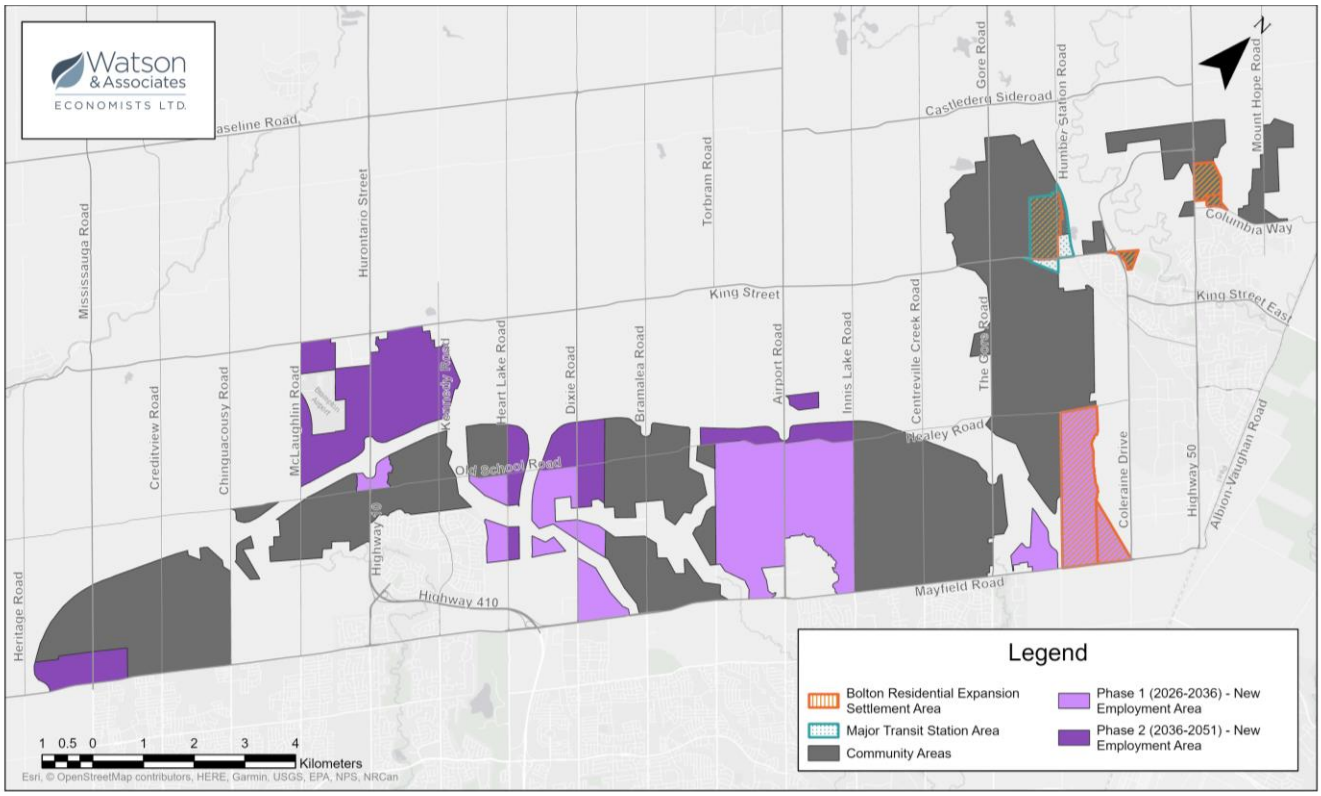
3.2.3 Employment Area Phasing Plan, 2021 to 2051

In support of the planning principles and criteria, Figure 3-8 demonstrates that Phase 1 Employment Area development is largely forecast within the Planning Areas of Bolton, Tullamore, and Mayfield West (see Appendix D for more details). Similar to the Community Area Phasing Plan, the planning for these lands can begin before the associated timing of the proposed phasing. Through ongoing monitoring, if Employment Area development within certain Phase 1 lands is not prioritized for development for various reasons, the Town can permit Phase 2 lands to begin development sooner than 2036. The following can be observed for the Town of Caledon Employment Area Phasing Plan:

- The proposed Phase 1 Employment Area lands expand on existing communities within Caledon and are generally located within the southern portion of the S.A.B.E. lands, supporting the south-to-north development of servicing infrastructure.

- In addition to Phase 1 growth in the Planning Areas, additional employment growth is also contemplated along Dixie Road. Development has already begun progressing here and the extension of this growth represents a logical phasing of development within Phase 1.
- Outside of these areas, the Phase 2 employment land development is located in the Alloa area (west of Creditview Road) in accordance with the timing of Community Area phasing.
- Lastly, the remaining Phase 2 lands represent the northern locations of the Caledon S.A.B.E. lands and are in closer proximity to the future Highway 413 Corridor. The timing of the Highway 413 Corridor could impact the timing of the Phase 1 and Phase 2 development. If the northern portion of certain lands abuts the Highway 413 Corridor buffer, development could potentially be delayed until the completion of the Highway.

Figure 3-8
Town of Caledon S.A.B.E. Employment Area Development Phases, 2026 to 2051



3.3 Conclusions

The Phasing Plan identified in this chapter represents a cohesive approach to planning for the Town of Caledon S.A.B.E. lands. The Phasing Plan functions within the criteria established in Chapter 2, while balancing the infrastructure considerations which will be explored in Chapters 4 and 5. Together, this Phasing Plan represents the prioritization of completing existing Caledon communities (Bolton, Mayfield West, and Tullamore), the early establishment of the Caledon GO Station, and complete communities. The Phasing Plan balances the goals of building out existing communities while balancing residential and non-residential growth in lockstep, to ensure that growth is appropriately concentrated and phased. Building on this, consideration was also given to the efficiency of water, wastewater, and transportation infrastructure, to support south-to-north servicing plans where the core criteria have already been met. The water and wastewater considerations are explored further in the following chapter.

Chapter 4
Water and Wastewater Servicing Analysis

4. Water and Wastewater Servicing Analysis

4.1 Introduction

Cost-efficient infrastructure planning dictates that population growth occur in a cost-effective manner and with the majority of existing Regional services located in south Caledon, the majority of S.A.B.E. options were also identified for south Caledon. While efficient infrastructure planning is a key component of identifying future growth areas in Caledon, the Town is completing this project to identify growth areas that would satisfy the following planning objectives:

- Support complete communities and active transportation.
- Make efficient use of existing and planned water, wastewater, and transportation infrastructure.
- Support the early establishment of a Caledon GO Station.

The timing of the "Made in Caledon" S.A.B.E. forecast will have impacts on the existing and planned water and wastewater infrastructure in Peel Region.

The scope of work for GEI Consultants (formerly GM BluePlan) is to review the "Made in Caledon" growth projections and phasing of growth throughout the planning period (i.e., where and when), and identify the impacts on Regional water and wastewater infrastructure. Specifically, the impacts to the existing and planned water and wastewater system, along with any additional projects necessary to provide adequate water and wastewater servicing to the alternative S.A.B.E. options put forward by the Town. High-level cost estimates will be prepared for the additional water and wastewater infrastructure needs and will ultimately feed into the financial analysis being conducted by Watson & Associates Economists Ltd. (Watson) to determine the financial implications of servicing growth within the alternative areas.

The following sections will provide a background review of the existing water and wastewater systems, the methodology undertaken to perform the analysis, the results, and the associated cost estimates.

4.2 Water System

4.2.1 Water System Background Review

The following summarizes the various sources of data that were used as part of the water system analysis for this assignment:

- "Made in Caledon" S.G.U. forecast for the Town of Caledon.
- Region of Peel's Latest Master Plan Model (InfoWater Pro software).
    - With permission from the Region of Peel, the team utilized the Region's Master Plan Model as a starting point for the hydraulic analysis conducted in this study.
    - The model used was provided by the Region as part of a separate study in June 2021.
    - The model includes scenarios from 2021 to 2041, based on the growth projections that were used during the Region's last Master Plan update.
- Region of Peel's Water System Schematic
    - With permission from the Region of Peel, the team utilized the Region's water system schematic. The water system schematic is a desktop (Excel) tool that can be used to identify and assess the potential system needs (storage, pumping, and transmission) throughout the Region of Peel's system, based on the latest growth projections.
    - The initial growth projections in the schematic (for the remainder of the system in Brampton and Mississauga) are based on the Region's most recent Post-2041 Servicing Study (October 2022). The remainder of the growth projections for Caledon areas (Pressure Zones 6 and 7) were updated as part of this G.M.P.P.

4.2.2 Water System Methodology

The following summarizes the overall approach used as part of the water system analysis for this assignment. Due to the availability of both the Region's Master Plan Model and the Water System Schematic, the water system analysis can assess the 2051 needs in Caledon using a new scenario in the InfoWater model and assess the approximate timing of all the various upgrades using the Water System Schematic and

heat maps that show the timing of growth in each S.G.U. Overall steps in the approach are summarized below:

1. The first step was focused on a Geographic Information System (G.I.S.) assessment of the provided S.G.U. data for Caledon and the intended future pressure zone boundaries for the Peel Region's system. Note that the pressure zone boundaries are based on the ground elevations throughout the system. This step involved a G.I.S. intersect between the Caledon S.G.U. data and the pressure zone boundaries.

    a. This step allows the team to identify which pressure zone each S.G.U. resides within. So, for some S.G.U.s that are fully within a single pressure zone, the shape is identical to its original S.G.U. and the entire growth of the S.G.U. (2021 to 2051 growth) is then able to be identified as growth for that pressure zone.

    b. However, for other S.G.U.s, the polygon could intersect multiple pressure zones (i.e., partly within Pressure Zone 6 (PZ6) and partly within PZ7). So, for these examples, the growth needs to be sub-divided into the two pressure zones. Since the more detailed growth allocation within the S.G.U. is not fully known, it is assumed to align with the percentage split based on the area of the now-divided shape (i.e., if the split S.G.U. has 25% by area within PD6 and 75% area within PD7, then the growth is also split with these same percentages).

    c. For large S.G.U.s on the periphery of the system, they may sometimes be partially within the service boundary and partially outside the service boundary. In these cases, all of the identified growth was assumed to be occurring within the service boundary.

    d. At the end of this step, there is a clear indication of the population growth and the employment growth (for each five-year period) for each of the S.G.U.s, which can also be summarized by pressure zone.

2. The growth identified by pressure zone is then transferred into the Region's Water System Schematic for initial assessment. This first stage is focused on the overall system needs (storage, pumping, and transmission) across the

Region's system. This provided the team with an awareness of what larger transmission upgrades, storage needs, and pumping needs would get triggered by the overall magnitude of growth in the Caledon system since all the flow has to first travel from the water treatment plants on Lake Ontario north through the existing water systems in Mississauga and Brampton.

a. All growth demand estimates were based on the same design criteria as used during the Region's Master Plan (residential average unit rate of 270 L per capita per day (L/cap/day); employment average unit rate of 250 L/cap/day; Maximum Day Peaking Factors of 1.8 and 1.4 for residential and employment, respectively.)

b. Starting point demands (2021) were based on historical flows and populations in 2021.

3. The following sub-steps are all part of the completed modelling analysis. Modelling was focused on developing the Caledon 2051 scenario and identifying what the total system needs would be for the system to meet that growth.

    a. Region's Master Plan Model and the 2041 Maximum Day Demand Scenario were used as a baseline for the demands/growth and infrastructure throughout the rest of the water system in Brampton and Mississauga.

    b. In order to allocate the Caledon growth into the hydraulic model, there were first some new model junctions that needed to be added for new service areas (i.e., areas that had previously not been considered for development in the model, so they were not previously created). These junctions were added along key expected right of ways such that a simplified distribution main network could be added to the model for the initial model simulations.

    c. With these new junctions across the full Caledon service area, demand allocation could proceed. Demand allocation involved a G.I.S. spatial join, where the growth of each S.G.U. by pressure zone was assigned to the various modelling junctions that were located within the S.G.U. This process does exclude "non-demand" junctions at facilities. Since there is

no further awareness of where the growth is happening within each S.G.U., the growth was allocated evenly to all of the model junctions within the S.G.U. For some S.G.U.s, all growth would have been allocated to one junction. For S.G.U.s with multiple existing junctions, the growth would have been split evenly amongst the existing junctions.

d. All growth demands were allocated using the Region of Peel's Master Plan design criteria.

e. All existing demand (2021) in the Caledon area was left as-is in the hydraulic model.

f. At this stage, with the model updated with the new Caledon growth demands to 2051, the model was ready for simulation.

g. Initial model runs did not include the expected major transmission, storage, or pumping upgrades since it would provide simulated impacts of what would happen without major upgrades. Subsequently, with the system unable to meet the new growth needs, additional projects were added to the model and sized to address each of the limitations. These limitations included: insufficient pumping from facilities, insufficient storage, insufficient transmission main capacity to move volumes from the pump station to the next storage facility, and adjustments to facility controls where necessary. This iterative process was completed using engineering best judgement and was based on the results generated after each subsequent model run until the system was operating to the targeted levels of service required by the Region of Peel (in terms of pressure, watermain velocity, and storage levels).

h. The various projects identified were then carried forward to the capital program.

4. The timing of distribution projects was estimated based on the timing of growth shown in the S.G.U.s. For example, when the growth starts in a new (currently un-serviced) S.G.U., the distribution mains to service it would follow in the same five-year window.

4.2.3 Water System Results

4.2.3.1 West & Central side of Caledon (west of Bramalea Road)

- Overall, the impacts on the west and central system are **moderate** because:
  - There is already an existing Pressure Zone 7 system in this area (existing storage and two existing pumping stations (P.S.))
  - There are already plans, in the Region of Peel's Master Plan, to expand this part of the system with a number of planned distribution mains and an additional storage facility on the west side of Pressure Zone 7.
  - The additional growth to 2051, over and above the growth considered by the Region of Peel to 2041 is a moderate increase.
- All the previously planned Region of Peel Master Plan projects in this area are still needed and the same size is still appropriate. The timing of these projects, however, would be revised slightly since all of these projects would need to be in place within "Phase 1," which is identified as growth to 2036.
- New projects (not previously in the Region's Master Plan) needed to service growth to 2051 are exclusively planned to occur during Phase 2 (2036 to 2051). These new projects generally include:
  - Additional distribution mains, west of Chinguacousy, to service areas not previously identified for growth within the Region's Master Plan horizon.
  - Additional distribution mains around Bramalea Road to service areas not previously identified for growth within the Region's Master Plan horizon.
  - Additional distribution mains, north of the proposed Highway 413 between McLaughlin and Kennedy Road, to service areas not previously identified for growth within the Region's Master Plan horizon.
  - A new Pressure Zone 7 P.S. located at the upcoming Victoria Reservoir site. This facility would be intended to support the additional growth beyond the capacities of the existing Alloa and North Brampton Pump Stations, while also providing the necessary resiliency of supply in the future.
- Summary maps of these projects and other information can be found in the November 21, 2023 Council Presentation, which is included in Appendix E.

4.2.3.2 East side of Caledon (east of Bramalea Road)

- Overall, the impacts on the east system are significant because:
    - Growth is now projected to be extending into areas north of King Street and north of Columbia Way. Both areas continue to increase in ground elevation, such that they can no longer feasibly be serviced by the existing Pressure Zone 6. This leads to new projects being required to create a new Pressure Zone 7 in this eastern side of Caledon.
    - Overall, the "Made in Caledon" growth forecast is significantly increased and faster than what was originally planned during the Region of Peel's Master Plan to 2041. As such, there are not only project needs within Caledon, but also further transmission/pumping upgrade needs south of Caledon to help bring increased flows north.
- All the previously planned Region of Peel Master Plan projects in this area are still needed and the same size is still appropriate. However, the timing of these projects would be revised slightly since all of these projects would need to be in place within "Phase 1" to service growth to 2036.
- New projects (not previously in the Region's Master Plan) needed to service growth to 2051 are not only needed to service post-2036 growth but in many cases would be needed prior to 2036 based on the proposed phasing of growth.
- The "Phase 1" Projects, needed to support the updated growth to 2036, include:
    - New projects are primarily related to creating a Pressure Zone 7 to service the near-term growth north of King Street/Columbia Way. This includes a P.S., an elevated storage facility, and various watermains ranging from distribution mains for looping and transmission mains between the P.S. and storage tank.
    - A major transmission upgrade is triggered through the Brampton system in order to increase the current supply of water from the Airport Road P.S. to the Tullamore Reservoir. The Tullamore Reservoir & Pump Station is the source of all water directed towards the east side of Caledon and the current transmission main is insufficient to meet the new growth. So, this twinned transmission main and pump station upgrade at Airport Zone 4 is being triggered to support this growth in Caledon.

- The “Phase 2” Projects needed to support the growth beyond 2036 to 2051 include:
    - With continued growth, the Tullamore Z6 PS is insufficient to meet the needs of the entire east side of Caledon. As such, the major upgrades that get triggered in Phase 2 include the creation of a new facility. This new facility is dubbed “Sandhill Reservoir and Pump Station.” It is envisioned to be a Zone 5 storage facility and a P.S. that sends water to both Zone 6 & Zone 7. This also means a significant amount of transmission and sub-transmission infrastructure is needed to connect this facility with Tullamore and the new growth areas.
    - A second elevated tank is also identified to support the continued growth in Pressure Zone 7, along with a further expansion of the distribution mains in the area northeast of Bolton.
- Summary maps of these projects and other information can be found in the November 21, 2023 Council Presentation, which is included in Appendix E.

4.2.4 Water System Cost Estimates

Figure 4-1 summarizes the overall project costs related to the above-noted water system projects. This table has been updated to reflect the revised phasing provided in July 2024. Cost estimates have been updated from 2023 dollars to 2024 dollars using Statistics Canada’s construction price index from Q1 2023 to Q1 2024 of 4.6%.

It is noted that project cost estimates were completed using the same methodology as during the Region of Peel’s Master Plan which largely involved unit rate costs for the facilities and watermains based on size (length/diameter; etc.), plus additional charges due to expected complexity of the project and the expected amount of tunneling vs. open-cut method of construction for the watermains. Additional “soft” costs are also included for contingency, design costs, and more.

It is also important to note that the below costs are exclusively for new projects, not previously identified in the Region of Peel’s Master Plan. The other Region of Peel identified Master Plan projects are also all needed to be completed to service the growth to 2036. These still-to-be-completed projects are expected to be an additional ~$200 million by 2036.

Figure 4-1
Town of Caledon Water System Cost Estimates

Category	Cost ($2024)
Phase 1 (Before 2036)	**$286 million**
West/Central: Additional Distribution Upgrades	-
West/Central: Additional Pumping, Storage & Transmission Upgrades	-
East: Additional Distribution Upgrades	$19 million
East: Additional Pumping, Storage & Transmission Upgrades	$79 million
East: Major Upgrades south of Caledon to support overall growth	$188 million
Phase 2 (2036 to 2051)	**$507 million**
West/Central: Additional Distribution Upgrades	$33 million
West/Central: Additional Pumping, Storage & Sub-Transmission Upgrades	$40 million
East: Additional Distribution Upgrades	$9 million
East: Additional Pumping, Storage & Transmission Upgrades	$256 million
East: Major Upgrades south of Caledon to support overall growth	$152 million
Phase 1 & Phase 2 Total	**$793 million**

4.3 Wastewater System

4.3.1 Wastewater System Background Review

The following summarizes the various sources of data that were used as part of the wastewater system analysis for this assignment:

- "Made in Caledon" S.G.U. forecast for the Town of Caledon S.A.B.E. lands.
- Region of Peel's Wastewater Area 1, which includes the majority of the Caledon area, and Area 2, which includes Brampton and West Caledon in the model (InfoWorks ICM software)

- The Area 1 model provided on 5th July 2023 included a single scenario using Region of Peel-generated 2051 projections. Growth in Caledon was removed and replaced with the "Made in Caledon" forecast.
- The Area 2 model included three scenarios: Base, 2051, and Ultimate. The 2051 scenario was used for the analysis on the west side of Caledon. However, this model did not contain all growth area subcatchments meaning it could not be simply loaded with the new growth projections.

4.3.2 Wastewater System Methodology

The following summarizes the overall approach used as part of the wastewater system analysis for this assignment. For the purposes of this analysis, Caledon is split into the east side of Caledon (east of Kennedy Road) and the west side of Caledon (west of Kennedy Road). Watson provided population growth projections which were allocated in the Area 1 model for the east side of Caledon. For the west side of Caledon, the existing model flows were exported to a spreadsheet where growth flows were added to complete a desktop analysis. This approach was taken as the Area 2 model, which included this area of Caledon, did not have the future growth area subcatchments added at the time of this study. The desktop analysis provides a conservative assessment of growth impacts. Overall steps in evaluating the system are summarized below:

4.3.2.1 East Side of Caledon

1. The first step was focused on a G.I.S. assessment of the provided S.G.U. data for Caledon and the Region-provided Area 1 subcatchments.

2. This involved a G.I.S. intersect between the Base subcatchments and the S.G.U.s, splitting both the subcatchments and their corresponding population based on weighted areas (i.e., if the split subcatchment has 25% by area within S.G.U. 1 and 75% area within S.G.U. 2, then the growth is also split with these same percentages).

3. In each S.G.U., the net growth is obtained by finding the difference of total (residential and employment) S.G.U. population and the sum of the base populations of all split base subcatchments.

4. Wherever there was a decrease from the base in an S.G.U., the population growth was replaced with 2051 data.

5. The net growth was then re-distributed to the 2051 split subcatchments by S.G.U. in accordance with their weighted areas (split as described in Step 2).

6. Subcatchments in Bolton were directed to Humber Station Road and Coleraine Road, in alignment with the draft recommendations of the ongoing Region of Peel Bolton Environmental Assessment study. A connecting pipe was added in the model to the Humber Station Road sewer to enable a flow split between the sewers on Coleraine Road and Humber Station Road.

7. The net growth for 2051 was allocated in the model and analyzed for a five-year SCS II design storm simulation. Constraints in the model were identified and the required upgrades were proposed.

4.3.2.2 West Side of Caledon

1. G.I.S. assessment was carried out with the provided S.G.U. data (west of Kennedy Road) for Caledon and the Area 2 latest model received from the Region as part of a separate study.

2. The net growth was obtained by calculating the difference between the Caledon 2051 population and the Base model. The 2051 population in the model was then subtracted to identify the additional growth to be allocated and analyzed.

3. For the desktop analysis, the growth loading points were selected based on the Post-2041 Study that was performed by the Region in 2022. The constraints due to additional 2051 growth were analyzed based on 2051 flows and pipe capacities extracted from the model.

4.3.3 Wastewater System Results

4.3.3.1 West Side of Caledon (West of Kennedy Road)

- Overall, the required upgrades were **moderate** on the west side of Caledon.
    - The updated growth projections to the west of Chinguacousy Road were significantly less than the GMBP-Watson 2051 projections. After desktop analysis, it was observed that the 2041 Master Plan projects could handle

the 2051 growth projections and therefore no additional upgrades were required.

- Upsizing of the Etobicoke Creek Trunk Sewer to an 825 mm diameter was required and attributed to growth between McLaughlin Road and Kennedy Road.

4.3.3.2 East Side of Caledon (East of Kennedy Road)

The required upgrades were **significant** on the east side of Caledon:

- Caledon East P.S. was not updated in the model; however, the firm capacity of the P.S. was recently upgraded to 143 L/s. After re-allocating growth in the model, it was observed that the P.S. would require further upsizing to 190 L/s by 2051, which is an additional 47 L/s beyond its current firm capacity.
- Bolton showed several constraints including surcharging and back flows; however, there were no basement flooding conditions identified. Therefore, it was concluded that numerous local collector sewer upgrades were needed in Bolton.
- The Airport Road Trunk Sewer experienced surcharging conditions from the Leachate P.S. and required a pipe upsize from 600 mm diameter to 1200 mm diameter to handle a future flow of 1,000 L/s.
- Upstream of Humber Station Road is a 1200 mm diameter trunk sewer whereas downstream beyond Mayfield Road the pipe has a diameter of 750 mm. Surcharging was observed from Mayfield to Highway 50, therefore an alternative route through Mayfield to The Gore Road was proposed with a 1200 mm diameter pipe.
- The Mayfield Road and Bramalea Road Trunk Sewers are Master Plan projects that require upsizing from 450 mm diameter to 600 mm diameter due to growth reallocation.
- The Dixie Road/Old School Road trunk sewer experienced surcharging and requires upsizing from a 750 mm diameter pipe to a 975 mm diameter pipe until the Sandalwood Parkway junction.
- The new North Bolton sewage pumping station (S.P.S.) would require an additional pump with a rated capacity of 210 L/s in conjunction with associated forcemains and gravity sewers.

4.3.4 Wastewater System Cost Estimates

Figure 4-2 summarizes the overall project costs related to the above-noted wastewater system projects. This table has been updated to reflect the revised phasing provided in July 2024. Cost estimates have been updated from 2023 dollars to 2024 dollars using Statistics Canada's construction price index from Q1 2023 to Q1 2024 of 4.6%. In summary, approximately $206M & $662M of wastewater infrastructure costs were identified for Phase 1 and Phase 2, respectively. It is noted that project cost estimates were completed using the same methodology as used during the Region of Peel's Master Plan which largely involved unit rate costs for the facilities and sewers based on size (length/diameter; etc.), plus additional charges due to expected complexity of the project and the expected amount of tunneling vs. open-cut method of construction for the watermains. Additional "soft" costs are also included for contingency, design costs, and more.

Figure 4-2
Town of Caledon Wastewater System Cost Estimates

No.	DESCRIPTION	Cost ($2024)
WEST / CENTRAL		
1	New Sewers Required (West of Kennedy Road)	$94 million
2	Dixie Road & Heart Lake Road Pipe Upsize on Dixie Road from Old School & Heart Lake Road (450 mm existing) to Dixie & Sandalwood Parkway East (750 mm existing)	$126 million (~$2 million of the project in 2020 MP)
3	Etobicoke Creek Trunk Sewer Upsizing Pipe upsize required on Etobicoke Creek, from Tremont Ct. to Sandalwood Parkway East (750 mm existing)	$7 million
West/Central Total:		**$227 million**
EAST / BOLTON		

No.	DESCRIPTION	Cost ($2024)
4	Caledon East Sewage Pumping Station Firm capacity upgrade required from 143 L/s to 190 L/s.	$2 million
5	New Sewers Required (East of Kennedy Road)	$105 million
6	Airport Road Pipe upsize on Airport Road from Sandhill (600 mm existing) to Sun Pac Boulevard & Ward Road intersection (1050 mm existing)	$283 million
7	Mayfield Road & Bramalea Road Pipe upsize required from 500 metres east of Dixie Road & 1,475 metres south of Old School Road (450 mm existing) to the intersection of Airport Road & Eagle Plain Drive (525 mm existing).	$94 million (~$10 million of the project in 2020 MP)
8	North Bolton S.P.S., Forcemain, & Gravity Sewers New North Bolton S.P.S. (~210 L/s), 1.4 km length of 300 mmø forcemain to Humber Station trunk sewer, and 3.1 km length of 525 mmø sewer.	$78 million
9	Bolton Local Sewer Upsizing	$32 million
10	Humber Station Road Divert flow from Humber Station Road to The Gore Road trunk sewer with new 1200 mm pipes along Mayfield Road	$47 million
East/Bolton Total:		**$641 million**
TOTAL:		**$868 million**

4.4 Conclusions

As outlined in the preceding sections, the Phase 1 S.A.B.E. lands can be functionally serviced by extensions and/or upgrades to the existing Regional water and wastewater system. The majority of these upgrades will be located within Caledon and serve to extend servicing to new expansion areas; however, some upgrades are required to existing facilities within Caledon or further downstream in Brampton and Mississauga.

The impacts to the west and central water system in Caledon will be moderate, partially due to existing and planned upgrades within these areas and partially due to the modest population growth increases proposed in these areas. The impacts on the east water system in Caledon will be significant due to additional growth being proposed north of the existing PZ6, thereby necessitating significant infrastructure to create a PZ7. Growth is also proposed to occur significantly higher and faster than what was originally proposed within the R.O.P. Master Plan to 2041. As such, additional capital costs for water infrastructure to facilitate Phases 1 and 2 are $286M and $507M, respectively. It is noted that still-to-be-completed Master Plan projects for water infrastructure were not included in the cost estimates and total an additional $200M by 2036.

Similar to the water system, the impacts to the west and central wastewater systems in Caledon will also be moderate, while the impacts to the east wastewater system in Caledon will be significant, for the reasons previously stated. While the available wastewater model did not provide the option of analyzing capital cost phasing between Phases 1 and 2, the phasing plans were used to estimate required capital expenditures for Phases 1 & 2 of the West/Central and East wastewater systems in Caledon. It is estimated that capital costs for wastewater infrastructure to facilitate Phases 1 & 2 are $206M and $662M, respectively. It is noted that still-to-be-completed Master Plan projects for wastewater infrastructure were not included in the cost estimates and total an additional $130M by 2041.

Chapter 5
Transportation and Transit Analysis

5. Transportation and Transit Analysis

5.1 Introduction

To identify the roadway improvement phasing plan and assess the financial impacts, background study documents were reviewed, including the Town's Multi-modal Transportation Master Plan (M.M.T.M.P.) model, a review of updated land use data (i.e. population and employment data and estimates), Region's 2024 ten-year capital program, Region's 2019 Long Range Transportation Plan, and the timing of the secondary plan based on the Region's servicing plans. This study identifies the road network improvements located within the Town of Caledon under both the Town's and Region's jurisdictions and associated costs for transportation improvements (roads and transit).

5.2 Fiscal Requirements for Road Network

The costing requirements for the Capital Costs (i.e., the cost for construction of new roads or road widening), Operations and Maintenance Costs (i.e., costs for routine operations and maintenance), and Life-Cycle Improvements (i.e., total project costs inclusive of replacement costs for aging components over a given timeframe) were considered to derive the total fiscal requirements for the road network. The study assumptions and methodology used to derive the fiscal requirements for road network, and analysis results are summarized in the following subsections.

5.2.1 Review of M.M.T.M.P. Model

The Town's M.M.T.M.P. travel demand model was collected from the Peel Region to assess the need for road network improvements for the proposed growth for each planning horizon years of 2031, 2041, and 2051, based on the servicing plan of the secondary plans. The Region's travel demand model is an Emme-based GTAModelv4.0 model; some key aspects of the model include:

- The model simulates morning peak hour conditions and encompasses future planning horizons of 2031, 2041, and 2051;

- It incorporates the land use data (i.e., population and employment data) utilized in the Town's recent MMTMP study.

The study further revisited the timing for the roadway improvement based on the secondary and the Region's servicing plans.

5.2.2 Review of Proposed Land Use

The "Made in Caledon" S.G.U. forecast was aggregated for Emme model zones. The updated land use data for split S.G.U.s and details of land use data aggregation are provided in Appendix F.

The updated land use data was reviewed and compared with the original land use data used in the MMTMP model. The review of land use data (population and employment) comparison between M.M.T.M.P. and G.M.P. land use data are presented in Appendix G, for each traffic analytical zone and planning horizon year. The land use data was further aggregated for Caledon areas covering the Bolton residential expansion area and S.A.B.E. areas, as presented in Figure 5-1 and Figure 5-2.

Figure 5-1
Town of Caledon Areas for Land Use Data Review

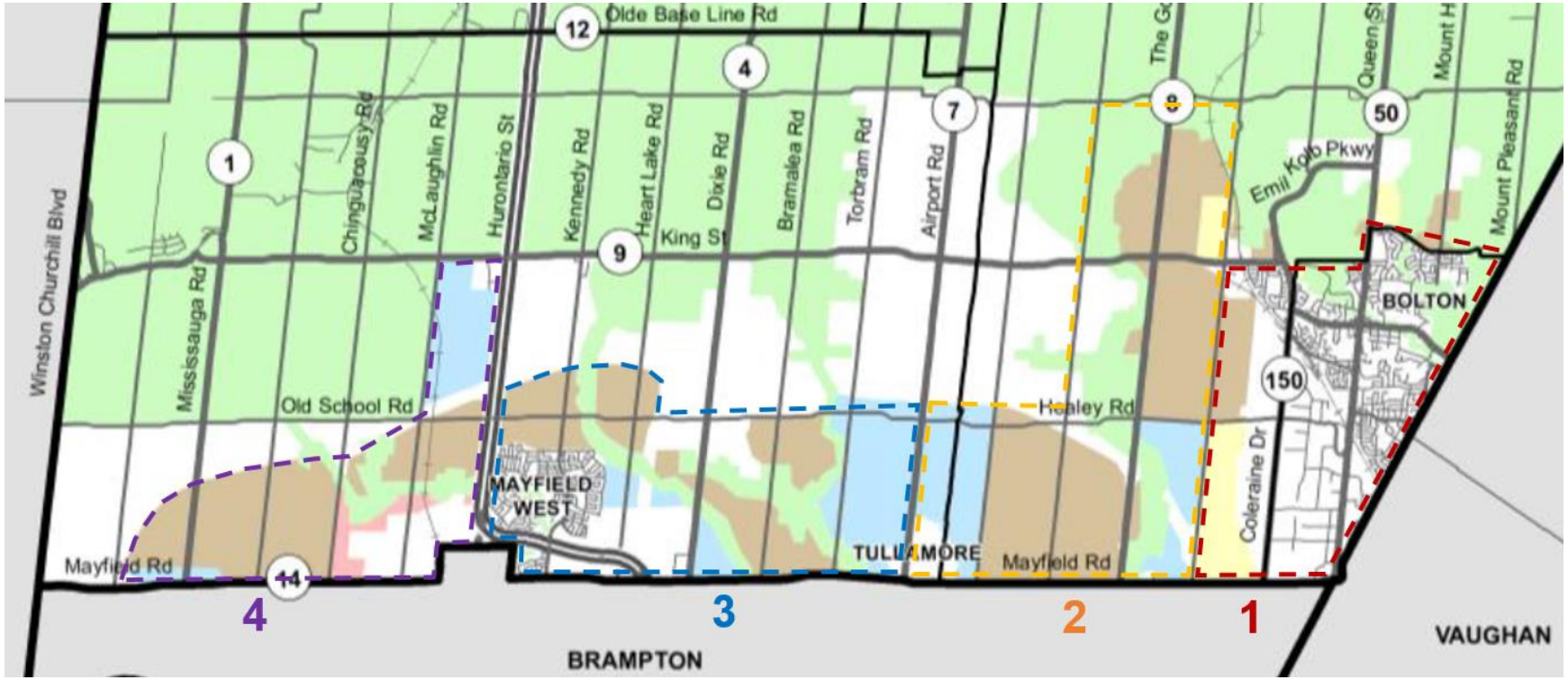


Figure 5-2
Town of Caledon Land Use Data Review and Comparison

Caledon Area	MMTMP Model Data						Updated Land Use Data					
	2031		2041		2051		2031		2041		2051	
	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment
1-Bolton	30,960	23,590	35,230	24,690	40,345	27,118	29,023	22,080	38,165	24,506	45,559	27,569
	Diff. (Updated - MMTMP Data)						-1,937	-1,510	2,935	-184	5,214	451
2-SABE bt. Airport Rd and Humber Station Rd	3,890	3,130	36,450	13,410	87,416	23,222	10,207	3,824	71,821	13,574	79,267	18,075
	Diff. (Updated - MMTMP Data)						6,317	694	35,371	164	-8,149	-5,147
3-SABE bt. Hurontario St and Airport Rd	19,420	6,480	48,000	15,570	54,236	28,882	18,657	8,800	28,424	20,532	52,642	28,782
	Diff. (Updated - MMTMP Data)						-763	2,320	-19,576	4,962	-1,594	-100
4-SABE west of Hurontario St	18,110	4,100	35,640	11,680	58,258	18,802	17,571	4,316	32,200	8,430	49,004	17,342
	Diff. (Updated - MMTMP Data)						-539	216	-3,440	-3,250	-9,254	-1,460
SUM	**72,380**	**37,300**	**155,320**	**65,350**	**240,255**	**98,024**	**75,458**	**39,020**	**170,610**	**67,042**	**226,472**	**91,768**
	Diff. (Updated - MMTMP Data)						**3,078**	**1,720**	**15,290**	**1,692**	**-13,783**	**-6,256**

The land use data review indicates that:

- In general, when considering all four Caledon areas, the updated data shows higher population and employment figures for the years 2031 and 2041 compared to the M.M.T.M.P. data. For the year 2051, however, the updated data reflects lower figures.[1]
- For planning horizon 2051, the updated data shows higher population and employment figures within the Bolton area compared to the M.M.T.M.P. data, while lower within the other three S.A.B.E. areas.
- For the Bolton area, the per capita increment (i.e., a total of population and employment from 2031 to 2041, and from 2041 to 2051) derived from the updated data ranges from 10,500 to 11,500 between planning horizon years, which is higher than the per-capita increment derived from the M.M.T.M.P. data (ranges from 5,400 to 7,500).

5.2.3 Review of Region's Ten-year Capital Program and Long-Range Transportation Plan

The Region's 2024 ten-year capital program was reviewed to extract details of roadway improvement, including roadway segment, improvement types, length, additional lane-km, and associated capital costs for projects planned between 2024 and 2033. Based on the capital costs for roadway improvement, unit costs were estimated for four-lane, five-lane, and six-lane widening projects. These unit costs were then used to estimate the capital costs for roadway improvements planned between 2034 and 2041. The ten-year capital program also includes funding required for roadway pavement repairs and structure rehabilitation, which were used to estimate the life cycle costs for regional roadways and structures.

The Region's 2019 Long Range Transportation Plan (L.R.T.P.) was used to identify regional roadway improvements planned between 2034 and 2041 (as detailed in the next section). According to the Region's LRTP, and verified by reviewing the M.M.T.M.P. model, no regional roadway improvements are planned beyond 2041.

[1] As noted in Chapter 3, the Town-wide forecast to 2051 has been maintained with the R.O.P. forecast but some S.A.B.E. growth has been shifted to the Bolton B.U.A.

5.2.4 Phasing Plan for Road Network Improvements

The updated land use data and the provided timing for the secondary plans were considered for the MMTMP model, and this information was used for future trip generation and assignment.

The future road improvements were identified by considering the future traffic demand forecasts. The phasing plan for roadways under the Town's jurisdiction is summarized in Figure 5-3 and presented in Figure 5-6.

It is noted that a travel demand modelling analysis was not conducted for the updated land use proposed under the Growth Management Phasing Plan (G.M.P.P.) Study. However, based on the high-level review, it could be possible that the segment of Heart Lak Road between Mayfield Road and Old School Road may need to be widened before the year 2051 to support the employment growth planned in Phase 1 (2026-2036). The change in phasing may also require construction simultaneously on various corridors, which could result in additional funding requirements in the early years and network congestion due to multiple road construction activities.

The phasing plan for regional roads within the Town is summarized in Figure 5-4 and presented in Error! Reference source not found.. Regional road improvements planned for 2033 were identified based on the Region's 2024 ten-year capital program, while improvements for 2041 were based on the Region's 2019 Long Range Transportation Plan and verified using the Region's travel demand model (Emme) which was utilized for the MMTMP Study. No additional regional road improvements have been identified for 2051.

With the proposed development planned in the Town, the major arterials under the Peel Region's jurisdiction may need additional improvements, to provide additional vehicular capacity and address the needs of active transportation (pedestrians, cyclists). It is recommended that the Town coordinate these arterial network improvements with Peel Region.

Figure 5-3
Proposed Road Widening and New Road Construction Phasing for Town of Caledon Roads (2024-2051)

Proposed Phasing	Road	From	To	Recommendation
2031	Chinguacousy Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes
	McLaughlin Road	Lippa Drive	Old School Road	Widening from 2 to 4 lanes
	Humber Station Road	Mayfield Road	Limit of Settlement Area (north of King Street)	Widening from 2 to 4 lanes
	Abbotside Way	Bonniglen Farm Boulevard	Heart Lake Road	Extension (4 lanes)
	Healey Road	The Gore Road	Coleraine Drive	Widening from 2 to 4 lanes
	Torbram Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes
	Kennedy Road	Bonniglen Farm Boulevard	Old School Road	Widening from 2 to 4 lanes
	Bramalea Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes
	Heart Lake Road	Mayfield Road	North of Abbotside Way	Widening from 2 to 4 lanes
	George Bolton Parkway	West of Coleraine Drive	Humber Station Road	Extension (4 lanes)
2041	Albion Vaughan Road	Mayfield Road	King Street	Widening from 2 to 4 lanes
	Innis Lake Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes
	Centreville Creek Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes
	Old School Road	Winston Churchill Boulevard	Airport Road	Widening from 2 to 4 lanes
	Healey Road	Airport Road	The Gore Road	Widening from 2 to 4 lanes
	Bramalea Road	Old School Road	King Street	Widening from 2 to 4 lanes
	Kennedy Road	Old School Road	King Street	Widening from 2 to 4 lanes
	Caledon King Townline	King Street	Columbia Way	Widening from 2 to 4 lanes
	Heart Lake Road	Abbotside Way	Old School Road	Widening from 2 to 4 lanes
	Creditview Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes
	Duffy's Lane	Emil Kolb Parkway	Limits of Option 1 Lands	Widening from 2 to 4 lanes
	Mount Hope Road	Columbia Way	1.1 km south of Castlederg	Widening from 2 to 4 lanes
	Columbia Way	Regional Road 50	Caledon King Townline	Widening from 2 to 4 lanes
2051	Chinguacousy Road	Old School Road	King Street	Widening from 2 to 4 lanes
	McLaughlin Road	Old School Road	King Street	Widening from 2 to 4 lanes
	Heritage Road	Highway 413 Limits	Old School Road	Widening from 2 to 4 lanes
	Bramalea Road	Old School Road	King Street	Widening from 2 to 4 lanes
	New Road linking Macville to Emil Kolb Parkway	Macville Limits at the rail line	Emil Kolb Parkway	New 2 to 4 lane road
	New Road Linking Option 1 Lands with Option 2 Lands	East Limits of Option 1 Lands	West Limits of Option 2 Lands	New 2 to 4 lane road

Figure 5-4
Proposed Road Widening and New Road Construction Phasing for Peel Region (2024-2041)

Proposed Phasing	Road	From	To	Recommendation
2033	Dixie Road	Mayfield Road	2 km northerly	Widening from 2 to 5 lanes
	Mayfield Road	Airport Road	The Gore Road	Widening from 2 to 5 lanes
	Mayfield Road	Coleraine Drive	Highway 50	Widening from 2 to 4 lanes
	Mayfield Road	Hurontario Street	Chinguacousy Road	Widening from 2 to 6 lanes
	Mayfield Road	The Gore Road	Coleraine Drive	Widening from 2 to 4 lanes
	Airport Road	1km north of Mayfield Road	King Street	Widening from 2 to 5 lanes
	Mayfield Road	Chinguacousy Road	Mississauga Road	Widening from 2 to 5 lanes
	Mayfield Road	Dixie Road	Bramalea Road	Widening from 5 to 6 lanes
	Mayfield Road	Mississauga Road	Winston Churchill Boulevard	Widening from 2 to 4 lanes
	Mayfield Road	Heart Lake Road	Hurontario Street	Widening from 4 to 6 lanes
	Mayfield Road	Airport Road	Clarkway Drive	Widening from 5 to 6 lanes
2041	Mississauga Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes
	Mayfield Road	Chinguacousy Road	Highway 413	Widening from 5 to 6 lanes
	The Gore Road	Mayfield Road	Healey Road	Widening from 2 to 4 lanes
	Mayfield Road	Clarkway Drive	Coleraine Drive	Widening from 4 to 6 lanes

Figure 5-5
Proposed Road Widening Phasing for Town of Caledon Roads

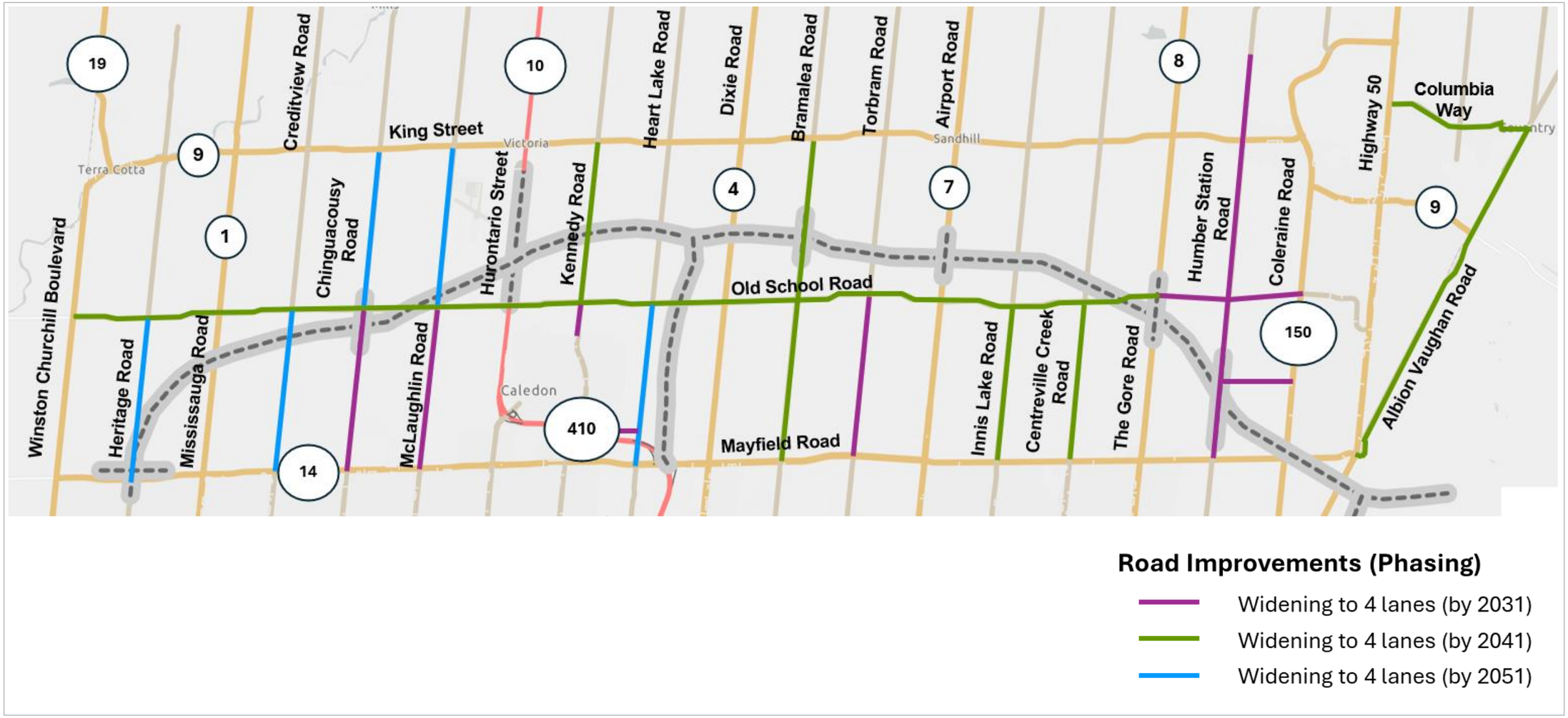


Figure 5-6: Proposed Road Widening and Phasing for Peel Regional Roads (2033 and 2041) within the Town of Caledon

5.3 Capital Costs

5.3.1 Roadways under the Town's Jurisdiction

The capital costs required for the Town's future roadway improvements were estimated based on the road network improvements identified for each planning horizon years of 2031, 2041 and 2051 (as discussed in the previous section). For the Town's roads, a high-level unit cost of $7.3 million per km was used to estimate the cost for road widening (from two-lane to four-lane with AT facilities, and $6.8 million per km for a new four-lane construction cost.

The capital cost requirements are presented in Figure 5-7 for Town roads. From the existing conditions to the future planning horizon year of 2051, about 83 km length of the roads are proposed to be either newly constructed or widened with a four-lane cross-section of complete street (i.e., general purpose lanes with sidewalk or multiuse path, transit stops, boulevard, etc., to accommodate all modes of transportation including, pedestrians, cyclists, autos, commercial vehicles, and transit users). The proposed road network improvements are estimated to cost about $758.1 million (in $ the value of 2024).

Figure 5-7
Review of Financial Requirements for Town Roads (2024-2051)

Item	Phasing Plan			Total
	2024 - 2031	2032 - 2041	2042 - 2051	
Proposed Length of Road network improvement (km)*	21.75	45.9	15.5	83.15
Construction Costs	$159 million	$386 million	$113 million	$658 million
Soft/Design Cost (15%)	$24 million	$58 million	$17 million	$99 million
Total Capital Costs	**$182 million**	**$444 million**	**$131 million**	**$756.8 million**

Note: The complete street construction costs were estimated based on a unit cost of $7.3 million per km for two-lane to four-lane widening and 6.8 million per km for a new four-lane road construction (including sidewalks, bike lanes, illumination, etc.).

The capital cost breakdown for Town roads for planning horizon years 2031, 2041 and 2051 is presented in Appendix H.

5.3.2 Roadways under the Region's Jurisdiction

For regional roads, the capital costs for roadways planned for improvement by 2033 were derived from the Region's 2024 ten-year capital program, while the capital costs for projects planned by 2041 were estimated using unit costs derived from the same ten-year capital program.

The capital cost requirements are presented in Figure 5-8 for regional roads within the Town of Caledon. From the existing conditions to the future planning horizon year of 2041, about 45 km length of the roads are proposed to be widened which are located within the Town of Caledon. The proposed road network improvements are estimated to cost about $388 million (in $ the value of 2024).

Figure 5-8
Review of Financial Requirements for Regional Roads (2024-2051)

Item	Phasing Plan		Total
	2024 - 2033	2034 - 2041	
Proposed Length of Road network improvement within the Town (km)	33.17	11.7	44.87
Capital Costs*	$291 Million	$97 Million	$388 Million

Note: Sourced from the Region's 2024 ten-year capital program

The Capital Cost breakdown for Town and Regional roads for planning horizon years 2031 (2033 for regional roads), 2041 and 2051 are presented in Appendix H.

5.4 Operations and Maintenance Costs

5.4.1 Roadways Under the Town's Jurisdiction

The Town of Caledon is currently maintaining about 1,370 lane km of paved road and 250 lane km of gravel road, for a total of 1,620 lane km. Based on the current

requirements, the existing and future Operations and Maintenance Costs are estimated considering the following:

- The existing annual costs for the routine operations and maintenance (including, but not limited to, street sweeping, tree maintenance, boulevard maintenance, streetlights, snow plowing, salting/sanding, potholes, etc.) is approximately $21.1 million, i.e., an average of $13,000 per lane km, including all aspects, except for the costs of traffic signals, yard maintenance and fleet maintenance (in $ the value of 2024);
- The routine operation and maintenance were estimated for roads as follows:
    - $26,000 per centre-line km for a two-lane road,
    - $31,100 per centre-line km for a two-lane road with complete street design (assuming 20% addition to a two-lane road without complete street design)
    - $36,300 per centre-line km for a four-lane road with complete street design (assuming 40% addition to a two-lane road without complete street design)
- About $487,000 per year is required for the yard maintenance;
- About $3.0-3.5 million per year is required for the Fleet Replacement program;
- About $5,230 to maintain each location of traffic signals (HDR understands that there are four traffic signal locations under the Town's jurisdiction are currently maintained by the Region, which was assumed to increase by one every year); and,
- The estimation of future routine operations and maintenance costs has considered the proposed road network improvements and lengths presented in previous sections.

The total operations and maintenance costs are estimated to increase from $24.8 million in 2024 to $40.9 million in 2051, resulting in total needs of $944.03 million for the next 28 years. It is noted that the Town will be required to operate and maintain local roads constructed within new subdivisions. The maintenance costs for the new local roads proposed within planned developments (such as Mayfield West Phase 2, RICE Group Development, and Tripe Crown Developments) have been included in this estimate.

5.4.2 Roadways under Peel Region's Jurisdiction

Existing Regional Road inventory within the Town of Caledon (i.e., lane-km and centre-line km for two-lane, four-lane, and six-lane roads) was established based on Peel Region's street data portal. Currently, the Region maintains about 522 lane km of paved road within the Town.

The Operations and Maintenance Costs for regional roads are estimated considering the following:

- Routine operations and maintenance cost was retained consistent with the Town roads' cost estimates – $31,100 per centre-line km for a two-lane road with complete street design (in $ the value of 2024);
    - A 40% increase (than the two-lane) was assumed for four-lane - $43,500 per centre-line km
    - A 60% increase (than the two-lane) was assumed for five-lane - $49,800 per centre-line km
    - An 80% increase (than the two-lane) was assumed for six-lane - $56,000 per centre-line km
- About $5,230 to maintain each location of traffic signals (there are 76 signalized intersections along regional roads within Caledon, which was assumed to increase by two every year);
- No cost was assumed for the yard maintenance and fleet replacement program; and,
- The estimation of future routine operations and maintenance costs has considered the proposed road network improvements and lengths presented in previous sections.

The total operations and maintenance costs for regional roads within the Town of Caledon are estimated to increase from $8.2 million in 2024 to $ 9.0 million in 2051, resulting in total needs of $244.14 million for the next 28 years.

The annual Operations and Maintenance Cost breakdown for the Town's and Region's roads are presented in Appendix H.

5.5 Roadway Life Cycle Costs

5.5.1 Roadways under the Town's Jurisdiction

The life cycle costs for the Town's roads and structures were developed based on the Town's 2020 Asset Management Plan, considering the following:

- The annual life cycle cost is $21.3 million for roads and $2.1 million for structures (in $ value of 2020);
- A non-residential building construction price index (NRBCPI) growth of 149.6% was derived from Statistics Canada from 2020 to 2024;
- The price index growth from 2020 to 2024 was applied to the 2020 life cycle costs for roads and structures to represent the existing (2024) $ value: $31.793 million for roads and $3.084 million for structures;
- A unit cost of $19,625 per lane-km per year was estimated based on the 2024 life cycle cost for roads and a total lane-km of 1,620;
- The estimation of life cycle costs for roads for future years has considered the proposed road network improvements and lengths presented in previous sections; and,
- The life cycle costs for structures for future years were assumed to remain the same as the existing (2024) condition.

The total life cycle cost for roads and structures is estimated to increase from $35.14 million in 2024 to $ 60.20 million in 2051, resulting in total needs of $1,373.1 million for the next 28 years.

5.5.2 Roadways under Peel Region's Jurisdiction

The life cycle costs for regional roads and structures within the Town of Caledon were developed based on Region's 2024 ten-year capital program, considering the following:

- The total funding allocated to maintain regional road pavement in a state of good repair was $289 million (over ten years);
- Based on the total regional road length derived from the Region's street data portal (approximately 1,609 lane-km), the estimated life cycle cost for regional roads was $17,960 per lane-km per year;

- This estimated life cycle cost for regional roads is lower than that for the Town's roads ($19,625 per lane-km per year), which is unexpected since regional roads typically accommodate higher truck traffic volumes and require higher design standards (e.g., thicker pavement) and more frequent pavement repair/replacement, both of which would increase the life cycle cost. Therefore, to provide a conservative estimate, a 10% higher life cycle cost was assumed for regional roads compared to the Town's streets, resulting in an adjusted estimate of $21,590 per lane-km per year.
- The total funding for rehabilitation and repair of structures within the Town was $43.87 million (ten-year total); the life cycle cost for structures was estimated to be $4,387,500 per year;
- The estimation of life cycle costs for future years has considered the proposed road network improvements and lengths presented in previous sections; and,
- The life cycle costs for structures for future years were assumed to remain the same as the existing (2024) condition.

The total life cycle cost for regional roads and structures within the Town of Caledon is estimated to increase from $16.08 million in 2024 to $ 17.77 million in 2051, resulting in total needs of $488.0 million for the next 28 years.

The annual Life Cycle Cost requirements for the Town's and Region's roads and structures are presented in **Appendix III**.

5.5.3 Total Fiscal Requirements for Road Network

The fiscal requirements for the road network are summarized in Figure 5-9. A total cost of $3,074 million was estimated to cover capital costs, operations and maintenance costs, and life cycle costs for the Town's road network, and $1,120 million for the Region's road network within the Town.

Figure 5-9
Total Fiscal Requirement for Road Network (2024-2051)

Road Infrastructure	Cost
Town's Road Network	
Capital Costs	$756.8 Million
Operations and Maintenance Costs	$944.0 Million

Road Infrastructure	Cost
Life Cycle Costs	$1,373.1 Million
Total Costs for Town' Road Network (in 2024 $ value)	**$3,073.9 Million**
Region's Road Network	
Capital Costs	$388.1 Million
Operations and Maintenance Costs	$244.1 Million
Life Cycle Costs	$488.0 Million
Total Costs for Region's Road Network (in 2024 $ value)	**$1,120.2 Million**
Total Costs (in 2024 $ value)	**$4,194.1 Million**

5.6 Fiscal Requirements for Transit Network

The fiscal requirements for the transit (including capital and operating costs) were estimated based on the current rates and arrangements between the Town of Caledon and Brampton Transit. The proposed developments in the Town are mostly adjacent to the City of Brampton, so the current arrangement is more fiscally prudent than establishing a new transit agency.

5.6.1 Transit Capital Costs

The transit capital costs for each year were estimated based on the daily capital costs of $285.52 per day per bus. It is assumed that Town Brampton Transit will gradually increase the number of buses from four in 2024 to 18 by 2049 to improve the transit service level and coverage in the Town of Caledon.

5.6.2 Transit Operating Costs

Based on the consultation with the Town, approximately 200 km of road network in the densely populated areas and employment areas were assumed to be served by the year 2051, which resulted in a round-trip length of 400 km. Assuming an average travel time of 30 km/h, an average round trip time was estimated at 13.33 hrs. Considering an average headway of 45 minutes, about 18 are expected to serve the Town by 2051. It is noted that only one Brampton transit bus was serving the Town at the time of this

analysis, which is expected to increase by 18 buses in 2049. The following assumptions are noted for the Transit service analysis for the year 2051:

- Road Lengths served by transit: 200 km
- Round trip length: 400 km
- Average speed: 30 km/h
- Average headway: 45 min
- Number of buses required: ~ 18
- Total service hours: 324 hours (assuming 18 hours of service hours during weekday)
- Based on the current hourly operating cost of $151.24 per hour, the average operating cost/weekday is $47,346.
- Assuming 50% transit services during weekends compared to weekdays, the total operating cost is about $14.6 million with 18 buses operating in the year 2051, which includes operating costs for weekdays (251 weekdays): $11.9 million, and for weekends (114 weekends): $2.7 million.

It was assumed that the Town of Caledon's transit share would gradually increase to 100% by 2034.

5.6.3 Total Fiscal Requirements for Transit Network

The total fiscal requirements for the transit network are summarized in Figure 5-10 for the years 2024 to 2051.

Figure 5-10
Total Fiscal Requirement for Transit Network (2025-2051)

Year	# of Buses	Caledon Share	Operating Cost	Capital Cost	Total Cost
2024	4	27%	$905,600	$77,400	$983,000
2025	5	30%	$1,257,700	$107,500	$1,365,200
2026	5	35%	$1,467,300	$125,400	$1,592,700
2027	6	40%	$2,012,300	$172,000	$2,184,300
2028	6	45%	$2,263,900	$193,500	$2,457,400
2029	7	45%	$2,641,200	$225,700	$2,866,900
2030	7	50%	$2,934,700	$250,800	$3,185,500
2031	7	50%	$2,934,700	$250,800	$3,185,500
2032	7	70%	$4,108,500	$351,200	$4,459,700

Year	# of Buses	Caledon Share	Operating Cost	Capital Cost	Total Cost
2033	7	90%	$5,282,400	$451,500	$5,733,900
2034	8	100%	$6,707,800	$573,300	$7,281,100
2035	8	100%	$6,707,800	$573,300	$7,281,100
2036	9	100%	$7,546,300	$645,000	$8,191,300
2037	9	100%	$7,546,300	$645,000	$8,191,300
2038	10	100%	$8,384,700	$716,700	$9,101,400
2039	10	100%	$8,384,700	$716,700	$9,101,400
2040	11	100%	$9,223,200	$788,300	$10,011,500
2041	11	100%	$9,223,200	$788,300	$10,011,500
2042	12	100%	$10,061,700	$860,000	$10,921,700
2043	12	100%	$10,061,700	$860,000	$10,921,700
2044	13	100%	$10,900,200	$931,700	$11,831,900
2045	14	100%	$11,738,600	$1,003,300	$12,741,900
2046	15	100%	$12,577,100	$1,075,000	$13,652,100
2047	16	100%	$13,415,600	$1,146,600	$14,562,200
2048	17	100%	$14,254,100	$1,218,300	$15,472,400
2049	18	100%	$15,092,500	$1,290,000	$16,382,500
2050	18	100%	$15,092,500	$1,290,000	$16,382,500
2051	18	100%	$15,092,500	$1,290,000	$16,382,500
Total			**$217,818,800**	**$18,617,300**	**$236,436,100**

The total capital costs and operating costs for transit services are expected to gradually increase from around $1 million in 2024 to $16.3 million in 2051. A total cost of $236.44 million was estimated to cover capital costs, and operational and maintenance costs for transit services for the next 28 years. Figure 5-11 provides the summary of the Total Fiscal requirement for transit. The transit costs would be partially offset by the fare revenue and the Provincial Gas tax.

Figure 5-11
Total Fiscal Requirement for Transit in the Town of Caledon (2025-2051)

Transit Infrastructure	Cost
Capital and Life-Cycle Costs	$18.62 million
Operations and Maintenance Costs	$217.82 million
Total Costs (in 2024 $ value)	**$236.44 million**

5.7 Summary

As presented in this chapter, the total fiscal requirement for the Town's transportation infrastructure (Roads and Transit) is about **$3.310 Billion**, to accommodate the planned growth by 2051. A total cost of $1,120 million was estimated to cover capital costs, operations and maintenance costs, and life cycle costs for Region's road network within the Town.

It is also noted that this study identifies the road network improvements and associated costs for road corridors that are under both the Town's and Region's jurisdictions. With the proposed development planned in the Town, the major arterials under the Peel Region's jurisdiction may need additional improvements, to provide additional vehicular capacity and address the needs of active transportation (pedestrians, cyclists). It is recommended that the Town coordinate these arterial network improvements with Peel Region.

Chapter 6
Phasing Plan Policy Recommendations

6. Phasing Plan Policy Recommendations

6.1 Introduction

As noted in Chapter 1, Bill 185, the *Cutting Red Tape to Build More Homes Act, 2024*, received Royal Assent on June 6, 2024. Effective July 1, 2024, this bill removes planning policy and approval duties from several upper-tier municipalities, including Peel Region. As a result, Peel Region will no longer oversee these responsibilities under the *Planning Act*. The R.O.P. will now serve as a plan for Brampton, Caledon, and Mississauga, which must implement and ensure applications comply with it.

With this change, the planning policy and approval responsibilities of Peel Region under the *Planning Act* have been removed. The R.O.P. becomes a plan of the lower tier municipality, and they are required to implement and ensure applications conform to the R.O.P. Where Peel Region was previously required to be the approval authority for certain O.P. reviews and amendments under the *Planning Act*, approval authority will now become the responsibility of the Province. Accordingly, if the policies of the R.O.P. conflict with the "Made in Caledon" vision for growth/phasing objectives, then the Town would be required to initiate an O.P. amendment, in which the Province would act as the approval authority.

6.2 R.O.P. Policy Conformity

With the R.O.P. becoming a plan of Caledon's, the Town will have to further reexamine the language of these policies, to determine their suitability within the context of the "Made in Caledon" growth management strategy. For example, there is R.O.P. policy language that requires examination, such as subsection 5.6.20.11 of the R.O.P., which states that "local municipalities develop staging and sequencing plans that provide for the orderly, fiscally responsible and efficient progression of development that is coordinated with the Region's Capital Plan, Peel Water and Wastewater Master Plan, and Transportation Master Plans."

Given that the Region is no longer the planning approval authority for the Town of Caledon, it is unclear how a determination will be made about how this coordination between the Region and Town unfolds. The intent of the G.M.P.P. is to build a "Made in

Caledon" plan that influences regional master planning rather than an implementation document that conforms to existing master planning prepared by the Region.

Further to the policies informing broad growth management and phasing strategies (such as subsection 5.5.6. or 5.6.20.11. of the R.O.P.) which have been addressed throughout this report, consideration should also be given to R.O.P. policy related to the phasing of secondary plans.[1] For example, subsection 5.6.20.14 of the R.O.P. provides phasing guidance related to new urban areas within Peel Region, with language that states "that local municipal secondary plan areas [are required to] be prioritized, advanced, sequenced and approved and based on a staging and sequencing plan, to the satisfaction of the Region, and in accordance with planning-related criteria."

At this time, it is unclear how a determination will be made about the validity of a specific secondary-plan phasing strategy and how "satisfaction of the Region" is ultimately evaluated under this new planning framework in Peel. As the R.O.P. becomes part of Caledon's O.P., the Town will need to review and potentially adjust the language of these requirements to ensure they fit within the framework of the "Made in Caledon" growth management strategy. As noted previously, this would require the Town to initiate an O.P. amendment, in which the Province would act as the approval authority.

6.2.1 Town of Caledon Growth Forecast

This report identifies a revised population, housing, and employment forecast for the Town of Caledon (Appendix A). It is recommended that the Town's O.P. embrace this revised Town-wide forecast and the resulting S.A.B.E. forecast. This analysis highlights a key difference between the original R.O.P. forecast for the Town of Caledon and the revised 2024 forecast developed through the study. The R.O.P. forecast (2021 to 2051) forecasts a significant portion of population growth in the S.A.B.E. lands would occur towards the end of the forecast period, particularly in the final decade. In contrast, the updated forecast, provided herein, anticipates that population and employment growth will happen more quickly than initially projected.

[1] This G.M.P.P. has not explored the phasing of specific secondary plan areas but has provided general guidance pertaining to the phasing across Caledon's S.A.B.E. lands.

Relying on growth in the final decade, as per the R.O.P. allocation, could pose a risk if the expected growth does not materialize as planned. It also creates an outcome where a greater concentration of development is planned to occur during the later period of the long-term planning horizon, thus reducing the Town's ability to coordinate and execute a distinct long-term phasing plan. By advancing the timeline, this updated forecast aims to mitigate this risk, ensuring that development is planned in a more timely manner, between two distinct phasing periods. For the Town of Caledon to achieve its overall growth forecast by 2051 it also implies a need for more immediate infrastructure and services to support this accelerated development.

Based on the analysis provided in this report, it is recommended that the Town of Caledon O.P. embrace the population, housing, and employment targets identified in Figure 6-1. This would require an O.P. amendment to Chapter 4 of the R.O.P.

Figure 6-1
Town of Caledon Population, Housing, and Employment Forecast, 2021 to 2051

	2021	2031	2041	2051
Population	80,000	113,800	226,800	300,000
Housing	24,070	37,070	70,400	91,610
Employment	31,800	56,600	92,100	125,000

Source: Forecast by Watson & Associates Economists Ltd.

6.3 Town of Caledon Official Plan Phasing Recommendation

The Caledon O.P. is currently under development. Below are two draft sections that address phasing and assist with the setting of a path forward:

3.2.12 - Planned residential growth will occur in lockstep with employment growth so that there is always an appropriate balance of residential and employment growth to support the development of a complete community.

3.8.13 - The Growth Phasing Plan will sequence development to:

a) Schedule and finance infrastructure needed to support growth in conformity with the Town Structure.

b) Plan for infrastructure in support of the intensification goals of this Plan and in keeping with the Town Structure.

c) Stage growth within a convenient walking distance from transit corridors to generate sufficient transit ridership to support viable new additions of transit service.

d) Support the timely build-out of existing planning communities in a logical phased manner.

e) Support growth in areas that are, or can be, served by existing infrastructure and existing public services and facilities.

f) Focus growth in areas that have existing servicing capacity or comparatively lower costs for required infrastructure.

g) Provide a basis for long-term, reliable municipal capital budgeting for growth relating servicing works.

h) Ensure that services are in place or planned to maintain a supply of land that will not constrain development such that the cost of housing is artificially escalated.

i) Avoid scattered or "leapfrog" development.

j) Prevent development patterns that are unnecessarily expensive and financially disadvantageous to the Town.

k) Provide for the early development of a range of housing types;

l) Supports the early servicing of retail and other non-retail uses and service uses needed to support new residents.

m) Support the early servicing of school sites, their acquisition by the school boards and their development.

n) Supports the conveyance of lands within the Greenlands System into public ownership.

o) Allows for the completion of distinct components of new community areas so that the length of construction in any given area is kept to a minimum where possible.

6.4 Next Steps

It is proposed that the Phase 1 areas identified in Chapter 3 be included as Phase 1 areas in the Town O.P. All other areas would be identified as Phase 2 areas. Within each of the Phase 1 areas, Secondary Plans would be prepared and within each Secondary Plan would be a phasing plan that provided for the logical development of each.

It is recognized that there may be a desire to be flexible with respect to the delineation of Phase 2 areas such that certain Phase 2 areas may be able to proceed earlier to support a number of policy objectives, or perhaps more importantly, because lands in Phase 1 are not proceeding to development in an expeditious manner. Below is a recommended policy framework that would allow for some flexibility in this regard.

6.4.1 Development of Priority Areas

- Schedule ____ identifies development priority areas for the 2021 - 2036 time period. These areas have been prioritized because they best support the continuing evolution of Caledon into a more complete community.
- Notwithstanding the above, public infrastructure such as roads, parks, fire halls, schools and servicing facilities may proceed at any time in the New Community Areas and New Employment Areas, subject to the availability of servicing infrastructure and other requirements of the Town and the Region.
- Notwithstanding the above, in no case will one owner or group of owners be permitted to unreasonably delay the normal progression of development contemplated by this Plan. Where unreasonable delay is occurring as determined at the Town's sole discretion, the identification of priority areas may be re-evaluated to the satisfaction of the Town in consultation with Peel Region. In such circumstances, an Amendment to this Plan will be required and in support of such an Amendment, it must be demonstrated that there are no unacceptable impacts on the Town as determined by Council in consultation with Peel Region.

Chapter 7
Fiscal Impact Assessment

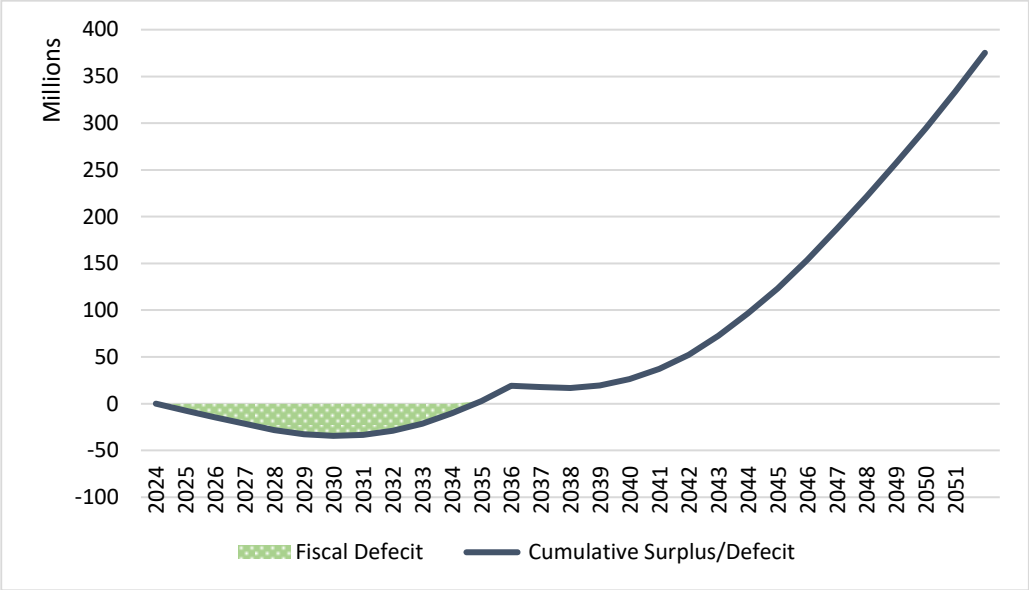
7. Fiscal Impact Assessment

The detailed FIA is included in Appendix I of the report. The analysis therein has considered the fiscal impact of the growth over the 2024 to 2051 period within the Town. The Town's 2024 D.C. Background Study, 2024 C.B.C. Strategy, and transit assessment undertaken by HDR address the infrastructure needs of future development. Operating expenditures arising from the service demands considered the service/program-related operating costs of additional population and employment growth, as well as the capital-related maintenance and lifecycle costs for incremental capital, and the annual costs of funding revenue foregone as a result of D.C. exemptions and reductions.

Incremental revenues associated with growth have been considered for property tax revenues and new non-tax revenues associated with new development and reflect anticipated user fees, permits, licenses, and other revenues associated with service program demands arising from population and employment growth.

Figure 7-1 illustrates the cumulative fiscal position over the forecast period. Development would generate cumulative annual operating deficits at current tax rates between 2024 and 2029 of $35.4 million. Operating surpluses would be generated after 2029 that would repay the accumulated deficit by 2034. Annual surpluses would continue to increase with new development between 2034 to 2035, however fiscal deficits would occur in 2036 and 2037 with the introduction of municipal transit. After 2037, annual surpluses would be generated over the remainder of the forecast period.

Figure 7-1
Cumulative Fiscal Impacts



To address the fiscal shortfalls generated over the 2024 to 2029 period (i.e., $30.9 million), the Town could elect to defer the lifecycle contributions included in the analysis until later in the forecast period as the 2024 to 2029 lifecycle costs total $73.4 million. This approach would be reasonable as there would be minimal lifecycle interventions required for the newly constructed infrastructure and the surpluses generated in future years would compensate for the deferred contributions.

Table 7-1 summarizes the annual Town fiscal impact at 2036 and 2051. Annual impacts for each year of the forecast period are presented in the full FIA report.

At 2036 annual tax revenues would be $115.1 million compared to an incremental tax levy requirement of $116.8 million. By 2051, annual incremental tax revenue would increase to $299.9 million at current tax rates, more than $41 million greater than annual net levy requirements. By 2036 the forecast development would have generated cumulative net surpluses of $17.6 million at current tax rates after accounting for all operating costs and the total cost of ownership of new assets. These cumulative surpluses would increase to $375.3 million by 2051. These surpluses would contribute towards the financial sustainability of the Town by assisting to close the Town's current infrastructure funding gap identified in the 2024 AMP related to existing assets,

improving service levels, or mitigating tax rate increases that would otherwise be required.

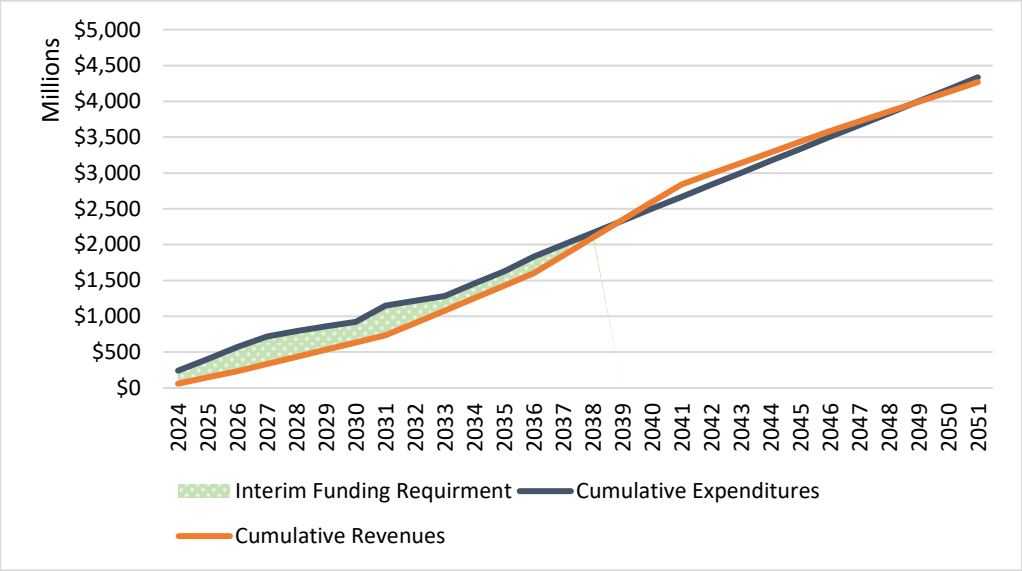
Table 7-1
Annual Fiscal Impacts at 2036 and 2051

	2036	2051
Net Operating Costs		
Gross Operating Expenditures	82,043,787	229,698,964
Less: Non-Tax Revenues	(36,591,289)	(103,520,884)
D.C. and C.B.C. Exemptions/Reductions	10,648,280	11,889,199
Net Operating Expenditures	56,100,777	138,067,279
Capital Related Operating Costs		
Incremental Lifcecylce Costs (Growth-Related Infrastructure)	50,611,292	111,727,227
Non-D.C./C.B.C. Funded Growth-Related Infrastructure (Annual Debt Payments)	10,085,068	8,501,352
Total Capital Related Operating Costs	60,696,360	120,228,578
Incremental Tax Levy Requirement	116,797,137	258,295,857
Annual Weighted Property Assessment (000's)	26,919,761	70,112,160
Current Residential (RT) Tax Rate	0.4277%	0.4277%
Annual Tax Revenue	115,135,816	299,869,708
Annual Surplus (Deficit)	(1,661,321)	41,573,851
Cumulative Surplus/Deficit	17,629,509	375,269,165

In addition to the operating impacts shown in Figure 7-1 and Table 7-1, there are also notable capital funding impacts that have been identified in Section 3.4 of the FIA report. Figures 7-2 and 7-3 summarize the cumulative D.C. and C.B.C. revenues and expenditures over the 2024 to 2051 period. These figures illustrate that while over the period to 2051, D.C. and C.B.C. revenues will fund the growth-related capital costs, there will be periods where interim funding from other sources is required as a result of the timing of expenditures and revenues.[1]

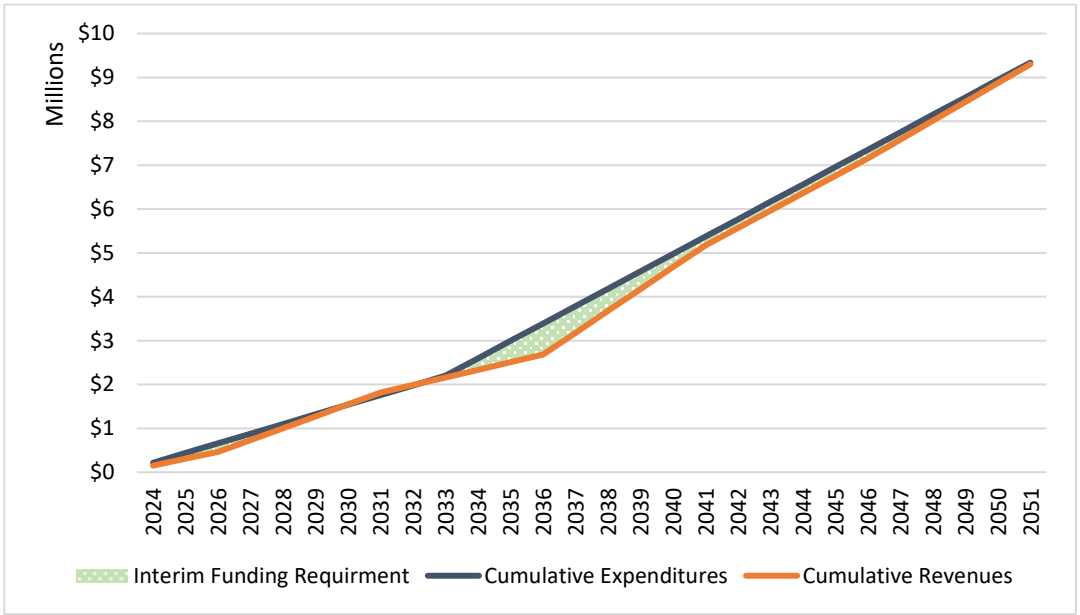
[1] D.C. and C.B.C. revenues include contributions from operating to account for revenue foregone from exemptions and discounts (see Section 4.2.1 of the FIA report for further discussion)

Figure 7-2
Cumulative D.C. Revenues and Expenditures



As shown in Figure 7-2, interim funding will increase to a peak of $416.7 million in 2031 before being repaid by future D.C. revenues due to the front-ended nature of the capital program relative to the timing of growth.

Figure 7-3
Cumulative C.B.C. Revenues and Expenditures



Interim funding requirements for C.B.C. expenditures will increase to a maximum of $708,000 in 2036 before being repaid by future C.B.C. revenues.

While these interim funding requirements do not necessarily represent a financial impact to the existing tax base as they will ultimately be repaid by new development, the interim funding sources should be considered. The Town can look to landowners to assist in the front-end financing of this infrastructure or alternatively could borrow funds from other internal reserves or issue long-term debt. The use of other internal reserves/reserve funds would need to be assessed within the context of other Town funding priorities. Developer front-end financing would need to be negotiated with landowners and would need to also be in the best interest of the landowner (for example the acceleration of capital works to service their development). If long-term debt was issued, the annual principal and interest payments would total $42.6 million at 2036. The Ministry of Municipal Affairs and Housing regulates the level of debt incurred by Ontario municipalities, through its powers established under the Municipal Act. Ontario Regulation 403/02 provides the current rules respecting municipal debt and financial obligations. Through the rules established under these regulations, a municipality's debt capacity is capped at a level where no more than 25% of the municipality's own purpose revenue may be allotted for servicing the debt (i.e., debt charges). The Town's current annual repayment limit as reported in the 2023 FIR is $27.7 million. Notwithstanding the foregoing, Town Council approved a long-term debt limit in 2011 of 10% of net revenues (below the Provincial limit of 25%). With growth in annual tax and non-tax revenue at 2036 of $152 million, the net revenues would increase to $273.8 million. This would equate to an internal debt repayment limit of $27.4 million or a Provincial limit of $68.4 million. This indicates that with the additional annual debt payments of $42.6 million and current annual debt payments of $2.8 million, total future debt payments (i.e., $45.3 million) would exceed the Town's internal borrowing limit at 16% of net revenues. As such, the Town would not have the capacity to issue debt to meet the interim funding requirements within the internal debt limit, but would have capacity within the Provincial borrowing limit. It should be noted that if the Town were to extend their internal borrowing limit to the Provincial borrowing limit, this amount of debt would still leave limited debt funding capacity for other AMP needs. As such, the Town could look at alternative funding arrangements (e.g. other internal financing sources, development front-end financing) as well as increasing D.C.s to account for the additional financing costs that are anticipated.

Key assumptions/risks that should be noted in the financial plan include that could reduce the positive fiscal impacts include:

- **Pace of growth.** If growth does not occur at the pace anticipated in the G.M.P.P. and infrastructure is constructed to facilitate that growth occurring, there will be reduced capital funding sources (i.e., D.C.s) to pay for the initial construction of the infrastructure and reduced operating revenue (i.e., taxes) to pay for the ongoing operating and maintenance/renewal. This would create financing pressures in the near, negatively impacting the fiscal impact of new development in the Town.
- **Average assessment per residential unit and non-residential sq.ft. of G.F.A.** These assumptions support the forecast weighted assessment and property tax revenue forecast. If development occurs at a lower assessed value on average than the assumptions used herein, this will reduce the operating revenues available on an annual basis from new development.
- **Future capital needs including assumptions on average annual costs post 2036.** Assumptions on growth-related infrastructure beyond 2036 have been made based on the average cost of capital per capita in the 2024 D.C. Background Study. If the timing/amount of these costs are required earlier in the forecast period, additional interim funding requirements could result until growth occurs and D.C. revenue is collected later in the forecast period.
- **Operating cost increases including maintaining current per capita and per employee non-tax revenues.** Assumptions have been made regarding the operating costs and revenues per capita/employee that incorporate certain economies of scale as growth occurs. If this does not materialize, the fiscal impacts would worsen due to the additional costs or reduced operating revenues.
- **Total cost of ownership assumptions.** If the total cost of ownership is greater that forecast herein (i.e., operating and maintenance costs and capital renewal and rehabilitation costs) increase beyond the levels anticipated herein and within the Town's 20224 asset management, there would be increases to the annual capital funding provisions.

Chapter 8
Conclusions

8. Conclusions

The Town of Caledon is projected to experience significant growth over the next 30 years, with a population increase to 300,000 people and 125,000 jobs by 2051. To accommodate this, strategic planning is essential, prioritizing phased development that integrates seamlessly with existing communities, optimizes infrastructure use, and supports the efficient extension of services. The Phasing Plan identified in this report embodies this approach, functioning within the established criteria while balancing key infrastructure considerations. This plan emphasizes logical extensions of existing urban areas, the early establishment of the Caledon GO Station, and support for complete communities, ensuring that development is both sustainable and aligned with the Town's growth objectives.

The Phasing Plan prioritizes the completion of existing communities, including Bolton, Mayfield West, and Tullamore, while balancing residential and non-residential growth in a coordinated manner. This approach ensures that growth is concentrated and phased appropriately, with a focus on feasible short-term growth opportunities and efficient use of infrastructure. Additionally, the plan considers the efficiency of water, wastewater, and transportation networks, supporting a south-to-north servicing strategy where core criteria are met. The goal is to ensure that growth is sustainable and that infrastructure development is closely aligned with the Town's long-term objectives.

Given that the Region is no longer the approval authority for the Town of Caledon, it is unclear how a determination will be made about how the coordination between the Region and the Town unfolds. It is unclear how a determination will be made about the validity of a specific secondary-plan phasing strategy and how "satisfaction of the Region" is ultimately evaluated under this new planning framework in Peel. As the R.O.P. becomes part of Caledon's O.P., the Town will need to review and potentially adjust the language of these requirements to ensure they fit within the framework of the "Made in Caledon" growth management strategy. As noted previously, this would require the Town to initiate an O.P. amendment, in which the Province would act as the approval authority.

This review of the "Made in Caledon" growth forecast assesses the impact on Regional water and wastewater infrastructure and identifies the necessary upgrades to support the Town's future development. The total cost for water infrastructure is estimated at $793 million, with Phase 1 costing $303 million and Phase 2 $490 million. While the

impacts on the west and central water systems will be moderate due to existing upgrades and modest growth, significant infrastructure is required for the east water system due to planned expansion north of the current service zone. Similarly, the wastewater infrastructure will see moderate impacts in the west and central areas but significant demands in the east, with costs of $259 million for Phase 1 and $609 million for Phase 2. The combined investment for water and wastewater infrastructure to support Caledon's growth is projected to total $1.66 billion.

Significant investments are required for road and transit infrastructure to support future growth up to 2051. The plan proposes approximately 83 km of new or widened Town roads and 45 km of widened regional roads within the Town, with a complete street design, at an estimated capital cost of $1.145 billion. Over the 28-year planning horizon, the total needs for road infrastructure are projected to reach $4.194 billion, including life cycle and maintenance of $3.049 billion. Additionally, the study also highlights the fiscal prudence of continuing the current transit service arrangement with Brampton Transit, estimating a total cost of $236 million for transit over the same period. In total, the plan anticipates a combined investment of approximately $4.430 billion for transportation (roads and transit) infrastructure. Coordination with Peel Region is recommended for arterial road improvements to meet future transportation demands and active transportation needs.

This report presents a "Made in Caledon" phasing plan designed to strategically position the Town for sustainable residential and non-residential development over the coming decades. The plan prioritizes accelerated growth with a focus on creating complete communities and supporting transit-oriented development. Achieving this growth will have significant financial implications for both the Region of Peel and the Town of Caledon. Specifically, the total capital costs for water and wastewater infrastructure are projected at $1.661 billion, while the combined capital and operating costs for roads and transit are estimated at $4.430 billion, bringing the combined estimated cost of Town and Regional infrastructure to $6.091 billion (see Figure 8-1). Of this total, $3.310 billion of capital and operating costs represent the total fiscal requirement for the Town's transportation infrastructure.

Figure 8-1
Combined Draft Estimated Water, Wastewater, Roads, and Transit Costs

Item	Cost
Water Infrastructure Capital Costs	**$793 million**
Wastewater Infrastructure Capital Costs	**$868 million**
Capital Requirements for Transportation Improvements	**$1.145 billion**
- Roadways under Town Jurisdiction	$757 million
- Roadways under Regional Jurisdiction	$388 million
Operating, Maintenance, and Life Cycle Costs for Transportation Infrastructure	**$3.049 billion**
- Roadways under Town Jurisdiction	$2.317 billion
- Roadways under Regional Jurisdiction	$732 million
Capital and Operating Budget Requirements for Transit	**$236 million**
Total Cost (2024 $ value)	**$6.091 billion**

The F.I.A. projects that development in the Town from 2024 to 2051 will initially result in annual operating deficits, reaching $35.4 million by 2029 at current tax rates. However, post-2029, operating surpluses are expected to repay this deficit by 2034, with surpluses continuing to grow over the forecast period. In 2036, these surpluses are projected to decrease slightly with the introduction of Town transit. Alternative strategies, such as deferring $73.4 million in early lifecycle contributions, could alleviate shortfalls during the 2024-2029 period. By 2051, incremental tax revenue is anticipated to exceed net levy requirements by over $41 million, generating cumulative net surpluses of $375.3 million, supporting the Town's financial sustainability and helping address its infrastructure funding gap.

The Town's development policy framework emphasizes flexibility in the sequencing of Phase 2 areas, allowing certain areas to proceed earlier to support policy goals or to address delays in Phase 1 development. Priority areas for 2021-2036 have been

identified to support Caledon's evolution into a more complete community. Essential public infrastructure in new areas may also advance as needed, provided there is adequate servicing infrastructure. To prevent delays from any one landowner, the Town reserves the right to re-evaluate priority areas in consultation with Peel Region, potentially amending the plan if necessary to avoid adverse impacts. As growth continues, establishing a robust growth monitoring framework through its O.P. will be critical to guiding adjustments and ensuring development aligns with Caledon's long-term vision for sustainable growth toward 2051.

Appendices

Appendix A
Town of Caledon Population and Housing Forecast, 2021 to 2051

Appendix A: Town of Caledon Population and Housing Forecast, 2021 to 2051

	Year	Population (Including Census Undercount)[1]	Population (Excluding Census Undercount)	Housing Units				Persons Per Unit (P.P.U.) with Undercount	Persons Per Unit (P.P.U.): without Undercount
				Singles & Semi-Detached	Multiple Dwellings[2]	Apartments[3]	Total Households		
Historical	*Mid-2006*	59,390	57,050	16,605	1,110	445	18,160	3.270	2.924
	Mid-2011	61,900	59,460	17,304	1,184	559	19,047	3.250	3.061
	Mid-2016	69,230	66,502	19,015	1,695	510	21,220	3.262	3.213
	Mid-2021	80,000	77,300	20,895	2,215	960	24,070	3.324	3.322
Forecast	*Mid-2026*	96,000	92,800	24,960	3,820	1,430	30,210	3.178	3.072
	Mid-2031	113,800	110,000	28,790	6,020	2,250	37,060	3.071	2.968
	Mid-2036	159,800	154,300	36,690	11,200	2,780	50,670	3.154	3.045
	Mid-2041	226,800	219,100	48,250	17,870	4,290	70,410	3.221	3.112
	Mid-2046	261,700	252,700	53,790	21,240	5,490	80,520	3.250	3.138
	Mid-2051	300,000	289,800	59,940	24,870	6,800	91,610	3.275	3.163
Incremental	**Mid-2006 to Mid-2011**	2,510	2,410	699	74	114	887		
	Mid-2011 to Mid-2016	7,330	7,042	1,711	511	-49	2,173		
	Mid-2016 to Mid-2021	10,770	10,798	1,880	520	450	2,850		
	Mid-2021 to Mid-2026	16,000	15,500	4,065	1,605	470	6,140		
	Mid-2021 to Mid-2031	33,800	32,700	7,895	3,805	1,290	12,990		
	Mid-2021 to Mid-2036	79,800	77,000	15,795	8,985	1,820	26,600		
	Mid-2021 to Mid-2041	146,800	141,800	27,355	15,655	3,330	46,340		
	Mid-2021 to Mid-2046	181,700	175,400	32,895	19,025	4,530	56,450		
	Mid-2021 to Mid-2051	220,000	212,500	39,045	22,655	5,840	67,540		

[1] Includes net Census undercount of 3.5%
[2] Includes townhouses and apartments in duplexes.
[3] Includes accessory apartments, bachelor, 1-bedroom, and 2-bedroom+ apartments.
Source: Statistics Canada Census 2006 to 2021. Forecast by Watson & Associates Economists Ltd., 2024.

Appendix B
Town of Caledon Employment Forecast by Land Use, 2021 to 2051

Appendix B: Town of Caledon Employment Forecast by Land Use, 2021 to 2051

Period	Population Including Undercount	Activity Rate						Employment					
		Major Office	Population Related Employment	Employment Lands Employment	Work From Home	Rural	Total	Major Office	Population Related Employment	Employment Lands Employment	Work From Home	Rural	Total
Mid 2021	80,000	0.003	0.076	0.037	0.097	0.059	0.272	240	4,430	18,270	3,380	5,480	31,800
Mid 2026	96,000	0.012	0.094	0.313	0.049	0.070	0.538	980	7,520	25,010	3,950	5,560	43,020
Mid 2031	113,800	0.037	0.109	0.345	0.049	0.050	0.590	3,590	10,490	33,090	4,690	4,780	56,650
Mid 2036	159,800	0.044	0.131	0.350	0.053	0.042	0.621	5,020	14,890	39,870	6,070	4,790	70,630
Mid 2041	226,800	0.045	0.149	0.300	0.053	0.028	0.576	7,220	23,820	47,970	8,540	4,550	92,100
Mid 2046	261,700	0.038	0.125	0.270	0.044	0.020	0.497	8,720	28,420	61,240	9,870	4,530	112,790
Mid 2051	300,000	0.036	0.127	0.254	0.043	0.017	0.478	9,470	33,130	66,590	11,280	4,510	124,990
Incremental Change													
Mid 2021 - Mid 2026	16,000	0.009	0.018	0.276	-0.048	0.011	0.266	740	3,090	6,740	570	80	11,220
Mid 2021 - Mid 2031	33,800	0.034	0.033	0.308	-0.048	-0.009	0.318	3,350	6,060	14,820	1,310	-700	24,850
Mid 2021 - Mid 2036	79,800	0.041	0.055	0.313	-0.044	-0.017	0.349	4,780	10,460	21,600	2,690	-690	38,830
Mid 2021 - Mid 2041	146,800	0.042	0.073	0.263	-0.044	-0.031	0.304	6,980	19,390	29,700	5,160	-930	60,300
Mid 2021 - Mid 2046	181,700	0.035	0.049	0.233	-0.053	-0.039	0.225	8,480	23,990	42,970	6,490	-950	80,990
Mid 2021 - Mid 2051	220,000	0.033	0.051	0.217	-0.054	-0.042	0.206	9,230	28,700	48,320	7,900	-970	93,190
Annual Average													
Mid 2021 - Mid 2026	3,200	0.0019	0.0036	0.0551	-0.0095	0.0021	0.0532	148	618	1,348	114	16	2,244
Mid 2021 - Mid 2031	3,380	0.0034	0.0033	0.0308	-0.0048	-0.0009	0.0318	335	606	1,482	131	-70	2,485
Mid 2021 - Mid 2036	5,320	0.0027	0.0037	0.0209	-0.0029	-0.0011	0.0232	319	697	1,440	179	-46	2,589
Mid 2021 - Mid 2041	7,340	0.0021	0.0037	0.0132	-0.0022	-0.0015	0.0152	349	970	1,485	258	-47	3,015
Mid 2021 - Mid 2046	7,268	0.0014	0.0020	0.0093	-0.0021	-0.0016	0.0090	339	960	1,719	260	-38	3,240
Mid 2021 - Mid 2051	7,333	0.0011	0.0017	0.0072	-0.0018	-0.0014	0.0069	308	957	1,611	263	-32	3,106

Note: Figures have been rounded.
Source: 2021 from Region of Peel forecast for the Town of Caledon. Forecast by Watson & Associates Economists Ltd., 2024.

Appendix C
Town of Caledon Incremental Residential Forecast by Location, 2021 to 2051

Appendix C: Town of Caledon Incremental Residential Forecast by Location, 2021 to 2051

Development Location	Timing	Single and Semi-Detached	Multiples[1]	Apartments[2]	Total Residential Units	Net Population Increase
Bolton SABE	2021 - 2026	280	160	10	450	1,500
	2021 - 2031	2,100	1,290	380	3,760	12,200
	2021 - 2036	6,380	3,800	600	10,780	36,100
	2021 - 2041	12,590	7,280	780	20,650	70,070
	2021 - 2046	13,230	7,650	790	21,670	73,580
	2021 - 2051	13,830	7,980	800	22,610	76,830
Mayfield West SABE	2021 - 2026	0	0	0	0	0
	2021 - 2031	220	140	20	370	1,230
	2021 - 2036	1,720	960	110	2,790	9,350
	2021 - 2041	3,570	1,960	230	5,750	19,380
	2021 - 2046	3,700	2,030	230	5,970	20,130
	2021 - 2051	3,820	2,100	240	6,150	20,740
Tullamore SABE	2021 - 2026	0	0	0	0	-10
	2021 - 2031	-40	0	0	-40	-170
	2021 - 2036	-40	0	0	-40	-170
	2021 - 2041	-80	0	0	-80	-310
	2021 - 2046	-80	0	0	-80	-310
	2021 - 2051	-80	0	0	-80	-310
Other SABE	2021 - 2026	0	0	0	0	-140
	2021 - 2031	-20	0	0	-20	-140
	2021 - 2036	1,770	950	80	2,800	9,660
	2021 - 2041	4,810	2,610	190	7,610	26,820
	2021 - 2046	9,220	4,900	330	14,440	50,690
	2021 - 2051	14,310	7,510	490	22,300	77,950
Outside SABE	2021 - 2026	3,780	1,450	460	5,690	14,710
	2021 - 2031	5,640	2,380	900	8,920	20,720
	2021 - 2036	5,980	3,270	1,030	10,280	24,850
	2021 - 2041	6,460	3,810	2,130	12,400	30,880
	2021 - 2046	6,820	4,440	3,180	14,450	37,610
	2021 - 2051	7,170	5,070	4,320	16,560	44,800
Town of Caledon	2021 - 2026	4,070	1,600	470	6,140	16,050
	2021 - 2031	7,890	3,810	1,290	13,000	33,830
	2021 - 2036	15,800	8,980	1,820	26,600	79,780
	2021 - 2041	27,350	15,660	3,330	46,330	146,840
	2021 - 2046	32,890	19,030	4,530	56,450	181,690
	2021 - 2051	39,040	22,660	5,840	67,540	220,000

[1] Includes townhouses and apartments in duplexes.
[2] Includes accessory apartments, bachelor, 1-bedroom, and 2-bedroom+ apartments.
Note: Figures may not sum correctly due to rounding.
Source: Watson & Associates Economists Ltd., 2024.

Appendix D
Town of Caledon Incremental Employment Forecast by Location, 2021 to 2051

Appendix D: Town of Caledon Incremental Employment Forecast by Location, 2021 to 2051

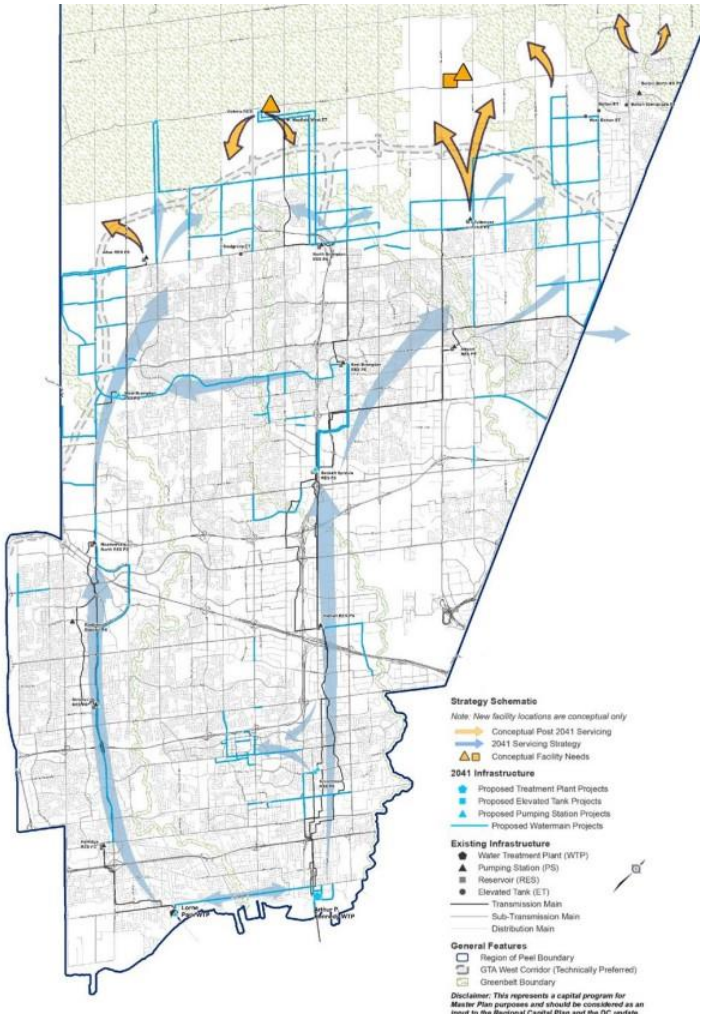
Development Location	Timing	Major Office	Population Related Employment	Employment Lands Employment	Work From Home	Rural	Total
Bolton SABE	2021 - 2026	0	160	480	40	0	680
	2021 - 2031	1,990	1,230	3,170	280	-70	6,600
	2021 - 2036	1,990	1,760	3,770	480	-70	7,930
	2021 - 2041	3,050	5,080	4,510	1,520	-130	14,030
	2021 - 2046	3,050	6,510	4,810	2,010	-130	16,250
	2021 - 2051	3,050	7,560	4,810	2,420	-130	17,720
Mayfield West SABE	2021 - 2026	0	0	0	0	0	0
	2021 - 2031	0	360	0	90	-60	380
	2021 - 2036	0	820	1,020	240	-60	2,020
	2021 - 2041	160	1,410	3,580	440	-60	5,520
	2021 - 2046	160	1,650	5,110	530	-60	7,380
	2021 - 2051	160	1,860	5,650	620	-60	8,230
Tullamore SABE	2021 - 2026	0	0	0	0	0	0
	2021 - 2031	280	0	1,570	-10	-150	1,690
	2021 - 2036	830	0	6,100	-10	-150	6,770
	2021 - 2041	830	0	11,220	-20	-250	11,790
	2021 - 2046	830	0	12,910	-20	-250	13,470
	2021 - 2051	830	0	13,700	-20	-250	14,270
Other SABE	2021 - 2026	0	0	0	0	10	10
	2021 - 2031	0	310	1,620	170	-480	1,620
	2021 - 2036	0	1,540	1,880	810	-480	3,750
	2021 - 2041	0	3,800	2,430	1,750	-550	7,430
	2021 - 2046	680	4,540	11,790	2,150	-550	18,610
	2021 - 2051	770	5,650	15,530	2,710	-550	24,110
Outside SABE	2021 - 2026	740	2,920	6,260	530	70	10,520
	2021 - 2031	1,080	4,170	8,460	790	70	14,560
	2021 - 2036	1,960	6,340	8,830	1,180	70	18,370
	2021 - 2041	2,940	9,110	7,970	1,470	60	21,540
	2021 - 2046	3,760	11,300	8,350	1,830	50	25,280
	2021 - 2051	4,410	13,630	8,630	2,170	30	28,870
Town of Caledon	2021 - 2026	740	3,090	6,740	570	80	11,230
	2021 - 2031	3,350	6,060	14,820	1,310	-690	24,850
	2021 - 2036	4,780	10,460	21,600	2,690	-690	38,840
	2021 - 2041	6,980	19,400	29,700	5,160	-920	60,300
	2021 - 2046	8,480	24,000	42,970	6,490	-940	81,000
	2021 - 2051	9,220	28,710	48,320	7,900	-960	93,190

Note: Figures may not sum correctly due to rounding.
Source: Watson & Associates Economists Ltd., 2024.

Appendix E
November 21, 2023, Council Presentation – Water and Wastewater Servicing Slides

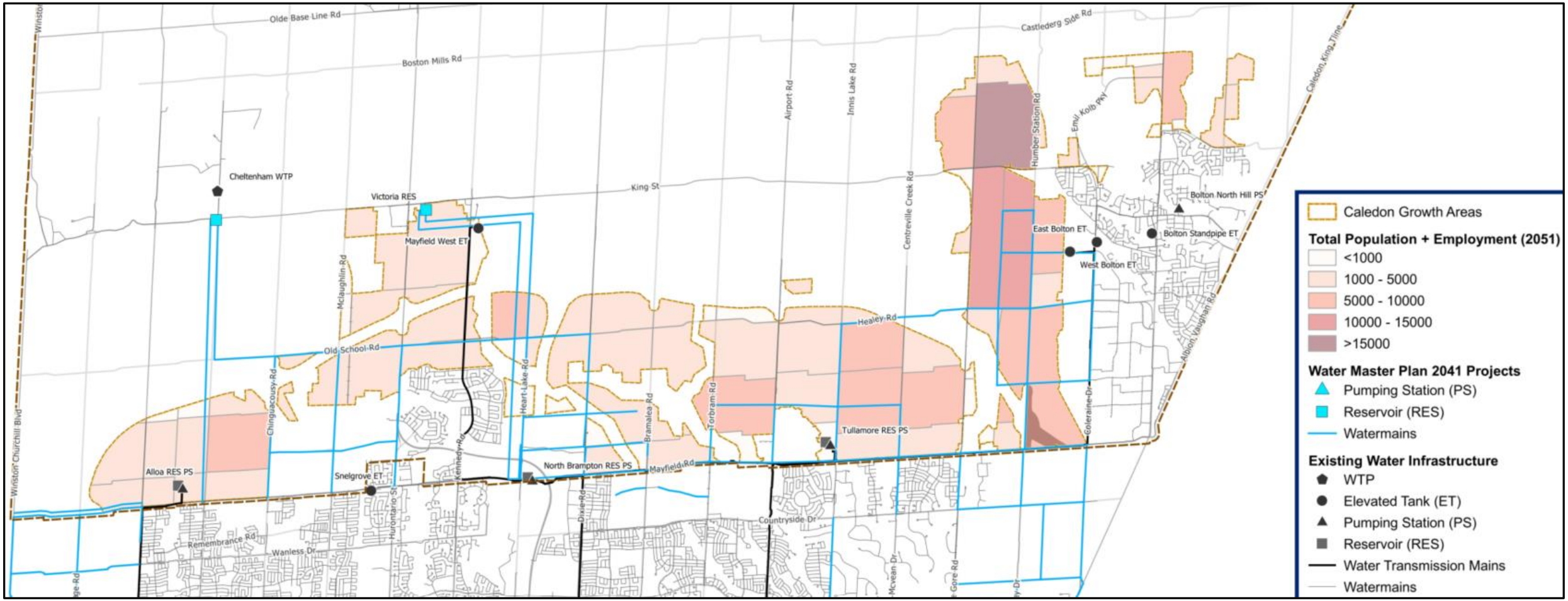
Background

- Region's 2020 Water & Wastewater Master Plan (MP) identified servicing for growth to 2041.
- Desktop analysis was completed for post-2041 scenario to build-out.
- The Region's water and wastewater hydraulic models (from the 2020 MP) were used as a base model with Caledon's updated growth areas loaded into the model.
- An Infrastructure Impact Assessment was completed to identify requirements beyond master plan projects (and any changes to MP projects).
- One feasible alternative was assessed; no evaluation of alternatives.
- Cost estimation was completed using same Regional MP cost estimate templates.



Existing Water System

- Map shows the previously identified 2020 MP projects (to 2041) in blue adjacent to many of the growth areas. Various additional growth areas that were identified after completion of the MP can be seen that were not supported by MP projects to 2041.

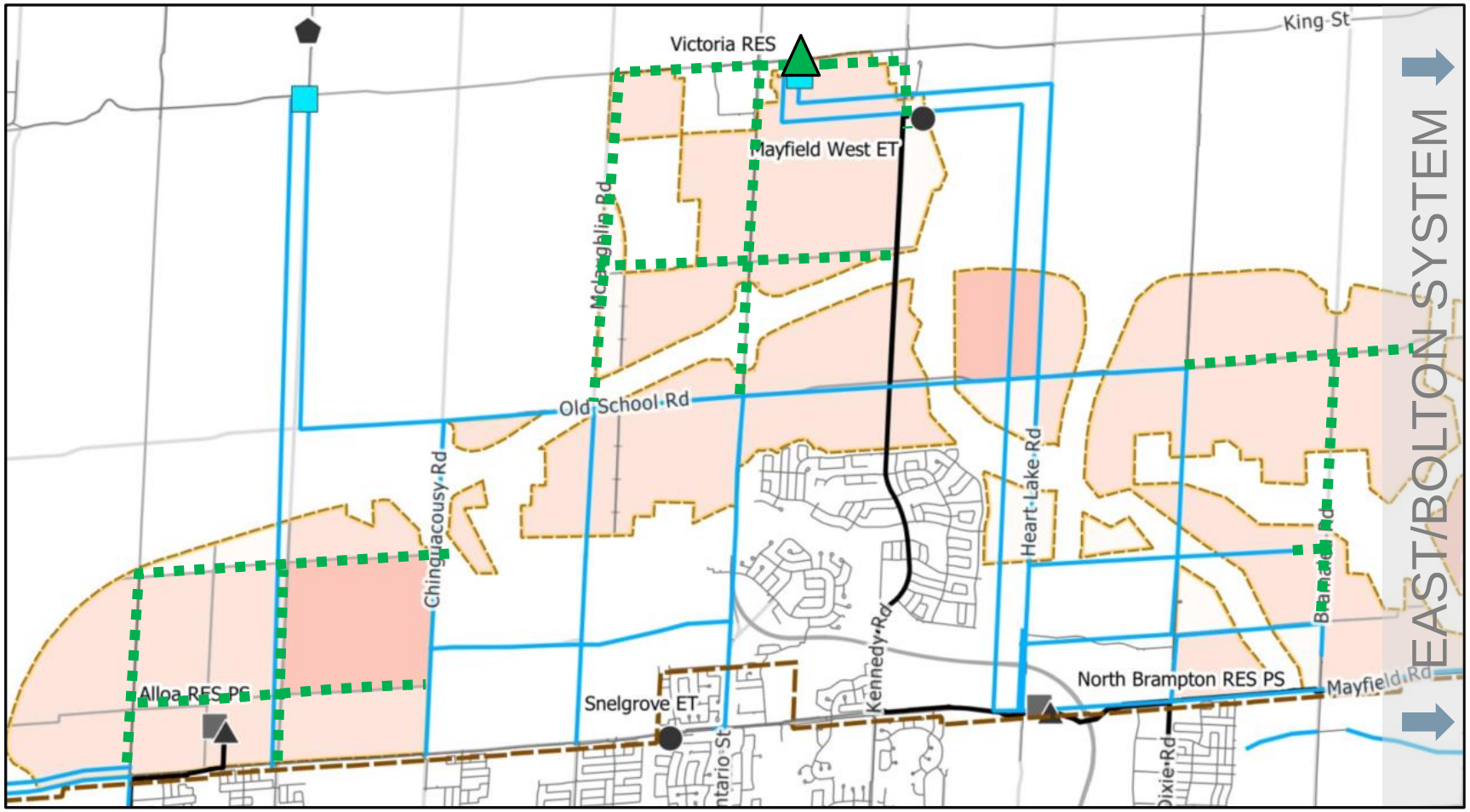


West/Central System - Water

Already Planned Region of Peel Master Plan Projects are shown in Blue. These projects are now needed within the 2036 horizon based on the advanced pace of growth

"Phase 1" Projects: to 2036
No new projects to 2036; other than those planned as part of Region's Master Plan

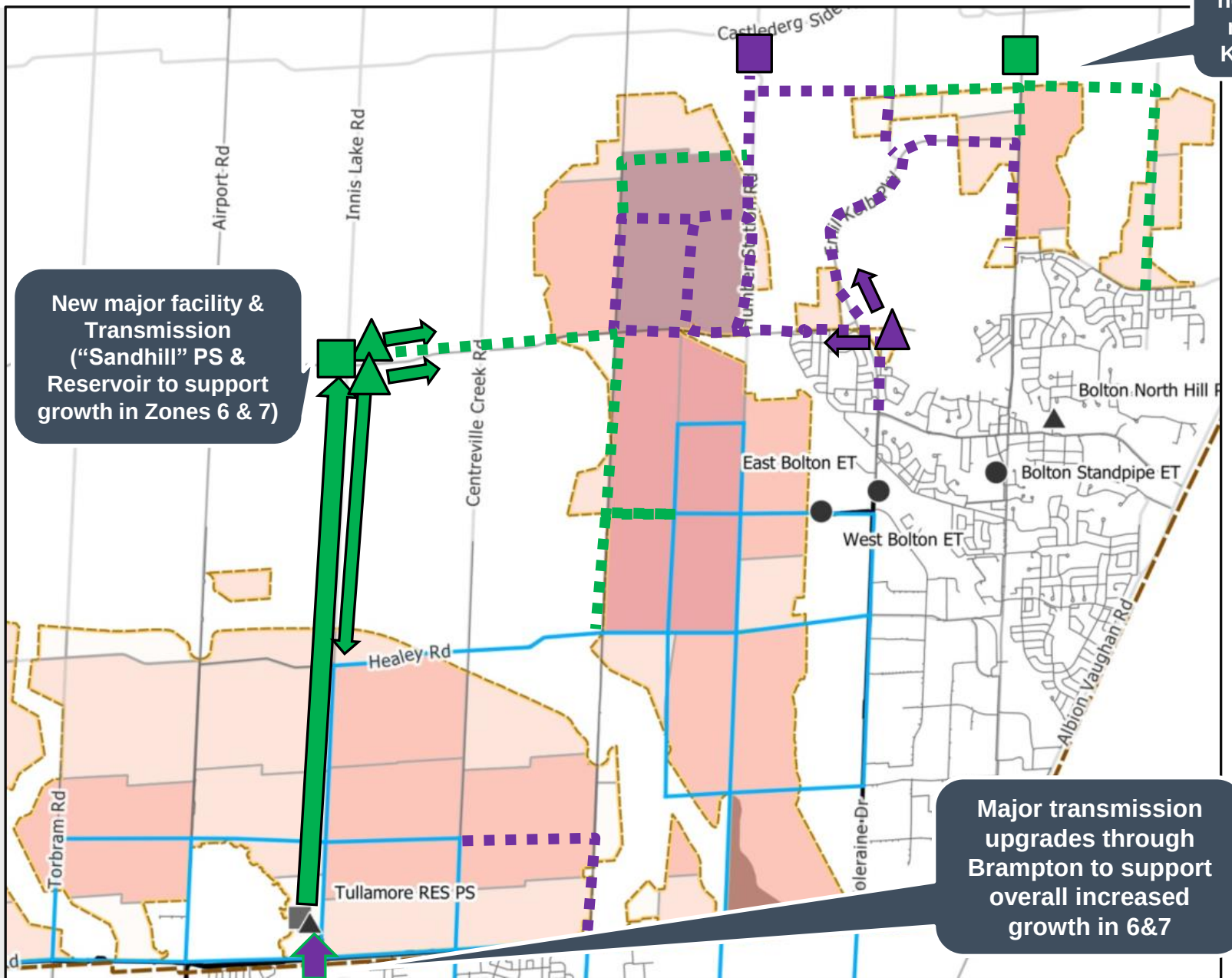
"Phase 2" Projects: 2036 to 2051
These new projects range from distribution mains to larger sub-transmission mains and a new Z7 Pumping Station



- Overall, the changes are moderate on the west/central system, because there is already an existing Z7 system (storage; pumping) here and the additional growth is moderate.
- Previous MP projects are still needed; but at a slightly altered pace.

East/Bolton System - Water

WEST/CENTRAL SYSTEM



Already Planned Region of Peel Master Plan Projects are shown in Blue. These are all needed by 2036.

"Phase 1" Projects: to 2036
New projects needed to support updated growth locations to 2036

"Phase 2": 2036 to 2051
New projects needed to support updated growth locations to 2051

- Overall, the changes are **significant** on the East/Bolton system; creation of an entirely new Zone 7 system and strengthening the entire eastern supply chain north through Brampton.
- Some major new projects needed by 2036 in Caledon, as well as, knock-on impacts through Brampton.

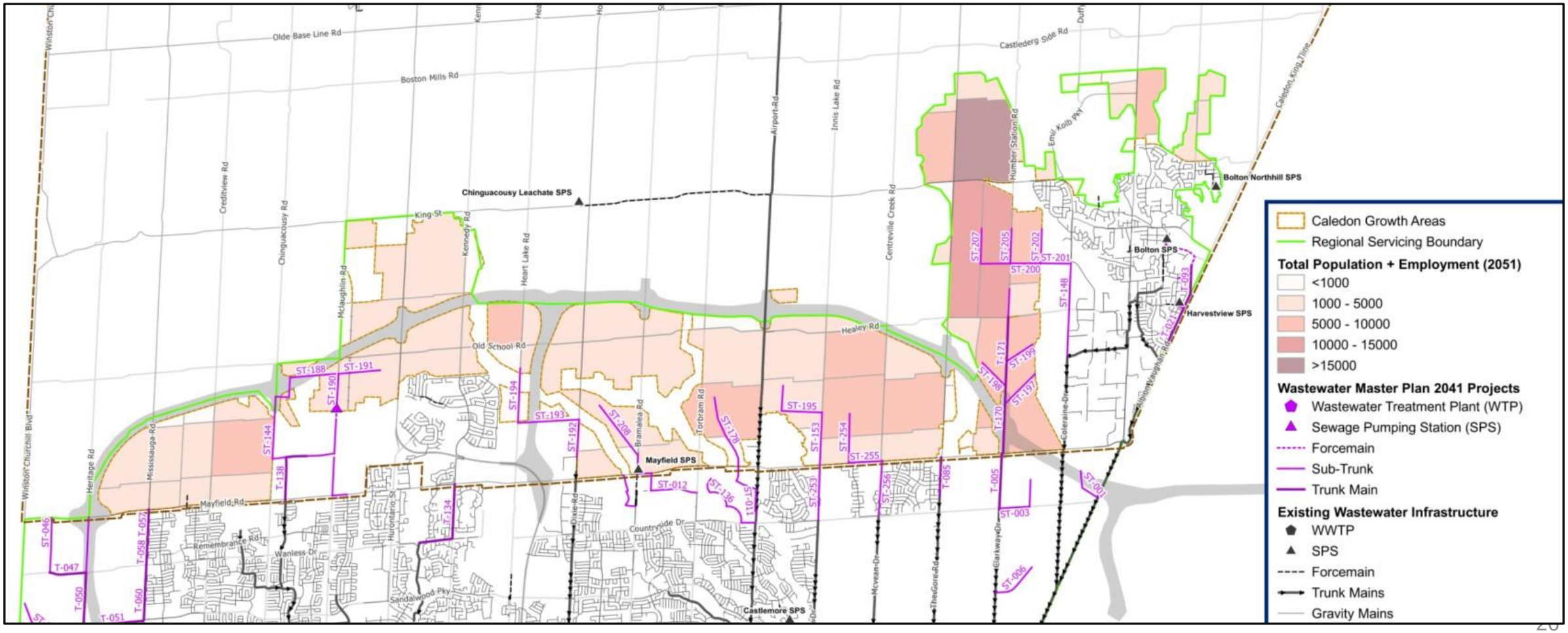
Cost Estimate – Water

Category	Cost ($ 2023 Dollars)
Phase 1 (Before 2036)	**$273M**
West/Central: Additional Distribution Upgrades	-
West/Central: Additional Pumping, Storage & Transmission Upgrades	-
East/Bolton: Additional Distribution Upgrades	$18M
East/Bolton: Additional Pumping, Storage & Transmission Upgrades	$75M
East/Bolton: Major Upgrades south of Caledon to support overall growth	$180M
Phase 2 (2036 to 2051)	**$485M**
West/Central: Additional Distribution Upgrades	$40M
West/Central: Additional Pumping, Storage & Sub-Transmission Upgrades	$38M
East/Bolton: Additional Distribution Upgrades	$17M
East/Bolton: Additional Pumping, Storage & Transmission Upgrades	$245M
East/Bolton: Major Upgrades south of Caledon to support overall growth	$145M
Phase 1 & Phase 2 Total	**$758M**

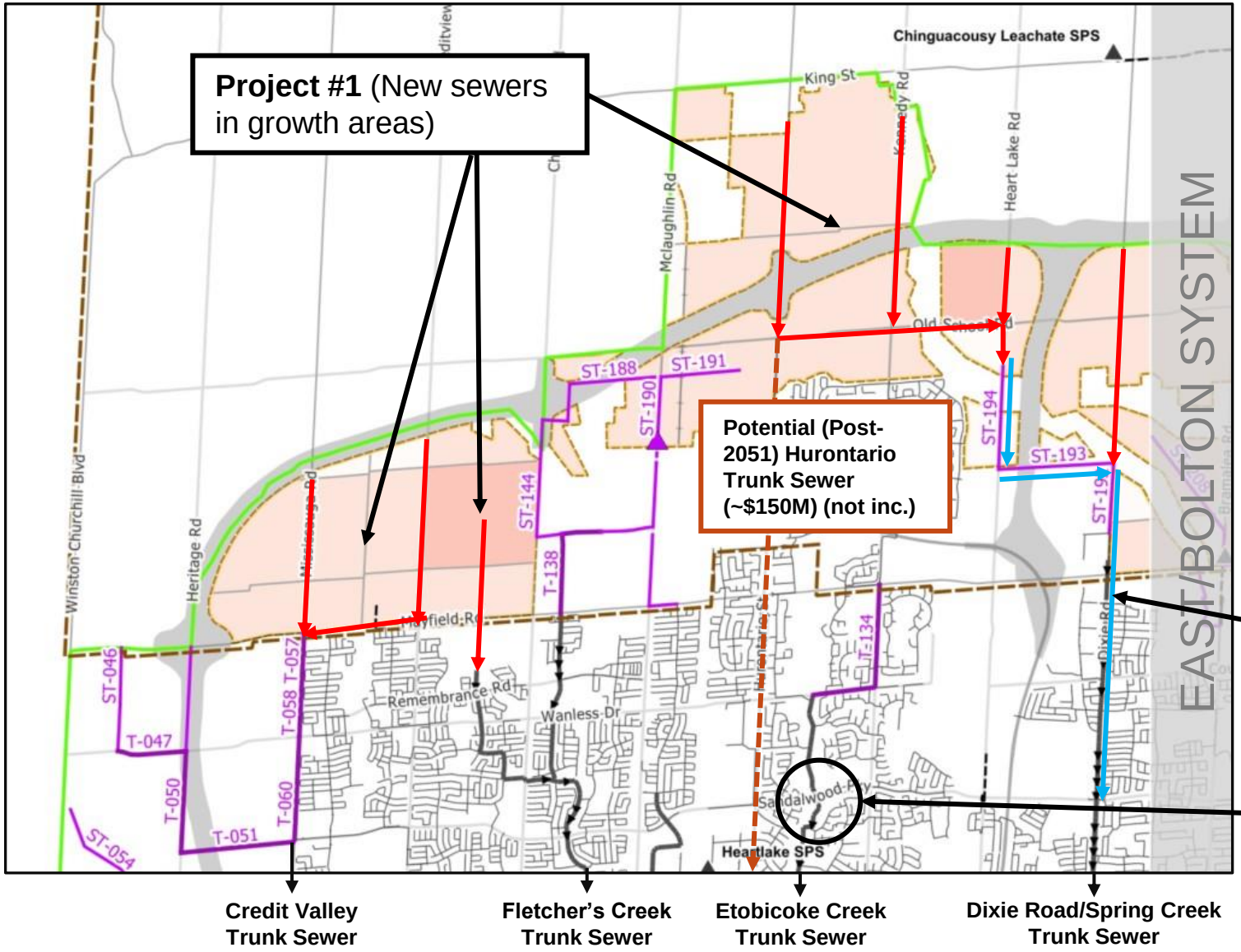
- Note that above table are for projects not previously identified in the Master Plan.
  - The still-to-be-completed MP Projects, within Caledon, are expected to be an additional ~$200M by 2036.

Existing Wastewater System

- Previously identified 2020 MP projects (to 2041) identified adjacent to & within Caledon
- Various additional growth areas that were identified after completion of the MP can be seen that were not supported by MP projects to 2041.



West/Central System - Wastewater

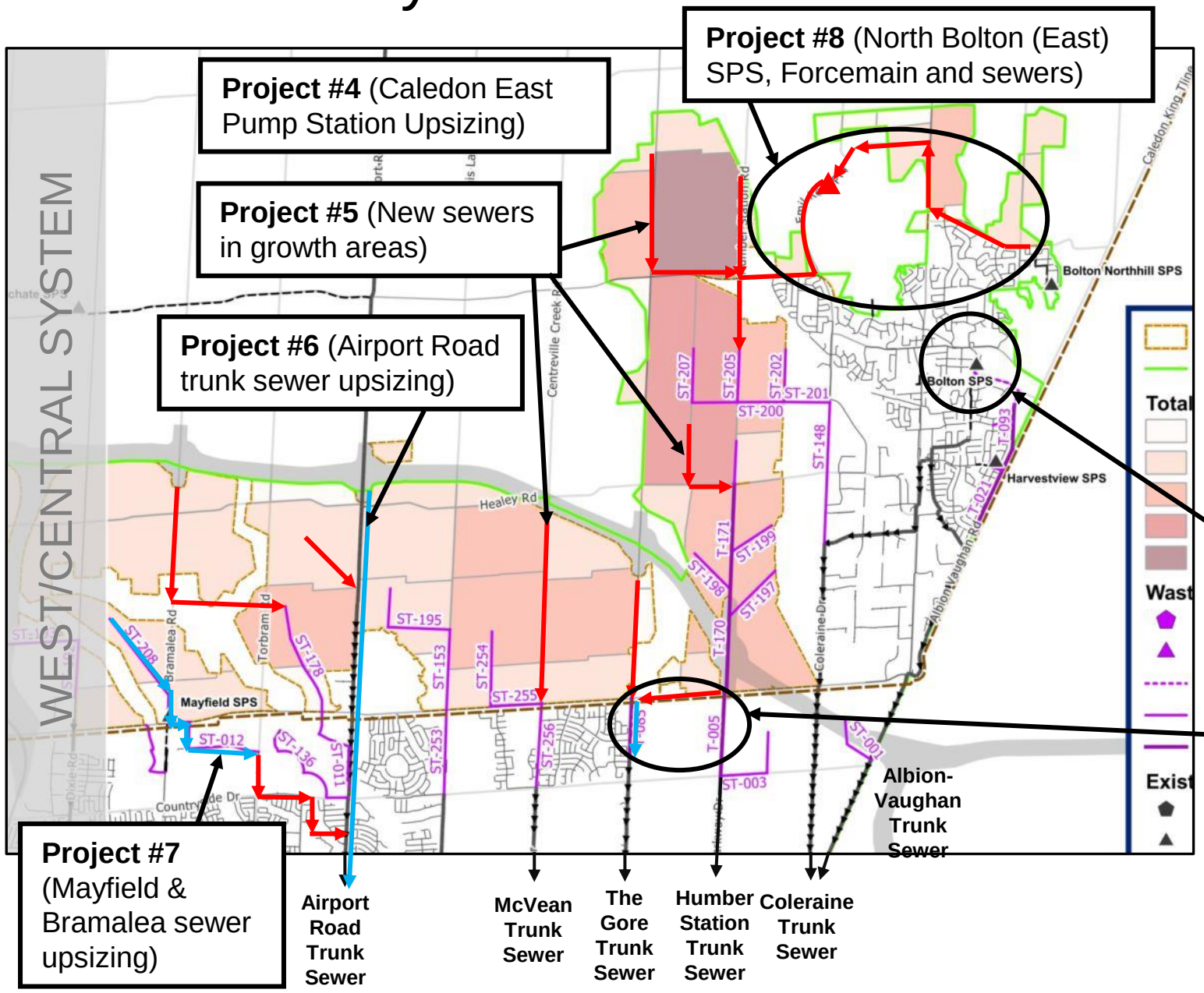


- Serviced by the Credit Valley, Fletcher's Creek, Etobicoke Creek, and Dixie Road/Spring Creek trunk sewers
- New infrastructure shown in red, pipe upsizing/twinning in blue
- Potential Hurontario trunk sewer considered for post-2051 by the Region – complicated, expensive sewer not included.
- Required upgrades total ~**$217M**.

Project #2 (Dixie/Heart Lake pipe upsizing)

Project #3 (Etobicoke Creek Trunk Sewer upsizing)

East/Bolton System - Wastewater



- Serviced by the Airport Road, McVean, The Gore, Clarkway/Humber Station, Coleraine, and Albion-Vaughan trunk sewers
- Required upgrades total ~**$612M**

Project #9 (Bolton local sewer upsizing)

Project #10 (Diversion sewer to The Gore trunk sewer)

Project #7 (Mayfield & Bramalea sewer upsizing)

Cost Estimate – Wastewater

No.	DESCRIPTION	Cost ($2023)
	WEST / CENTRAL	
1	**New Sewers Required** (West of Kennedy Rd)	**$90M**
2	**Dixie Road & Heart Lake Road** Pipe Upsize on Dixie Rd from Old School & Heart Lake Rd (450 mm existing) to Dixie & Sandalwood Pkwy E (750mm existing)	**$120M** (~$2M of project in 2020 MP)
3	**Etobicoke Creek Trunk Sewer Upsizing** Pipe upsize required on Etobicoke Creek, from Tremont Ct to Sandalwood Parkway East (750mm existing)	**$7M**
	West/Central Total:	**$217M**
	EAST / BOLTON	
4	**Caledon East Sewage Pumping Station (SPS)** Firm capacity upgrade required from 143 L/s to 190 L/s.	**$2M**
5	**New Sewers Required** (East of Kennedy Rd)	**$100M**
6	**Airport Road** Pipe upsize on Airport Rd from Sandhill (600 mm existing) to Sun Pac Blvd & Ward Rd intersection (1050mm existing)	**$270M**
7	**Mayfield Road & Bramalea Road** Pipe upsize required from 500 metres east of Dixie Rd & 1,475 metres south of Old School Rd (450mm existing) to intersection of Airport Road & Eagle Plain Dr (525mm existing).	**$90M** (~$10M of project in 2020 MP)
8	**North Bolton SPS, Forcemain, & Gravity Sewers** New North Bolton SPS (~210 L/s), 1.4 km length 300mmø forcemain to Humber Station trunk sewer, and 3.1 km length of 525mmø sewer.	**$75M**
9	**Bolton Local Sewer Upsizing**	**$30M**
10	**Humber Station Road** Divert flow from Humber Station Rd to The Gore Rd trunk sewer with new 1200mm pipes along Mayfield Rd	**$45M**
	East/Bolton Total:	**$612M**
	TOTAL:	**$829M**

Note: Table does not include projects previously identified in 2020 MP. Remaining MP projects, within Caledon, are expected to be an additional $130M to 2041.

Appendix F
Transportation and Transit – Land Use Data Aggregation

Emme Model Zone	MMTMP Land Use Data						Updated Land Use Data (Aggregated SGU)							Updated Land Use Data (Split SGU)					
	2031		2041		2051		2031		2041		2051			2031		2041		2051	
	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Split SGU	Population	Employment	Population	Employment	Population	Employment
3001	240	60	250	60	237	58	234	57	248	58	258	57	1017	195	30	195	30	203	30
													1018	33	10	36	10	37	10
													1019	6	17	17	18	18	17
3002	2610	290	8260	1060	15839	2254	5,818	428	19,810	1,617	20,876	3,728	1004	28	1	29	1	30	1
													1005	50	6	2,063	222	2,665	243
													1006E	3,770	418	5,810	1,391	5,810	1,391
													1006W MTSA	1,951	2	7,817	2	8,021	1,253
													1006W North	19	1	4,091	1	4,350	840
3003	3,090	610	4,750	940	8,701	1,410	1,884	48	7,137	465	8,155	1,050	0984N	10	2	301	9	398	38
													0984S	8	0	1,279	34	1,514	167
													0985N	8	1	1,523	148	1,638	148
													0985C	6	1	1,104	1	1,104	117
													0985S	1,547	13	2,365	217	2,365	498
													1194	0	0	0	0	0	0
													1195	305	31	565	56	1,136	82
3004	100	160	100	330	11649	2115	76	5	74	267	7,836	1,893	1104	23	1	23	1	2,592	245
													1105	9	0	9	122	2,180	292
													1107	28	2	27	144	3,064	322
													1108	16	2	15	0	0	1,034
3005	1,190	130	4,760	560	4,811	891	1,225	306	5,035	723	5,036	778	1089	1,192	305	3,878	578	3,878	610
													1091	33	1	1,157	145	1,158	168
3006	7,320	1,850	7,840	2,600	7,753	3,230	6,033	1,516	7,934	2,767	8,903	3,280	1090J	0	393	0	697	0	723
													1090R	1,509	288	2,206	896	2,579	1,117
													1092	1,477	221	2,052	340	2,329	428
													1093	1,963	363	2,241	485	2,411	587
													1196	515	113	720	168	797	210
													1197	569	138	715	181	787	215
3007	3,290	260	3,350	780	3,672	323	4,387	295	4,654	579	5,187	738	439	3,200	259	3,489	543	3,994	698
													442	1,187	36	1,165	36	1,193	40
3008	5030	270	4850	280	4780	221	4,889	385	4,811	456	4,932	531	1083	1,284	76	1,254	84	1,278	94
													1084	2,083	207	2,066	254	2,131	301
													1200	1,522	102	1,491	118	1,523	136
3009	30	10	2640	1230	3006	1382	3	587	3	2,460	5	2,742	1069	-1	1	-1	569	0	635
													1071	-1	0	-1	722	0	809
													1073E	0	461	0	938	0	986
													1073R	5	125	5	231	5	312
3010	3,770	580	3,610	750	3,378	635	3,719	467	3,661	677	3,759	734	1074J	0	241	0	414	0	427
													1074R	3,719	226	3,661	263	3,759	307
3011	3,790	190	3,760	220	4,006	648	2,045	354	2,481	499	2,827	624	447	1,287	222	1,654	322	1,950	409
													1075	758	132	827	177	877	215
3012	30	20	720	530	31	781	0	0	0	371	0	790	1059E	0	0	0	371	0	427
													1059W	0	0	0	0	0	363
3013	20	2,150	20	2,130	19	2,095	12	985	12	996	12	1,297	1060	12	752	12	773	12	1,071
													1206	0	233	0	223	0	226
3014	70	240	3970	640	11636	1772	54	3	924	733	9,091	1,269	1048	33	2	33	324	4,420	509
													1049	15	1	15	1	1,326	140
													1050	6	0	876	408	3,345	620
3015	170	2510	160	5230	155	9224	0	1,950	0	5,099	0	6,169	1035	0	0	0	2,107	0	2,389
													1036	0	0	0	604	0	695
													1037E	0	1,610	0	1,528	0	1,554
													1037R	0	340	0	860	0	1,531

Emme Model Zone	MMTMP Land Use Data						Updated Land Use Data (Aggregated SGU)							Updated Land Use Data (Split SGU)					
	2031		2041		2051		2031		2041		2051			2031		2041		2051	
	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Split SGU	Population	Employment	Population	Employment	Population	Employment
3016	70	50	12,350	1,410	19,924	2,705	83	4	16,709	1,304	19,250	1,993	1007	16	1	8,532	763	9,726	1,026
													1008	67	3	8,177	541	9,524	967
3017	150	130	1160	1380	1462	2287	117	289	937	1,257	943	1,424	1012	12	51	773	88	773	88
													1013	0	191	0	879	0	1,024
													1014	51	3	107	7	112	7
													1207J	0	37	0	276	0	298
													1207R	54	7	57	7	58	7
3018	180	70	2,210	260	6,283	865	181	72	5,913	357	6,014	607	1015	31	54	5,762	339	5,857	588
													1016	150	18	151	18	157	19
3019	380	300	1000	560	2911	418	1,284	173	3,610	369	3,800	454	993	4	0	663	0	851	76
													994	30	1	31	1	33	2
													995	26	1	1,061	116	1,061	124
													0996E	738	108	1,153	124	1,153	124
													0996W	486	63	702	128	702	128
3020	310	80	630	120	4757	657	501	153	4,472	293	5,059	780	449	15	1	16	1	16	1
													986	71	14	72	14	75	15
													987	4	0	714	0	880	79
													988	0	0	533	0	660	60
													989	7	4	2,089	1	2,298	211
													990	0	0	0	0	0	0
													991	0	0	580	0	661	127
													992	8	0	9	0	10	1
													1208	396	134	459	277	459	286
3021	0	0	0	0	313	53	358	53	1,353	53	2,535	257	448	335	53	335	53	348	54
													982	4	0	336	0	1,144	104
													0983N	10	0	417	0	698	62
													0983S	9	0	265	0	345	37
3022	100	40	7050	920	13130	1908	107	6	3,879	781	10,649	1,330	1100N	7	0	7	0	7	0
													1100S	14	1	13	102	1,719	287
													1101	40	2	2,191	415	5,431	644
													1102	46	3	1,668	264	3,492	399
3023	90	0	70	0	80	4	38	1	38	21	1,002	95	1103N	10	0	10	0	10	0
													1103S	9	0	9	0	527	49
													1106N	15	1	15	1	15	1
													1106S	4	0	4	20	450	45
3024	9230	1070	11900	1520	11967	2146	7,141	1,437	7,431	1,944	7,750	2,367	1097	1,693	284	1,749	390	1,819	479
													1098	2,316	397	2,427	535	2,537	651
													1198	2,083	392	2,229	521	2,347	631
													1199	1,049	364	1,026	498	1,047	606
3025	10	0	3090	310	3720	511	2,861	414	7,166	878	8,153	1,198	1094N	19	1	19	1	589	52
													1094S	16	1	3,577	277	3,633	400
													1095	1,454	239	1,580	322	1,673	392
													1096	1,372	173	1,990	278	2,258	354
3026	20	10	10	20	15	260	44	2	43	2	44	2	1099	44	2	43	2	44	2
3027	2,850	100	2,700	80	2,733	99	2,852	145	4,311	260	4,367	330	1070	10	1	1,533	110	1,533	165
													1072	2,842	144	2,778	150	2,834	165
3028	60	1540	40	1900	47	1713	49	994	49	1,185	49	1,248	1061E	0	256	0	374	0	401
													1061W	36	223	36	325	36	349
													1062E	7	504	7	470	7	481
													1062W	6	11	6	16	6	17
3029	30	0	3,480	790	32	2,393	0	2	0	1,363	0	2,230	1058E	0	1	0	1,362	0	1,846

Emme Model Zone	MMTMP Land Use Data						Updated Land Use Data (Aggregated SGU)							Updated Land Use Data (Split SGU)					
	2031		2041		2051		2031		2041		2051			2031		2041		2051	
	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Split SGU	Population	Employment	Population	Employment	Population	Employment
3029	50	0	3,480	790	32	2,595	0	2	0	1,305	0	2,230	1058W	0	1	0	1	0	384
3030	60	70	9,320	2,390	12,308	3,560	68	1,626	165	3,063	7,435	4,069	1052E	14	1	14	284	3,109	356
													1052W	9	0	0	209	0	995
													1053E	36	2	36	324	3,546	383
													1053W	0	0	0	535	0	624
													1054	0	527	0	527	0	527
													1055	9	1	115	89	780	89
													1056	0	1,095	0	1,095	0	1,095
3031	160	1010	150	2890	144	9364	48	2,657	32	7,283	2,357	7,806	1042E	15	458	0	2,175	0	2,334
													1042W	12	2	12	6	745	5
													1043E	0	1,199	0	3,495	0	3,639
													1043W	21	3	20	80	1,612	81
													1044	0	200	0	540	0	585
													1131E	0	677	0	502	0	520
													1131R	0	118	0	485	0	642
3032	290	20	260	90	17,251	2,090	141	17	5,723	784	8,556	858	1032	107	15	3,922	565	6,451	639
													1033	34	2	1,801	219	2,105	219
3033	150	0	10,810	1,190	18,582	2,491	95	219	11,587	1,260	11,582	1,260	1029	70	217	7,924	833	7,921	833
													1030	25	2	3,663	427	3,661	427
3034	210	280	210	270	192	267	290	285	220	3,158	225	4,660	1026	130	18	131	18	133	18
													1027E	39	2	56	3	58	3
													1027W	11	1	0	0	0	293
													1027S	19	75	0	0	0	681
													1034	57	20	0	2,911	0	3,424
													1130E	0	90	0	120	0	128
													1130R	34	79	33	106	34	113
3035	160	0	160	0	161	8	277	18	1,352	560	7,447	671	1024	69	4	71	4	73	5
													1025N	86	4	88	4	90	4
													1025S	15	1	15	1	1,245	111
													1031	107	9	1,178	551	6,039	551
3036	200	10	1170	120	1490	197	228	236	4,674	440	5,578	508	1020	8	0	9	0	10	0
													1021	79	4	81	4	83	4
													1022	50	8	50	8	51	7
													1023	38	2	37	2	38	2
													1028N	39	2	42	2	43	2
													1028S	0	216	3,001	332	3,673	332
													1209	7	4	622	1	714	70
													1210	7	0	832	91	966	91
3037	1710	180	4720	560	5887	897	144	187	5,339	704	6,001	850	1000	39	2	4,201	361	4,652	513
													1001	105	6	1,138	120	1,138	120
													1120	0	179	0	223	211	217
3038	0	1030	0	910	0	1002	0	1,363	0	1,342	0	1,372	997	0	1,025	0	955	0	978
													1118	0	184	0	243	0	247
													1119	0	154	0	144	0	147
3039	60	1220	60	1690	57	993	0	723	0	787	0	803	1002N	0	3,106	0	3,578	0	3,642
3041	3600	1150	4770	1450	5244	3481	0	4,168	0	4,778	0	4,884	1002S	0	723	0	787	0	803
													1002T	0	1,062	0	1,200	0	1,242
3040	70	50	70	2670	6430	1109	3,544	609	6,468	1,456	6,468	1,528	1009N	3,502	433	4,036	528	4,036	542
													1009S	0	65	0	696	0	714
													1010	23	110	2,097	231	2,097	231
													1011	19	1	335	1	335	41

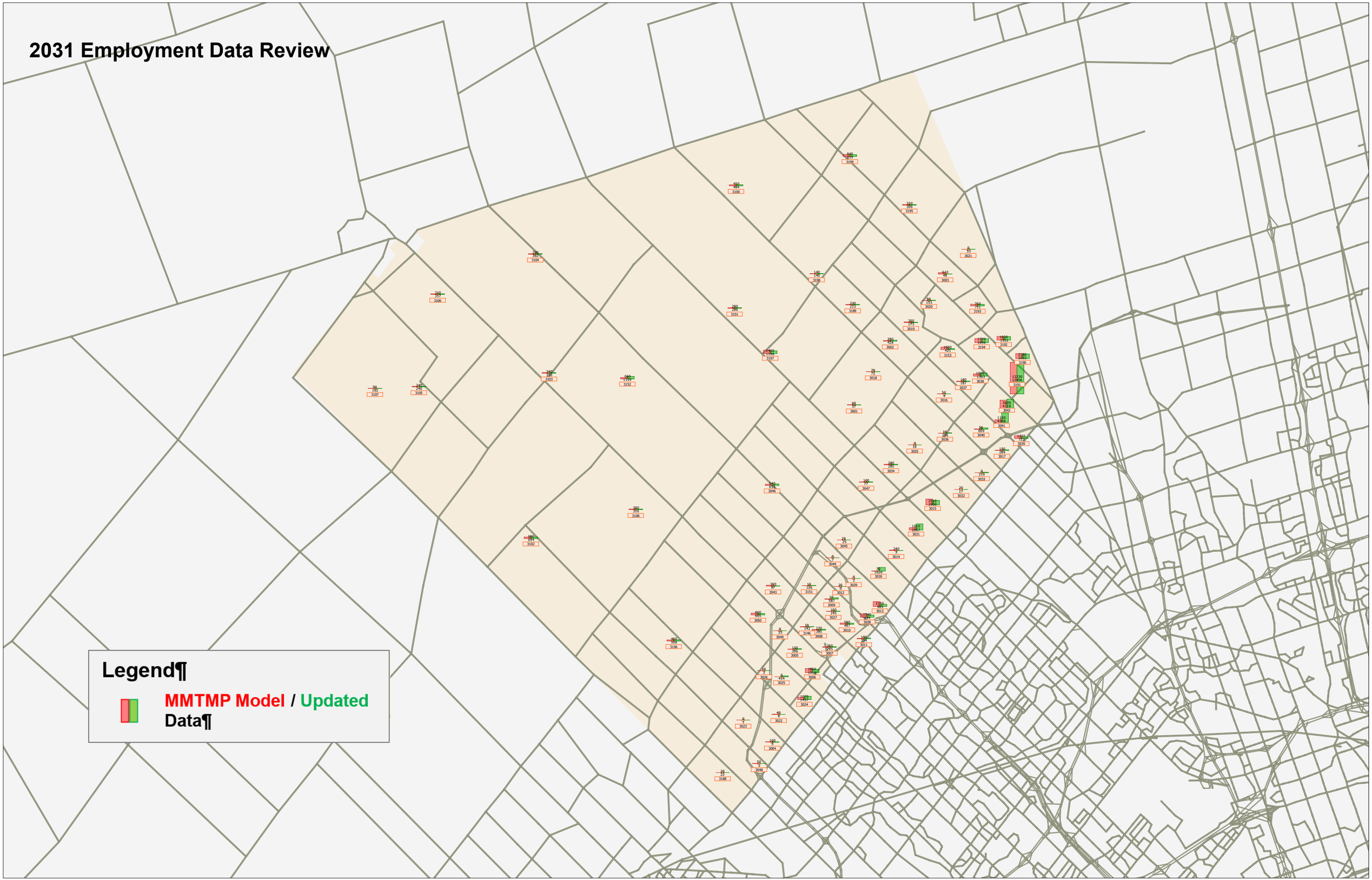
Emme Model Zone	MMTMP Land Use Data						Updated Land Use Data (Aggregated SGU)							Updated Land Use Data (Split SGU)					
	2031		2041		2051		2031		2041		2051			2031		2041		2051	
	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Split SGU	Population	Employment	Population	Employment	Population	Employment
3042	10	3670	10	3710	15	4796	15	4,118	15	4,066	15	4,760	998	15	4,118	15	4,066	15	4,760
3043	260	390	250	390	254	6,554	198	97	2,117	691	2,319	4,788	1065	75	13	78	13	84	13
													1078	26	64	26	64	25	90
													1080	42	19	42	2	0	3,455
													1081E	52	1	1,968	202	2,210	231
													1081W	0	0	0	410	0	479
													1081N	3	0	3	0	0	520
3044	40	0	40	0	33	911	80	7	79	7	41	1,707	1057E	39	2	39	2	0	1,194
													1057W	0	2	0	2	0	510
													1057N	41	3	40	3	41	3
3045	80	20	80	20	78	17	147	25	145	6	5,105	1,145	1047N	9	0	9	0	9	0
													1047S	9	0	9	0	1,885	187
													1051E	27	11	27	1	3,140	309
													1051W	31	10	31	1	0	645
													1051N	71	4	69	4	71	4
3046	1,330	540	1,320	540	1,289	573	1,242	655	1,253	686	1,302	696	1038	121	10	122	10	125	10
													1039	56	43	59	43	60	43
													1046	937	488	941	487	979	488
													1063	44	28	43	27	44	27
													1076	4	71	4	104	4	112
													1127	53	12	55	12	59	12
													1133	27	3	29	3	31	4
3047	230	100	220	100	201	99	296	77	266	374	272	756	1040	133	21	134	21	137	21
													1041N	46	3	49	3	50	3
													1041S	36	4	0	220	0	491
													1045N	42	2	45	2	46	2
													1045S	0	0	0	60	0	166
													1129E	0	9	0	9	0	9
													1129R	39	38	38	59	39	64
3048	20	50	20	250	4742	1887	26	2	26	1	0	1,279	1111	26	2	26	1	0	1,279
3049	10	0	780	80	392	430	47	25	601	376	666	2,190	1087E	7	0	7	304	0	354
													1087W	7	0	561	71	666	71
													1087N	6	1	6	0	0	1,162
													1088	27	24	27	1	0	603
3050	130	800	100	5110	94	5684	55	605	54	693	11	3,027	1079E	0	313	0	410	0	473
													1079R	11	164	10	155	11	121
													1085E	28	3	28	3	0	2,009
													1085W	0	124	0	124	0	123
													1086	16	1	16	1	0	301
3100	2580	450	2550	450	2593	492	2,685	484	2,745	488	2,900	498	405	1,570	297	1,582	298	1,652	303
													470	546	125	555	126	584	127
													474	569	62	608	64	664	68
3101	1,550	280	1,670	310	1,641	395	2,956	286	2,910	334	2,975	383	414	173	11	175	11	183	12
													417	479	60	474	59	488	60
													456	1,108	62	1,084	68	1,106	77
													1121	0	70	0	96	0	117
													1122	1,121	69	1,103	82	1,122	96
													1123	75	14	74	18	76	21
3102	1450	680	1570	690	1712	714	1,551	694	1,691	703	1,875	712	407	1,126	608	1,136	609	1,189	610
													479	297	77	405	83	512	90
													1134	128	9	150	11	174	12

Emme Model Zone	MMTMP Land Use Data						Updated Land Use Data (Aggregated SGU)							Updated Land Use Data (Split SGU)					
	2031		2041		2051		2031		2041		2051			2031		2041		2051	
	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Split SGU	Population	Employment	Population	Employment	Population	Employment
3103	1730	340	1780	390	1755	478	1,675	310	1,701	402	1,788	486	409	605	99	630	130	675	159
													410	1,063	211	1,064	272	1,105	327
													434	7	0	7	0	8	0
3104	1,550	290	1,570	290	1,615	311	1,610	302	1,666	305	1,778	314	404	1,481	232	1,494	233	1,564	239
													475	129	70	172	72	214	75
3105	1,280	240	1,460	260	1,617	263	1,379	240	1,559	251	1,770	265	402	262	99	263	99	274	100
													476	1,117	141	1,296	152	1,496	165
3106	470	310	460	310	452	319	478	317	483	319	506	317	403	426	315	430	316	450	314
													1135	52	2	53	3	56	3
3107	790	90	780	90	773	103	810	102	816	102	852	104	401	810	102	816	102	852	104
3108	1,510	300	1,560	310	1,594	325	1,571	316	1,643	322	1,768	329	408	627	148	631	149	660	150
													468	944	168	1,012	173	1,108	179
3146	20	10	1510	200	1117	559	181	142	1,940	219	1,940	219	1082	181	142	1,940	219	1,940	219
3151	90	10	7,760	740	7,216	2,409	123	126	5,157	375	5,535	1,303	1064E	4	93	4	93	4	92
													1064W	43	29	44	29	47	28
													1066	16	1	16	1	0	601
													1067N	22	1	21	1	22	1
													1067S	16	1	4,215	170	4,514	484
													1068	22	1	857	81	948	97
3152	1330	660	1320	650	1303	682	4,611	1,159	4,795	1,291	5,245	1,426	411	101	54	103	54	108	54
													412	876	71	955	90	1,106	115
													413	1,353	126	1,456	166	1,665	214
													431	1,366	677	1,376	679	1,437	679
													452	154	10	154	10	159	11
													453	10	0	10	1	11	1
													1124	730	220	718	290	733	351
													1126	21	1	23	1	26	1
3153	3,950	1,090	4,010	1,170	4,472	1,248	3,944	421	4,319	882	5,582	1,336	0444J	0	294	0	716	769	1,110
													0444R	3,944	127	4,319	166	4,813	226
3188	190	20	180	10	168	20	199	22	195	22	3,718	342	1109N	44	3	43	3	44	3
													1109S	0	0	0	0	46	2
													1110N	18	1	18	1	18	1
													1110S	12	1	12	1	3,485	319
													1112	60	6	59	6	60	6
													1113	39	10	38	10	39	10
													1114	26	1	25	1	26	1
3189	840	230	830	230	832	248	802	213	808	214	846	216	432	802	213	808	214	846	216
3190	5120	2180	5550	2570	6445	3113	5,282	2,022	7,501	2,636	11,272	3,302	430	4,725	403	5,252	644	5,823	948
													0469E	0	170	0	279	0	390
													0469R	557	1,449	2,249	1,713	5,449	1,964
3191	30	13730	30	12860	37	13785	36	13,406	37	12,990	40	13,590	0429E	0	6,755	0	6,414	0	6,585
													0429R	0	968	0	1,090	0	1,192
													1115E	0	2,771	0	2,609	0	2,778
													1115R	11	298	11	260	12	235
													1116	0	210	0	196	0	201
													1117	0	906	0	965	0	1,102
													1177	0	177	0	220	0	233
													1202	0	43	0	40	0	41
													1204	12	743	12	698	13	713
													1205	13	535	14	498	15	510
3192	6230	1630	6910	2050	8134	2512	6,393	1,551	7,068	2,176	7,713	2,707	428	6,393	1,551	7,068	2,176	7,713	2,707

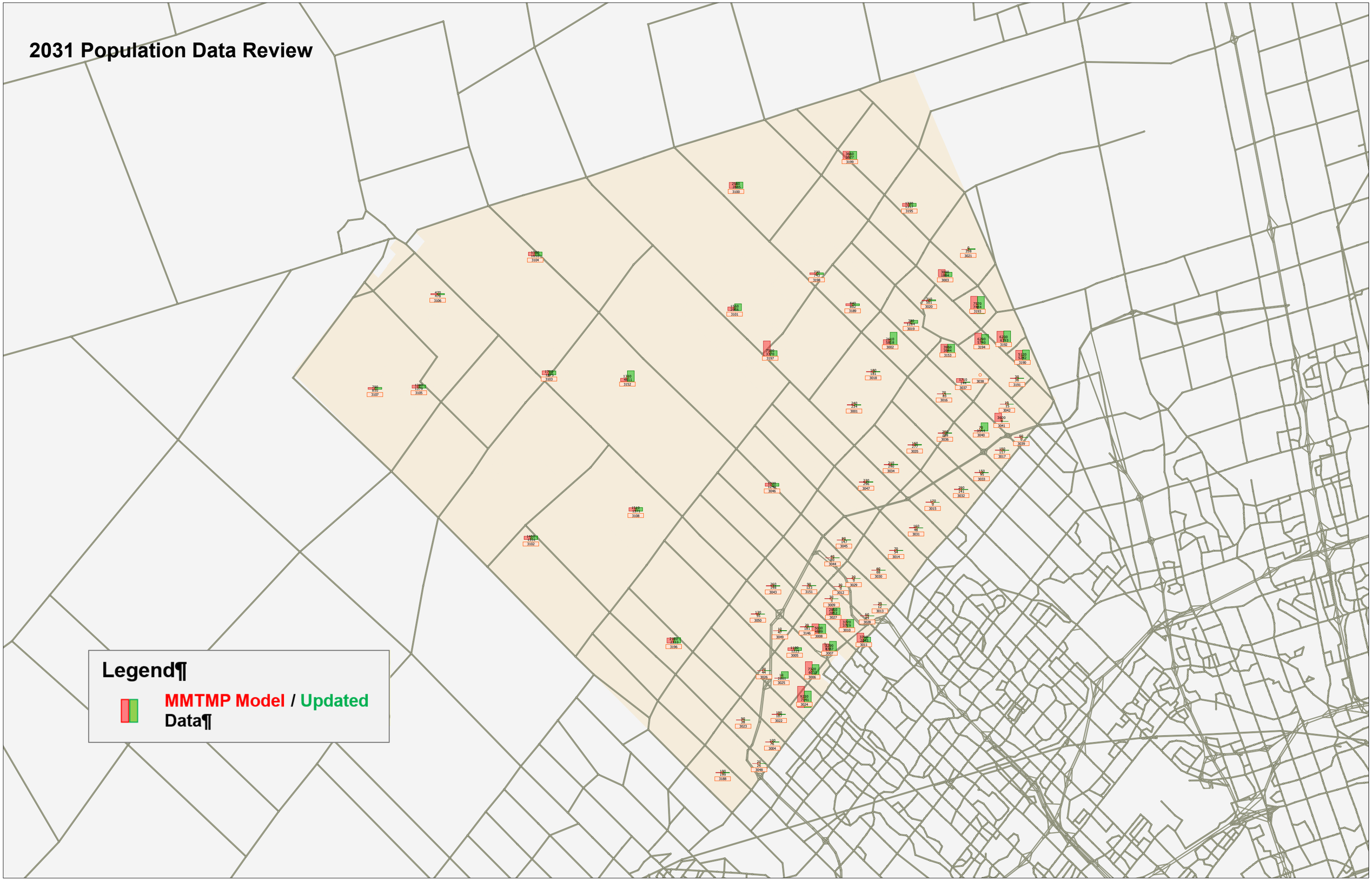
Emme Model Zone	MMTMP Land Use Data						Updated Land Use Data (Aggregated SGU)							Updated Land Use Data (Split SGU)					
	2031		2041		2051		2031		2041		2051			2031		2041		2051	
	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Split SGU	Population	Employment	Population	Employment	Population	Employment
3193	7570	760	7590	850	8275	1032	7,484	711	7,822	923	8,542	1,150	427	6,185	440	6,624	576	7,122	732
													445	1,273	270	1,172	346	1,393	417
													981	26	1	26	1	27	1
3194	6,290	1,770	6,360	2,030	7,038	2,536	5,740	1,696	6,079	2,066	6,409	2,459	0426E	0	857	0	799	0	818
													0426W	5,740	839	6,079	1,267	6,409	1,641
3195	1330	320	1790	400	2356	349	1,317	306	1,835	326	2,345	345	422	405	32	528	37	653	42
													450	64	11	66	11	71	12
													1193	848	263	1,241	278	1,621	291
3196	2180	460	2370	490	2559	510	2,333	508	2,543	521	2,820	540	419	1,461	301	1,483	303	1,559	309
													477	686	114	858	125	1,035	137
													478	144	31	159	32	179	33
													1077	13	28	12	26	13	26
													1132	29	34	31	35	34	35
3197	7590	1490	8250	1900	8550	2280	3,370	1,196	3,461	1,628	3,708	1,944	415	11	91	11	91	13	90
													416	1,006	331	1,106	525	1,285	637
													454	2,170	373	2,151	476	2,193	568
													455	117	369	126	504	145	616
													1128	66	32	67	32	72	33
3198	730	140	710	130	691	140	743	140	745	140	776	143	418	623	110	625	110	651	113
													1125	120	30	120	30	125	30
3199	3660	840	4990	1030	5164	958	3,627	819	4,510	886	5,431	953	451	391	112	403	112	428	114
													1181	1,034	323	1,450	339	1,857	354
													1186	789	186	1,129	198	1,460	208
													1190	1,413	198	1,528	237	1,686	277

Appendix G
Transportation and Transit – Land Use Data Review and Comparison

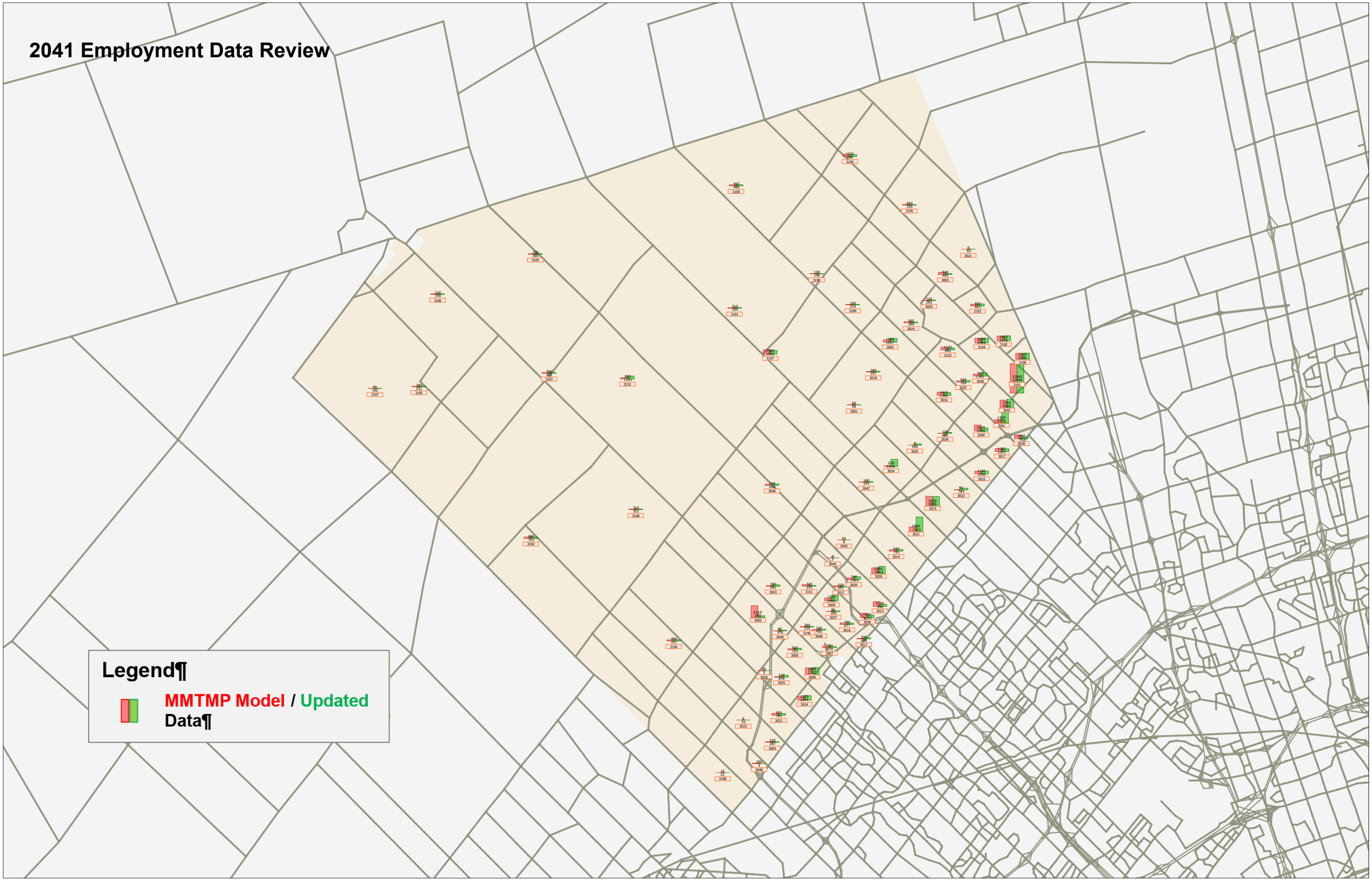
2031 Employment Data Review



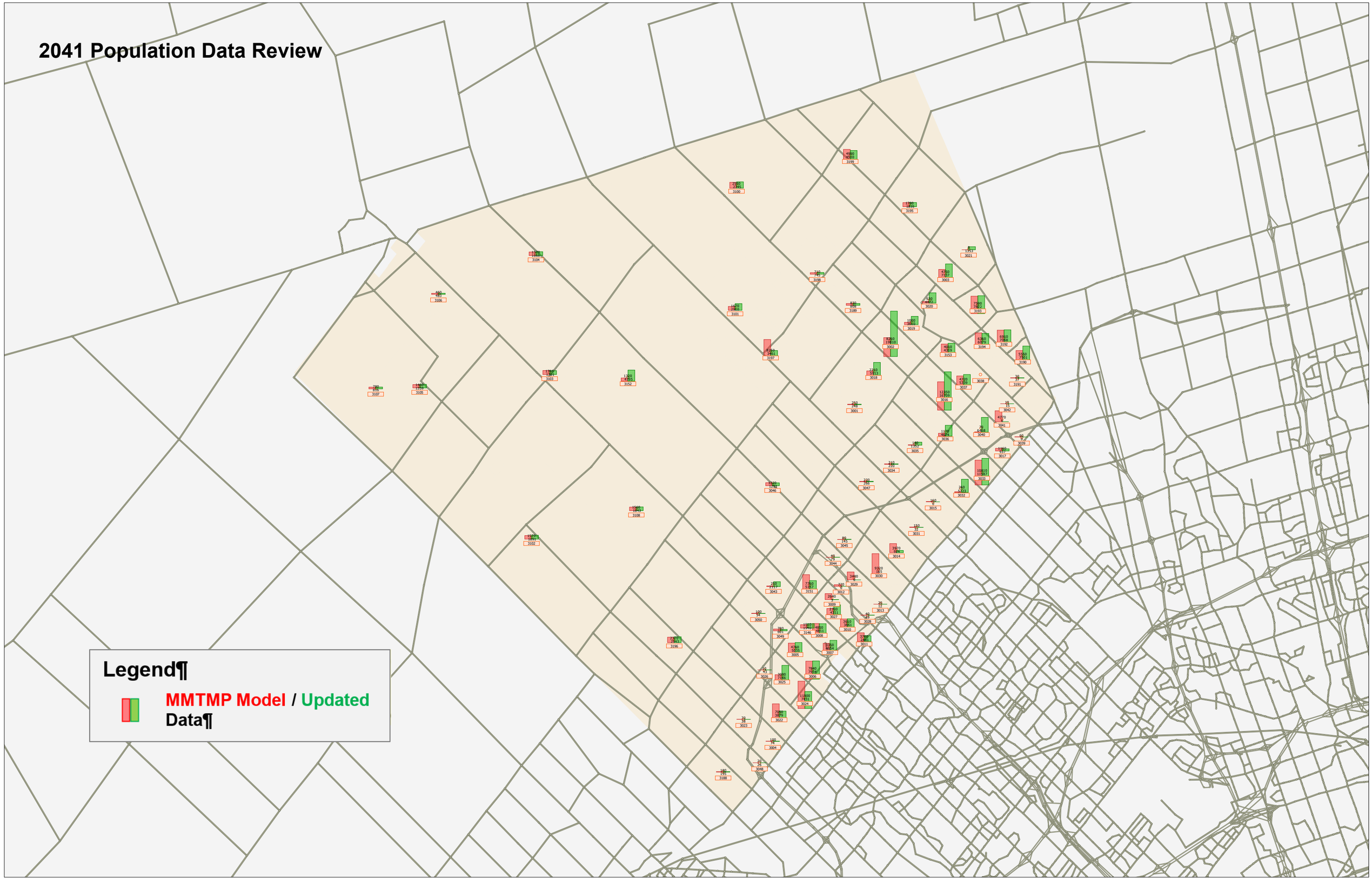
2031 Population Data Review



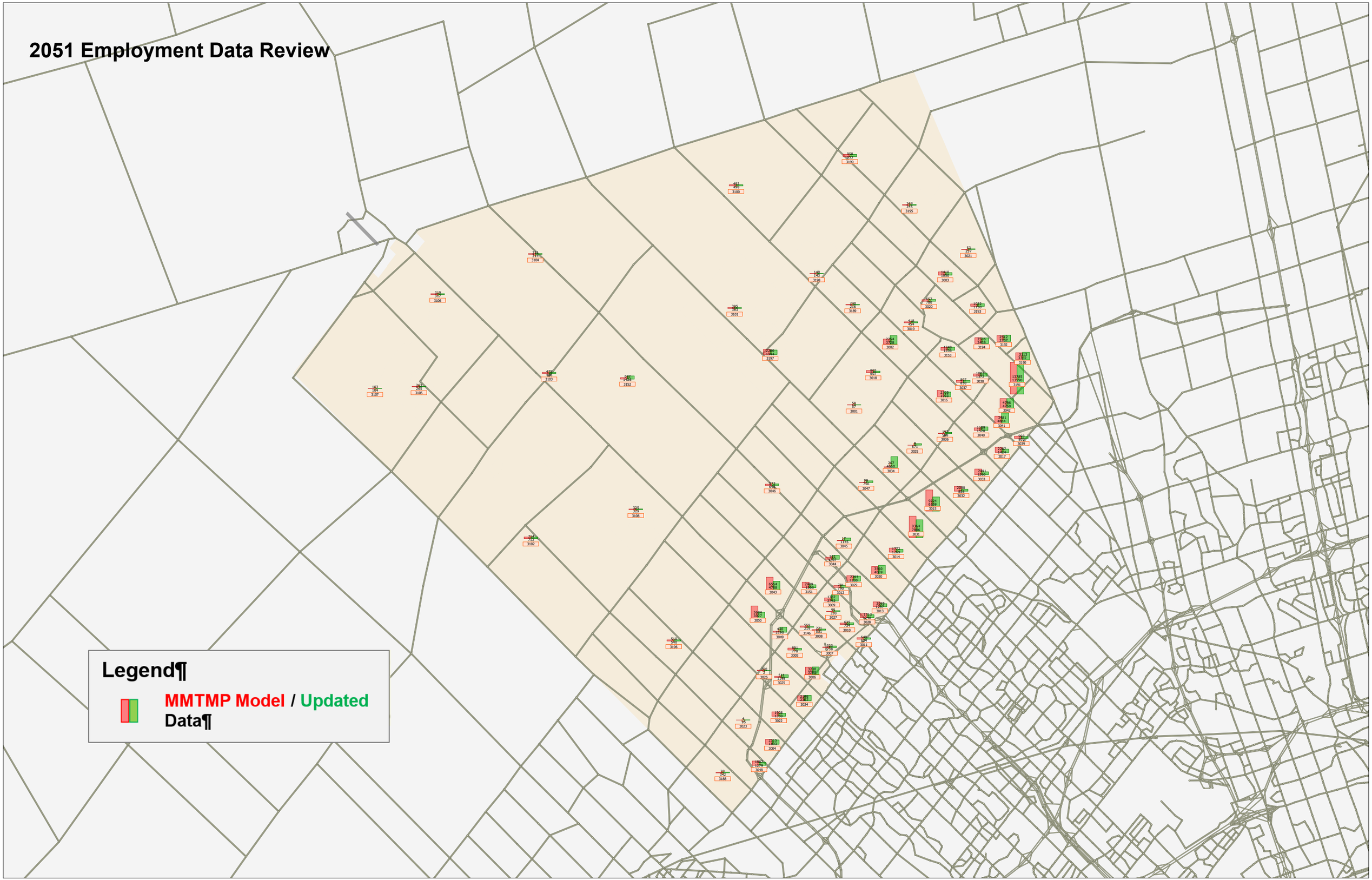
2041 Employment Data Review



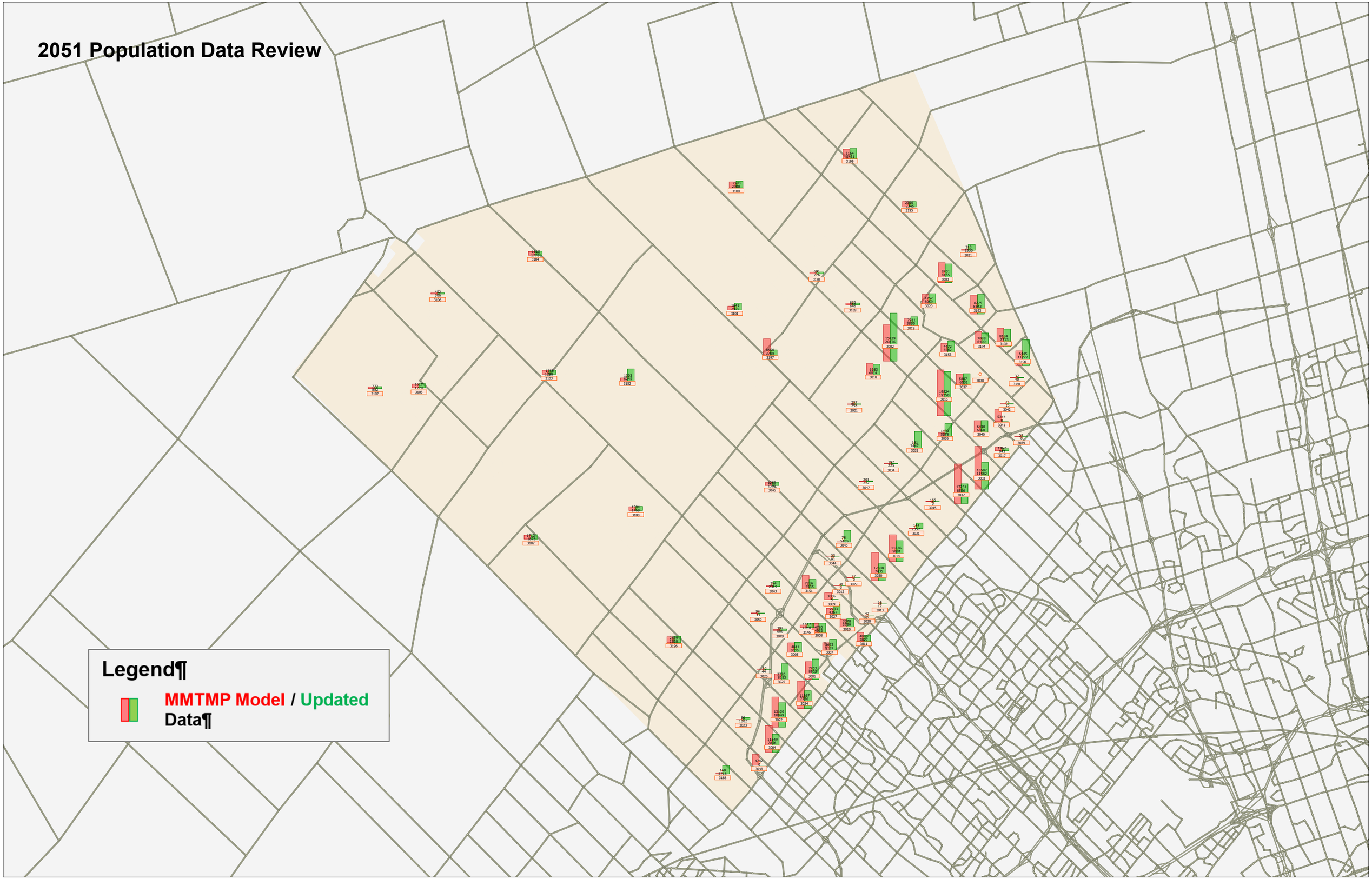
2041 Population Data Review



2051 Employment Data Review



2051 Population Data Review



Appendix H
Transportation and Transit – Cost Breakdown for Road Network

Capital Cost Breakdown for Town's Roads

ID	Road	From	To	Recommendation	Corridor Length (km)	Unit Cost ($/km)	Construction Cost incl. contingencies	Design and EA Cost (15%)	Total Capital Cost	GMP Phasing
1	Chinguacousy Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.1	$ 7,322,000	$ 22,698,200	$ 3,405,000	$ 26,103,200	2031
2	McLaughlin Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.1	$ 7,322,000	$ 22,698,200	$ 3,405,000	$ 26,103,200	2031
3	Albion Vaughan Road	Mayfield Road	King Street	Widening from 2 to 4 lanes	4.8	$ 7,322,000	$ 35,145,600	$ 5,272,000	$ 40,417,600	2041
3a	Albion Vaughan Road	Mayfield Road	King Street	Grade Separation	-	$ 50,000,000	$ 50,000,000	$ 7,500,000	$ 57,500,000	2041
4	Humber Station Road	Mayfield Road	Limit of Settlement Area (north of King Street)	Widening from 2 to 4 lanes	7.6	$ 7,322,000	$ 55,647,200	$ 8,347,000	$ 63,994,200	2031
5	Heart Lake Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.2	$ 7,322,000	$ 23,430,400	$ 3,515,000	$ 26,945,400	2051
6	Abbotside Way	Bonniglen Farm Boulevard	Heart Lake Road	Extension (4 lanes)	0.5	$ 6,799,000	$ 3,399,500	$ 510,000	$ 3,909,500	2031
7	Innis Lake Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3	$ 7,322,000	$ 21,966,000	$ 3,295,000	$ 25,261,000	2041
8	Centreville Creek Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.1	$ 7,322,000	$ 22,698,200	$ 3,405,000	$ 26,103,200	2041
9	Old School Road	Winston Churchill Boulevard	Airport Road	Widening from 2 to 4 lanes	16.6	$ 7,322,000	$ 121,545,200	$ 18,232,000	$ 139,777,200	2041
10a	Healey Road	The Gore Road	Coleraine Drive	Widening from 2 to 4 lanes	2.7	$ 7,322,000	$ 19,769,400	$ 2,965,000	$ 22,734,400	2031
10b	Healey Road	Airport Road	The Gore Road	Widening from 2 to 4 lanes	4.1	$ 7,322,000	$ 30,020,200	$ 4,503,000	$ 34,523,200	2041
11	Torbram Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.2	$ 7,322,000	$ 23,430,400	$ 3,515,000	$ 26,945,400	2031
12	Chinguacousy Road	Old School Road	King Street	Widening from 2 to 4 lanes	3.1	$ 7,322,000	$ 22,698,200	$ 3,405,000	$ 26,103,200	2051
13	McLaughlin Road	Old School Road	King Street	Widening from 2 to 4 lanes	3.1	$ 7,322,000	$ 22,698,200	$ 3,405,000	$ 26,103,200	2051
14	Bramalea Road	Mayfield Road	King Street	Widening from 2 to 4 lanes	6.2	$ 7,322,000	$ 45,396,400	$ 6,809,000	$ 52,205,400	2041
15	Heritage Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.1	$ 7,322,000	$ 22,698,200	$ 3,405,000	$ 26,103,200	2051
16	Creditview Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3	$ 7,322,000	$ 21,966,000	$ 3,295,000	$ 25,261,000	2051
New	George Bolton Parkway	West of Coleraine Drive	Humber Station Road	Extension (4 lanes)	0.9	$ 6,799,000	$ 6,119,100	$ 918,000	$ 7,037,100	2031
New	Kennedy Road	Bonniglen Farm Boulevard	Old School Road	Widening from 2 to 4 lanes	0.65	$ 7,322,000	$ 4,759,300	$ 714,000	$ 5,473,300	2031
New	Kennedy Road	Old School Road	King Street	Widening from 2 to 4 lanes	3.1	$ 7,322,000	$ 22,698,200	$ 3,405,000	$ 26,103,200	2041
New	Caledon King Townline	King Street	Columbia Way	Widening from 2 to 4 lanes	2.2	$ 7,322,000	$ 16,108,400	$ 2,416,000	$ 18,524,400	2041
New	Columbia Way	Regional Road 50	Caledon King Townline	Widening from 2 to 4 lanes	2.8	$ 7,322,000	$ 20,501,600	$ 3,075,000	$ 23,576,600	2041

Item	Phasing Plan			Total
	2024 - 2031	2032 - 2041	2042 - 2051	
Proposed Length of Road Widening (km)	21.75	45.9	15.5	83.15
Construction Costs	$ 158,521,300	$ 386,079,800	$ 113,491,000	$ 658,092,100
Soft/Design Cost (15%)	$ 23,779,000	$ 57,912,000	$ 17,025,000	$ 98,716,000
Total Capital Costs	$ 182,300,300	$ 443,991,800	$ 130,516,000	$ 756,808,100

Capital Cost Breakdown for Regional Roads

Capital Plan Project No.	Road	From	To	Road Improvement Recommendations	Length (km)	Capital Cost ($'000)	GMP Phasing
114020	Dixie Road	Mayfield Road	2 km northerly	Widening from 2 to 5 lanes	2	13,200	2033
114075	Mayfield Road	Airport Road	The Gore Road	Widening from 2 to 5 lanes	4.1	39,900	2033
114080	Mayfield Road	Coleraine Drive	Highway 50	Widening from 2 to 4 lanes	1.3	11,200	2033
134055	Mayfield Road	Hurontario Street	Chinguacousy Road	Widening from 2 to 6 lanes	2.78	3,600	2033
134065	Mayfield Road	The Gore Road	Coleraine Drive	Widening from 2 to 4 lanes	2.75	22,573	2033
144030	Airport Road	1km north of Mayfield Road	King Street	Widening from 2 to 5 lanes	5.13	62,948	2033
154070	Mayfield Road	Chinguacousy Road	Mississauga Road	Widening from 2 to 5 lanes	2.75	33,518	2033
174020	Mayfield Road	Dixie Road	Bramalea Road	Widening from 5 to 6 lanes	1.35	6,329	2033
174030	Mayfield Road	Mississauga Road	Winston Churchill Boulevard	Widening from 2 to 4 lanes	2.81	25,119	2033
214030	Mayfield Road	Heart Lake Road	Hurontario Street	Widening from 4 to 6 lanes	2.73	31,507	2033
274025	Mayfield Road	Airport Road	Clarkway Drive	Widening from 5 to 6 lanes	5.47	40,712	2033
	Mississauga Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.07	26,300	2041
	Mayfield Road	Chinguacousy Road	Highway 413	Widening from 5 to 6 lanes	4.1	28,300	2041
	The Gore Road	Mayfield Road	Healey Road	Widening from 2 to 4 lanes	3.15	27,000	2041
	Mayfield Road	Clarkway Drive	Coleraine Drive	Widening from 4 to 6 lanes	1.38	15,900	2041

Item	Phasing Plan		Total
	2024 - 2033	2034 - 2041	
Proposed Length of Road network improvement (km)	33.17	11.7	44.87
Capital Costs ($ million)*	$ 291M	$ 97M	$ 388M

Operations and Maintenance Cost Breakdown for Town's Roads

Year	Paved 2-Lane Road (CL-km)	Paved 4-Lane Road with Complete Street (CL-km)	Gravel 2-Lane Road (CL-km)	Number of Traffic Signals	Roads Maintenance Cost ($)				
					Routine Maintenance	Yard Maintenance	Fleet Maintenance	Traffic Signals	Total
2024	677.5	5.2	125.0	5	$ 21,183,000	$ 487,000	$ 3,138,000	$ 26,000	$ 24,834,000
2025	674.9	7.9	125.0	6	$ 21,341,000	$ 487,000	$ 3,138,000	$ 31,000	$ 24,997,000
2026	672.4	10.7	125.0	7	$ 21,499,000	$ 487,000	$ 3,138,000	$ 37,000	$ 25,161,000
2027	669.8	13.4	125.0	8	$ 22,000,000	$ 487,000	$ 3,138,000	$ 42,000	$ 25,667,000
2028	667.3	16.1	125.0	9	$ 22,501,000	$ 487,000	$ 3,138,000	$ 47,000	$ 26,173,000
2029	681.9	18.8	125.0	10	$ 23,002,000	$ 487,000	$ 3,138,000	$ 52,000	$ 26,679,000
2030	679.3	21.5	125.0	11	$ 23,503,000	$ 487,000	$ 3,138,000	$ 58,000	$ 27,186,000
2031	676.8	24.3	125.0	12	$ 24,004,000	$ 487,000	$ 3,138,000	$ 63,000	$ 27,692,000
2032	672.2	28.8	125.0	13	$ 24,933,000	$ 487,000	$ 3,138,000	$ 68,000	$ 28,626,000
2033	667.6	33.4	125.0	14	$ 25,862,000	$ 487,000	$ 3,138,000	$ 73,000	$ 29,560,000
2034	663.0	38.0	125.0	15	$ 26,791,000	$ 487,000	$ 3,138,000	$ 78,000	$ 30,494,000
2035	658.4	42.6	125.0	16	$ 27,720,000	$ 487,000	$ 3,138,000	$ 84,000	$ 31,429,000
2036	653.8	47.2	125.0	17	$ 28,649,000	$ 487,000	$ 3,138,000	$ 89,000	$ 32,363,000
2037	649.2	51.8	125.0	18	$ 29,987,000	$ 487,000	$ 3,138,000	$ 94,000	$ 33,706,000
2038	644.7	56.4	125.0	19	$ 31,325,000	$ 487,000	$ 3,138,000	$ 99,000	$ 35,049,000
2039	640.1	61.0	125.0	20	$ 32,663,000	$ 487,000	$ 3,138,000	$ 105,000	$ 36,393,000
2040	635.5	65.6	125.0	21	$ 34,001,000	$ 487,000	$ 3,138,000	$ 110,000	$ 37,736,000
2041	630.9	70.2	125.0	22	$ 35,339,000	$ 487,000	$ 3,138,000	$ 115,000	$ 39,079,000
2042	629.3	71.7	125.0	23	$ 35,528,000	$ 487,000	$ 3,138,000	$ 120,000	$ 39,273,000
2043	627.8	73.3	125.0	24	$ 35,717,000	$ 487,000	$ 3,138,000	$ 126,000	$ 39,468,000
2044	626.2	74.8	125.0	25	$ 35,906,000	$ 487,000	$ 3,138,000	$ 131,000	$ 39,662,000
2045	624.7	76.4	125.0	26	$ 36,095,000	$ 487,000	$ 3,138,000	$ 136,000	$ 39,856,000
2046	623.1	77.9	125.0	27	$ 36,284,000	$ 487,000	$ 3,138,000	$ 141,000	$ 40,050,000
2047	621.6	79.5	125.0	28	$ 36,455,000	$ 487,000	$ 3,138,000	$ 146,000	$ 40,226,000
2048	620.0	81.0	125.0	29	$ 36,626,000	$ 487,000	$ 3,138,000	$ 152,000	$ 40,403,000
2049	618.5	82.6	125.0	30	$ 36,797,000	$ 487,000	$ 3,138,000	$ 157,000	$ 40,579,000
2050	616.9	84.1	125.0	31	$ 36,968,000	$ 487,000	$ 3,138,000	$ 162,000	$ 40,755,000
2051	615.4	85.7	125.0	32	$ 37,139,000	$ 487,000	$ 3,138,000	$ 167,000	$ 40,931,000
Total Maintenance Costs for Road Network (2024-2051)									**$ 944,027,000**

Life-Cycle Cost Breakdown for Town's Roads

Year	Road Lane-km (incl. local roads)	Life-Cycle Cost ($) -in $2024 Value		
		Life Cycle Cost for Roads	Life Cycle Cost for Structures	Total
2024	1,634	$ 32,060,000	$ 3,083,608	$ 35,143,608
2025	1,647	$ 32,326,000	$ 3,083,608	$ 35,409,608
2026	1,661	$ 32,593,000	$ 3,083,608	$ 35,676,608
2027	1,701	$ 33,379,000	$ 3,083,608	$ 36,462,608
2028	1,741	$ 34,165,000	$ 3,083,608	$ 37,248,608
2029	1,781	$ 34,951,000	$ 3,083,608	$ 38,034,608
2030	1,821	$ 35,737,000	$ 3,083,608	$ 38,820,608
2031	1,861	$ 36,523,000	$ 3,083,608	$ 39,606,608
2032	1,936	$ 38,000,000	$ 3,083,608	$ 41,083,608
2033	2,012	$ 39,477,000	$ 3,083,608	$ 42,560,608
2034	2,087	$ 40,954,000	$ 3,083,608	$ 44,037,608
2035	2,162	$ 42,430,000	$ 3,083,608	$ 45,513,608
2036	2,237	$ 43,907,000	$ 3,083,608	$ 46,990,608
2037	2,344	$ 46,003,000	$ 3,083,608	$ 49,086,608
2038	2,451	$ 48,099,000	$ 3,083,608	$ 51,182,608
2039	2,558	$ 50,196,000	$ 3,083,608	$ 53,279,608
2040	2,665	$ 52,292,000	$ 3,083,608	$ 55,375,608
2041	2,771	$ 54,388,000	$ 3,083,608	$ 57,471,608
2042	2,786	$ 54,675,000	$ 3,083,608	$ 57,758,608
2043	2,801	$ 54,961,000	$ 3,083,608	$ 58,044,608
2044	2,815	$ 55,248,000	$ 3,083,608	$ 58,331,608
2045	2,830	$ 55,535,000	$ 3,083,608	$ 58,618,608
2046	2,844	$ 55,821,000	$ 3,083,608	$ 58,904,608
2047	2,858	$ 56,081,000	$ 3,083,608	$ 59,164,608
2048	2,871	$ 56,340,000	$ 3,083,608	$ 59,423,608
2049	2,884	$ 56,600,000	$ 3,083,608	$ 59,683,608
2050	2,897	$ 56,859,000	$ 3,083,608	$ 59,942,608
2051	2,910	$ 57,119,000	$ 3,083,608	$ 60,202,608
Total Life-Cycle Costs for Road Network (2024-2051)				**$ 1,373,060,024**

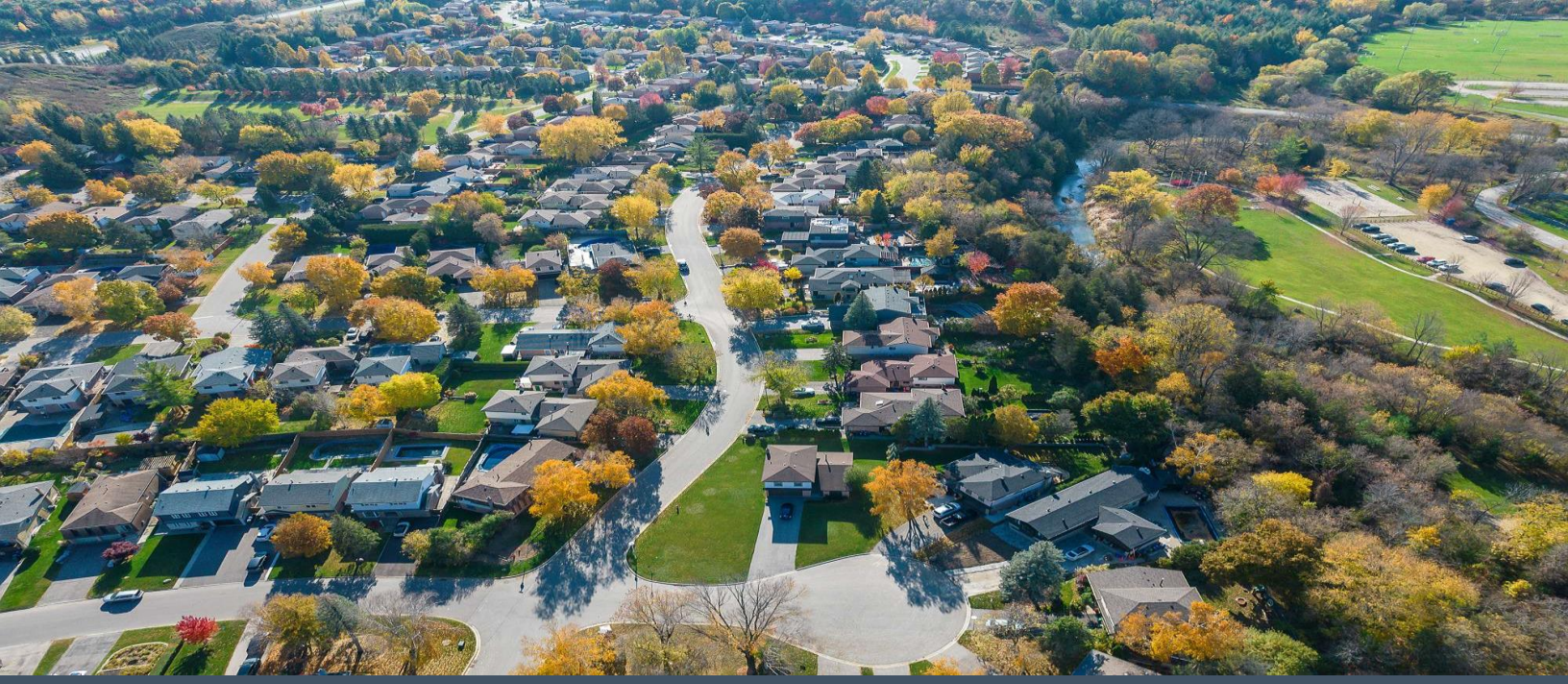
Operations and Maintenance Cost Breakdown for Regional Roads

Year	Paved 2-Lane Road (CL-km)	Paved 4-Lane Road (CL-km)	Paved 5-Lane Road (CL-km)	Paved 6-Lane Road (CL-km)	Number of Traffic Signals	Roads Maintenance Cost ($)		
						Routine Maintenance	Traffic Signals	Total
2024	209.8	18.6	2.0	6.2	78	$ 7,782,700	$ 408,000	$ 8,190,700
2025	209.8	18.6	2.0	6.2	80	$ 7,782,700	$ 418,000	$ 8,200,700
2026	196.4	24.1	9.9	6.2	82	$ 7,999,000	$ 429,000	$ 8,428,000
2027	192.3	24.1	12.6	7.6	84	$ 8,084,000	$ 439,000	$ 8,523,000
2028	192.3	24.1	12.6	7.6	86	$ 8,084,000	$ 450,000	$ 8,534,000
2029	192.3	21.4	12.6	10.3	88	$ 8,118,100	$ 460,000	$ 8,578,100
2030	192.3	21.4	12.6	10.3	90	$ 8,118,100	$ 471,000	$ 8,589,100
2031	192.3	21.4	12.6	10.3	92	$ 8,118,100	$ 481,000	$ 8,599,100
2032	192.3	21.4	7.2	15.8	94	$ 8,152,000	$ 492,000	$ 8,644,000
2033	192.3	21.4	7.2	15.8	96	$ 8,152,000	$ 502,000	$ 8,654,000
2034	191.5	22.0	6.6	16.5	98	$ 8,167,000	$ 513,000	$ 8,680,000
2035	189.8	22.6	6.1	17.2	100	$ 8,153,000	$ 523,000	$ 8,676,000
2036	189.2	23.2	5.6	17.9	102	$ 8,172,800	$ 533,000	$ 8,705,800
2037	188.5	23.8	5.1	18.5	104	$ 8,192,600	$ 544,000	$ 8,736,600
2038	187.9	24.4	4.6	19.2	106	$ 8,212,400	$ 554,000	$ 8,766,400
2039	187.3	25.0	4.1	19.9	108	$ 8,232,200	$ 565,000	$ 8,797,200
2040	186.7	25.6	3.6	20.6	110	$ 8,252,000	$ 575,000	$ 8,827,000
2041	186.0	26.2	3.1	21.3	112	$ 8,271,800	$ 586,000	$ 8,857,800
2042	186.0	26.2	3.1	21.3	114	$ 8,271,800	$ 596,000	$ 8,867,800
2043	186.0	26.2	3.1	21.3	116	$ 8,271,800	$ 607,000	$ 8,878,800
2044	186.0	26.2	3.1	21.3	118	$ 8,271,800	$ 617,000	$ 8,888,800
2045	186.0	26.2	3.1	21.3	120	$ 8,271,800	$ 628,000	$ 8,899,800
2046	186.0	26.2	3.1	21.3	122	$ 8,271,800	$ 638,000	$ 8,909,800
2047	186.0	26.2	3.1	21.3	124	$ 8,271,800	$ 649,000	$ 8,920,800
2048	186.0	26.2	3.1	21.3	126	$ 8,271,800	$ 659,000	$ 8,930,800
2049	186.0	26.2	3.1	21.3	128	$ 8,271,800	$ 669,000	$ 8,940,800
2050	186.0	26.2	3.1	21.3	130	$ 8,271,800	$ 680,000	$ 8,951,800
2051	186.0	26.2	3.1	21.3	132	$ 8,271,800	$ 690,000	$ 8,961,800
Total Maintenance Costs for Road Network (2024-2051)								**$ 244,138,500**

Life-Cycle Cost Breakdown for Regional Roads

Year	Road Lane-km	Life-Cycle Cost ($)		
		Life Cycle Cost for Roads	Life Cycle Cost for Structures	Total
2024	541	$ 11,689,000	$ 4,387,500	$ 16,076,500
2025	541	$ 11,689,000	$ 4,387,500	$ 16,076,500
2026	576	$ 12,440,000	$ 4,387,500	$ 16,827,500
2027	590	$ 12,734,000	$ 4,387,500	$ 17,121,500
2028	590	$ 12,734,000	$ 4,387,500	$ 17,121,500
2029	595	$ 12,852,000	$ 4,387,500	$ 17,239,500
2030	595	$ 12,852,000	$ 4,387,500	$ 17,239,500
2031	595	$ 12,852,000	$ 4,387,500	$ 17,239,500
2032	601	$ 12,970,000	$ 4,387,500	$ 17,357,500
2033	601	$ 12,970,000	$ 4,387,500	$ 17,357,500
2034	603	$ 13,022,000	$ 4,387,500	$ 17,409,500
2035	604	$ 13,034,000	$ 4,387,500	$ 17,421,500
2036	606	$ 13,093,000	$ 4,387,500	$ 17,480,500
2037	609	$ 13,152,000	$ 4,387,500	$ 17,539,500
2038	612	$ 13,211,000	$ 4,387,500	$ 17,598,500
2039	615	$ 13,269,000	$ 4,387,500	$ 17,656,500
2040	617	$ 13,328,000	$ 4,387,500	$ 17,715,500
2041	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2042	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2043	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2044	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2045	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2046	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2047	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2048	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2049	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2050	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
2051	620	$ 13,387,000	$ 4,387,500	$ 17,774,500
Total Life-Cycle Costs for Road Network (2024-2051)				**$ 487,998,000**

Appendix I
Fiscal Impact Assessment



Growth Management and Phasing Plan

Town of Caledon

Fiscal Impact Assessment

November 8, 2024

Watson & Associates Economists Ltd.
905-272-3600
info@watsonecon.ca

Table of Contents

1. Introduction

1.1 Background

Under the Peel Region Official Plan (R.O.P.) (April 2022), the Town of Caledon (Town) is forecast to experience unprecedented growth over the next 30 years, increasing to 300,000 people and 125,000 jobs by 2051. Accordingly, a settlement area boundary expansion (S.A.B.E.) of approximately 3,930 hectares of Community Area land and 1,952 hectares of Employment Area land will be required to accommodate forecast growth over the next three decades.

The Growth Management and Phasing Plan (G.M.P.P.) has been developed establishing two periods of development: lands categorized as Phase 1 are permitted to begin development between 2026 and 2036 while lands that are categorized in Phase 2 are permitted to begin development between 2036 and 2051. The Fiscal Impact Assessment (FIA) forms an important part of the G.M.P.P. from a municipal planning perspective, in that the forecast development, including the S.A.B.E, should be serviced and implemented in a manner that does not place a fiscal burden on Town either in terms of increased tax rates, debt, or reduction in service levels below acceptable levels. This report focuses on the fiscal impacts to the Town and does not consider the fiscal impacts to Peel Region.

1.2 Approach

This study has been prepared to address the fiscal impacts of development from 2024 to 2051 within the existing settlement area and within the proposed S.A.B.E. on the Town's costs of services from an operating and capital perspective. The study addresses the following annual net fiscal impacts over the 2024 to 2051 period:

- Property assessment growth as a result of forecast residential and non-residential development in the Town;
- Net operating expenditures;
- Capital expenditures and funding sources, including lifecycle capital replacement costs; and
- Tax and non-tax revenues.

A key aspect of the FIA is ensuring that sufficient funding provisions are identified to account for the total cost of ownership of new assets including regular operating and maintenance and renewal and rehabilitation costs to maintain new infrastructure in a state of good repair (SOGR) over the assets full lifecycle. The FIA measures the annual impacts of future development on the Town's property taxes over the period to 2051. As the G.M.P.P. has been prepared with two distinct phases (i.e. Phase 1 – pre 2036 and Phase 2 – 2036 to 2051), the FIA will summarize impacts for these time periods.

1.3 Overview of the Fiscal Impact Assessment

Figure 1-1 provides a schematic overview of the methodology undertaken for the purposes of this Town-specific FIA, which is described as follows:

- Blue Boxes (labelled "A" in bottom right corner) – denote the anticipated development forecast for the 2024 to 2051 period. The residential and non-residential development is summarized in Chapter 2.

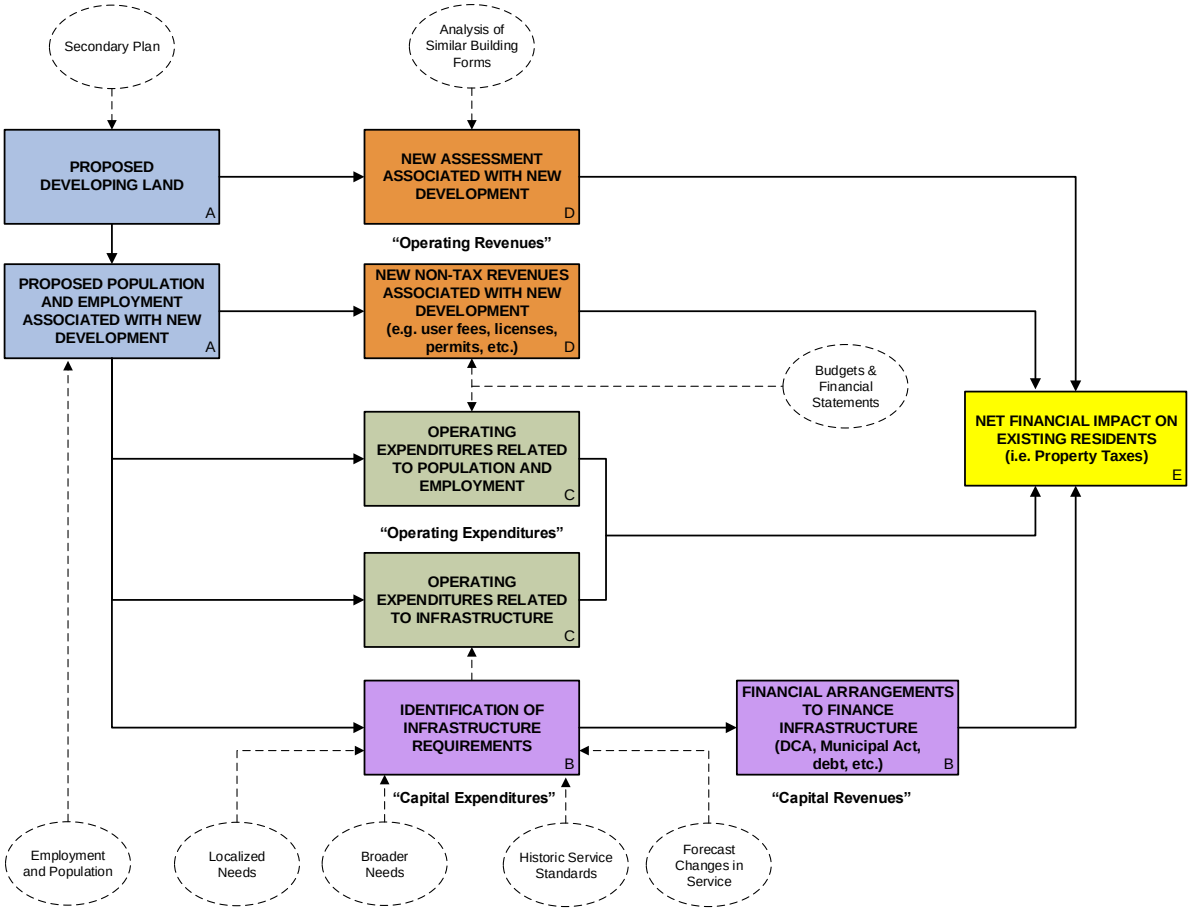
- Fuchsia Boxes (labelled "B" in bottom right corner) – denote capital infrastructure required to service the anticipated development over the forecast period. The capital requirements to service growth were derived from the Town's 2024 Development Charges (D.C.s) Background Study, 2024 Community Benefits Charges (C.B.C.) Strategy, and well as the assessment of financial requirements of future roadway improvements and transit services undertaken by HDR Inc. (HDR) as part of the G.M.P.P. work plan. In addition to the future development-related capital costs, the analysis also identifies the lifecycle requirements associated with the additional infrastructure based on the Town's asset management plan to provide for sustainable capital spending for new infrastructure.

- Green Boxes (labelled "C" in bottom right corner) – denote the incremental operating expenditures anticipated over the forecast period arising from new development. These expenditures comprise two parts: program/service costs assessed on the basis of anticipated employment and incremental operating expenditures associated with new capital works emplacement. Consideration of economies/diseconomies of scale have been provided in the incremental operating expenditure assessment reflective of anticipated future service levels.

- Orange Boxes (labelled “D” in bottom right corner) – denote incremental revenues commensurate with growth. The new assessment associated with development produces incremental property tax revenues as building activity occurs. Moreover, new non-tax revenues associated with new development reflect anticipated user fees, permits, licenses, and other revenues associated with service program demands arising from employment growth.

- Yellow Box (labelled “E” in bottom right corner) – denotes the overall fiscal impact on the Town’s net levy over the forecast period. This is the summation of the anticipated development and incremental net expenditures relative to the property taxes generated, at current tax rates, over the 2024 to 2051 period. Where net expenditures exceed anticipated property tax revenues, forecast development will apply increasing upward pressure on property tax rates. Where property tax revenues exceed net expenditures, additional revenues may serve to support increased funding of future service levels, increases in infrastructure lifecycle spending, etc.

Figure 1-1
Overview of the FIA Methodology

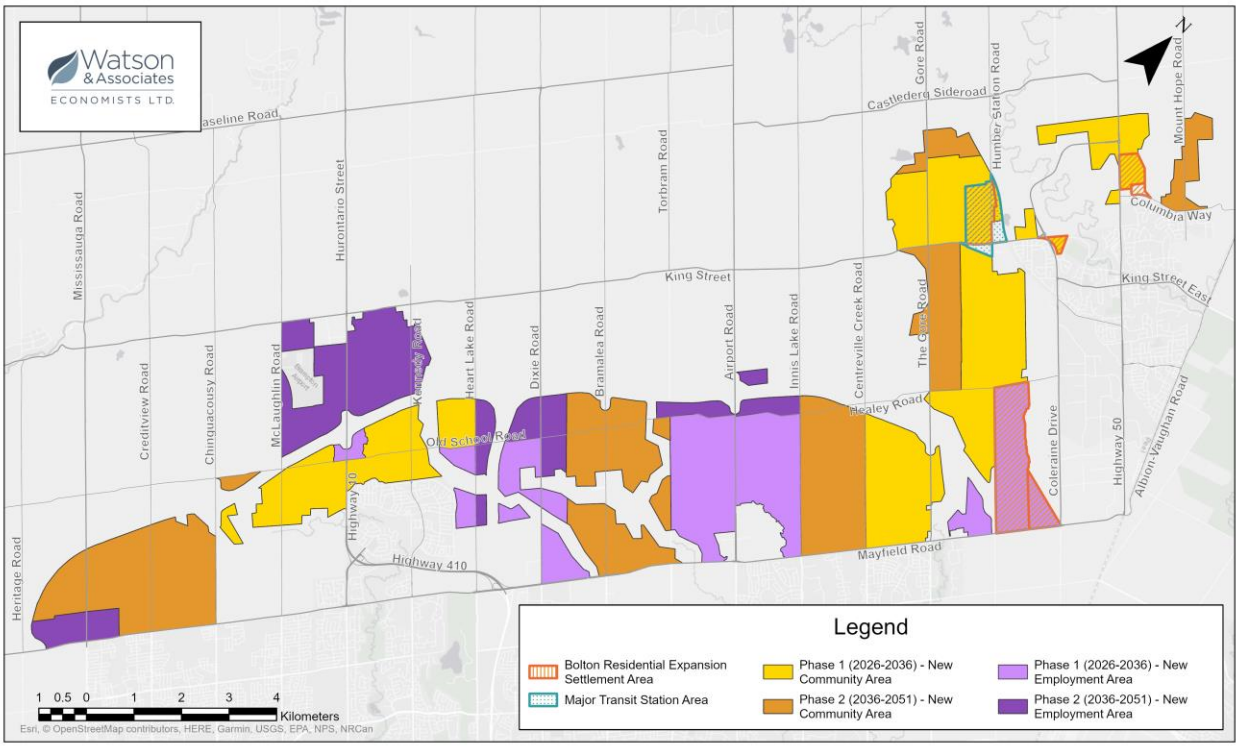


2. Anticipated Development & Property Value Assessment

2.1 Anticipated Development

Growth over the 2021 to 2051 period within the Town is summarized in Chapter 3 of the G.M.P.P. report. The Town S.A.B.E. Phase 1 and Phase 2 Lands are illustrated in Figure 2-1.

Figure ES-1
Town of Caledon S.A.B.E. Phase 1 and Phase 2 Lands



The following tables summarize the forecast residential units and population and non-residential employment and gross floor area (G.F.A.) development over the 2024 to 2051 period based on the G.M.P.P. forecast.

Table 2-1
2024-2051 Residential Development[1]

Type of Development	P.P.U.	2024-2036	2037-2051	2024-2051
Units				
Low Density	3.639	14,192	23,235	37,427
Medium Density	3.299	8,335	13,680	22,015
High Density	2.072	1,625	4,011	5,636
Total		**24,152**	**40,926**	**65,078**
Population				
Gross Population		82,651	137,895	220,546
Decline in Existing Population		(9,289)	2,328	(6,961)
Net Population		**73,362**	**140,223**	**213,585**

Table 2-2
2024-2051 Non-Residential Development

Type of Development	FSW	2024-2036	2037-2051	2024-2051
Employment				
Commerical	611	11,213	17,399	28,612
Industrial	1,385	16,051	23,593	39,644
Institutional	670	2,981	5,457	8,438
Total		**30,245**	**46,449**	**76,694**
G.F.A. (sq.ft.)				
Commerical	611	6,853,849	10,634,987	17,488,836
Industrial	1,385	22,225,288	32,668,038	54,893,326
Institutional	670	1,998,215	3,657,919	5,656,134
Total		**31,077,351**	**46,960,945**	**78,038,296**

The net population of the Town is anticipated to increase by 213,600 persons over the 2024 to 2051 period, with growth of 73,400 occurring by 2036 and a further 140,200 from 2037 to 2051. Commercial, industrial, and institutional employment will increase by 76,700 over the forecast period producing 78.0 million sq.ft. of G.F.A. based on the following floor space per worker (FSW) assumptions derived from the Town's 2024 D.C. Background Study:

- Commercial: 611 sq.ft.
- Industrial: 1,385 sq.ft.
- Institutional: 670 sq.ft(FSW),700 s

[1] P.P.U. means persons per unit derived from the G.M.P.P.

The annual forecast of population, housing, employment, and G.F.A. is included in Appendix A.

2.2 Property Value Assessment

Property tax revenues are calculated based on the weighted taxable assessment and current residential tax rates. The forecast increment in weighted taxable assessment is determined by multiplying market assessed values per residential dwelling unit and per sq.ft. of G.F.A. by the anticipated type and amount of development over the forecast period to determine the forecast market value assessment. The forecast increase in market value assessment is then weighted based on the Town's current tax ratios to determine the incremental weighted assessment for taxation purposes.

Tables 2-3 and 2-4 summarize the property assessment samples that were derived from the new residential construction in the Town over the past five years as well as average assessment per sq.ft. of G.F.A. for development in the past eight-years. A longer-term period was used for non-residential development due to the limited sample size of new non-residential construction in the past 5-year period. Only 10% of the average institutional assessment per sq.ft. has been used for property tax forecasting purposes, recognizing that a significant share of this development will be exempt from taxation.

The total growth in market assessed value and weighted assessment value is summarized for the forecast period and phasing intervals in Table 2-5.

In aggregate, growth over the 2024-2051 period will produce incremental market value assessment of $61.6 billion of which 72% will be the result of residential development. After applying the Town's current tax ratios, the forecast property assessment is increased to $70.1 billion. Of the total growth in weighted assessment, 38% ($23.1 billion) will occur over the 2024 to 2036 period, and 62% ($37.7 billion) will occur beyond 2036.

The detailed forecasts of residential and non-residential market and weighted assessment are included in Appendix A.

Table 2-3
Property Assessment Assumptions and Incremental Assessment Value

Town-wide Low Density

Unit Type	Typical Assm/Unit	% of Total Unit Type	Average Assessment
Single Detached	849,648	98%	$829,567
Semi-Detached	553,188	2%	$13,074
Total		**100%**	**$842,641**

Town-wide Medium Density

Unit Type	Typical Assm/Unit	% of Total Unit Type	Average Assessment
Townhouse	$527,000	100%	$527,000
Total		**100%**	**$527,000**

Town-wide High Density

Unit Type	Typical Assm/Unit	% of Total Unit Type	Average Assessment
Condo/Apartment	$352,205	100%	$352,205
Total		**100%**	**$352,205**

Table 2-4
Property Assessment Assumptions and Incremental Assessment Value
Non-Residential

Non-Residential

Development Type	Per Sq. Ft. of G.F.A.	% of Total Usage	Average Assessment/ sq.ft.
Commercial	$387	100%	$387
Total		**100%**	**$387**

Development Type	Per Sq. Ft. of G.F.A.	% of Total Usage	Average Assessment/ sq.ft.
Industrial	$185	100%	$185
Total		**100%**	**$185**

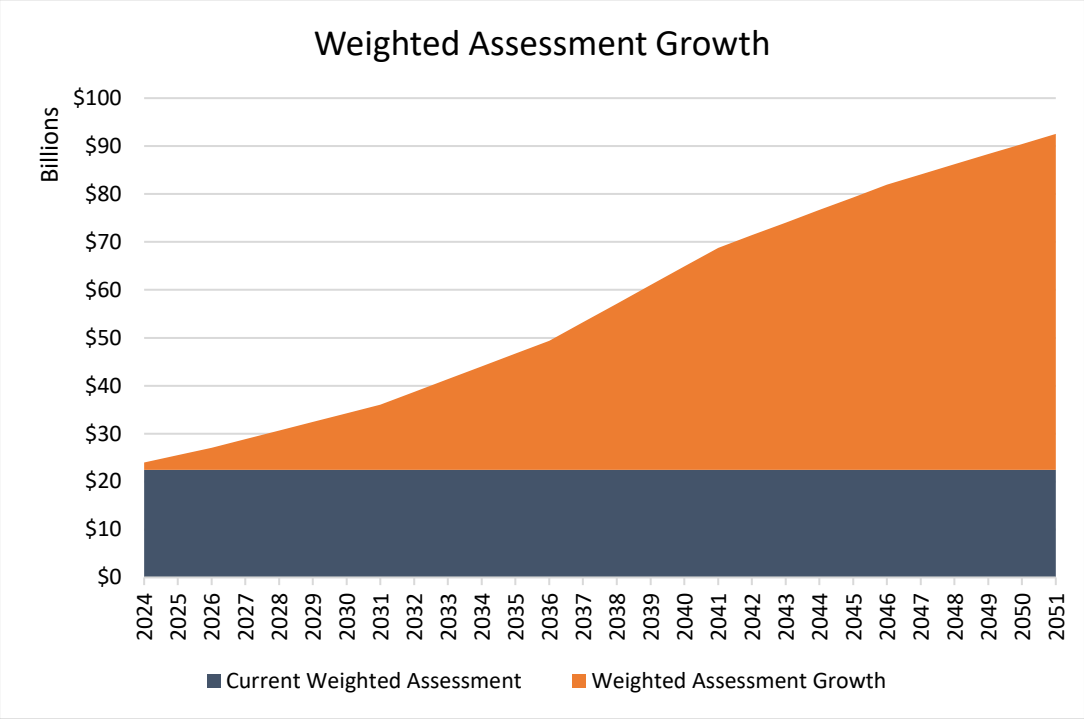
Development Type	Per Sq. Ft. of G.F.A.	% of Total Usage	Average Assessment/ sq.ft.
Institutional	$543.23	10%	$54
Total		**10%**	**$54**

Table 2-5
Property Assessment Forecast (000's)

Description	Market Assessed Value			Weighted Assessment		
	2024-2036	2037-2051	2024-2051	2024-2036	2037-2051	2024-2051
Residential						
Low Density	$11,958,761	$19,578,764	$31,537,525	$11,958,761	$19,578,764	$31,537,525
Medium Density	$4,119,940	$6,761,942	$10,881,882	$4,119,940	$6,761,942	$10,881,882
High Density	$572,334	$1,412,696	$1,985,030	$572,334	$1,412,696	$1,985,030
Subtotal Residential	**$16,651,035**	**$27,753,402**	**$44,404,437**	**$16,651,035**	**$27,753,402**	**$44,404,437**
Non-Residential						
Commercial	$2,654,290	$4,118,612	$6,772,902	$3,562,210	$5,509,832	$9,072,041
Industrial	$4,114,123	$6,047,181	$10,161,304	$6,545,714	$9,621,276	$16,166,990
Institutional	$108,543	$198,698	$307,241	$160,802	$307,890	$468,692
Subtotal Non-Residential	**$6,876,956**	**$10,364,490**	**$17,241,446**	**$10,268,725**	**$15,438,998**	**$25,707,723**
Grand Total	**$23,527,992**	**$38,117,892**	**$61,645,884**	**$26,919,761**	**$43,192,399**	**$70,112,160**

Table 2-6 illustrates the weighted assessment growth in comparison to the current property assessment base. Table 2-6 shows that the incremental assessment growth of $70.1 billion represents a significant increase in the Town's overall assessment (i.e., 312% increase).

Table 2-6
Weighted Property Assessment Forecast



3. Capital Expenditures & Funding Impacts

3.1 Introduction

The growth-related capital needs that are required to provide the desired levels of service within the Town are identified within the Town's 2024 D.C. Background Study and C.B.C. Strategy and include the following services:

- Fire Protection Services (Facilities, fleet, and equipment)
- Parks and Recreation Services (Parkland development and amenities, fleet, and facilities)
- Library Services (Facilities, equipment, and materials)
- By-Law Enforcement (Facilities and fleet)
- Roads – Operations (Facilities, fleet, and equipment)
- Roads – Engineering (Roads right of way infrastructure)
- Public Realm, Community Facilities, CIP & Administration (Parkland development, active transportation, and facilities)

In addition, capital needs for a new Town transit system have been identified by HDR as part of the G.M.P.P.

The 2024 D.C. Background Study and C.B.C. Strategy identify capital needs over the 2024 to 2033 period. Growth-related capital needs for the 2034 to 2051 period have been estimated based on an average annual cost basis by assessing the total D.C. and C.B.C. revenue that would be generated over that period in addition to the estimated costs that would be in excess of the C.B.C. ca (i.e. 4% of land value). This approach assumes that the per capita and per employee growth-related cost that are required over the 2024 to 2033 period will remain the same over the 2034 to 2051 period. To the extent that future development requires further capital needs to be emplaced at a higher level of service or significantly in advance of development occurring, the capital impacts presented herein may be understated.

In addition to the initial emplacement of new infrastructure, the total cost of ownership (i.e. operating and maintenance costs and capital renewal and rehabilitation) for new assets needs to be accounted for to maintain assets in a SOGR. As such, the capital needs also include a recognition of lifecycle costs for all growth-related infrastructure. Local service assets (e.g. local roads, sidewalks, streetlights, related services internal to

a plan, or within the area to with the plan relates) are not included in the Town's 2024 D.C. Background Study as these works are emplaced directly by the developers pursuant to conditions of development agreements. However, these works are addressed in the lifecycle capital analysis in Section 3.3 as the Town is responsible for maintaining these assets over their lifecycle once these assets are assumed. For roads (including local service needs), HDR undertook an assessment of the future lifecycle costs.

This chapter also assesses the timing of growth-related capital needs relative to capital funding sources to inform alternative or interim funding support that may be required (e.g. debt financing or front-end developer financing).

3.2 Growth-Related Capital Program

The total capital needs and capital funding sources that are anticipated over the forecast period are summarized in Table 3-1.

Table 3-1
Capital Needs and Funding Sources

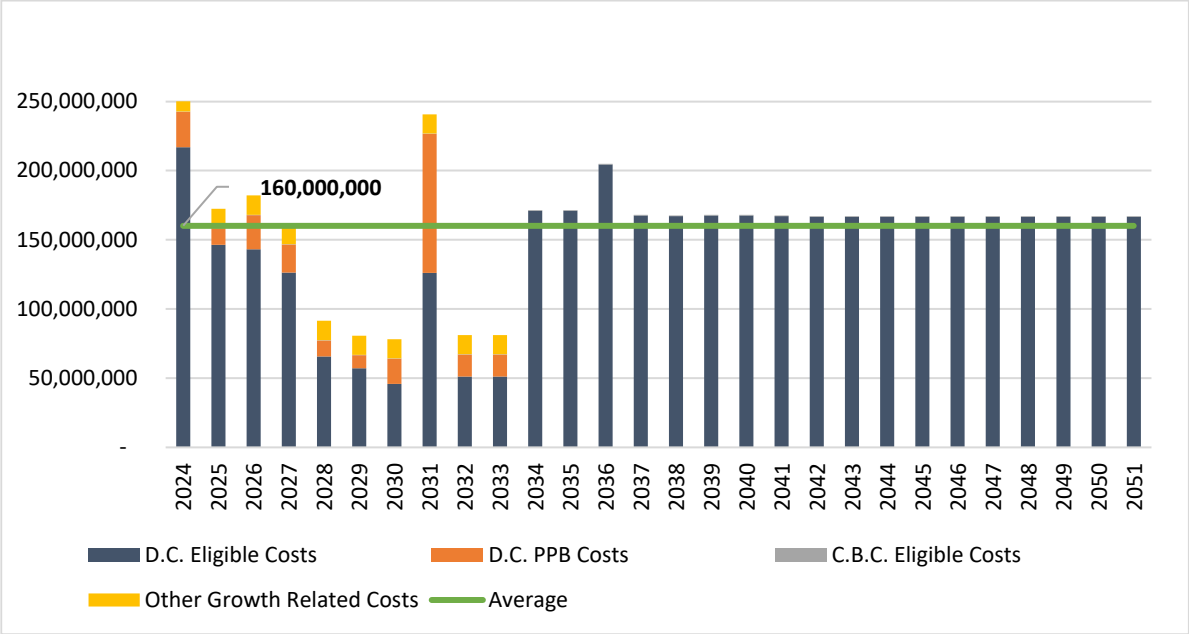
Description	2024-2051
D.C. Services	
Fire Protection Services	$353,468,062
Parks and Recreation Services	$1,309,196,477
Library Services	$101,730,254
By-law Enforcement	$33,121,175
Roads - Operations	$369,861,582
Roads - Engineering	$2,002,074,316
C.B.C. Services	
Public Realm, Community Facilities, CIP & Administration	$148,483,186
Transit	$76,087,198
Total Capital Costs	**$4,394,022,249**
Funding Sources	
D.C.s	$3,928,948,029
C.B.C.s	$9,299,400
Tax Based Funding (D.C. and C.B.C. Exemptions)	$316,591,034
Tax Based Funding (Other Growth-Related Costs)	$139,183,786
Total Funding Sources	**$4,394,022,249**

In aggregate, $4.4 billion in capital needs are anticipated over the forecast period. This includes capital costs associated with the transit system which is anticipated to occur in the second phase of development (i.e., post 2036). These costs exclude the benefit to existing share of projects that are not of a benefit to growth over the forecast period and the share of projects that would be funded by grants. The annual forecast of the costs by service area is included in Appendix B.

For the transit system, HDR has identified capital costs of $217.0 million that have been allocated between 2036 to 2051 based on the feedback received from Town staff. For the purposes of this FIA, we have assumed that 50% of the forecast costs would be funded by provincial and federal grants. The actual funding share will be based on the grant funding programs that are available and received. Of the remaining costs, 30% have been allocated to new development based on relationship of incremental to existing population. As such, the growth-related costs included in Table 3-1 total $76.1 million.

Figure 3-1 illustrates the annual growth-related costs summarized in Table 3-1. On average the growth-related needs total $160 million per year. These costs fluctuate over the first 10-years of the forecast based on the timing of projects identified in the 2024 D.C. Background Study and 2024 C.B.C. Strategy. Figure 3-1 includes D.C. and C.B.C. eligible costs, D.C. Post Period Benefit (P.P.B.) costs being growth related costs that are incurred for the benefit of development post 2033, and other growth-related costs being costs that are growth related costs that will not be funded by D.C.s or C.B.C.s.

Figure 3-1
Growth-Related Capital Plan



D.C. and C.B.C. revenues are anticipated to fund the majority of the costs (i.e., $3.9 billion or 89%). This amount includes the estimated share of transit costs, assuming those needs would be included in a future D.C. by-law update. Other tax-based funding sources towards the growth-related needs total $316.6 million for the share of D.C. and C.B.C. costs that will not be funded from D.C. and C.B.C. revenues due to statutory exemptions and reductions to charges payable (i.e. secondary units, rental housing discounts, and affordable units)[1] and $139.2 million for other growth-related costs that are above the 4% of land value cap for C.B.C. services would also be required.

3.3 Lifecycle Costs

As the objective of the FIA is to assess the net financial impact of the development to 2051, once the incremental capital needs have been assessed, the total cost of ownership of the incremental capital assets are calculated to determine the on-going funding obligation. This funding obligation has been included in the annual operating expenditure impacts.

[1] See Section 4.2.1 for more information

In addition to assessing the annual operating expenditure impacts associated with lifecycle costs of the incremental growth-related cost that have been identified in the 2024 D.C. Background Study, C.B.C. Strategy, and transit assessment, the analysis also considers the lifecycle costs and funding implications of the 561 kms of local roads that will be constructed as a condition of development and assumed by the Town. Lifecycle costs for roads (both local and D.C.-eligible) have been calculated by HDR When considering the total cost of ownership for roads, preventative maintenance costs are included as part of the forecast of operating expenditures summarized in Section 4.2 while the capital renewal and rehabilitation costs are summarized in this Section. Lifecycle costs for fleet and equipment assets have been assessed using a straight-line amortization and useful life estimates from the Town's AMP or industry benchmarks where information was not available. This approach was used as these types of assets have minimal lifecycle interventions during their lifecycle and aligns with asset management best practices.. The following useful life estimates have been assumed:

- Parks infrastructure: 20 years
- Vehicles and equipment (Fire Protection): 15 years
- Vehicles and equipment (Transit): 12 years

For facilities, an annual re-investment rate of 2.5%[1] of replacement costs has been used to account for the average annual costs for preventative maintenance (e.g., routine maintenance and repairs) and capital renewal and rehabilitation. In our experience, this level of reinvestment would account for both preventative operating and maintenance costs as well as capital renewal and rehabilitation. The approach to calculating lifecycle costs used by HDR for roads has been reviewed in comparison to the level of funding identified in the Town's 2024 AMP for the SOGR of transportation assets and identifies a greater level of investment on a per lane km basis and therefore is deemed reasonable for the purposes of ensuring the total cost of ownership is accounted for in the FIA.

Table 3-2 summarizes the estimated cumulative annual lifecycle costs at 2036 and 2051 (Detailed annual forecast of lifecycle costs are included in Appendix B).

[1] Canadian Infrastructure Report Card identified a range of 1.7% to 2.5% for buildings

Table 3-2
Annual Capital Lifecycle Costs

Description	2036	2051
Development Charge Background Study Services		
Fire Protection Services	$5,474,707	$11,193,937
Parks and Recreation Services	$18,772,281	$45,787,798
Library Services	$2,530,170	$4,437,947
By-law Enforcement	$981,775	$981,775
Roads - Operations	$4,805,412	$11,765,684
Roads - Engineering	$9,469,830	$25,325,830
Subtotal	**$42,034,174**	**$99,492,971**
Community Benefit Charges Infrastructure	$50,988	$381,895
Transit	$8,526,130	$11,852,361
Grand Total	**$50,611,292**	**$111,727,227**

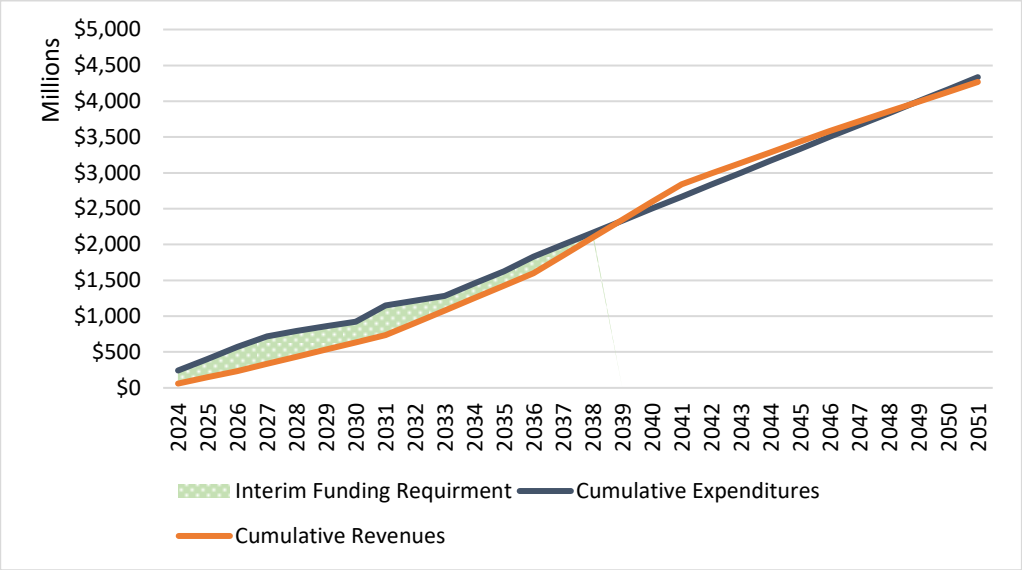
Annual lifecycle costs are anticipated to be $50.6 million per year by 2036 and $111.7 million by 2051.

3.4 D.C. & C.B.C. Funding Implications

Figures 3-2 and 3-3 summarize the cumulative D.C. and C.B.C. revenues and expenditures over the 2024 to 2051 period. These figures illustrate that while over the period to 2051, D.C. and C.B.C. revenues will fund the growth-related capital costs, there will be periods where interim funding from other sources is required as a result of the timing of expenditures and revenues.[1]

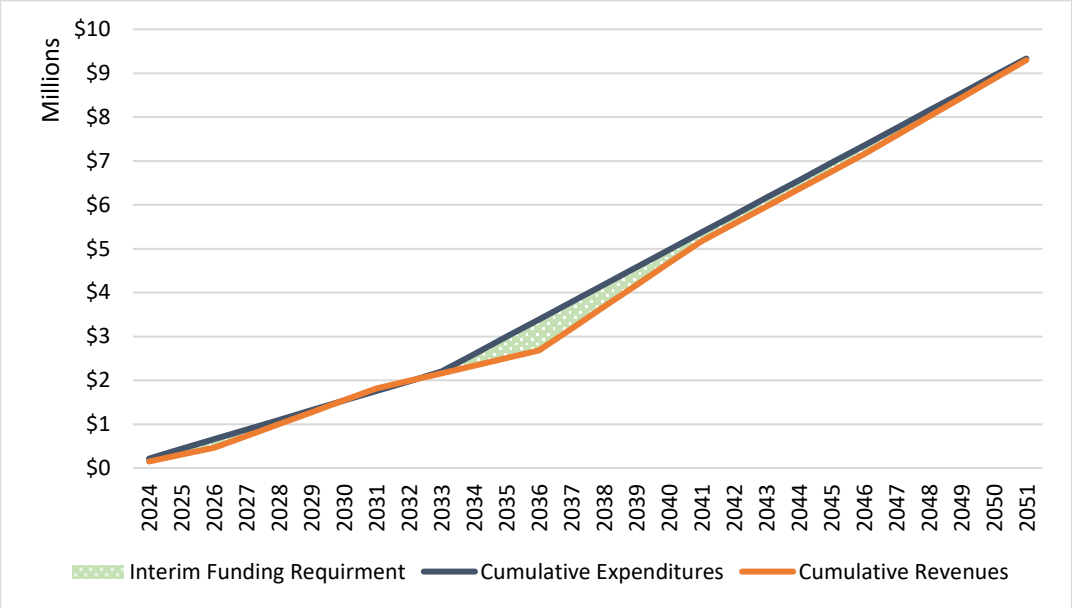
[1] D.C. and C.B.C. revenues include contributions from operating to account for revenue foregone from exemptions and discounts (see Section 4.2.1 for further discussion)

Figure 3-2
Cumulative D.C. Revenues and Expenditures



As shown in Figure 3-2, interim funding will increase to a peak of $416.7 million in 2031 before being repaid by future D.C. revenues due to the front-ended nature of the capital program relative to the timing of growth.

Figure 3-3
Cumulative C.B.C. Revenues and Expenditures



Interim funding requirements for C.B.C. expenditures will increase to a maximum of $708,000 in 2036 before being repaid by future C.B.C. revenues.

While these interim funding requirements do not necessarily represent a financial impact to the existing tax base as they will ultimately be repaid by new development, the interim funding sources should be considered. The Town can look to land owners to assist in the front-end financing of this infrastructure or alternatively could borrow funds from other internal reserves or issue long-term debt. The use of other internal reserves/reserve funds would need to be assessed within the context of other Town funding priorities. Developer front-end financing would need to be negotiated with land owners and would need to also be in the best interest of the land owner (for example the acceleration of capital works to service their development). If long-term debt was issued, the annual principal and interest payments would total $42.6 million at 2036. The Ministry of Municipal Affairs and Housing regulates the level of debt incurred by Ontario municipalities, through its powers established under the Municipal Act. Ontario Regulation 403/02 provides the current rules respecting municipal debt and financial obligations. Through the rules established under these regulations, a municipality's debt capacity is capped at a level where no more than 25% of the municipality's own purpose revenue may be allotted for servicing the debt (i.e., debt charges). The Town's current annual repayment limit as reported in the 2023 FIR is $27.7 million. Notwithstanding the foregoing, Town Council approved a long-term debt limit in 2011 of 10% of net revenues (below the Provincial limit of 25%). With growth in annual tax and non-tax revenue at 2036 of $152 million, the net revenues would increase to $273.8 million. This would equate to an internal debt repayment limit of $27.4 million or a Provincial limit of $68.4 million. This indicates that with the additional annual debt payments of $42.6 million and current annual debt payments of $2.8 million, total future debt payments (i.e., $45.3 million) would exceed the Town's internal borrowing limit at 16% of net revenues. As such, the Town would not have the capacity to issue debt to meet the interim funding requirements within the internal debt limit, but would have capacity within the Provincial borrowing limit. It should be noted that if the Town were to extend internal borrowing limit to the Provincial borrowing limit, this amount of debt would still leave limited debt funding capacity for other AMP needs. As such, the Town could look at alternative funding arrangements (e.g. other internal financing sources, development front-end financing) as well as increasing D.C.s to account for the additional financing costs that are anticipated.

4. Net Operating Expenditures and Revenues

4.1 Introduction

The analysis to follow provides a review of the operating expenditures and revenues arising from development within Town. The product of the analysis is to assess whether the Town's current property tax rates would be sufficient to fund the costs of service of future development.

Operating expenditures have been assessed on two different bases: (1) operating costs related to the incremental capital assets identified in the previous chapter, and (2) service/program operating costs required to service the incremental population and employment-related demands. The former identifies the specific operating costs anticipated to be incurred as additional capital assets (e.g. facilities) are constructed, based on the current cost of assets (e.g. $/sq.ft of facility space). Operating cost forecasts for roads and transit services have been assessed separately by HDR. Based on discussion with Town staff, transit services are forecast to come into service in 2036 and as such costs operating costs would not be incurred until that point. For roads infrastructure, the operating cost forecast includes costs that are considered as part of the total cost of ownership, including preventative maintenance that may not be occurring at current Town service levels.

In addition to these projections of operating costs, additional lifecycle funding costs of incremental assets and funding D.C./C.B.C. revenue foregone, identified in the previous chapter, is also included.

Operating revenues are assessed for property tax and non-property tax sources. Incremental weighted property assessment, anticipated as a result of residential and non-residential building activity over the forecast period, gives rise to additional property tax revenues. Non-property tax revenues, such as user fees, permits, licenses, etc., are generally expected to grow in concert with population and employment growth to offset some of the incremental program costs.

The sufficiency of property tax and non-property tax revenues to support the incremental operating costs determines the fiscal impact of the forecast development over the forecast period The operating expenditure and non-property tax revenue forecast has been based on the Town's 2024 operating budget.

4.2 Operating Expenditure Impacts

The operating expenditure impacts of growth have been considered with regard for:

- Service/Program related operating costs;
- Capital-related operating costs;
- Lifecycle costs for incremental growth-related capital assets (See Section 3.3); and
- Annual costs of funding the D.C. revenue foregone

The Town's 2024 operating budget was assessed to determine whether operating expenditures were capital-related and required to maintain the incremental assets as constructed or assumed, or service/program related and driven by population and employment growth. Moreover, capital-related items, such as debt payments, transfers to reserves/reserve funds, and amortization were removed from the analysis as these items are addressed separately for growth-related assets.

Table 4-1 summarizes the operating expenditures for each service, as defined in the Town's operating budget. These costs have further been allocated between population & employment related costs and infrastructure related costs. The costs per capita and per employee are calculated based on the current estimated population and employment in the Town (i.e., 81,900 population and 25,200 employment). These costs have been adjusted based on anticipated economies of scale associated with growth. For example, a growth-related adjustment of 25% has been applied to the service/program operating costs for Office of the CAO, while a 95% adjustment has been used for Community and Human Services consistent with adjustments used in other FIAs undertaken in the province. The per capita and employee costs are also allocated to residential and non-residential growth based on the benefits of the service received. Most service areas have been allocated to residential and non-residential development based on the relationship of existing population and employment (i.e., 76% residential and 24% non-residential), however, services such as Library have been weighted more heavily to residential development (i.e., 95% residential). The results of these adjustments are incremental per capita costs of $660 and per employee costs of $411. Infrastructure -related operating costs are calculated based on the inventory of current assets from the Town's 2024 AMP.

Table 4-1
Operating Cost Analysis

Departments	2024 Total Operating Expenditures	Less: Capital Related Operating Expenditures	Less: Transportation Operating Costs Assessed by HDR	Net Operating Costs	Infrastructure Related Costs (2024$)						Population/Employment Growth Related Costs (2024$)						
					Facility Related Costs	Parkland Related Costs	Other Equipment-related Costs	Exp. per Sq.ft.	Exp. per Hectare	Exp. Per Equipment/ Vehicle Collection Items	Total Cost	Growth-Related Adj.		Per Capita		Per Employee	
												%	$	%	$	%	$
001 Office of CAO	3,237,608	-	-	3,237,608	-	-	-	-	-	-	3,237,608	25%	809,402	76%	7.56	24%	7.56
002 Corporate Services	11,191,237	385,378	-	10,805,859	-	-	-	-	-	-	10,805,859	53%	5,684,737	76%	53.09	24%	53.09
003 Community & Human Services	28,814,194	359,571	-	28,454,623	35,406	-	269,638	0.17	-	254.62	28,149,579	95%	26,742,100	83%	269.98	17%	183.99
004 Planning & Development	13,949,422	377,700	-	13,571,722	-	-	-	-	-	-	13,571,722	25%	3,392,930	78%	32.43	22%	29.27
005 Engineering, Public & Transportation	46,115,596	7,788,540	21,046,000	17,281,056	1,573,838	70,673	2,472,109	5.50	216.79	13,733.94	13,164,436	95%	12,506,215	92%	140.94	8%	38.24
007 Caledon Public Library	6,269,674	-	-	6,269,674	-	-	-	-	-	-	6,269,674	95%	5,956,190	95%	69.09	5%	11.83
006 People Services	2,389,893	-	-	2,389,893	-	-	-	-	-	-	2,389,893	95%	2,270,398	76%	21.21	24%	21.21
002 Finance	4,236,475	-	-	4,236,475	-	-	-	-	-	-	4,236,475	25%	1,059,119	76%	9.89	24%	9.89
006 Corporate Accounts	28,977,714	4,885,420	-	24,092,294	-	-	-	-	-	-	24,092,294	25%	6,023,074	76%	56.25	24%	56.25
Total	**145,181,812**	**13,796,609**	**21,046,000**	**110,339,203**	**1,609,244**	**70,673**	**2,741,747**	**5.66**	**216.79**	**13,988.55**	**105,917,539**		**64,444,164**		**660.44**		**411.34**

The per capita and per employee operating costs are applied to the forecast population and employment growth over the forecast period. Furthermore, the per infrastructure costs are applied to the forecast infrastructure contained in the Town's 2024 D.C. Background Study and C.B.C. Strategy[1] In addition to the forecast of operating costs summarized above, the incremental operating costs for roads and transit have been prepared by HDR. Table 4-2 summarized the incremental annual operating costs at 2036 and 2051 based on the above approach. Detailed annual forecast of operating costs are contained in Appendix C.

Table 4-2
Incremental Operating Costs (2024-2051)[2]

Categories	2036	2051
Per Capita/Employee Expenditures		
001 Office of CAO	795,647	2,227,161
002 Corporate Services	5,588,127	15,642,193
003 Community & Human Services	25,672,895	72,570,925
004 Planning & Development	3,312,670	9,298,791
005 Engineering, Public & Transportation	11,559,466	33,202,406
007 Caledon Public Library	5,445,675	15,714,685
006 People Services	2,231,814	6,247,256
002 Finance	1,041,119	2,914,284
006 Corporate Accounts	5,920,714	16,573,165
Total Per Capita/Employee Expenditures	**61,568,127**	**174,390,866**
Infrastructure Related Expenditures - Incremental		
003 Community & Human Services	82,070	347,852
005 Engineering, Public & Transportation	20,393,590	54,960,246
Total New Inftastructure-Related Expenditures	**20,475,660**	**55,308,098**
Total Incremental Expenditures	**82,043,787**	**229,698,964**

In aggregate, incremental annual operating costs will increase by $82.0 million by 2036 and by $229.7 million by 2051. The majority of these costs are as a result of population and employment growth, representing 76% of the forecast costs.

4.2.1 Funding of D.C. and C.B.C. Exemptions

Paragraph 3 of subsection 5(6) of the *Development Charges Act (*D.C.A.) states that:

[1] Where size/amount of new infrastructure is not stated in the studies, it has been calculated based on the historical level of service information contained in the Town's 2024 AMP.
[2] 005 Engineering, Public & Transportation operating costs includes HDR forecasts for Roads and Transit Infrastructure

> "If the development charge by-law will exempt a type of development, phase in a development charge, or otherwise provide for a type of development to have a lower development charge than is allowed, the rules for determining development charges may not provide for any resulting shortfall to be made up through higher development charges for other development"

What this means is that if the Town reduces or exempts the D.C.s payable, either through exemptions that are required by the D.C.A. or those that are included in the Town's D.C. by-law, those amounts cannot be made up through higher D.C.s on other forms of development and become a tax-based funding responsibility.

For the purposes of this analysis we have assessed the loss in D.C. revenue associated with rental housing, additional residential units, and affordable units. The number of additional units and rental tenure housing has been estimated based on assessments of the financial impacts of *The More Homes Built Fast Act* that Watson undertook for the Town in 2023. Based on the bulletin the Province has released determining the affordable rental and ownership thresholds in the Town for the purposes of D.C. and C.B.C. exemptions, it is not anticipated that any new ownership units would be sold at the affordable threshold. For rental housing, we have conservatively assumed that 10% of all future rental households would be affordable, as most newly constructed rental units would be priced above the average market rent of the current rental stock.

This approach results in the following assumptions in terms of total units that would be exempt from D.C.s and results in reduced payments over the 2024 to 2051 period:

- Additional residential units would represent 1.6% of all future housing units and be exempt from the payment of D.C.s
- Affordable rental residential units would represent 2.2% of all future housing units and be exempt from the payment of D.C.s
- Other rental residential units would represent 19.9% of all future housing units and D.C.s would be reduced by 20% on average

Additional residential units and affordable housing would be exempt from D.C.s. The D.C.A. requires D.C.s for rental units to be reduced by 15% to 25% depending on the number of bedrooms in the unit. For the purposes of this analysis D.C. revenues associated with forecast market rental housing have been reduced by 20%.

In aggregate over the 2024 to 2051 period, these exemptions/reductions would result in $316.6 million in D.C. revenue foregone.

4.3 Operating Revenues

The revenue impacts of development over the period to 2051 considered with regard for:

- Service/Program related non-tax revenues; and
- Property tax revenues.

Similar to the assessment presented in Section 4.2, the Town's 2024 Operating Budget was assessed to forecast annual non-tax revenues (except for transit revenues). For transit services a separate assessment was undertaken by HDR.

4.3.1 Non-Tax Revenues

Non-tax service/program revenues (e.g. user fees, licenses, etc.) are presented in the same format as service/program related operating expenditures in Section 4.2.1. Table 4-4 details the service/program related non-tax operating revenues per capita and per employee. Non-tax revenues of $194 per capita and $127 per employee are anticipated based on the Town's 2024 operating budget. Based on the forecast population and employment growth over the period to 2051, annual non-tax revenues of $42.4 million are anticipated at 2036 and $103.5 million at 2051.

Included within the above revenues are revenues over the 2036 to 2051 period for the Town transit system. Revenues have been estimated based on the following assumptions:

- Revenue per transit trip in the City of Brampton (i.e., $4.53/trip)
- 17.5 transit rides per capita

Transit revenue is forecast to increase from $5.8 million in 2036 to $16.9 million in 2051 and includes only the transit revenue associated with the incremental population increase over the forecast period.

Table 4-3
Non-Tax Revenue Analysis

Departments	2024 Total Operating Revenues	Less: Capital Related Revenue and Tax Revenue	Net Revenues	Population/Employment Growth Related Revenue (2024$)						
				Total Revenue	Growth-Related Adj.		Per Capita		Per Employee	
					%	$	%	$	%	$
001 Office of CAO	-	-	-	-		-		-		-
002 Corporate Services	6,565,716	1,596,122	4,969,594	4,969,594	95%	4,721,114	76%	44.09	24%	44.09
003 Community & Human Services	8,496,520	367,288	8,129,232	8,129,232	95%	7,722,770	92%	86.58	8%	25.09
004 Planning & Development	11,725,272	5,109,029	6,616,243	6,616,243	26%	1,695,497	77%	15.96	23%	15.42
005 Engineering, Public & Transportation	6,247,771	3,694,560	2,553,211	2,553,211	95%	2,425,550	80%	23.64	20%	19.45
007 Caledon Public Library	99,200	66,200	33,000	33,000	95%	31,350	95%	0.36	5%	0.06
006 People Services	-	-	-	-		-		-		-
002 Finance	99,878	63,878	36,000	36,000	95%	34,200	76%	0.32	24%	0.32
006 Corporate Accounts	111,947,463	109,352,435	2,595,028	2,595,028	95%	2,465,277	76%	23.03	24%	23.03
Total	**145,181,820**	**120,249,512**	**24,932,308**	**24,932,308**		**19,095,759**		**193.99**		**127.46**

Table 4-4
Non-Tax Operating Revenues

Service Categories	2036	2051
Per Capita/Employee Revenues		
001 Office of CAO	4,640,881	12,990,677
002 Corporate Services	7,151,912	20,525,667
003 Community & Human Services	1,662,819	4,658,984
004 Planning & Development	2,354,371	6,624,810
005 Engineering, Public & Transportation	28,663	82,713
007 Caledon Public Library	-	-
006 People Services	33,619	94,105
002 Finance	2,423,380	6,783,486
006 Corporate Accounts	18,295,644	51,760,442
Transit	5,816,851	16,935,061
Total Per Capita/Employee Revenues	**42,408,140**	**103,520,884**
Total Incremental Revenues	**42,408,140**	**103,520,884**

4.3.2 Property Tax Revenues

The Town's incremental weighted assessment growth over the forecast period was presented in Table 2-5. In total, the incremental weighted assessment for taxation purposes at 2051 is $70.1 billion. Applying the Town's 2024 residential tax rates to the incremental weighted assessment forecast produces annual property taxation revenues at 2036 of $115.1 million and $299.9 million at 2051 (Table 4-5). 64% of the forecast tax revenue is generated by residential development. Although non-residential development represents 24% of the total forecast population and employment growth, non-residential tax revenue represents 36% of the total tax revenue over the 2024 to 2051 period.

Table 4-5
Incremental Property Tax Revenues[1]

Description	CVA		Weighted Assessment		Property Tax Revenue		
	2036	2051	2036	2051	RT Tax Rate	2036	2051
Residential	16,651,035,466	44,404,437,199	16,651,035,466	44,404,437,199	0.4277%	71,216,479	189,917,778
Commerical	2,654,290,006	13,545,803,200	3,562,209,615	9,072,041,436	0.4277%	15,235,571	38,801,121
Industrial	4,114,123,029	20,322,607,182	6,545,713,734	16,166,989,659	0.4277%	27,996,018	69,146,215
Institutional	108,543,013	614,482,348	160,801,813	468,691,677	0.4277%	687,749	2,004,594
Total	**23,527,991,514**	**78,887,329,930**	**26,919,760,628**	**70,112,159,971**		**115,135,816**	**299,869,708**

[1] CVA – Curren value assessment

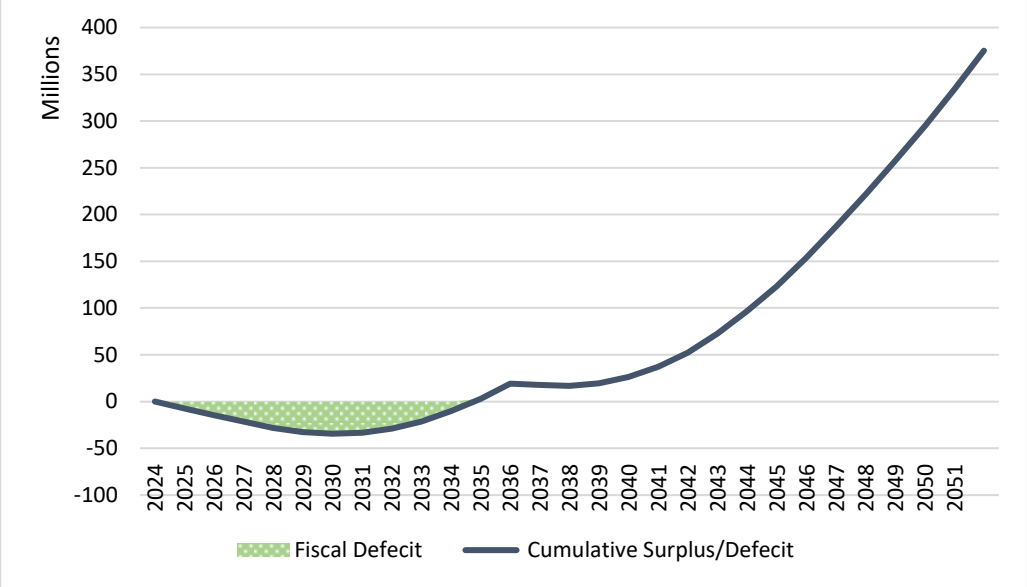
5. Conclusions

The analysis provided herein has considered the fiscal impact of the growth over the 2024 to 2051 period within the Town. The Town's 2024 D.C. Background Study, 2024 C.B.C. Strategy, and transit assessment undertaken by HDR address the infrastructure needs of future development. Operating expenditures arising from the service demands considered the service/program related operating costs of additional population and employment growth, as well as the total cost of ownership (operating and capital costs) incremental capital, and the annual costs of funding revenue foregone as a result of D.C. exemptions and reductions.

Incremental revenues associated with growth have been considered for property tax revenues and new non-tax revenues associated with new development and reflect anticipated user fees, permits, licenses, and other revenues associated with service program demands arising from population and employment growth.

Figure 5-1 illustrates the cumulative fiscal position over the forecast period. Development would generate cumulative annual operating deficits at current tax rates between 2024 and 2029 of $34.5 million. Operating surpluses would be generated after 2029 that would repay the accumulated deficit by 2034. Annual surpluses would continue to increase with new development between 2034 to 2035, however fiscal deficits would occur in 2036 and 2037 with the introduction of municipal transit. After 2037, annual surpluses would be generated over the remainder of the forecast period.

Figure 5-1
Cumulative Fiscal Impacts



To address the fiscal shortfalls generated over the 2024 to 2029 period (i.e., $35.4 million), the Town could elect to defer the lifecycle contributions included in the analysis until later in the forecast period as the 2024 to 2029 lifecycle costs total $73.4 million. This approach would be reasonable as there would be minimal lifecycle interventions required for the newly constructed infrastructure (e.g., local roads) and the surpluses generated in future years would compensate for the deferred lifecycle contributions.

Table 5-1 summarizes the annual Town fiscal impact at 2036 and 2051 and annual impacts for each year of the forecast period are presented in Appendix D.

At 2036 annual tax revenues would be $115.1 million compared to an incremental tax levy requirement of $116.8 million (with the introduction of transit). By 2051, annual incremental tax revenue would increase to $299.9 million, more than $41 million greater than annual net levy requirements. By 2036 the forecast development would have generated cumulative net surpluses of $17.6 million at current tax rates after accounting for all operating costs and the total cost of ownership of new assets. These cumulative surpluses would increase to $375.3 million by 2051. These surpluses would contribute towards the financial sustainability of the Town by assisting to close the Town's current infrastructure funding gap identified in the 2024 AMP related to existing assets, improving service levels, or mitigating tax rate increases that would otherwise be required.

Table 5-1
Annual Fiscal Impacts at 2036 and 2051

	2036	2051
Net Operating Costs		
Gross Operating Expenditures	82,043,787	229,698,964
Less: Non-Tax Revenues	(36,591,289)	(103,520,884)
D.C. and C.B.C. Exemptions/Reductions	10,648,280	11,889,199
Net Operating Expenditures	56,100,777	138,067,279
Capital Related Operating Costs		
Incremental Lifcecylce Costs (Growth-Related Infrastructure)	50,611,292	111,727,227
Non-D.C./C.B.C. Funded Growth-Related Infrastructure (Annual Debt Payments)	10,085,068	8,501,352
Total Capital Related Operating Costs	60,696,360	120,228,578
Incremental Tax Levy Requirement	116,797,137	258,295,857
Annual Weighted Property Assessment (000's)	26,919,761	70,112,160
Current Residential (RT) Tax Rate	0.4277%	0.4277%
Annual Tax Revenue	115,135,816	299,869,708
Annual Surplus (Deficit)	(1,661,321)	41,573,851
Cumulative Surplus/Deficit	17,629,509	375,269,165

Key assumptions/risks that should be noted in the financial plan include that could reduce the positive fiscal impacts include:

- **Pace of growth.** If growth does not occur at the pace anticipated in the G.M.P.P. and infrastructure is constructed to facilitate that growth occurring, there will be reduced capital funding sources (i.e., D.C.s) to pay for the initial construction of the infrastructure and reduced operating revenue (i.e., taxes) to pay for the ongoing operating and maintenance/renewal. This would create financing pressures in the near, negatively impacting the fiscal impact of new development in the Town.
- **Average assessment per residential unit and non-residential sq.ft. of G.F.A.** These assumptions support the forecast weighted assessment and property tax revenue forecast. If development occurs at a lower assessed value on average than the assumptions used herein, this will reduce the operating revenues available on an annual basis from new development.
- **Future capital needs including assumptions on average annual costs post 2036.** Assumptions on growth-related infrastructure beyond 2036 have been made based on the average cost of capital per capita in the 2024 D.C.

Background Study. If the timing/amount of these costs are required earlier in the forecast period, additional interim funding requirements could result until growth occurs and D.C. revenue is collected later in the forecast period.

- **Operating cost increases including maintaining current per capita and per employee non-tax revenues.** Assumptions have been made regarding the operating costs and revenues per capita/employee that incorporate certain economies of scale as growth occurs. If this does not materialize, the fiscal impacts would worsen due to the additional costs or reduced operating revenues.
- **Total cost of ownership assumptions.** If the total cost of ownership is greater that forecast herein (i.e., operating and maintenance costs and capital renewal and rehabilitation costs) increase beyond the levels anticipated herein and within the Town's 20224 asset management, there would be increases to the annual capital funding provisions.

Appendices

Appendix A
Anticipated Development & Property Value Assessment

Appendix A: Anticipated Development & Property Value Assessment

Table A-1
Annual Population, Housing, Employment and G.F.A. Growth

Type of Development	P.P.U.	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Units														
Low Density	3.639	813	813	813	776	776	776	776	776	1,575	1,575	1,575	1,575	1,573
Medium Density	3.299	320	320	320	441	441	441	441	441	1,034	1,034	1,034	1,034	1,034
High Density	2.072	94	94	92	164	164	164	164	164	105	105	105	105	105
Total		**1,227**	**1,227**	**1,225**	**1,381**	**1,381**	**1,381**	**1,381**	**1,381**	**2,714**	**2,714**	**2,714**	**2,714**	**2,712**
Population														
Gross Population		4,209	4,209	4,205	4,770	4,619	4,619	4,619	4,619	9,351	9,360	9,360	9,360	9,353
Decline in Existing Population		(1,000)	(1,000)	(995)	(1,212)	(1,061)	(1,061)	(1,061)	(1,061)	(161)	(171)	(171)	(171)	(163)
Net Population		**3,209**	**3,209**	**3,209**	**3,557**	**3,557**	**3,557**	**3,557**	**3,557**	**9,189**	**9,189**	**9,189**	**9,189**	**9,189**

Type of Development	FSW	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Employment														
Commerical	611	651	651	651	949	949	949	949	949	903	903	903	903	903
Industrial	1,385	1,070	1,070	1,070	1,351	1,351	1,351	1,351	1,351	1,217	1,217	1,217	1,217	1,217
Institutional	670	197	197	197	213	213	213	213	213	265	265	265	265	265
Total		**1,918**	**1,918**	**1,918**	**2,513**	**2,513**	**2,513**	**2,513**	**2,513**	**2,385**	**2,385**	**2,385**	**2,385**	**2,385**
G.F.A.														
Commerical	611	397,918	397,918	397,918	580,068	580,068	580,068	580,068	580,068	551,951	551,951	551,951	551,951	551,951
Industrial	1,385	1,482,129	1,482,129	1,482,129	1,870,662	1,870,662	1,870,662	1,870,662	1,870,662	1,685,119	1,685,119	1,685,119	1,685,119	1,685,119
Institutional	670	132,052	132,052	132,052	142,777	142,777	142,777	142,777	142,777	177,634	177,634	177,634	177,634	177,634
Total		**2,012,099**	**2,012,099**	**2,012,099**	**2,593,507**	**2,593,507**	**2,593,507**	**2,593,507**	**2,593,507**	**2,414,703**	**2,414,703**	**2,414,703**	**2,414,703**	**2,414,703**

Type of Development	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Units															
Low Density	2,307	2,307	2,307	2,307	2,307	1,110	1,110	1,110	1,110	1,110	1,230	1,230	1,230	1,230	1,230
Medium Density	1,334	1,334	1,334	1,334	1,334	675	675	675	675	675	727	727	727	727	727
High Density	302	302	302	302	302	240	240	240	240	240	260	260	260	260	261
Total	**3,943**	**3,943**	**3,943**	**3,943**	**3,943**	**2,025**	**2,025**	**2,025**	**2,025**	**2,025**	**2,217**	**2,217**	**2,217**	**2,217**	**2,218**
Population															
Gross Population	13,403	13,422	13,422	13,422	13,422	6,702	6,763	6,763	6,763	6,763	7,395	7,413	7,413	7,413	7,415
Decline in Existing Population	8	(10)	(10)	(10)	(10)	269	207	207	207	207	268	250	250	250	247
Net Population	**13,411**	**13,411**	**13,411**	**13,411**	**13,411**	**6,971**	**6,971**	**6,971**	**6,971**	**6,971**	**7,663**	**7,663**	**7,663**	**7,663**	**7,663**

Type of Development	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Employment															
Commerical	1,581	1,581	1,581	1,581	1,581	1,109	1,109	1,109	1,109	1,109	790	790	790	790	789
Industrial	1,561	1,561	1,561	1,561	1,561	2,253	2,253	2,253	2,253	2,253	905	905	905	905	903
Institutional	511	511	511	511	511	313	313	313	313	313	268	268	268	268	265
Total	**3,653**	**3,653**	**3,653**	**3,653**	**3,653**	**3,675**	**3,675**	**3,675**	**3,675**	**3,675**	**1,963**	**1,963**	**1,963**	**1,963**	**1,957**
G.F.A.															
Commerical	966,373	966,373	966,373	966,373	966,373	677,867	677,867	677,867	677,867	677,867	482,881	482,881	482,881	482,881	482,269
Industrial	2,161,438	2,161,438	2,161,438	2,161,438	2,161,438	3,119,616	3,119,616	3,119,616	3,119,616	3,119,616	1,253,108	1,253,108	1,253,108	1,253,108	1,250,339
Institutional	342,532	342,532	342,532	342,532	342,532	209,809	209,809	209,809	209,809	209,809	179,645	179,645	179,645	179,645	177,634
Total	**3,470,342**	**3,470,342**	**3,470,342**	**3,470,342**	**3,470,342**	**4,007,291**	**4,007,291**	**4,007,291**	**4,007,291**	**4,007,291**	**1,915,633**	**1,915,633**	**1,915,633**	**1,915,633**	**1,910,242**

Table A-2
Annual Market Value Assessment Forecast

Type of Units		Assessment Increment 2024-2051	Forecast 1	2	3	4	5	6	7	8	9	10	11	12	13
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Low Density		31,537,524,707	685,067,133	685,067,133	685,067,133	653,889,416	653,889,416	653,889,416	653,889,416	653,889,416	1,327,159,575	1,327,159,575	1,327,159,575	1,327,159,575	1,325,474,293
Medium Density		10,881,882,410	158,174,080	158,174,080	158,174,080	217,983,654	217,983,654	217,983,654	217,983,654	217,983,654	511,099,996	511,099,996	511,099,996	511,099,996	511,099,996
High Density		1,985,030,082	33,107,315	33,107,315	32,402,904	57,761,699	57,761,699	57,761,699	57,761,699	57,761,699	36,981,575	36,981,575	36,981,575	36,981,575	36,981,575
Residential Total	Annual	44,404,437,199	876,348,528	876,348,528	875,644,117	929,634,769	929,634,769	929,634,769	929,634,769	929,634,769	1,875,241,146	1,875,241,146	1,875,241,146	1,875,241,146	1,873,555,864
	Cumulative		876,348,528	1,752,697,056	2,628,341,173	3,557,975,942	4,487,610,711	5,417,245,479	6,346,880,248	7,276,515,016	9,151,756,163	11,026,997,309	12,902,238,455	14,777,479,602	16,651,035,466

NON-RESIDENTIAL

Type of Development		Assessment Increment 2023-2051	1	2	3	4	5	6	7	8	9	10	11	12	13
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Commercial		6,772,901,600	154,101,738	154,101,738	154,101,738	224,642,934	224,642,934	224,642,934	224,642,934	224,642,934	213,754,024	213,754,024	213,754,024	213,754,024	213,754,024
Industrial		10,161,303,591	274,356,889	274,356,889	274,356,889	346,278,173	346,278,173	346,278,173	346,278,173	346,278,173	311,932,300	311,932,300	311,932,300	311,932,300	311,932,300
Institutional		307,241,174	7,173,087	7,173,087	7,173,087	7,755,673	7,755,673	7,755,673	7,755,673	7,755,673	9,649,077	9,649,077	9,649,077	9,649,077	9,649,077
Non-residential Total	Annual	17,241,446,365	435,631,714	435,631,714	435,631,714	578,676,780	578,676,780	578,676,780	578,676,780	578,676,780	535,335,401	535,335,401	535,335,401	535,335,401	535,335,401
	Cumulative		435,631,714	871,263,429	1,306,895,143	1,885,571,923	2,464,248,703	3,042,925,483	3,621,602,263	4,200,279,043	4,735,614,444	5,270,949,845	5,806,285,246	6,341,620,647	6,876,956,048

Type of Units		Assessment Increment 2024-2051	Forecast															
			14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
			2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	
Low Density		31,537,524,707	1,943,972,787	1,943,972,787	1,943,972,787	1,943,972,787	1,943,972,787	935,331,510	935,331,510	935,331,510	935,331,510	935,331,510	1,036,448,430	1,036,448,430	1,036,448,430	1,036,448,430	1,036,448,430	1,036,448,430
Medium Density		10,881,882,410	659,388,196	659,388,196	659,388,196	659,388,196	659,388,196	333,648,450	333,648,450	333,648,450	333,648,450	333,648,450	359,351,738	359,351,738	359,351,738	359,351,738	359,351,738	359,351,738
High Density		1,985,030,082	106,366,055	106,366,055	106,366,055	106,366,055	106,366,055	84,529,315	84,529,315	84,529,315	84,529,315	84,529,315	91,573,425	91,573,425	91,573,425	91,573,425	91,573,425	91,925,630
Residential Total	Annual	44,404,437,199	2,709,727,038	2,709,727,038	2,709,727,038	2,709,727,038	2,709,727,038	1,353,509,275	1,353,509,275	1,353,509,275	1,353,509,275	1,353,509,275	1,487,373,593	1,487,373,593	1,487,373,593	1,487,373,593	1,487,373,593	1,487,725,798
	Cumulative		19,360,762,504	22,070,489,542	24,780,216,579	27,489,943,617	30,199,670,655	31,553,179,930	32,906,689,205	34,260,198,480	35,613,707,755	36,967,217,030	38,454,590,623	39,941,964,216	41,429,337,808	42,916,711,401	44,404,437,199	

NON-RESIDENTIAL

Type of Development		Assessment Increment 2023-2051	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
			2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	
Commercial		6,772,901,600	374,247,079	374,247,079	374,247,079	374,247,079	374,247,079	262,517,401	262,517,401	262,517,401	262,517,401	262,517,401	187,005,182	187,005,182	187,005,182	187,005,182	186,768,466	
Industrial		10,161,303,591	400,103,796	400,103,796	400,103,796	400,103,796	400,103,796	577,472,039	577,472,039	577,472,039	577,472,039	577,472,039	231,962,803	231,962,803	231,962,803	231,962,803	231,450,178	
Institutional		307,241,174	18,606,333	18,606,333	18,606,333	18,606,333	18,606,333	11,396,834	11,396,834	11,396,834	11,396,834	11,396,834	9,758,312	9,758,312	9,758,312	9,758,312	9,649,077	
Non-residential Total	Annual	17,241,446,365	792,957,208	792,957,208	792,957,208	792,957,208	792,957,208	851,386,274	851,386,274	851,386,274	851,386,274	851,386,274	428,726,297	428,726,297	428,726,297	428,726,297	427,867,721	
	Cumulative		7,669,913,256	8,462,870,464	9,255,827,673	10,048,784,881	10,841,742,089	11,693,128,363	12,544,514,637	13,395,900,910	14,247,287,184	15,098,673,458	15,527,399,754	15,956,126,051	16,384,852,347	16,813,578,644	17,241,446,365	

Table A-3
Weighted Property Assessment Forecast

Type of Units		Assessment Increment 2024-2051	Forecast															
			1	1	2	3	4	5	6	7	8	9	10	11	12	13		
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036		
Low Density		31,537,524,707	6,971,555	685,067,133	685,067,133	685,067,133	653,889,416	653,889,416	653,889,416	653,889,416	653,889,416	1,327,159,575	1,327,159,575	1,327,159,575	1,327,159,575	1,325,474,293		
Medium Density		10,881,882,410	0	158,174,080	158,174,080	158,174,080	217,983,654	217,983,654	217,983,654	217,983,654	217,983,654	511,099,996	511,099,996	511,099,996	511,099,996	511,099,996		
High Density		1,985,030,082	31,714	33,107,315	33,107,315	32,402,904	57,761,699	57,761,699	57,761,699	57,761,699	57,761,699	36,981,575	36,981,575	36,981,575	36,981,575	36,981,575		
Residential Total	Annual	44,404,437,199	7,003,269	876,348,528	876,348,528	875,644,117	929,634,769	929,634,769	929,634,769	929,634,769	929,634,769	1,875,241,146	1,875,241,146	1,875,241,146	1,875,241,146	1,873,555,864		
	Cumulative		7,003,269	876,348,528	1,752,697,056	2,628,341,173	3,557,975,942	4,487,610,711	5,417,245,479	6,346,880,248	7,276,515,016	9,151,756,163	11,026,997,309	12,902,238,455	14,777,479,602	16,651,035,466		

NON-RESIDENTIAL

Type of Development		Assessment Increment 2024-2051	1	1	2	3	4	5	6	7	8	9	10	11	12	13		
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036		
Commercial		9,072,041,436	12,035,325,758	207,657,332	207,657,332	207,657,332	309,954,200	302,713,991	302,713,991	302,713,991	302,713,991	266,264,193	288,040,815	288,040,815	288,040,815	288,040,815		
Industrial		16,166,989,659	73	436,511,412	436,511,412	436,511,412	550,940,693	550,940,693	550,940,693	550,940,693	550,940,693	496,295,206	496,295,206	496,295,206	496,295,206	496,295,206		
Institutional		468,691,677	0	9,665,979	9,665,979	9,665,979	3,210,824	10,451,033	10,451,033	10,451,033	10,451,033	34,779,081	13,002,459	13,002,459	13,002,459	13,002,459		
Non-residential Total	Annual	25,707,722,772	12,035,325,831	653,834,723	653,834,723	653,834,723	864,105,717	864,105,717	864,105,717	864,105,717	864,105,717	797,338,481	797,338,481	797,338,481	797,338,481	797,338,481		
	Cumulative		12,035,325,831	653,834,723	1,307,669,447	1,961,504,170	2,825,609,888	3,689,715,605	4,553,821,323	5,417,927,040	6,282,032,758	7,079,371,239	7,876,709,720	8,674,048,201	9,471,386,681	10,268,725,162		

Type of Units		Assessment Increment 2024-2051	Forecast															
			14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
			2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	
Low Density		31,537,524,707	1,943,972,787	1,943,972,787	1,943,972,787	1,943,972,787	1,943,972,787	935,331,510	935,331,510	935,331,510	935,331,510	935,331,510	1,036,448,430	1,036,448,430	1,036,448,430	1,036,448,430	1,036,448,430	1,036,448,430
Medium Density		10,881,882,410	659,388,196	659,388,196	659,388,196	659,388,196	659,388,196	333,648,450	333,648,450	333,648,450	333,648,450	333,648,450	359,351,738	359,351,738	359,351,738	359,351,738	359,351,738	359,351,738
High Density		1,985,030,082	106,366,055	106,366,055	106,366,055	106,366,055	106,366,055	84,529,315	84,529,315	84,529,315	84,529,315	84,529,315	91,573,425	91,573,425	91,573,425	91,573,425	91,573,425	91,925,630
Residential Total	Annual	44,404,437,199	2,709,727,038	2,709,727,038	2,709,727,038	2,709,727,038	2,709,727,038	1,353,509,275	1,353,509,275	1,353,509,275	1,353,509,275	1,353,509,275	1,487,373,593	1,487,373,593	1,487,373,593	1,487,373,593	1,487,373,593	1,487,725,798
	Cumulative		19,360,762,504	22,070,489,542	24,780,216,579	27,489,943,617	30,199,670,655	31,553,179,930	32,906,689,205	34,260,198,480	35,613,707,755	36,967,217,030	38,454,590,623	39,941,964,216	41,429,337,808	42,916,711,401	44,404,437,199	

NON-RESIDENTIAL

Type of Development		Assessment Increment 2024-2051	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
			2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	
Commercial		9,072,041,436	488,783,115	504,310,664	504,310,664	504,310,664	504,310,664	390,408,251	353,751,123	353,751,123	353,751,123	353,751,123	186,380,444	251,995,841	251,995,841	251,995,841	256,025,340	
Industrial		16,166,989,659	636,579,143	636,579,143	636,579,143	636,579,143	636,579,143	918,778,225	918,778,225	918,778,225	918,778,225	918,778,225	369,060,938	369,060,938	369,060,938	369,060,938	368,245,334	
Institutional		468,691,677	40,600,215	25,072,667	25,072,667	25,072,667	25,072,667	-21,299,506	15,357,622	15,357,622	15,357,622	15,357,622	78,765,053	13,149,657	13,149,657	13,149,657	8,653,978	
Non-residential Total	Annual	25,707,722,772	1,165,962,473	1,165,962,473	1,165,962,473	1,165,962,473	1,165,962,473	1,287,886,970	1,287,886,970	1,287,886,970	1,287,886,970	1,287,886,970	634,206,436	634,206,436	634,206,436	634,206,436	632,924,652	
	Cumulative		11,434,687,636	12,600,650,109	13,766,612,582	14,932,575,055	16,098,537,528	17,386,424,498	18,674,311,468	19,962,198,438	21,250,085,408	22,537,972,377	23,172,178,813	23,806,385,249	24,440,591,685	25,074,798,120	25,707,722,772	

Appendix B
Capital Expenditures & Funding Impacts

Appendix B: Capital Expenditures & Funding Impacts

Table B-1
Annual Growth-Related Capital Costs

Description	2024-2051	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
D.C. Services														
Fire Protection Services	$353,468,062	$35,272,758	$29,500,000	$26,364,667	$10,071,667	$4,364,667	$0	$0	$0	$0	$14,167	$13,771,119	$13,771,119	$13,771,119
Parks and Recreation Services	$1,309,196,477	$49,251,302	$34,689,400	$35,157,025	$59,317,558	$36,519,558	$32,635,158	$30,051,825	$25,451,825	$39,593,575	$39,593,575	$51,496,426	$51,496,426	$51,496,426
Library Services	$101,730,254	$0	$8,690,000	$9,022,000	$9,102,258	$412,258	$412,258	$412,258	$380,258	$0	$0	$4,072,165	$4,072,165	$4,072,165
By-law Enforcement	$33,121,175	$8,676,175	$8,610,000	$8,610,000	$7,225,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
Roads - Operations	$369,861,582	$25,136,867	$32,070,200	$32,520,200	$15,853,533	$820,200	$450,000	$450,000	$0	$0	$0	$14,586,699	$14,586,699	$14,586,699
Roads - Engineering	$2,002,074,316	$122,911,741	$43,455,510	$53,109,320	$36,976,300	$26,012,620	$26,012,620	$26,012,620	$193,720,282	$22,666,620	$22,666,620	$79,362,781	$79,362,781	$79,362,781
C.B.C. Services														
Public Realm, Community Facilities, CIP & Administration	$148,483,186	$14,134,529	$14,134,529	$14,134,529	$14,134,529	$14,134,529	$14,134,529	$14,134,529	$14,134,529	$14,134,529	$14,134,529	$396,550	$396,550	$396,550
Transit	$76,087,198	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,843,655	$5,843,655	$39,168,340
Total	**$4,394,022,249**	**$132,471,630**	**$127,694,129**	**$125,808,420**	**$115,704,545**	**$56,251,212**	**$47,631,945**	**$45,048,612**	**$39,966,612**	**$53,728,104**	**$53,742,270**	**$90,166,614**	**$90,166,614**	**$123,491,299**

Description	2024-2051	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
D.C. Services																
Fire Protection Services	$353,468,062	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119	$13,771,119
Parks and Recreation Services	$1,309,196,477	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426	$51,496,426
Library Services	$101,730,254	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165	$4,072,165
By-law Enforcement	$33,121,175	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Roads - Operations	$369,861,582	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699	$14,586,699
Roads - Engineering	$2,002,074,316	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781	$79,362,781
C.B.C. Services																
Public Realm, Community Facilities, CIP & Administration	$148,483,186	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550	$396,550
Transit	$76,087,198	$2,380,335	$1,904,268	$2,380,335	$2,380,335	$1,904,268	$1,428,201	$1,428,201	$1,428,201	$1,428,201	$1,428,201	$1,428,201	$1,428,201	$1,428,201	$1,428,201	$1,428,201
Total	**$4,394,022,249**	**$86,703,293**	**$86,227,226**	**$86,703,293**	**$86,703,293**	**$86,227,226**	**$85,751,160**	**$85,751,160**	**$85,751,160**	**$85,751,160**	**$85,751,160**	**$85,751,160**	**$85,751,160**	**$85,751,160**	**$85,751,160**	**$85,751,160**

Table B-2
Annual Capital Lifecycle Costs

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Development Charge Background Study Services													
Fire Protection Services	$713,428	$1,450,928	$2,254,594	$3,013,728	$3,392,394	$3,521,061	$3,936,461	$3,936,461	$3,943,794	$4,330,861	$4,712,143	$5,093,425	$5,474,707
Parks and Recreation Services	$1,335,501	$2,603,879	$3,895,639	$5,774,591	$7,063,644	$8,182,582	$9,318,187	$10,197,126	$11,783,152	$13,369,178	$15,170,212	$16,971,247	$18,772,281
Library Services	$0	$217,250	$628,214	$1,034,386	$1,495,331	$1,659,848	$1,824,364	$1,976,214	$2,062,414	$2,148,614	$2,275,799	$2,402,985	$2,530,170
By-law Enforcement	$262,727	$516,001	$769,275	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775
Roads - Operations	$672,052	$1,599,938	$2,592,110	$3,167,614	$3,284,786	$3,349,071	$3,413,357	$3,413,357	$3,413,357	$3,413,357	$3,877,375	$4,341,393	$4,805,412
Roads - Engineering	$198,830	$397,830	$597,830	$1,087,830	$1,578,830	$2,069,830	$2,560,830	$3,051,830	$4,334,830	$5,618,830	$6,902,830	$8,186,830	$9,469,830
Subtotal	**$3,182,539**	**$6,785,826**	**$10,737,662**	**$15,059,924**	**$17,796,760**	**$19,764,167**	**$22,034,975**	**$23,556,763**	**$26,519,322**	**$29,862,615**	**$33,920,135**	**$37,977,655**	**$42,034,174**
Community Benefit Charges Infrastructure	$2,500	$5,000	$7,500	$10,000	$12,500	$15,000	$17,500	$20,000	$22,500	$25,000	$33,663	$42,325	$50,988
Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$416,667	$833,333	$8,526,130
Grand Total	**$3,185,039**	**$6,790,826**	**$10,745,162**	**$15,069,924**	**$17,809,260**	**$19,779,167**	**$22,052,475**	**$23,576,763**	**$26,541,822**	**$29,887,615**	**$34,370,464**	**$38,853,313**	**$50,611,292**

Description	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Development Charge Background Study Services															
Fire Protection Services	$5,855,989	$6,237,271	$6,618,553	$6,999,835	$7,381,117	$7,762,399	$8,143,681	$8,524,963	$8,906,245	$9,287,527	$9,668,809	$10,050,091	$10,431,373	$10,812,655	$11,193,937
Parks and Recreation Services	$20,573,315	$22,374,350	$24,175,384	$25,976,419	$27,777,453	$29,578,488	$31,379,522	$33,180,557	$34,981,591	$36,782,626	$38,583,660	$40,384,694	$42,185,729	$43,986,763	$45,787,798
Library Services	$2,657,355	$2,784,540	$2,911,725	$3,038,910	$3,166,095	$3,293,281	$3,420,466	$3,547,651	$3,674,836	$3,802,021	$3,929,206	$4,056,391	$4,183,577	$4,310,762	$4,437,947
By-law Enforcement	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775	$981,775
Roads - Operations	$5,269,430	$5,733,448	$6,197,466	$6,661,484	$7,125,502	$7,589,521	$8,053,539	$8,517,557	$8,981,575	$9,445,593	$9,909,611	$10,373,630	$10,837,648	$11,301,666	$11,765,684
Roads - Engineering	$11,182,830	$12,895,830	$14,607,830	$16,320,830	$18,033,830	$18,768,830	$19,503,830	$20,239,830	$20,974,830	$21,709,830	$22,432,830	$23,156,830	$23,879,830	$24,602,830	$25,325,830
Subtotal	**$46,520,694**	**$51,007,214**	**$55,492,734**	**$59,979,253**	**$64,465,773**	**$67,974,293**	**$71,482,813**	**$74,992,332**	**$78,500,852**	**$82,009,372**	**$85,505,892**	**$89,003,411**	**$92,499,931**	**$95,996,451**	**$99,492,971**
Community Benefit Charges Infrastructure	$75,903	$100,818	$125,733	$150,648	$175,563	$195,363	$215,163	$234,963	$254,763	$274,563	$296,013	$317,463	$338,913	$360,363	$381,895
Transit	$9,045,854	$9,461,633	$9,981,356	$10,501,080	$10,916,859	$11,228,693	$11,540,527	$11,852,361	$11,852,361	$11,852,361	$11,852,361	$11,852,361	$11,852,361	$11,852,361	$11,852,361
Grand Total	**$55,642,450**	**$60,569,664**	**$65,599,822**	**$70,630,981**	**$75,558,194**	**$79,398,348**	**$83,238,502**	**$87,079,656**	**$90,607,976**	**$94,136,295**	**$97,654,265**	**$101,173,235**	**$104,691,205**	**$108,209,174**	**$111,727,227**

Appendix C
Net Operating Costs & Revenues

Appendix C: Net Operating Costs & Revenues

Table C-1
Annual Net Operating Expenditures

Service Categories	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Per Capita/Employee Expenditures													
001 Office of CAO	40,367	80,734	121,101	167,487	213,873	260,258	306,644	353,030	441,554	530,077	618,600	707,123	795,647
002 Corporate Services	283,512	567,024	850,536	1,176,322	1,502,108	1,827,893	2,153,679	2,479,465	3,101,197	3,722,930	4,344,662	4,966,394	5,588,127
003 Community & Human Services	1,258,428	2,516,856	3,775,284	5,210,127	6,644,970	8,079,812	9,514,655	10,949,498	13,894,177	16,838,857	19,783,536	22,728,216	25,672,895
004 Planning & Development	166,447	332,894	499,341	690,194	881,046	1,071,899	1,262,752	1,453,604	1,825,417	2,197,230	2,569,044	2,940,857	3,312,670
005 Engineering, Public & Transportation	533,820	1,067,640	1,601,459	2,201,468	2,801,477	3,401,486	4,001,494	4,601,503	5,993,096	7,384,688	8,776,281	10,167,873	11,559,466
007 Caledon Public Library	246,937	493,873	740,810	1,017,092	1,293,374	1,569,657	1,845,939	2,122,222	2,786,912	3,451,603	4,116,294	4,780,984	5,445,675
006 People Services	113,230	226,461	339,691	469,805	599,919	730,033	860,147	990,261	1,238,571	1,486,882	1,735,192	1,983,503	2,231,814
002 Finance	52,821	105,642	158,463	219,160	279,856	340,553	401,250	461,947	577,782	693,616	809,450	925,285	1,041,119
006 Corporate Accounts	300,386	600,772	901,157	1,246,333	1,591,508	1,936,683	2,281,859	2,627,034	3,285,770	3,944,506	4,603,242	5,261,978	5,920,714
Total Per Capita/Employee Expenditures	**2,995,948**	**5,991,896**	**8,987,842**	**12,397,988**	**15,808,131**	**19,218,274**	**22,628,419**	**26,038,564**	**33,144,476**	**40,250,389**	**47,356,301**	**54,462,213**	**61,568,127**
Infrastructure Related Expenditures - Incremental													
003 Community & Human Services	1,782	3,565	5,602	8,657	11,967	15,532	23,537	31,542	40,056	49,334	59,429	70,341	82,070
005 Engineering, Public & Transportation	563,815	1,327,804	800,815	1,111,815	1,422,815	1,733,815	2,045,815	2,356,815	3,162,815	3,968,815	4,774,815	5,581,815	20,393,590
Total New Inftastructure-Related Expenditures	**565,597**	**1,331,369**	**806,416**	**1,120,472**	**1,434,782**	**1,749,346**	**2,069,351**	**2,388,357**	**3,202,871**	**4,018,149**	**4,834,244**	**5,652,156**	**20,475,660**
Total Incremental Expenditures	**3,561,545**	**7,323,265**	**9,794,258**	**13,518,460**	**17,242,913**	**20,967,620**	**24,697,770**	**28,426,921**	**36,347,347**	**44,268,538**	**52,190,545**	**60,114,369**	**82,043,787**

Service Categories	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Per Capita/Employee Expenditures															
001 Office of CAO	925,754	1,055,861	1,185,968	1,316,076	1,446,183	1,528,151	1,610,118	1,692,086	1,774,053	1,856,021	1,930,249	2,004,477	2,078,705	2,152,933	2,227,161
002 Corporate Services	6,501,920	7,415,712	8,329,505	9,243,298	10,157,090	10,732,780	11,308,469	11,884,158	12,459,847	13,035,536	13,556,868	14,078,199	14,599,531	15,120,862	15,642,193
003 Community & Human Services	29,992,698	34,312,501	38,632,304	42,952,106	47,271,909	49,866,241	52,460,573	55,054,905	57,649,237	60,243,569	62,709,040	65,174,511	67,639,983	70,105,454	72,570,925
004 Planning & Development	3,858,844	4,405,017	4,951,191	5,497,365	6,043,539	6,382,954	6,722,369	7,061,785	7,401,200	7,740,615	8,052,250	8,363,885	8,675,521	8,987,156	9,298,791
005 Engineering, Public & Transportation	13,595,032	15,630,598	17,666,164	19,701,730	21,737,296	22,867,848	23,998,400	25,128,952	26,259,504	27,390,056	28,552,526	29,714,996	30,877,466	32,039,936	33,202,406
007 Caledon Public Library	6,417,181	7,388,687	8,360,193	9,331,699	10,303,206	10,830,602	11,357,998	11,885,394	12,412,791	12,940,187	13,495,087	14,049,986	14,604,886	15,159,785	15,714,685
006 People Services	2,596,769	2,961,724	3,326,679	3,691,634	4,056,589	4,286,510	4,516,432	4,746,353	4,976,275	5,206,197	5,414,409	5,622,620	5,830,832	6,039,044	6,247,256
002 Finance	1,211,367	1,381,615	1,551,863	1,722,111	1,892,359	1,999,615	2,106,872	2,214,128	2,321,384	2,428,640	2,525,769	2,622,898	2,720,027	2,817,156	2,914,284
006 Corporate Accounts	6,888,892	7,857,071	8,825,249	9,793,428	10,761,606	11,371,559	11,981,511	12,591,463	13,201,416	13,811,368	14,363,727	14,916,087	15,468,446	16,020,805	16,573,165
Total Per Capita/Employee Expenditures	**71,988,457**	**82,408,786**	**92,829,116**	**103,249,447**	**113,669,777**	**119,866,260**	**126,062,742**	**132,259,224**	**138,455,707**	**144,652,189**	**150,599,925**	**156,547,659**	**162,495,397**	**168,443,131**	**174,390,866**
Infrastructure Related Expenditures - Incremental															
003 Community & Human Services	94,615	107,978	122,157	137,153	152,966	169,596	187,042	205,306	224,386	244,283	264,997	285,711	306,425	327,139	347,852
005 Engineering, Public & Transportation	23,775,100	27,118,116	30,431,381	33,718,692	36,985,475	38,763,850	40,544,550	42,325,465	44,107,494	45,890,549	47,706,616	49,522,424	51,336,072	53,148,652	54,960,246
Total New Inftastructure-Related Expenditures	**23,869,715**	**27,226,094**	**30,553,538**	**33,855,845**	**37,138,441**	**38,933,445**	**40,731,592**	**42,530,771**	**44,331,880**	**46,134,832**	**47,971,613**	**49,808,134**	**51,642,496**	**53,475,790**	**55,308,098**
Total Incremental Expenditures	**95,858,172**	**109,634,880**	**123,382,654**	**137,105,292**	**150,808,218**	**158,799,705**	**166,794,334**	**174,789,995**	**182,787,587**	**190,787,021**	**198,571,538**	**206,355,793**	**214,137,893**	**221,918,921**	**229,698,964**

Table C-2
Annual Non-Tax Revenues

Service Categories	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Per Capita/Employee Revenues													
001 Office of CAO	235,454	470,908	706,361	976,923	1,247,485	1,518,046	1,788,608	2,059,169	2,575,512	3,091,854	3,608,196	4,124,538	4,640,881
002 Corporate Services	331,328	662,656	993,984	1,366,687	1,739,391	2,112,094	2,484,798	2,857,501	3,716,383	4,575,266	5,434,148	6,293,030	7,151,912
003 Community & Human Services	84,086	168,171	252,257	348,809	445,362	541,915	638,468	735,020	920,580	1,106,140	1,291,699	1,477,259	1,662,819
004 Planning & Development	117,300	234,601	351,901	486,144	620,388	754,631	888,875	1,023,118	1,289,369	1,555,620	1,821,870	2,088,121	2,354,371
005 Engineering, Public & Transportation	1,300	2,599	3,899	5,353	6,808	8,262	9,716	11,170	14,669	18,167	21,666	25,164	28,663
007 Caledon Public Library	-	-	-	-	-	-	-	-	-	-	-	-	-
006 People Services	1,706	3,411	5,117	7,077	9,037	10,997	12,957	14,917	18,657	22,398	26,138	29,878	33,619
002 Finance	122,950	245,899	368,849	510,131	651,413	792,695	933,977	1,075,259	1,344,883	1,614,508	1,884,132	2,153,756	2,423,380
006 Corporate Accounts	894,122	1,788,245	2,682,367	3,701,125	4,719,883	5,738,640	6,757,398	7,776,155	9,880,053	11,983,951	14,087,849	16,191,747	18,295,644
Transit													5,816,851
Total Per Capita/Employee Revenues	**1,788,246**	**3,576,490**	**5,364,735**	**7,402,249**	**9,439,767**	**11,477,280**	**13,514,797**	**15,552,309**	**19,760,106**	**23,967,904**	**28,175,698**	**32,383,493**	**36,591,289**
Total Incremental Revenues	**1,788,246**	**3,576,490**	**5,364,735**	**7,402,249**	**9,439,767**	**11,477,280**	**13,514,797**	**15,552,309**	**19,760,106**	**23,967,904**	**28,175,698**	**32,383,493**	**36,591,289**

Service Categories	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Per Capita/Employee Revenues															
001 Office of CAO	5,399,776	6,158,671	6,917,566	7,676,462	8,435,357	8,913,461	9,391,564	9,869,668	10,347,772	10,825,876	11,258,836	11,691,796	12,124,757	12,557,717	12,990,677
002 Corporate Services	8,408,430	9,664,948	10,921,466	12,177,984	13,434,502	14,135,185	14,835,867	15,536,550	16,237,233	16,937,915	17,655,466	18,373,016	19,090,566	19,808,117	20,525,667
003 Community & Human Services	1,935,494	2,208,170	2,480,845	2,753,521	3,026,196	3,197,182	3,368,169	3,539,155	3,710,141	3,881,128	4,036,699	4,192,270	4,347,841	4,503,412	4,658,984
004 Planning & Development	2,745,297	3,136,222	3,527,148	3,918,073	4,308,999	4,549,086	4,789,172	5,029,259	5,269,346	5,509,433	5,732,508	5,955,584	6,178,659	6,401,735	6,624,810
005 Engineering, Public & Transportation	33,776	38,890	44,003	49,117	54,230	57,006	59,782	62,558	65,334	68,110	71,030	73,951	76,872	79,792	82,713
007 Caledon Public Library	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
006 People Services	39,116	44,614	50,111	55,609	61,106	64,570	68,033	71,496	74,960	78,423	81,560	84,696	87,832	90,969	94,105
002 Finance	2,819,661	3,215,942	3,612,222	4,008,503	4,404,784	4,654,441	4,904,097	5,153,754	5,403,411	5,653,068	5,879,151	6,105,235	6,331,319	6,557,402	6,783,486
006 Corporate Accounts	21,381,550	24,467,456	27,553,362	30,639,268	33,725,174	35,570,930	37,416,685	39,262,441	41,108,197	42,953,952	44,715,250	46,476,548	48,237,846	49,999,144	51,760,442
Transit	6,880,234	7,943,617	9,007,000	10,070,383	11,133,766	11,686,462	12,239,157	12,791,852	13,344,547	13,897,243	14,504,806	15,112,370	15,719,934	16,327,497	16,935,061
Total Per Capita/Employee Revenues	**42,763,100**	**48,934,913**	**55,106,723**	**61,278,537**	**67,450,348**	**71,141,861**	**74,833,369**	**78,524,881**	**82,216,394**	**85,907,905**	**89,430,500**	**92,953,096**	**96,475,692**	**99,998,288**	**103,520,884**
Total Incremental Revenues	**42,763,100**	**48,934,913**	**55,106,723**	**61,278,537**	**67,450,348**	**71,141,861**	**74,833,369**	**78,524,881**	**82,216,394**	**85,907,905**	**89,430,500**	**92,953,096**	**96,475,692**	**99,998,288**	**103,520,884**

Table C-3
Annual Tax Revenue

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Residential	3,748,143	7,496,285	11,241,415	15,217,463	19,193,511	23,169,559	27,145,607	31,121,655	39,142,061	47,162,467	55,182,874	63,203,280	71,216,479
Commerical	888,150	1,776,301	2,664,451	3,990,125	5,284,833	6,579,541	7,874,249	9,168,956	10,307,768	11,539,719	12,771,669	14,003,620	15,235,571
Industrial	1,866,959	3,733,919	5,600,878	7,957,251	10,313,625	12,669,998	15,026,371	17,382,745	19,505,399	21,628,054	23,750,708	25,873,363	27,996,018
Institutional	41,341	82,683	124,024	137,757	182,456	227,155	271,854	316,553	465,303	520,915	576,526	632,138	687,749
Total	**6,544,594**	**13,089,188**	**19,630,769**	**27,302,597**	**34,974,425**	**42,646,253**	**50,318,081**	**57,989,909**	**69,420,532**	**80,851,155**	**92,281,778**	**103,712,401**	**115,135,816**

Description	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Residential	82,805,981	94,395,484	105,984,986	117,574,489	129,163,991	134,952,951	140,741,910	146,530,869	152,319,828	158,108,787	164,470,284	170,831,781	177,193,278	183,554,775	189,917,778
Commerical	17,326,096	19,483,033	21,639,969	23,796,906	25,953,843	27,623,619	29,136,612	30,649,606	32,162,599	33,675,593	34,472,742	35,550,528	36,628,315	37,706,101	38,801,121
Industrial	30,718,667	33,441,316	36,163,965	38,886,614	41,609,263	45,538,877	49,468,492	53,398,106	57,327,720	61,257,335	62,835,809	64,414,282	65,992,756	67,571,229	69,146,215
Institutional	861,396	968,632	1,075,868	1,183,104	1,290,340	1,199,242	1,264,926	1,330,611	1,396,295	1,461,980	1,798,858	1,855,099	1,911,340	1,967,581	2,004,594
Total	**131,712,140**	**148,288,464**	**164,864,788**	**181,441,112**	**198,017,436**	**209,314,688**	**220,611,940**	**231,909,192**	**243,206,443**	**254,503,695**	**263,577,693**	**272,651,691**	**281,725,688**	**290,799,686**	**299,869,708**

Appendix D
Financial Impacts

Appendix D: Financial Impacts

Table D-1
Annual Fiscal Impacts

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Net Operating Costs													
Gross Operating Expenditures	3,561,545	7,323,265	9,794,258	13,518,460	17,242,913	20,967,620	24,697,770	28,426,921	36,347,347	44,268,538	52,190,545	60,114,369	82,043,787
Less: Non-Tax Revenues	(1,788,246)	(3,576,490)	(5,364,735)	(7,402,249)	(9,439,767)	(11,477,280)	(13,514,797)	(15,552,309)	(19,760,106)	(23,967,904)	(28,175,698)	(32,383,493)	(36,591,289)
D.C. and C.B.C. Exemptions/Reductions	8,972,969	8,972,969	8,948,465	10,010,358	10,010,358	10,010,358	10,010,358	10,010,358	10,649,261	10,649,261	10,649,261	10,649,261	10,648,280
Net Operating Expenditures	10,746,268	12,719,744	13,377,989	16,126,569	17,813,504	19,500,698	21,193,331	22,884,970	27,236,502	30,949,895	34,664,108	38,380,137	56,100,777
Capital Related Operating Costs													
Incremental Lifcecylce Costs (Growth-Related Infrastructure)	3,185,039	6,790,826	10,745,162	15,069,924	17,809,260	19,779,167	22,052,475	23,576,763	26,541,822	29,887,615	34,370,464	38,853,313	50,611,292
Non-D.C./C.B.C. Funded Growth-Related Infrastructure (Annual Debt Payments)	-	1,002,880	2,005,759	3,008,639	4,011,518	5,014,398	6,017,277	7,020,157	8,023,036	9,025,916	10,028,795	10,056,932	10,085,068
Total Capital Related Operating Costs	3,185,039	7,793,706	12,750,921	18,078,563	21,820,778	24,793,565	28,069,752	30,596,920	34,564,859	38,913,531	44,399,259	48,910,244	60,696,360
Incremental Tax Lew Requirement	13,931,307	20,513,450	26,128,910	34,205,131	39,634,282	44,294,263	49,263,084	53,481,890	61,801,360	69,863,426	79,063,367	87,290,381	116,797,137
Annual Weighted Property Assessment (000's)	1,530,183	3,060,367	4,589,845	6,383,586	8,177,326	9,971,067	11,764,807	13,558,548	16,231,127	18,903,707	21,576,287	24,248,866	26,919,761
Current Residential (RT) Tax Rate	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%
Annual Tax Revenue	6,544,594	13,089,188	19,630,769	27,302,597	34,974,425	42,646,253	50,318,081	57,989,909	69,420,532	80,851,155	92,281,778	103,712,401	115,135,816
Annual Surplus (Deficit)	(7,386,713)	(7,424,262)	(6,498,141)	(6,902,535)	(4,659,857)	(1,648,011)	1,054,997	4,508,019	7,619,172	10,987,729	13,218,411	16,422,020	(1,661,321)
Cumulative Surplus/Deficit	(7,386,713)	(14,810,975)	(21,309,116)	(28,211,651)	(32,871,508)	(34,519,518)	(33,464,521)	(28,956,502)	(21,337,330)	(10,349,601)	2,868,810	19,290,830	17,629,509

	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Net Operating Costs															
Gross Operating Expenditures	95,858,172	109,634,880	123,382,654	137,105,292	150,808,218	158,799,705	166,794,334	174,789,995	182,787,587	190,787,021	198,571,538	206,355,793	214,137,893	221,918,921	229,698,964
Less: Non-Tax Revenues	(42,763,100)	(48,934,913)	(55,106,723)	(61,278,537)	(67,450,348)	(71,141,861)	(74,833,369)	(78,524,881)	(82,216,394)	(85,907,905)	(89,430,500)	(92,953,096)	(96,475,692)	(99,998,288)	(103,520,884)
D.C. and C.B.C. Exemptions/Reductions	13,912,492	13,912,492	13,912,492	13,912,492	13,912,492	11,488,014	11,488,014	11,488,014	11,488,014	11,488,014	11,876,947	11,876,947	11,876,947	11,876,947	11,889,199
Net Operating Expenditures	67,007,565	74,612,459	82,188,423	89,739,247	97,270,362	99,145,859	103,448,980	107,753,128	112,059,207	116,367,130	121,017,985	125,279,644	129,539,148	133,797,580	138,067,279
Capital Related Operating Costs															
Incremental Lifcecylce Costs (Growth-Related Infrastructure)	55,642,450	60,569,664	65,599,822	70,630,981	75,558,194	79,398,348	83,238,502	87,079,656	90,607,976	94,136,295	97,654,265	101,173,235	104,691,205	108,209,174	111,727,227
Non-D.C./C.B.C. Funded Growth-Related Infrastructure (Annual Debt Payments)	10,113,204	10,141,340	10,169,476	10,197,613	10,225,749	10,253,885	10,282,021	10,310,157	10,338,294	10,366,430	10,394,566	10,422,702	10,450,838	9,476,095	8,501,352
Total Capital Related Operating Costs	65,755,654	70,711,004	75,769,299	80,828,593	85,783,943	89,652,233	93,520,523	97,389,813	100,946,269	104,502,725	108,048,831	111,595,937	115,142,043	117,685,269	120,228,578
Incremental Tax Lew Requirement	132,763,219	145,323,463	157,957,722	170,567,840	183,054,305	188,798,092	196,969,503	205,142,941	213,005,476	220,869,855	229,066,816	236,875,581	244,681,191	251,482,849	258,295,857
Annual Weighted Property Assessment (000's)	30,795,450	34,671,140	38,546,829	42,422,519	46,298,208	48,939,604	51,581,001	54,222,397	56,863,793	59,505,189	61,626,769	63,748,349	65,869,929	67,991,510	70,112,160
Current Residential (RT) Tax Rate	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%	0.4277%
Annual Tax Revenue	131,712,140	148,288,464	164,864,788	181,441,112	198,017,436	209,314,688	220,611,940	231,909,192	243,206,443	254,503,695	263,577,693	272,651,691	281,725,688	290,799,686	299,869,708
Annual Surplus (Deficit)	(1,051,078)	2,965,001	6,907,067	10,873,272	14,963,131	20,516,596	23,642,437	26,766,251	30,200,967	33,633,840	34,510,877	35,776,110	37,044,497	39,316,837	41,573,851
Cumulative Surplus/Deficit	16,578,431	19,543,432	26,450,499	37,323,771	52,286,902	72,803,498	96,445,935	123,212,186	153,413,153	187,046,993	221,557,870	257,333,979	294,378,477	333,695,313	375,269,165