Addendum No. 2 to:

Town of Milton Development Charge Background Study

October 12, 2016





Plaza Three 101–2000 Argentia Rd. Mississauga, Ontario Canada L5N 1V9

Fax: (905) 272-3602 e-mail: info@watson-econ.ca www.watson-econ.ca

Phone: (905) 272-3600



List of Acronyms and Abbreviations

A.M.P. Asset Management Plan

D.C. Development Charge

D.C.A. Development Charges Act

F.I.A. Fiscal Impact Analysis

G.F.A. Gross floor area

H.T.M.P. Halton Transportation Master Plan, 2011

I.T.S. Intelligent Transportation Systems

M.T.M.P. Milton Transit Master Plan, 2013

N.F.P.O.W. No Fixed Place of Work

O.M.B. Ontario Municipal Board

O.Reg. Ontario Regulation

P.P.U. Persons per unit

S.D.E. Single detached equivalent

S.D.U. Single detached unit

s.s. Subsection

sq.ft. Square footage

T.M.P. Transportation Master Plan, 2011

T.T.S. Transportation Tomorrow Study

1. Introduction

1.1 Introduction

Commensurate with the provisions of the Development Charges Act, 1997, (D.C.A.) the Town undertook a Background Study, dated December 8, 2015 at which time it was released to the public. Subsequently, the D.C.A. was amended by Bill 73 which came into effect on January 1, 2016. Due to the changes in the D.C.A., an addendum to the Background Study was required and released on March 15, 2016.

The most significant change to the D.C.A. impacting the Town's Development Charge (D.C.) related to transit services, requiring new more detailed calculations, therefore transit was removed from the original background study. Council passed D.C. By-law 053-2016 on June 27, 2016 which included all services except transit. On the same date, Council amended By-law 087-2011 (the Town's former by-law) to remove all services except transit in order to allow the Town to continue to collect the Transit D.C. that was in place until the By-law expired in September, 2016.

Bill 73 did not provide transitional provisions for the amendments to the D.C.A. therefore, staff and their consulting team required additional time to undertake the necessary review and calculations to update the Transit D.C. to meet the new requirements. This report provides for the update calculations. As well, it updates the capital project listing for Services Related to a Highway to identify a road that is to be included in future D.C. studies.

1.2 Purpose of Report

As noted, the purpose of this Addendum Report is to provide for refinements to the December 8, 2015 Background Study, as amended. The refinements are in direct relation to changes required as a result of amendments to the D.C.A. and supporting regulation (O.Reg. 428/15) for transit services. The Town has retained Dillon Consulting and Watson & Associates Economists Ltd. to undertake this work.

In addition to the updates to the Transit D.C., an update to the capital project listing relating to Services Related to a Highway is included to identify a project which will be included in future D.C. studies which address growth for the Sustainable Halton Lands.

2. Changes to the December 8, 2015, Report (as amended) and By-law

The following provides an explanation of the changes to the December 8, 2015 Development Charges Background Study, as amended.

2.1 Transit

The capital requirements for transit have been updated based on the Dillon report (Appendix B) and discussions undertaken with staff.

A. Transit vehicles:

- As per the Transit Development Charges Technical Appendix (Appendix B), by Dillon Consulting, there are 18 additional 40 ft. accessible buses identified to service growth. The cost of these vehicles is budgeted at \$9.72 million (\$2016).
- Based on Dillon's analysis provided in Appendix B, two vehicles have been identified as benefiting growth in the post ten year forecast period. This equates to \$1.08 million in deductions to the D.C. calculations.
- In addition, a growth/non-growth share has been determined based on the increase in PM peak hour transit trips for the existing base vs. the new growth. This has resulted in a spilt of 64% growth/36% non-growth.
- After the above noted deductions for benefit to existing and post period benefit, the net amount for inclusion in the D.C. calculations is \$5,529,600.

B. Transit facility:

- A transit facility is anticipated to constructed by 2020 at a cost of \$11,279,000. Based on a conceptual design, the facility is anticipated to accommodate 50 buses.
- The Town has identified grants to assist in funding the design of the transit facility in the amount of \$463,000. This amount has been deducted from the D.C. calculations.

- Based on the number of existing buses (18), a benefit to existing equal to 36% has been identified, equating to \$3,893,800 (after the deduction for the grant funding).
- Post Period benefit is based on the number of additional growth related buses required to service growth in the post 10-year period (estimated at 16 additional vehicles). This amount is equal to \$3,461,100.
- After the above noted deductions for grants, benefit to existing and post period benefit, the net amount for inclusion in the D.C. calculations is \$3,461,100.

C. Heavy Duty Support Vehicle:

 Currently, the Town has two support vehicles, there is a need to add a third support vehicle to the fleet to service growth. The cost of this vehicle is \$63,200 and is attributed fully to growth. Therefore, the gross cost of this vehicle has been included in the D.C. calculations.

D. Transit Bus Pads:

 Additional transit bus pads are anticipated along new routes (not internal to developments) to service growth. The cost of these total \$248,000 and are fully attributable to growth over the 10-year forecast period.

E. Automated Vehicle Location (A.V.L.) Centralized System and Components:

- An A.V.L. centralized system is anticipated over the forecast period. This system provides the Town the ability to gather future data required to assist in ensuring that transit is being deployed in a way that best services its customers needs. In addition to the centralized system, each bus requires equipment to be installed to allow the centralized system to be fully operational. The cost of the component equipment for each bus is \$15,000. This cost has been included in the cost of new vehicles (identified in section A. above). The total cost for the centralized system and the component equipment required for the existing 18 vehicles total \$514,000.
- A grant has been identified which will fund 50% of the gross cost of the centralized system and equipment component for the existing buses.
 Therefore, a deduction in the amount of \$257,000 has been made to the D.C. calculations.

- Benefit to existing deductions have been based two portions of the project. The first portion, for the 18 component equipment units, is based on the net cost (after the grant) being fully deducted as BTE. This equates to 50% of the cost of the components or \$135,000. The second portion, for the centralized system, is based on 50% of the net cost (after the grant deduction), equating to \$61,000. Therefore, the total benefit to existing deduction is \$196,000.
- A post period benefit amount equal to \$5,900 has also been made to recognize the portion of the centralized system that is attributable to the two vehicles that were identified by Dillon as having a post period benefit.
- After the above noted deductions for grants, benefit to existing and post period benefit, the net amount for inclusion in the D.C. calculations is \$55,100.

F. Reserve Fund Adjustment.

 The initial December, 2015 D.C. Background Study provided an adjustment for the estimated year-end Transit D.C. reserve fund balance. This adjustment has been updated to reflect the actual year-end Transit D.C. reserve fund deficit of \$651,018. This amount has been included in the D.C. calculations.

As presented above, the capital projects related to transit services have been identified for inclusion in the D.C. forecast. The gross total of projects, including the deficit in the D.C. reserve fund is equal to \$22,475,218. Deductions to recognize post period benefit in the amount of \$4,547,000, benefit to existing development of \$7,200,200 and anticipated grant funding of \$720,000 have been made. This results in a total net growth related cost of \$10,008,018 attributable to growth over the 10-year forecast being included in the D.C. calculations.

These costs are shared between residential and non-residential development based on the growth in population and employment anticipated over the ten-year forecast (as provided in the 2015 D.C. Background Study). This results in a residential share of 66% and a non-residential share of 34%. The growth forecast is for the entire Town of Milton and the service will be imposed on a Town wide basis consistent with the prior Council recommendations for most D.C. services.

The following tables provide a summary of the above costs related to transit services and the resulting D.C. calculations.

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Milton

Service: Transit Services

							Le	ss:	Potential DC Recoverable Cost		
Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2016\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non- Residential Share
	Ten Year Capital Plan									66%	34%
	Facilities:										
1	New Facility (Phase 1 & 2)	2018-2020	11,279,000	3,461,100	***************************************	7,817,900	3,893,800	463,000	3,461,100	2,284,326	1,176,774
2	Transit Bus Pads	2015-2024	248,000	-		248,000	-		248,000	163,680	84,320
3	Heavy Duty Support Vehicle	2017	63,200	-		63,200	-		63,200	41,712	21,488
	Vehicles & Equipment:										200000000000000000000000000000000000000
4	Accessible Transit - 40ft. Bus (18)	2017-2024	9,720,000	1,080,000		8,640,000	3,110,400		5,529,600	3,649,536	1,880,064
5	AVL Centralized System & Components	2016-2021	514,000	5,900	100000000000000000000000000000000000000	508,100	196,000	257,000	55,100	36,366	18,734
6	Reserve Fund Adjustment		651,018	-		651,018	-		651,018	429,672	221,346
	Total		22,475,218	4,547,000	-	17,928,218	7,200,200	720,000	10,008,018	6,605,292	3,402,726

TOWN OF MILTON

DEVELOPMENT CHARGE CALCULATION

Municipal-wide Transit Services

Ten Year Forecast

Ten real rolevas.									
		2016 \$ DC	Eligible Cost	2016 \$ DC E	ligible Cost	2016 \$ DC EI	igible Cost	2016 \$ DC I	Eligible Cost
SERVICE	SERVICE		Non-Residential	SDU	per ft²	Retail	Non-Retail	Retail	Non-Retail
		\$	\$	\$	\$	\$	\$	per sq. ft. \$	per sq. ft. \$
1. Transit									
1.1 Transit Services		6,605,292	3,402,726	396	0.13	820,485	2,582,242	0.24	0.11
TOTAL		\$6,605,292	\$3,402,726	\$396	\$0.13	\$820,485	\$2,582,242	\$0.24	\$0.11
DC ELIGIBLE CAPITAL COST		\$6,605,292	\$3,402,726			\$820,500	\$2,582,200		
10 Year Gross Population / GFA Growth (ft².)		58,669	27,042,270			3,435,010	23,607,260		
Cost Per Capita / Non-Residential GFA (ft².)		\$113	\$0.13			\$0.24	\$0.11		
By Residential Unit Type	p.p.u								
Single and Semi-Detached Dwelling	3.52	\$396							
Apartments - 2 Bedrooms +	1.89	\$213							
Apartments - Bachelor and 1 Bedroom	1.27	\$143							
Other Multiples	2.52	\$284							

Special Care/Special Dwelling Units

1.10

\$124

2.2 Asset Management Plan for New Infrastructure

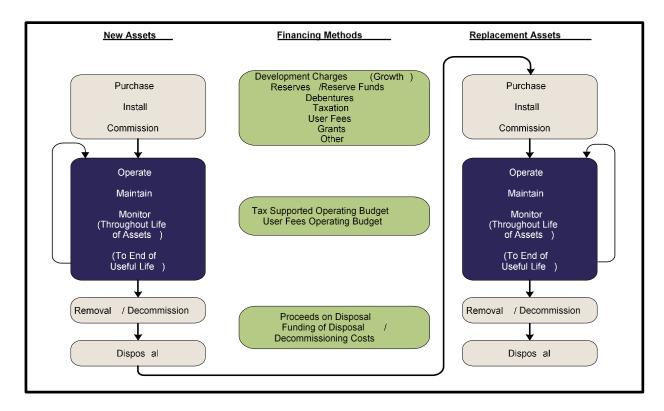
The recent changes to the D.C.A. (new clause 10(2)(c.2)) require that the Background Study must include an asset management plan related to new infrastructure. Subsection 10 (3) of the D.C.A. provides:

The asset management plan shall,

- (a) deal with all assets whose capital costs are proposed to be funded under the development charge by-law;
- (b) demonstrate that all the assets mentioned in clause (a) are financially sustainable over their full life cycle;
- (c) contain any other information that is prescribed; and
- (d) be prepared in the prescribed manner.

In regard to the above, O.Reg. 428/15 amends O.Reg. 82/92, section 8 to include subsections (2), (3) and (4) which set out for specific detailed requirements for transit (only). For all services except transit, there are no prescribed requirements at this time thus requiring the municipality to define the approach to include within the Background Study. For transit, the amended regulations provide for a prescriptive evaluation (as discussed later in this Appendix).

At a broad level, the Asset Management Plan (A.M.P.) provides for the long term investment in an asset over its entire useful life along with the funding. The schematic below identifies the costs for an asset through its entire lifecycle. For growth related works, the majority of capital costs will be funded by the D.C. Non-growth related expenditures will then be funded from non-D.C. revenues as noted below. During the useful life of the asset, there will be minor maintenance costs to extend the life of the asset along with additional program related expenditures to provide the full services to the residents. At the end of the life of the asset, it will be replaced by non-D.C. financing sources.



In 2012, the Province developed Building Together: Guide for Municipal Asset Management Plans which outlines the key elements for an A.M.P., as follows:

State of local infrastructure: asset types, quantities, age, condition, financial accounting valuation and replacement cost valuation.

Desired levels of service: defines levels of service through performance measures and discusses any external trends or issues that may affect expected levels of service or the municipality's ability to meet them (for example, new accessibility standards, climate change impacts).

Asset management strategy: the asset management strategy is the set of planned actions that will seek to generate the desired levels of service in a sustainable way, while managing risk, at the lowest lifecycle cost.

Financing strategy: having a financial plan is critical for putting an A.M.P. into action. By having a strong financial plan, municipalities can also demonstrate that they have made a concerted effort to integrate the A.M.P. with financial planning and municipal budgeting, and are making full use of all available infrastructure financing tools.

The above provides for the general approach to be considered by Ontario municipalities. At this time there is not a mandated approach for municipalities hence leaving discretion to individual municipalities as to how they plan for the long term

replacement of their assets. In 2015, the Town of Milton undertook its asset management plan. The document "The Town of Milton Asset Management Plan 2015 – Facilities and Transit" dated October 2015 (prepared by CH2M Hill) provides their long term approach to addressing the Transit Service.

In regard to the D.C.A. requirements for asset management for the Transit Service, Ontario Regulation 82/98 (as amended) provides the following:

8(3) If a council of a municipality proposes to impose a development charge in respect of transit services, the asset management plan referred to in subsection 10 (2) (c.2) of the Act shall include the following in respect of those services:

The table below provides the individual items prescribed by subsection 8(3) of the Regulation (as amended) and how these items were addressed for this D.C. Background Study:

Ontario Regulation 82/92, as amended subsection 8(3) Requirements	Compliance				
1. A section that sets out the state of local infrastructure and that	See A.M.P., chapter 3				
sets out,					
i. the types of assets and their quantity or extent,	See A.M.P., Table 3-2				
ii. the financial accounting valuation and replacement cost valuation for all assets,	See A.M.P., Table 3-4				
iii. the asset age distribution and asset age as a proportion of expected useful life for all assets, and	See A.M.P., Figure 3-4 and Table 3-5				
iv. the asset condition based on standard engineering practices for all assets.	See A.M.P., Section 3.4.1 (Figures 3-12 to 3-17) and section 6.4.2 (Table 6-13)				
2. A section that sets out the proposed level of service and that,					
i. defines the proposed level of service through timeframes and performance measures,	See A.M.P., Table 4-7				
ii. discusses any external trends or issues that may affect the proposed level of service or the municipality's ability to meet it, and	See A.M.P., Table 4-8				
iii. shows current performance relative to the targets set out.	See A.M.P., Table 4-7 & section 5.6.1				

Ontario Regulation 82/92, as amended subsection 8(3) Requirements	Compliance
3. An asset management strategy that,	See A.M.P., section 5.4 and 5.6
i. sets out planned actions that will enable the assets to provide the proposed level of service in a sustainable way, while managing risk, at the lowest life cycle cost,	Sustainability - See A.M.P., section 5.6 Managing Risk – See A.M.P., section 5.6.1 Lowest Cost – See A.M.P., Section 5.4
ii. is based on an assessment of potential options to achieve the proposed level of service, which assessment compares,	Level of service and options are discussed in the documents identified in A.M.P. Section 2.4, in A.M.P. section 5.6 and the updated Dillon report in Appendix B to this report
A. life cycle costs, B. all other relevant direct and indirect costs and benefits, and C. the risks associated with the potential options,	See A.M.P., Section 5.6 See A.M.P., tables 6-6 and 6-9 See A.M.P., Section 5.6.3
iii. contains a summary of, in relation to achieving the proposed level of service, (not defined clearly) A. non-infrastructure solutions, B. maintenance activities, C. renewal and rehabilitation activities, D. replacement activities, E. disposal activities, and F. expansion activities,	See A.M.P. Section 5.6 and the Town's "Moving Milton Forward" document dated February 2013
iv. discusses the procurement measures that are intended to achieve the proposed level of service, and	See A.M.P., Section 5.4
v. includes an overview of the risks associated with the strategy and any actions that will be taken in response to those risks.	See A.M.P., sections 5.6.3 and 6.6

Ontario Regulation 82/92, as amended subsection 8(3) Requirements	Compliance
4. A financial strategy that, i. shows the yearly expenditure forecasts that are proposed to achieve the proposed level of service, categorized by, A. non-infrastructure solutions, B. maintenance activities, C. renewal and rehabilitation activities, D. replacement activities,	The Town's "Long Term Fiscal Impact Study" identified in A.M.P. section 2.4 provided the long term forecast of these items. This has been subsequently updated annually during the budget process. The A.M.P., Chapter 6 provides for the update commentary
E. disposal activities, and F. expansion activities, ii. provides actual expenditures in respect of the categories set out in sub-subparagraphs i A to F from the previous two years, if available, for comparison purposes,	See A.M.P., Table 6-2 & 6-4
iii. gives a breakdown of yearly revenues by source,	See A.M.P., Table 6-6 & 6-9
iv. discusses key assumptions and alternative scenarios where appropriate, (see associated text) and	See A.M.P., Chapter 6
v. identifies any funding shortfall relative to financial requirements that cannot be eliminated by revising service levels, asset management or financing strategies, and discusses the impact of the shortfall and how the impact will be managed.	See A.M.P., Section 1.4

Note – Reference to A.M.P. means "The Town of Milton Asset Management Plan 2015 – Facilities and Transit" dated October, 2015 and prepared by CH2M Hill

2.3 Services Related to a Highway

An update to the project listing included in the December 8, 2015 study has been included to recognize the inclusion of the crossing of 16 Mile Creek, estimated at \$9.98 million. This project will be funded 72% by the developing landowners in the Boyne Secondary Plan Area with the remaining 28% required due to growth in the Sustainable Halton Lands therefore, 28% is considered a post 10 year forecast period benefit. There is no impact on the current D.C. calculation due to the inclusion of this project. The following table provides the updated list of projects (with the additional project highlighted).

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Milton

Service: Services Related to a Highway

								Less:	Poten	tial DC Recoverat	ole Cost
Prj .No	Increased Service Needs Attributable to Anticipated Development 2015-2024	Timing (year)	Gross Capital Cost Estimate (2015\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 60%	Non-Residential Share 40%
1	Appleby Line (Derry Rd to 14SR)	2016	547,000	0		547,000	492,300		54,700	32,820	21,880
2	Gateway Features	2017	221,000	0		221,000	0		221,000	132,600	88,400
3	Thompson Road (Louis St. Laurent Blvd. to Britannia Road)	2017-2019	10,353,000	0		10,353,000	1,035,300		9,317,700	5,590,620	3,727,080
4	Bronte St. (Main St. to Steeles Ave.)	2016/17	7,337,000	0		7,337,000	1,614,100		5,722,900	3,433,740	2,289,160
5	Bronte St. S. (Louis St. Laurent Blvd. to Britannia Road)	2015/16	8,744,000	0		8,744,000	874,400		7,869,600	4,721,760	3,147,840
6	Main Street (Bronte to James)	2019	2,770,000	0		2,770,000	1,108,000		1,662,000	997,200	664,800
7	Main Street (Scott Blvd. (incl. CN Crossing) to Bronte St.)	2015	508,750	0		508,750	50,900		457,850	274,710	183,140
8	Main Street (James Snow Parkway to 5th Line) (4 lane)	2017	3,248,000	0		3,248,000	0		3,248,000	1,948,800	1,299,200
9	Main Street (5th Line to 258m E of 5th Line) (2 lane)	2021/22	1,001,000	0		1,001,000	100,100		900,900	540,540	360,360
10	Main Street (5th Line to 258m E of 5th Line) (4 lane)	2025+	1,323,000	1,323,000		0	0		0	0	0
11	Main Street (258m E of 5th Line to 6th Line) (structure)	2022/23	3,378,000	0		3,378,000	0		3,378,000	2,026,800	1,351,200
12	Main Street (258m E of 5th Line to 6th Line) (2 lane)	2022/23	8,462,000	0		8,462,000	846,200		7,615,800	4,569,480	3,046,320
13	Main Street (258m E of 5th Line to 6th Line) (4 lane)	2025+	6,681,000	6,681,000		0	0		0	0	0
14	5th Line (Derry Road to Louis St. Laurent Blvd.) (2 lane)	2017/18	5,344,000	0		5,344,000	534,400		4,809,600	2,885,760	1,923,840
15	5th Line (Derry Road to Louis St. Laurent Blvd.) (4 lane)	2025+	7,938,000	7,938,000		0	0		0	0	0
16	6th Line (Hwy 401 to Derry Road) (2 lane)	2018/19	15,536,000	0		15,536,000	1,553,600		13,982,400	8,389,440	5,592,960
17	Louis St. Laurent Extension (James Snow Parkway to 5th Line) (2 lane)	2017/18	3,269,000	0		3,269,000	0		3,269,000	1,961,400	1,307,600
18	Louis St. Laurent Extension (James Snow Prwy to 5th Line) (4 lane)	2025+	4,319,000	4,319,000		0	0		0	0	0
19	5th Line (Louis St. Laurent Blvd. to Britannia Road) (2 lane)	2017/18	6,626,000	0		6,626,000	662,600		5,963,400	3,578,040	2,385,360
20	5th Line (Louis St. Laurent Blvd. to Britannia Road) (4 lane)	2025+	8,408,000	8,408,000		0	0		0	0	0
21	5th Line (Britannia Road to Lower Base Line) (4 lane)	2025+	15,536,000	15,536,000		0	0		0	0	0
22	5th Line (Britannia Road to Lower Base Line) (2 lane)	2025+	6,155,000	6,155,000		0	0		0	0	0
23	5th Line (Main Steet to Trudeau Drive Extension)	2024	6,735,000	0		6,735,000	0		6,735,000	4,041,000	2,694,000
24	6th Line (Derry Road to Britannia Road) (2 lane)	2018/19	6,526,000	0		6,526,000	652,600		5,873,400	3,524,040	2,349,360
25	Main Street (6th Line to Trafalgar) (structure)	2025+	3,378,000	3,378,000		0	0		0	0	0
26	Main Street (6th Line to Trafalgar) (4 lane)	2025+	7,445,000	7,445,000		0	0		0	0	0
27	5th Line (Hwy 401 to Main Street) (2 lane)	2016	564,000	0		564,000	56,400		507,600	304,560	203,040
28	5th Line (Hwy 401 to Main Street) (4 lane)	2025+	3,717,000	3,717,000		0	0		0	0	0
29	6th Line (Derry Road to 1928m S of Derry Road) (4 lane)	2025+	10,639,000	10,639,000		0	0		0	0	0
	6th Line (1928m S of Derry Road to Britannia Road) (4 lane)	2025+	4,701,000	4,701,000		0	0		0	0	0
000000000000000000000000000000000000000	6th Line (Britannia Road to Lower Base Line) (2 lane)	2025+	5,883,000	5,883,000		0	0		0	0	0
	6th Line (Britannia to Lower Base Line) (structure)	2025+	3,378,000	3,378,000		_	_		_	-	_
	Louis St. Laurent Extension (5th Line to 6th Line) (2 lane)	2022	7,883,000	7,883,000		0	0		0	0	0
	Louis St. Laurent Extension (5th Line to 6th Line) (4 lane)	2025+	8,528,000	8,528,000		0	0		0	0	0
	Louis St. Laurent Extension (6th Line to Trafalgar) (Bridge)	2022	3,378,000	3,378,000		0	0		0	0	
36	Louis St. Laurent Extension (6th Line to Trafalgar) (2 lane)	2022	6,648,000	6,648,000		0	0		0	0	0
37	Louis St. Laurent Extension (6th Line to Trafalgar Road) (4 lane)	2025+	8,255,000	8,255,000		0	0		0	0	0
38	Louis St. Laurent Extension (Regional Road 25 to Yates Drive) (incl. deck for bridge)	2016/17	7,136,000	0		7,136,000	0		7,136,000	4,281,600	2,854,400
39	Louis St. Laurent Extension (Yates Drive to Thompson Road)	2017/18	5,150,000	0		5,150,000	0		5,150,000	3,090,000	2,060,000
40	Louis St. Laurent Extension (Thompson Road to 4th Line)	2019/20	10,267,000	0		10,267,000	0		10,267,000	6,160,200	4,106,800

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Milton

Service: Services Related to a Highway

								Less:	Poten	tial DC Recoveral	ble Cost
Prj .No	Increased Service Needs Attributable to Anticipated Development 2015-2024	Timing (year)	Gross Capital Cost Estimate (2015\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 60%	Non-Residential Share 40%
41	Louis St. Laurent Extension (4th Line to James Snow Parkway) (4 lane)	2019/2020	3,958,000	0		3,958,000	0		3,958,000	2,374,800	1,583,200
42	Louis St. Laurent Blvd (4th Line to James Snow Parkway) (4 Iane)	2019/2020	973,000	-		973,000	-		973,000	583,800	389,200
43	Green Connectors (Collector Rd 2 to Collector Rd 3 & RR 25 to Collector Rd 8) Land only	2024	4,898,000	4,898,000		0	0		0	0	0
44	Sidewalks and Bikepaths on Regional Roads - BPII	2016/17, 2019/20, 2025+	8,158,400	5,629,000		2,529,400	815,800		1,713,600	1,028,160	685,440
45	Sidewalks and Bikepaths on Regional Roads - Boyne	2016/17, 2019/20, 2025+	14,718,500	8,831,000		5,887,500	1,471,900		4,415,600	2,649,360	1,766,240
46	Main Street (CP Crossing to Ontario St.)	2015	3,782,000	-		3,782,000	334,300	439,400	3,008,300	1,804,980	1,203,320
47	Asphalt Overlay Program	2015-2024	36,286,000	-		36,286,000	32,657,500		3,628,500	2,177,100	1,451,400
48	New Traffic Signals	2016-2024	1,399,600	-		1,399,600	140,000		1,259,600	755,760	503,840
49	Preemption Traffic Control System	2015-2024	349,200	-		349,200	34,900		314,300	188,580	125,720
	Signal Interconnect Program	2016-2024	447,000	-		447,000	44,700		402,300	241,380	160,920
************	Boyne Pedestrian/Cycling Railway Crossing	2022	4,575,813	_		4,575,813	-		4,575,813	2,745,488	1,830,325
52	Lower Base Line (5th Line to 4th Line)	2017-2019	2,583,900	_		2,583,900	2,325,500		258,400	155,040	103,360
53	16 Mile Creek Crossing	2025+	9,980,000	2,794,400		7,185,600	_	7,185,600		_	_
54	Reserve Fund Adjustment		39,030,163	-		39,030,163	-		39,030,163	23,418,098	15,612,065
	Total		369,055,326	146,345,400	-	222,709,926	47,405,500	7,625,000	167,679,426	100,607,656	67,071,770

2.4 60-Day Circulation of D.C. Background Study

With the new legislation, as per Bill 73, there is a requirement that a D.C. Background Study be made available to the public at least 60 days prior to passage of the D.C. Bylaw. No other changes were made to timing requirements for such things as notice of the public meeting and notice of by-law passage.

This addendum report is being provided to the public on October 12, 2016, with an anticipated date for by-law passage of December 12, 2016, to meet the new requirement.

2.5 Area Rating

With the changes to the D.C.A., as per Bill 73, the Act now requires Council's consideration of area rating vs. the use of uniform charges (as detailed in section 3.1 of Addendum to the Town of Milton Development Charge Background Study, dated March 11, 2016). As the Town has always imposed a uniform rate for all services except stormwater management, it is recommended that the charges for Transit Services continue to be imposed based on a uniform charge.

2.6 Amendment to D.C. By-law 053-2016

With the changes to the D.C.A. for transit services, an amendment to By-law 053-2016 is required, the draft amending by-law is provided in Appendix A to this report. Changes to the by-law are to include the Transit D.C. in the schedule of charges applicable to new development.

2.7 Changes to the December 8, 2015 Background Study

The following summarizes the charges based on By-law 053-2016 and the charges now included under this addendum based on a residential single detached unit and per square foot for non-residential (based on the average). It is noted that the costing provided in these tables is provided in 2016 values, as By-law 053-2016 was passed in June, 2016, subsequent to the annual indexing of April 1, 2016 in accordance with the Town's current policies.

Residential (Single Detached) Comparison

	, ,	Calculated as per	
	Based on By-law	October 12, 2016	
	053-2016	Addendum No. 2	
Service	(2016\$)*	(2016\$)	Change
Municipal Wide Services:			
Services Related to a Highway	6,139	6,139	-
Public Works Operations	1,021	1,021	-
Fire Protection Services	399	399	-
Recreation	4,743	4,743	-
Parks Development	4,232	4,232	-
Library	717	717	-
Administration	430	430	-
Parking	293	293	-
Transit*	85	396	311
Total Municipal Wide Services	18,059	18,370	311
Area Specific Services:			
Stormwater Management - Sherwood Survey	204	204	-
Stormwater Management - Boyne Survey	74	74	-
Stormwater Management - Derry Green	-	-	-
Total Area Specific Services	278	278	-
Grand Total - Sherwood	18,263	18,574	311
Grand Total - Boyne	18,133	18,444	311
Grand Total - Derry Green	18,059	18,370	311

^{*} Transit as per By-law 087-2011 which expired in September, 2016

Non-Residential Retail (per ft².) Comparison

		Calculated as per	
	Based on By-law	October 12, 2016	
	053-2016	Addendum No. 2	
Service	(2016\$)*	(2016\$)	Change
Municipal Wide Services:			
Services Related to a Highway	4.78	4.78	-
Public Works Operations	0.34	0.34	-
Fire Protection Services	0.44	0.44	-
Recreation	0.29	0.29	-
Parks Development	0.26	0.26	-
Library	0.05	0.05	-
Administration	0.25	0.25	-
Parking	0.17	0.17	-
Transit*	0.06	0.24	0.18
Total Municipal Wide Services	6.64	6.82	0.18
Area Specific Services:			
Stormwater Management - Sherwood Survey	0.17	0.17	-
Stormwater Management - Boyne Survey	0.09	0.09	-
Stormwater Management - Derry Green	0.16	0.16	-
Total Area Specific Services	0.42	0.42	-
Grand Total - Sherwood	6.81	6.99	0.18
Grand Total - Boyne	6.73	6.91	0.18
Grand Total - Derry Green	6.80	6.98	0.18

^{*} Transit as per By-law 087-2011 which expired in September, 2016

Non-Residential Non-Retail (per ft2.) Comparison

		Calculated as per	
	Based on By-law	October 12, 2016	
	053-2016	Addendum No. 2	
Service	(2016\$)*	(2016\$)	Change
Municipal Wide Services:			
Services Related to a Highway	2.19	2.19	-
Public Works Operations	0.15	0.15	-
Fire Protection Services	0.20	0.20	-
Recreation	0.13	0.13	-
Parks Development	0.12	0.12	-
Library	0.02	0.02	-
Administration	0.12	0.12	-
Parking	0.08	0.08	-
Transit*	0.02	0.11	0.09
Total Municipal Wide Services	3.03	3.12	0.09
Area Specific Services:			
Stormwater Management - Sherwood Survey	0.11	0.11	-
Stormwater Management - Boyne Survey	0.05	0.05	-
Stormwater Management - Derry Green	0.07	0.07	-
Total Area Specific Services	0.23	0.23	-
Grand Total - Sherwood	3.14	3.23	0.09
Grand Total - Boyne	3.08	3.17	0.09
Grand Total - Derry Green	3.10	3.19	0.09

^{*} Transit as per By-law 087-2011 which expired in September, 2016

3. Process to Complete the D.C. By-law Process

The following provides the balance of the process to be undertaken in finalizing the addendum report and recommendations:

- Background Study Addendum No. 2 released to the public (October 12, 2016);
- Consultation with stakeholders (October 25, 2016);
- Public meeting advertisement placed in newspaper(s) in accordance with the requirements of the D.C.A., as amended;
- Public meeting of Council (November 7, 2016);
- Consideration of responses received prior to, at, or immediately following the public meeting;

- Council considers adoption of the addendum report and passage of the amended D.C. by-law (December 12, 2016);
- Notice in the newspaper(s) given of by-law passage/amendment within 20 days of passage;
- Last day for by-law appeal is 40 days after by-law passage; and
- Town make pamphlet available (where by-law is not appealed) within 60 days after the by-law amendment comes into force.

4. Recommendations

The information contained herein provides the additional information required as per the D.C.A., 1997, as amended. With this second Addendum report, the following recommendations are to be considered prior to approval of the amendment to By-law 053-2016:

- That whenever appropriate, request that grants, subsidies and other contributions be clearly designated by the donor as being to the benefit of existing development or new development, as applicable;
- 2) That the assumptions contained herein as an 'anticipation' with respect to capital grants, subsidies and other contributions be adopted;
- 3) That Council approve the capital project listings set out in Addendum No. 2 of the Development Charges Background Study dated October 12, 2016, subject to further annual review during the capital budget process;
- 4) That Council approve Addendum No. 2 to the Development Charges Background Study (as amended) dated October 12, 2016;
- 5) That Council determine no further public meeting is required; and
- 6) That Council approve the proposed D.C. charges for Transit Services and that By-law 053-2016 be amended to include Transit Services.

Appendix A

THE CORPORATION OF THE TOWN OF MILTON

BY-LAW NO. ____-2016

A BY-LAW TO AMEND DEVELOPMENT CHARGES BY-LAW NUMBER 053-2016 TO ESTABLISH A DEVELOPMENT CHARGE FOR TRANSIT SERVICE FOR THE TOWN OF MILTON

WHEREAS The Corporation of the Town of Milton (the "Town") has and will continue to experience growth through development;

AND WHEREAS development requires the provision of physical and other services by the Town;

AND WHEREAS Council desires to ensure that the capital cost of meeting growth related demands for, or the burden on, Town services does not place an undue financial burden on the Town or its taxpayers;

AND WHEREAS the *Development Charges Act, 1997*, S.O. 1997, c.27, as amended (the "Act") provides that the council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services:

AND WHEREAS the Town enacted By-law No. 053-2016 on June 27, 2016 pursuant to the Act:

AND WHEREAS By-law No. 053-2016 did not include updated development charges for transit:

AND WHEREAS a development charge background study has now been completed in accordance with the Act and the regulations thereto in respect of transit;

AND WHEREAS Council has before it a report entitled "Addendum No. 2 to: Town of Milton Development Charge Background Study" prepared by Watson and Associates Economists Ltd. dated October 12, 2016;

AND WHEREAS the Town has given notice of and Council has held a public meeting on the ___ day of ______, 2016, in accordance with the Act and the regulations thereto;

NOW THEREFORE the Council of The Corporation of the Town of Milton hereby enacts as follows:

1.	By-law Number	053-2016 is	hereby	amended by	y the fo	llowing	provisions:

- a) A new clause (I) is added to section 4 as follows: I) Transit;
- b) Delete the entire listing for "Existing By-law Amended", including clauses 51 and 52 in their entirety, and amend all subsequent section numbering accordingly;
- c) Schedule A to By-law Number 053-2016 is amended as follows:

At the end of the list under the heading "100% Eligible Services", after the entire listing for "Fire Protection", add the following words:

Transit Services

Transit Facilities

Transit Vehicles

Transit Bus Pads

Transit Equipment

d) Schedule B to By-law Number 053-2016 is amended as follows:

At the end of the list under the heading "Municipal Wide Services", after "Parking", add the following row:

Transit Services	396	213	143	284	124	0.24	0.11
------------------	-----	-----	-----	-----	-----	------	------

- e) Schedule 1 to By-law Number 053-2016 is hereby repealed in its entirety;
- f) Schedule 2 to By-law Number 053-2016 is hereby repealed in its entirety.
- Except as amended by this By-law, all provisions of By-law Number 053-2016 are and shall remain in full force and effect.

4. A certified copy of this By-law n Registry Office against all lands any land to which this By-law ap	s in the town and may be regis	
PASSED IN OPEN COUNCIL ON _	, 2016.	
	Gordon A. Krantz	Mayor
	Troy McHarg	Town Clerk

Appendix B Town of Milton Transit Development Charges Technical Appendix Dillon Consulting



TOWN OF MILTON

Transit Development Charges Technical Appendix

Table of Contents

1.0	Introduction				
2.0	Growth Forecasts				
3.0	Transit Network and System Capacity Improvements				
	3.1	Halton Region Transportation Master Plan	4		
	3.2	2013 Milton Transit Master Plan – Moving Milton Forward (2013-2017)	7		
	3.3	Milton Transit Today	10		
4.0	10-Year Capital Program for DC Application				
5.0	Approa	ach	14		
	5.1	Ridership Forecast	14		
	5.2	Apportioning Benefit	16		
6.0	Summary of Development Charge Calculations 2		22		

Appendix A: Ridership Forecast Details

Appendix B: Route-by-Route Analysis for Apportionment between Existing Population and New

Population



Introduction

1.0

The Town of Milton has experienced significant population and community growth over the last 15 years, and continues to be one of the fastest growing communities in Canada. Over the next ten years, this rapid growth in population and employment is expected to continue, moving from a population of 101,266 today to a population of 159,238 by 2025.

Through the application of Development Charges (D.C.), the development community contributes an appropriate share of infrastructure capital costs for necessary growth-related transit improvements over the ten-year planning period. D.C. are a tool for municipalities to ensure that "growth pays for growth". The Development Charges Act, 1997, as amended (D.C.A.) regulates when and how municipalities may collect D.C.

The provincial government recently enacted changes to the D.C.A. with direct implications for how the Town plans and funds future transit services. Historically, transit services could only be funded through D.C. in the following manner:

- Service costs could only be recovered at up to 90% of total capital cost due to a D.C.A. mandatory 10% reduction of eligible growth related capital cost applied to transit services; and,
- Growth-related capital expenditures for transit infrastructure were limited to expenditures that supported maintaining historic service levels. This was calculated based on the average level of service over the prior ten years.

Changes in the D.C.A., which came into effect in January 2016, have resulted in alterations to the Town's growth-related transit funding mechanisms. These changes are summarized as follows:

- The mandatory 10% reduction of eligible growth-related capital costs has been removed for transit services, allowing growth related transit services to be 100% recoverable through D.C.
- The introduction of planned levels of services for transit, with the prescribed method and
 criteria to establish the service level (outlined in O.Reg. 428/15). This allows municipalities to be
 forward-looking in estimating future level of service for transit D.C. calculations and apportion
 them to growth accordingly. It also included new highly prescriptive reporting requirements
 associated with the background reporting for D.C.

The new reporting requirements that need to be outlined in the D.C. background study related to transit include:

 The calculations that were used to prepare the estimate for the planned level of service for transit services;



- 2
- An identification of the portion of the total estimated capital costs related to the transit service
 that would benefit the anticipated development over the ten-year D.C. period and after the tenyear D.C. period;
- An identification of the anticipated excess capacity that would exist at the end of the ten-year
 D.C. period;
- An assessment of ridership forecasts for all modes of transit services proposed to be funded, categorized by development types and whether the ridership will be from existing or planned development; and,
- An assessment of the ridership capacity for all modes of transit services proposed to be funded by the D.C.

The Town of Milton's current D.C. By-law will expire in the fall of 2016 and the Town is currently preparing a new by-law. The purpose of this memo is to identify the transit expenditures that can be funded through D.C. in the Town's 2016 D.C. Background Study for transit prepared by Watson and Associates.



2.0 Growth Forecasts

The Town of Milton has experienced very strong population growth in the last 15 years. Between 2001 and 2011, the Town was one of the fastest growing communities in Ontario and Canada, with a census population of 31,495 in 2001, growing to 84,370 in 2011 (an increase of 52,875 residents or 167% over the 2001 population). This high rate of growth is unique for an Ontario community and high growth is expected to continue into the future.

The Region of Halton's Official Plan indicates Milton will grow to 238,000 people and 114,000 jobs by 2031¹. The majority of this population growth is expected in the greenfield community of the Boyne Secondary Plan Area (approximately 86% of the population growth), followed by the Sherwood (9%) and Bristol Secondary Plan Area (4%). The majority of employment growth expected in the Derry Green Corporate Business Park. **Table 2-1** presents the population and employment forecasts for the ten-year D.C. period.

Table 2-1: Town of Milton Population and Employment 2016-2025

	2016 Population	2016 Employment	2025 Population	2025 Employment
Town of Milton	104,217	39,791	159,238	59,231



¹ Region of Halton Official Plan (2009), Table 1: Population and Employment Distribution

Transit Network and System Capacity Improvements

The local transit system currently operates a good reliable service, six days a week, with a focus on commuters to the GO Train station as well as school trips. A separate specialized system is also offered for persons with disabilities that are unable to use the conventional service. In recent years, Milton Transit has experienced some of the highest ridership growth rates in Canada; up 66 percent between 2001 and 2011. This was due to recent improvements in service reliability, a redesign of the route structure, the addition of new innovative service concepts (e.g. the GO Drop-Off service), the introduction of new routes into newly developing areas, and the extension of service on Saturdays. New development in Milton has also become more "transit supportive" in response to a proactive effort by the Town to create a more sustainable community that can accommodate greater mobility options. This is reflected in Milton's Official Plan policies and Transit Supportive Development Guidelines.

3.1 Halton Region Transportation Master Plan

3.0

The Halton Transportation Master Plan (H.T.M.P.), titled "A Road to Change", was completed in 2011 and provides the strategies, policies and tools for the development of a balanced and sustainable transportation system including all modes of travel (automobile, transit, cycling and walking). The H.T.M.P. supports the objectives of Sustainable Halton and guides the development of the Regional transportation system. It helps define the Region's role in the establishment of the broader transportation system serving Halton.

Specific to transit, the H.T.M.P. established Region-wide policy mode share targets of 5% by 2016, 10% by 2021, 15% by 2026 and 20% by 2031 for internal and external trips in the peak period (4:30 – 7:30 PM); see **Table 3-1**.

Table 3-1: Excerpt from H.T.M.P. Table 7.1 - PM Peak Period Transit Mode Share Targets by Horizon Year

Horizon	Transit I	Mode Share Target		1
Year	Internal Trips	External Trips	Total	

Horizon	rizon Transit Mode Share Target			
Year	Internal Trips	External Trips	Total	
2016	2%	7%	5%	
2021	6%	20%	10%	
2026	8%	30%	15%	
2031	11%	30%	20%	

Note: 2006 Transportation Tomorrow Survey (T.T.S) data was used to support the H.T.M.P. model.



The Halton TMP developed an inter-municipal higher-order transit service concept to support the transit mode share policy target by 2031 (**Figure 3-2**). Three types of corridors were considered, each providing a different level of transit service, including:

- Transit in reserved rights-of-way;
- Transit in semi-inclusive/exclusive rights-of-way; and
- Corridors with transit priority.

The H.T.M.P. did not provide any indication of who would operate these routes. Since many of these routes also do not connect to Milton, they were not considered to be applicable to the current Milton Transit D.C. By-law. Milton is presently undertaking its own Transportation Master Plan which will develop Milton specific transit mode share targets. These will be in line with proposed mode share targets that are being developed as part of the H.T.M.P. update. This information is not yet available and therefore is not considered in this D.C. review.

As the H.T.M.P. strategic policy targets were used in the Region's travel demand modeling but were not intended to support the generation of transit ridership forecasts at the municipal level, have not been operationalized nor implemented in Milton through the capital planning process, they have not been carried forward for use in this D.C. technical appendix for Milton Transit.



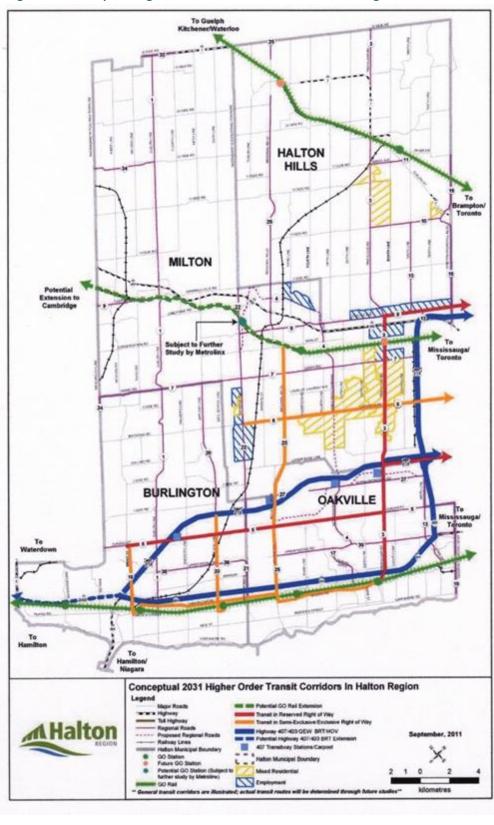


Figure 3-2: Conceptual Higher Order Transit Corridors in Halton Region





3.2 2013 Milton Transit Master Plan – Moving Milton Forward (2013-2017)

The Milton Transit Master Plan (M.T.M.P.), titled "Moving Milton Forward", was completed in 2013 and reviewed Milton's conventional and specialized transit services in context of planned growth and recommended a transit strategy for the following five years (2013-2017). A ten-year transit service concept to 2023 was developed as part of the M.T.M.P. (**Figure 3-3**). In order to implement this service concept, the transit fleet would need to be increased from 10² buses to 29 buses by 2023. This averages almost two buses per year over the life of the plan.

The M.T.M.P. assumed the development of Education Village (located west of Tremaine Road and south of Derry Road), including a post-secondary campus which would accommodate 5,000 to 10,000 undergraduate students.

The M.T.M.P. proposed changes to existing routes, as well as new routes to meet the demands of a growing population and to increase overall transit ridership within Milton. These included:

- Modification of existing routes (Route 2, 3, 4, 5) to better service demand within the existing urban area of Milton;
- Conversion of Route 1A/B Industrial into two Business Park Shuttles with flexible routing in opposite directions;
- New Route 7 Harrison providing corridor service on Derry Road to the Scott neighbourhood;
- New Route 8 Willmott providing service south of Derry Road, east of Bronte Road;
- New Route 9 Bronte connecting the southwest Boyne Survey area and the Milton GO Station;
- New Route 10 Boyne connecting the Boyne Survey area and Milton GO Station via James Snow Parkway;
- Removal of Trans-Cab service in the Boyne Survey area, with the introduction of service from Routes 9 and 10:
- New GO Connect Drop off service to provide direct connections to GO Train services at the Milton GO Station;
- New Route 11 connecting Education Village to the Milton GO Station³;
- New Kelso / Glen Eden Seasonal Route serving the Glen Eden Park and Kelso Conservation Area;
- New Derry Green Employer Shuttle providing weekday morning and afternoon peak service through the Derry Green Business Park, connecting to the Milton GO Station;
- New Milton-Mississauga Inter-municipal Service connecting the Milton GO Station to Mississauga Transit routes at Meadowvale and Brampton Transit Züm services at Lisgar GO Station; and

³Since the time of the M.T.M.P., Education Village has been deferred. All improvements made solely to serve Education Village were not included within the 2016 capital forecast and have been removed from the service plan for this study.



²At the time of the Transit Master Plan the Town had 10 buses in its fleet.

• New Milton-Oakville Inter-municipal Service connecting Milton GO station to the Palermo Village Transit Terminal in Oakville.

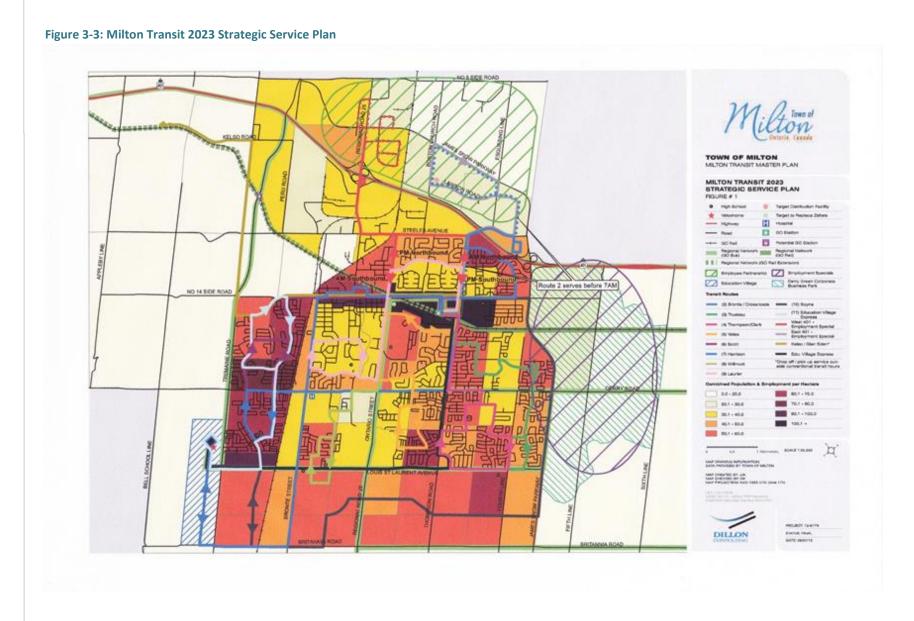
The M.T.M.P. also proposed several service improvements, which included:

- A service span increase to seven days of the week;
- An extension of evening service on weekdays and Saturdays;
- Introduction of Sunday service;
- Increased headway on Routes 9 and 10 based on population growth in the Boyne Survey Area;
 and
- Increased midday and Saturday headway on all base routes.

The M.T.M.P. proposed an Intelligent Transportation Systems (I.T.S.) strategy that focussed initially on an onboard stop announcement system through an Automatic Vehicle Location system that is GPS based. Other priorities include real-time bus stop arrival information for riders, an operational system to monitor schedule adherence to enhance incident management and service reliability and implementation of transit signal priority.

The M.T.M.P. also recommended the development of a new transit facility. The preferred service delivery strategy remains as a contracted operation while a new transit facility was recommended to accommodate the projected growth in fleet and allow for indoor storage of vehicles. A number of cost scenarios were provided for the transit facility, including a cost to redevelopment of the Nipissing Yard (the intended site for the transit facility) and alternative costs for a new transit facility (provided a 50-bus facility, expandable to a100-bus facility). There was a strong emphasis for the development of the Mobility Hub at the Milton Central GO Station as a means to enhance local transit ridership and meet other quality of life goals.





Town of Milton

Transit Development Charges Technical Appendix September 30, 2016 – 16-3891



3.3 Milton Transit Today

A number of recommendations from the M.T.M.P. were implemented between 2013 and 2016. These include:

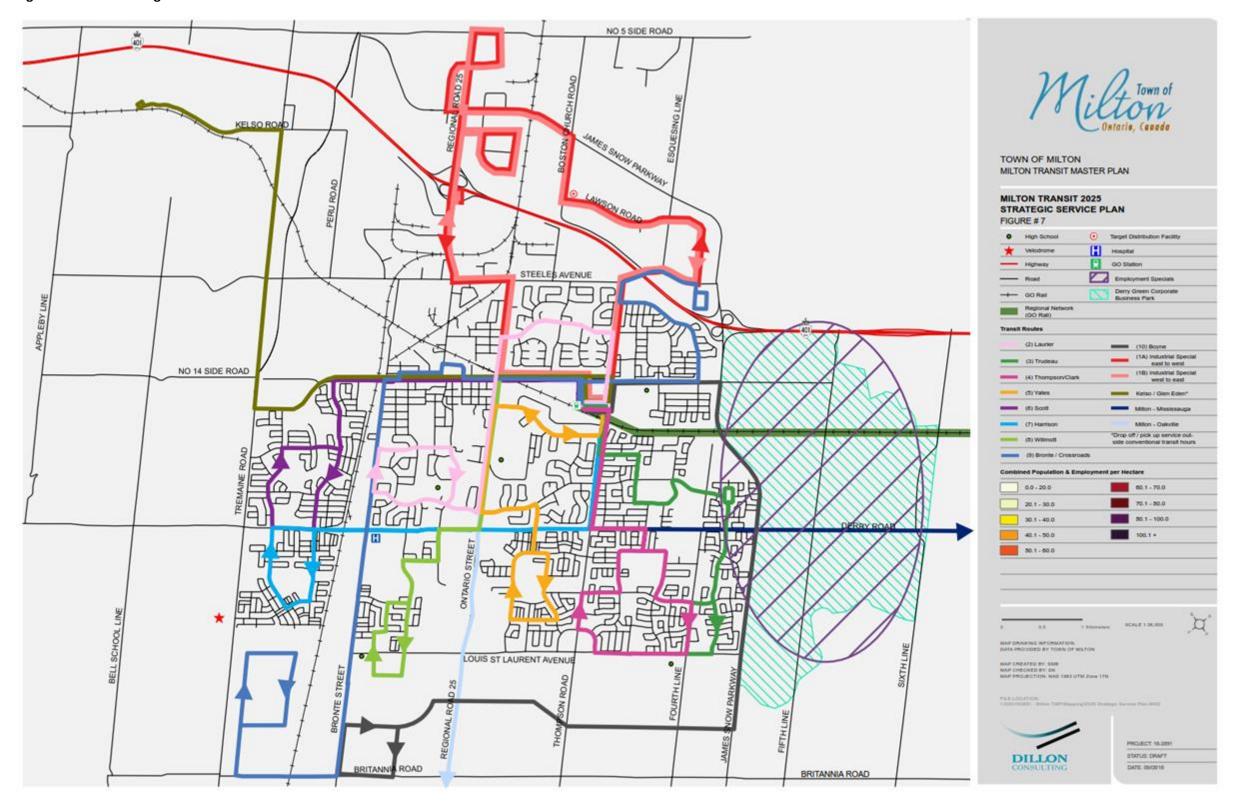
- Modification of existing route structure;
- Introduction of Route 7 Harrison;
- Introduction of Route 8 Willmott;
- Introduction of Milton GO Connect Services;
- Introduction of Saturday Service;
- Introduction of Kelso Bus;
- Improvement in peak period service frequency from 30 min to 15 min on Route 6 and 7; and
- Expansion of Milton Specialized Transit service.

Based on these modifications, Milton Transit currently operates eight routes and a number of special services. Over the next ten years, the Town is planning to add six additional routes/services to accommodate growth (Route 9 and 10, GO Drop off service 30, Derry Green Industrial Shuttle and Mississauga and Oakville inter-municipal connections). In addition, Milton Transit will be extending evening service on all conventional fixed routes and introducing limited Sunday service on all routes.

Figure 3-1 presents the 2025 Strategic Service Plan used for this Transit D.C. The need and justification for the planned transit service improvements have been documented in the M.T.M.P. This plan represents a slightly modified version of the M.T.M.P. 2023 Strategic Plan as the ten-Year Capital Forecast assumed Education Village will not be in place by 2025, therefore, certain modifications were made to the route structure. Year-over-year changes in development patterns and travel behaviour have also resulted in modifications to the strategic plan on an annual basis. This is a typical process that all transit agencies go through that are experiencing growth.



Figure 3-1: 2025 Strategic Service Plan







10-Year Capital Program for D.C. Application

The 2016 Town of Milton budget was approved by Council on February 22, 2016. It includes annual costs under three categories for each year between 2016 and 2025, as presented in **Table 4-1**.

Table 4-1: 10-Year Transit Capital Forecast

4.0

	Total -2025 Capital Forecast
Transit	
Transit Study	\$356,126
Transit Facility	\$11,278,848
Transit Bus Pads	\$248,000
Automatic Vehicle Location	\$513,659
Transit Bus Stop-Retrofit	\$198,022
Sub-total Transit	\$12,594,655
Transit Fleet Replacement	
Transit Bus Non-Growth: Refurbishment	\$1,156,899
Transit Bus Non-Growth: Replacement	\$7,980,082
Transit Support Vehicles – Replacement	\$115,046
Sub-total Transit Fleet Replacement	\$9,252,027
Transit Fleet Growth	
Transit Bus (18 buses ⁴)	\$9,720,000
Sub-total Transit Fleet Growth	\$8,394,260
TOTAL 10-YEAR TRANSIT CAPITAL FORECAST	\$30,240,942

The ten-year transit capital forecast was built on the M.T.M.P. and includes the introduction of six additional routes/services to accommodate growth (Transit Route 9, 10, 30, Derry Green, Mississauga and Oakville). Required peak period vehicle requirements and additional spare capacity was determined for each of these new routes. The Transit Capital Program includes one to two expansion buses per year, a new transit facility (2018-2020) to accommodate the increased bus fleet and Automated Vehicle Location and automated bus stop announcements in 2016. It should be noted that Milton Transit intends to implement additional technology recommended in the M.T.M.P. but has not budgeted for



⁴ This includes both peak period buses and spares associated with new transit routes.

anything additional at this time. Also, no location has been selected for the transit facility at this time and no site plan has been developed.

5.0 Approach

The Town's ten-year Transit Capital Forecast, which builds on the transportation program identified from the M.T.M.P., demonstrates the planned transit level of service for Milton Transit.

The D.C.A. indicates that:

- transit must be a discrete service, which precludes treating transportation services such as roads and transit together;
- no portion of the service that is intended to benefit anticipated development after the ten-year period may be included in the estimate;
- no portion of service that is anticipated to exist as excess capacity at the end of the ten-year period may be included in the estimate; and
- requires a reduction in the eligible capital expenditures based on the extent to which an increase in service benefits existing development.

The 2015 Milton D.C. Background Study, conducted by Watson and Associates, provided population and employment growth forecasts for the Town of Milton between 2016 and 2025. Although population and employment growth could be used to determine apportionment of benefit, ridership forecasts were determined to be a more appropriate variable to allocate benefit under the updated D.C.A. The following section describes the methodology to prepare the ridership forecast for Milton Transit.

5.1 Ridership Forecast

The ridership forecast used for this D.C. analysis was built on updated 2016 ridership forecasts provided by Milton Transit and built on the methodology used to calculate ridership to 2017 in the 2013 M.T.M.P. The 2025 network, previously presented in **Figure 3-1**, as well as the 2025 Capital Budget program was used to provide a forecast to the 2025 time horizon.

Minor adjustments were made to the recommendations in the M.T.M.P. to account for the differences in current service and planned 2023 service, including the removal of the Education Village Express route, route structure and frequency adjustments to Route 9 and 10, frequency adjustments to Route 6 and 7, additional service to Derry Green Business Pak and the re-introduction of the GO Connect service (Route 30). No changes were made to the peak period transit bus requirements identified in the Ten-Year Capital Program.



This analysis was focused on PM peak period ridership, as this is the indicator used to identify the need for additional capacity. The PM peak period was defined as 4:30pm to 7:30pm. This is the same period used in the demand forecasting model in the 2010 Halton Transportation Master Plan (H.T.M.P.).

The methodology to estimate increased Milton Transit PM peak period ridership to 2025 included the following steps:

- 1. Establish base level ridership.
- 2. Confirm 2025 Route Network and Service Levels.
- 3. Estimate increase in internal transit trips due to population and employment growth, using trip generation rates.
- 4. Attribute increased ridership due to population and employment growth to each route.
- 5. Estimate increases in ridership on internal Milton Transit routes due to other factors.
 - a. Service frequency changes.
 - b. Span of service increase.
 - c. Impact of off-peak service improvements during PM peak periods.
 - d. Normal ridership growth.
 - e. For new routes, growth in ridership over corridor with parallel existing route.
- 6. Identify the existing increase in ridership on new Inter-municipal routes.
- 7. Sum all increases in PM peak period ridership by route to estimate total increase in PM peak period ridership from 2016 to 2025.

Appendix A provides additional details on the process and key assumptions and PM peak period transit trips by route. **Table 5-1** presents a summary of PM peak period ridership forecasts for Milton Transit.

Table 5-1: Summary of PM Peak Period Milton Transit Ridership Forecast

Mode Share	2016	2025				
Milton Transit within Milton						
PM Peak Period Transit Trips	378	1,405				
PM Peak Period Total Trips	43,329	69,473				
Transit Mode Share	0.9%	2.0%				
Milton Transit within Milton and to/from South Halton						
PM Peak Period Transit Trips	378	1,735				
PM Peak Period Total Trips	54,916	85,169				
Transit Mode Share	0.7%	2.0%				
Milton Transit- All GTHA (external and internal)	Milton Transit- All GTHA (external and internal)					
PM Peak Period Transit Trips	378	1,944				
PM Peak Period Total Trips	95,752	143,663				
Transit Mode Share	0.4%	1.4%				

^{*} Numbers in table have been rounded



5.2 Apportioning Benefit

The Town of Milton is introducing six additional transit routes in the 10-year D.C. period, largely to accommodate Greenfield development in new residential growth areas (Transit Route 9, 10, 30), to accommodate Greenfield development in new employment growth areas (Derry Green employment shuttle) and to provide better connections to key inter-municipal destinations (Mississauga and Oakville Transit Routes). The D.C.A. requires that the increased need for service be reduced by the extent to which a service would benefit existing development. To determine the benefit to existing, the methodology used to establish the bottom-up transit ridership forecast was used to consider the allocation of ridership between existing and new population. The changes in ridership due to existing and new population were estimated based on the following:

- Allocation of ridership growth from new population: Any ridership growth calculated that is a
 result of new population growth was 100 percent allocated to 'growth'. This includes both
 population growth in new greenfield areas as well as new intensification in the existing urban
 area.
- Determine length of route within existing versus growth areas: The length of the route within the existing urban area versus newly developing area was calculated. For example, Route 2 is 100 percent in the existing urban area while Route 10 is only 20 percent in the existing urban area. This calculation was used to portion the forecasted ridership growth as a result of service level improvements to existing population versus new population growth.
- Determine allocation of ridership growth from service improvements: Using the above calculated split of each route between the existing urban areas and new growth areas, ridership growth from service improvements to existing routes (service frequency, span of service, general improvements) was proportionally allocated to account for benefit to 'growth' versus 'existing'. As an example, Route 5 is 100 percent within the existing urban area; therefore, 100 percent of the ridership growth from service frequency enhancements, span of service enhancements and general service improvements will benefit existing. Conversely, 67 percent of Route 9 is within the existing urban area, therefore 67 percent of ridership growth that results from service frequency, span of service or other general service enhancements are allocated to 'non-growth'.
- Determination of allocation of ridership from employment routes and Inter-municipal routes: For routes that service the employment lands and provide connections to Mississauga and Oakville, a different method of allocation was used. It was assumed that existing residents would benefit equally from these routes as new residents. Therefore, the ratio of existing versus new residents to 2025 was used to calculate the benefit to existing population versus growth.

Ridership growth allocated to each route that benefits the existing versus new population was totalled to determine an overall system-wide allocation to 'growth' versus 'non-growth'. This is illustrated in **Table 5-2** below. The Transit Fleet Growth costs that are indicated in the Town's capital program are associated with additional vehicles required to accommodate growth during the peak period for Transit



Routes 9, 10, 30, Derry Green, Mississauga and Oakville. **Table 5-3** below presents the benefit of ridership growth allocated to each route for only those routes that include growth-related capital costs. **Appendix B** provides additional details on the route-by-route analysis used to apportion ridership between existing population and new population.

Table 5-2: Allocation of Ridership Growth Benefiting Existing Population and New Population

Route	2016-2025	Ridership Growt	th Apportionment	Percen	t Growth
	Ridership Growth	Benefit to Growth	Benefit to Existing	Benefit to Growth	Benefit to Existing
Route 1A	3.7	1.6	2.1	42%	58%
Route 1B	3.7	1.6	2.1	42%	58%
Route 2*	-14.1	0	-14.1	0%	0%
Route 3	19.9	13.9	5.9	70%	30%
Route 4	37.4	31.4	6.1	84%	16%
Route 5	15.1	10.7	4.4	71%	29%
Route 6	19.2	2.7	16.4	14%	86%
Route 7	46.5	26.7	19.8	57%	43%
Route 8	21.5	17.3	4.2	80%	20%
Route 9	161.8	132.6	29.2	82%	18%
Route 10	485.7	480.8	4.8	99%	1%
Route 30	8.9	8.9	0.0	100%	0%
Route 31	1.2	0.6	0.6	49%	51%
Route 32	1.5	0.8	0.7	53%	47%
Kelso	9.2	7.5	1.6	82%	18%
Derry Green	205.6	74.5	131.1	36%	64%
Mississauga	208.6	76.0	132.7	36%	64%
Oakville	330.7	120.4	210.3	36%	64%
TOTAL	1,566.1	1,008.0	558.2	64%	36%

Numbers have been rounded



^{*}Note: Route 2 shows a decrease in ridership due to a route restructuring. This ridership has been transferred to Route 9 which will replace Route 2 on a portion of the Main Street and Bronte Road corridors.

Route	2016-2025	Ridership Growt	th Apportionment	Percent Growth		
	Ridership Growth	Benefit to Growth	Benefit to Existing	Benefit to Growth	Benefit to Existing	
Route 9	161.8	132.6	29.2	82%	18%	
Route 10	485.7	480.8	4.8	99%	1%	
Route 30	8.9	8.9	0.0	100%	0%	
Derry Green	205.6	74.5	131.1	36%	64%	
Mississauga	208.6	76.0	132.7	36%	64%	
Oakville	330.7	120.4	210.3	36%	64%	
TOTAL	1,401.4	893.2	508.2	64%	36%	

Table 5-3: Allocation of Ridership Growth Benefiting Existing Population and New Population for Routes with Transit Fleet Growth in Capital Program

Numbers have been rounded

Benefits due to the transit facility have been calculated separately, using a different methodology from that used to apportion benefits due to routing and service changes between existing and growth populations. The Watson report should be referenced for all calculations related to the transit facility.

5.3 In-Period and Post-Period

The D.C.A. requires that no portion of the service that is intended to benefit anticipated development after the 10-year D.C. period nor to exist as excess capacity at the end of the 10 year D.C. period be included within the D.C.

There are two elements of capacity: vehicle capacity and service level capacity. Vehicle capacity is based on the number of seats and room for standees on a transit vehicle. This is a fixed unit based on the size of the vehicle. Transit agencies typically purchase one or two standard bus units to reduce overall maintenance and driver change-over costs, therefore, there is little ability to adjust vehicle capacity to meet demand.

Service level capacity is based on the number of vehicles operating on a route per hour (frequency of service). Frequency can be adjusted by a transit agency to reflect the demand, typically based on clock-face intervals (bus operating every 60, 30, 20, 15, 10 and 5 minutes). There are limitations as to adjustment factors since transit routes operate as part of a system and there is a need to ensure connections are made at a central terminal to ensure effective operations and customer satisfaction.

For the purposes of this assessment, service level capacity was used to calculate In-Period and Post-Period benefit. This methodology treats a bus as a whole unit when determining the capital cost to be apportioned to the In-Period or Post-Period benefit. There are two reasons why vehicle capacity was not used:



- 1. Milton Transit does not collect data on vehicle load. Vehicle load is a measure of the number of passengers on board a transit vehicle at any given point in time. Without this data, there is no means to understand whether a bus has reached a crush load or whether there are empty seats.
- 2. If a service level trigger is reached and additional frequency is required to accommodate demand, the entire bus is needed to accommodate this demand, whether the bus is full or not. There is limited ability to right-size a bus to limit the amount of excess vehicle capacity that results in a service change.

By using service level capacity to calculate In-Period and Post-Period Benefit, a transit vehicle is treated as a whole. If the planned 2025 service frequency meets the trigger to move to the proposed frequency, than the capital cost of the entire vehicle(s) should be included as In-Period benefit. If the planned 2025 service frequency does not meet the trigger for a service enhancement, then the entire transit vehicle(s) required to achieve the planned service frequency should be considered a Post-Period benefit.

To calculate the In-Period and Post-Period benefit for Milton Transit, Milton Transit's council approved Transit Service Standards were used as a base. The following service standards apply:

- Provide a minimum headway of 30 minutes on all local routes serving residential areas during weekday peak period
- Increase frequency when vehicle passenger capacity is consistently exceeded
- Reduce frequency when less than 10 boardings per revenue service hour on local fixed-routes is consistently reached, maintaining minimum service standards

The services standards document only provides a minimum frequency for local fixed-routes and a trigger for service reduction (if too much service is being provided).

To assess the post-period benefit, a trigger was also determined to assess whether the service frequency proposed is required. As mentioned above, due to data collection limitations, the Town of Milton does not have information on travel patterns to establish peak load of its fleet. The ridership forecasts presented in Section 5.2 indicate the number of riders on a bus during the peak period, however there is no information available on the peak load (occupancy relative to capacity) of a single vehicle at any given time.

As part of the D.C. calculations, boardings per revenue vehicle hour was used to consider whether the planned service frequency was necessary to accommodate demand. A trigger of 45 boardings per revenue vehicle hour was used as a trigger for service level increases. While this standard is not identified in Milton Transit's service standard document, use of boardings per revenue hour is a common standard used by other transit systems to identify a trigger for service improvement.



The target of 45 boardings per hour is considered conservative for a number of reasons:

- 1. Milton Transit fixed-routes currently average approximately 11 boardings per revenue vehicle hour during the PM peak period;
- 2. Milton will face pressures to improve service to reach the higher mode share targets identified in the Halton Transportation Master Plan.

It is important to note that this is believed to be a conservative trigger, as none of the current routes are operating close to this capacity at present⁵.

Using this methodology, **Table 5-4** presents the forecasted 2025 boardings per revenue vehicle hour for each of the routes with transit fleet growth in the capital program based on the PM Peak Headway that is proposed as part of the Milton Transit Master Plan.

Table 5-5: Boardings per Revenue Vehicle Hour based on Proposed PM Peak Headway

Transit Route	PM Peak Headway	Boardings	Revenue Hours	Boardings per Revenue Vehicle Hour	Trigger for Service Reduction (10 B/RVH)
9	30	180	6	30	10
10	15	539	12	45	10
30	30	9	2	4	N/A
Derry Green	15	228	6	38	10
Mississauga	30	232	9	26	10
Oakville	30	367	6	61	10

⁵ The highest existing boardings per revenue vehicle hour for the Town of Milton's transit routes is 16 boardings per revenue vehicle hour. See Appendix A Table A-7 for more information.



Table 5-5: Boardings per Revenue Vehicle Hour based on Alternative PM Peak Headway (Lower Service Level)

Transit Route	PM Peak Headway	Boardings	Revenue Hours	Boardings per Revenue Vehicle Hour	Trigger for Service Increase (45 B/RVH)
9	60	140	3	46.5	45
10	30	420	6	70.1	45
30	N/A	N/A	N/A	N/A	N/A
Derry Green	30	178	3	59.4	45
Mississauga	90	177	3	59.1	45
Oakville	60	301	3	100.2	45

As illustrated in the two tables above, all of the proposed new routes exceed the minimum boardings per revenue vehicle hour trigger (10 boardings per revenue vehicle hour).

The exception is the Route 30 (the GO Bus Drop-off Shuttle proposed to be in place in the west Boyne Survey area). GO Drop-off services complement existing fixed route services and are designed to ensure passengers from the GO Train are able to connect with a Milton Transit bus within 5 minutes of a GO Train arrival. These are in place in neighourhoods where the Milton Transit frequency is every 30 minutes as a more cost effective solution than providing 15 minute service using a 40 foot vehicle. A smaller mini-bus is used for this service, therefore the minimum boardings per revenue vehicle hour standard does not apply. As a result, the Route 30 GO Drop off service is considered an In-Period benefit since it is being used as a more cost effective service offering to provide connections from the GO Train until such time that 15 minute service is justified on Route 9.

In order to confirm the need for the proposed service level, **Table 5-5** illustrated the projected 2025 boardings per revenue vehicle hour that would be achieved if the service frequency were reduced. This is compared against the trigger to determine Post-Period benefit. As illustrated, Routes 9, 10, Derry Green and Oakville exceed the trigger of 45 boardings per revenue vehicle hour if the service frequency were reduced. This suggests that the planned service frequency on these routes should fall within the In-Period benefit.

The Mississauga Route only meets the minimum 45 boardings per revenue vehicle hour standard if the service frequency is reduced to every 90 minutes. To operate the planned 30 minute service, 3 peak vehicles are required. This analysis suggests that for the planned 30 minute service, the capital cost of one vehicle should be considered In-Period Benefit while the capital cost of two vehicles should be considered Post-Period benefit.



Summary of Calculations

6.0

The following presents the calculations used in the Milton Transit 2016-2025 D.C.

Apportionment of Benefit to Existing and Growth-Related Calculation in-period (Transit Vehicles)

Ridership growth on transit routes which have growth-related capital costs were included in the analysis (see Table 5-3).

Increase in PM peak hour transit trips for existing base (2016-2025) = 508.2 (see Table 5-3) Increase in PM peak hour transit trips for new growth (2016-2025) = 893.2 (see Table 5-3)

Benefit to existing (2016-2025) = (508.2 / (558.2 + 1,401.4)) = 36% of in-period D.C. eligible costs D.C. eligible growth related benefit (2016-2025) = (1893.2 / (558.2 + 1,401.4)) = 64% of in-period D.C. eligible costs

These reflect the benefits arising from buses only. The benefits arising from the new transit facility were calculated separately, using a different methodology.

In-Period D.C. Eligible Costs and Post-Period Benefit

For all other routes except the Mississauga route, the boardings per revenue vehicle hour justify the proposed service levels in the Milton Transit Master Plan, as presented in **Table 5-4**. The Mississauga Route will only justify 90 minute headway service for 2025, based on the boardings per revenue vehicle hour, as shown in **Table 5-5**. Therefore the Mississauga route has a post-period benefit of two buses. Costs of two buses should be allocated to the future Milton Transit D.C., post 2025.



Appendix A: Ridership Forecast Details



Table A-1: Existing Daily Boardings By Route

Route	Weekday	AM Peak Period	Midday	PM Peak Period	Evening	Saturday
1A/B Industrial	60	31	26	4	0	15
2 Main	422	101	255	65	0	106
3 Trudeau	225	69	108	47	1	56
4 Thompson/Clark	216	72	96	47	0	54
5 Yates	128	39	57	31	1	32
6 Scott	206	69	78	58	1	51
7 Harrison	217	69	86	61	0	54
8 Wilmot	139	38	67	33	0	35
30 West Zone Drop-Off	12	0	0	9	3	-
31 Central Zone Drop-Off	8	0	0	5	3	-
32 East Zone Drop-Off	8	0	0	5	3	-
50 School Special	17	6	10	0	0	-
51 School Special	17	7	10	0	0	-
52 School Special	24	0	24	0	0	-
TOTAL	1,698	502	817	366	12	403

Table A-2: Proposed 2025 Milton Transit Service Plan

Route		Wee	kday	Satu	rday	Sunday	
	AM Peak	Midday	PM Peak	Evening	Base	Evening	Base
Route 1A	45	45	45				
Route 1B	45	45	45				
Route 2E	30	30	30	60	30	60	60
Route 2W	30	30	30	60	30	60	60
Route 3	30	30	30	60	30	60	60
Route 4	30	30	30	60	30	60	60
Route 5	30	30	30	60	30	60	60
Route 6	15	30	15	60	30	60	60
Route 7	15	30	15	60	30	60	60
Route 8	30	30	30	60	30	60	60
Route 9	15	30	15	60	30	60	60
Route 10	15	30	15	60	30	60	60
Derry Green	15	30	15				
GO Drop Off (30)	30		30				
GO Drop Off (31)	30		30				
GO Drop Off (32)	30		30				
Kelso		30	30				
Mississauga Express	30	30	30				
Oakville Express	30	30	30				



Table A-3: Peak Period Vehicle Requirements by Horizon Year

Route	Peak Period Vehicle Requirements			
	2016	2025		
Route 1A	1	1		
Route 1B	1	1		
Route 2	2	2		
Route 3	1	1		
Route 4	1	1		
Route 5	1	1		
Route 6	2	2		
Route 7	2	2		
Route 8	1	1		
Route 9	0	2		
Route 10	0	4		
Derry Green	0	2		
Route 30	0	1		
Route 31	1	1		
Route 32	1	1		
Kelso	0	0		
Mississauga	0	3		
Oakville	0	2		
TOTAL	14	28		

Table A-4: Trip Generation Rate for Residential Uses

Unit Type	Peak Hour Trips/Unit
Single/Semi	1
Multiple	0.78
Apartment	0.62

Table A-5: Trip Generation Rate for Employment Uses

Land Use Type	Peak Hour Trips/1000 sqft
Industrial Park	0.84



Table A-6: PM Peak Period Trips By Route

Route	PM Peak P	2025 Ridership Growth	
	<u>2016</u>	<u>2025</u>	<u>Total</u>
Route 1A	1.8	5.5	3.7
Route 1B	1.8	5.5	3.7
Route 2	65.5	51.3	-14.1
Route 3	47.4	67.3	19.9
Route 4	47.2	84.6	37.4
Route 5	31.1 46.2		15.1
Route 6	57.7	76.9	19.2
Route 7	65.8	112.3	46.5
Route 8	37.1	58.6	21.5
Route 9	0.0	161.8	161.8
Route 10	0.0	485.7	485.7
Route 30	0.0	8.9	8.9
Route 31	5.1	6.3	1.2
Route 32	5.5	7	1.5
Kelso	12.0	21.2	9.2
Derry Green	0	205.6	205.6
Mississauga	0	208.6	208.6
Oakville	0	330.7	330.7
TOTAL	378	1,944.1	1,566.1

Table A-7: Existing PM Peak Boardings per Revenue Vehicle Hour

Route	PM Peak		
	B/RVH		
Route 1A	4		
Route 1B	4		
Route 2	11		
Route 3	16		
Route 4	16		
Route 5	10		
Route 6	13		
Route 7	11		
Route 8	12		
Route 30	4		
Route 31	3		
Route 32	3		
Kelso	4		



Appendix B: Route-by-Route Analysis for Apportionment between Existing Population and New Population



Table B-1: Details on Existing / Growth Benefits Attribution

The table below summarizes the details and rationale behind the allocation of ridership between existing and new population/employment. The portion of the total ridership increase due to growth includes ridership increase due to population includes ridership increase due to service improvements, scaled to the proportion of the route length within the growth area. The portion of the ridership increase due to existing population includes ridership increase due only to service improvements, scaled to the proportion of the route length within the existing urban area

Route	Route Description	Key Factors Informing Existing / Growth Benefits Attribution	Percent Benefit to Growth	Percent Benefit to Existing
Route 1A/B Industrial	 Weekday service only to the 401 Industrial Business Park area in north Milton during the weekday morning, midday and afternoon periods only, via the Milton GO Station 45 min peak frequency per direction 	 New employment in this area with benefit both new population (36% of 2025 population) and existing population (58% of 2025 population) 	42%	58%
Route 2	 Service between the Milton District Hospital and Milton Crossroads Centre, via Main Street and the Milton GO Station 30 min peak frequency 	Entirely within the existing built-up area. Route saw a decrease in ridership with restructuring. Lost ridership was transferred to Route 6 and Route 9	0%	0%
Route 3	 Service to southeast Milton (Fourth Line and Louis St. Laurent Avenue), interlining with Route 4 at the Milton GO Station 30 min peak frequency 	 Entirely within Bristol Survey Secondary Plan area, which will experience additional growth due to new greenfield development and intensification. Service levels will not increase significantly to cause growth in ridership from existing residents (30% existing benefit) 	70%	30%
Route 4	 Service to southeast Milton (Fourth Line and Louis St. Laurent Avenue), interlining with Route 3 at the Milton GO Station 30 min peak frequency 	 Entirely within Bristol Survey Secondary Plan area, which will experience additional growth due to new greenfield development and intensification. Service levels will not increase significantly to cause growth in ridership from existing residents (16% existing benefit) 	84%	16%
Route 5	 Service to south Milton and the Milton Mall, interlining with Route 8 at the Milton GO Station 30 min peak frequency 	 Half within existing built-up area, half within Bristol Survey development area, which will experience additional growth due to new greenfield development and intensification. Service levels will not increase significantly to cause growth in ridership from existing residents (29% existing benefit) 	71%	29%
Route 6	 Service between west Milton and the Milton GO Station via Main Street, interlining with Route 7 at the Milton GO Station 15 min peak frequency 	 Half within existing built-up area, half within Sherwood Survey development area, which will experience additional growth, but is already built-up along this route. Majority of route improvement will benefit existing residents (86% existing benefit) 	14%	86%
Route 7	 Service between southwest Milton and the Milton GO Station via Derry Road West, interlining with Route 6 at the Milton GO Station 15 min peak frequency 	 Majority within existing built-up area, end loop within Sherwood Survey development area, which will experience additional growth. Majority of ridership growth due to new population growth (39% existing benefit) 	57%	39%
Route 8	 Service between south Milton, the Milton District Hospital, and the Milton GO Station, interlining with Route 5 at the Milton GO Station 30 min peak frequency 	 Half within existing built-up area, half within Sherwood Survey development area, which will experience additional growth, but is already built-up. Majority of ridership growth due to new population growth (20% existing benefit) 	80%	20%
Route 9	 New route Service between the southwest Boyne Survey area and the Milton GO Station 30 min peak frequency 	 New route added to serve Boyne Survey development area (growth-related need) Two-thirds within existing urban area and Sherwood Survey development area (which will experience additional growth, but is already built-up), and one-third within Boyne Survey development area, which will be entirely new growth. Majority of ridership growth due to new population growth (18% existing benefit) 	82%	18%
Route 10	 New route Service between the Boyne Survey area and Milton GO Station, via James Snow Parkway 15 min peak frequency 	 New route added to serve Boyne Survey development area (growth-related need) Majority of the route within Boyne Survey development area and bordering Derry Green Business Park development area (1% existing benefit) 	99%	1%
GO Drop-Off Service (Route 30)	 New route Additional GO Drop off service operating during the PM peak period from the Milton GO Train station to the Boyne survey area south of Derry Road and west of Bronte route (one bus) 	Service only services new population within the Boyne Survey Secondary Plan Area	100%	0%





Route	Route Description	Key Factors Informing Existing / Growth Benefits Attribution	Percent Benefit to Growth	Percent Benefit to Existing
GO Drop-Off Service (Route 31)	Demand responsive bus that provides PM peak period drop-off service from the GO Station to neighbourhoods south of Main Street	 Service within an existing urban area. About half of the ridership growth is due to population growth within the area (51% existing benefit) 	49%	51%
GO Drop-Off Service (Route 32)	Demand responsive bus that provides PM peak period drop-off service from the GO Station to neighbourhoods south of Main Street	 Service within an existing urban area. About half of the ridership growth is due to population growth within the area (47% existing benefit) 	53%	47%
Kelso	Seasonal bus to Kelso Conservation Area which operates midday every 30 min during the summer and winter months	 Existing route entirely within the existing urban. Most of the growth in ridership is due to new population (18% existing benefit) 	82%	18%
Derry Green Employment Express	 New route Weekday morning, midday and afternoon peak service through the Derry Green Business Park, connecting to the Milton GO Station 2 bus routes operating at a 30 min peak frequency 	 New route added to service new population growth (36% of 2025 population) and existing population (64% of 2025 population) 	36%	64%
Mississauga Express	 New route Weekday service connecting Milton GO Station with the Lisgar GO Station in Northwest Mississauga 30 min peak frequency The route would connect to Mississauga Transit routes and Brampton Transit Züm services at Lisgar GO Station 	 New route added to service new population growth (36% of 2025 population) and existing population (64% of 2025 population) 	36%	64%
Oakville Express	 New route Weekday service connecting Milton GO Station and the Palermo Village Transit Terminal in Oakville 30 minute peak frequency 	 New route added to service new population growth (36% of 2025 population) and existing population (64% of 2025 population) 	36%	64%
Milton Specialized Transit Service	Accessible transit service using a combination of bus service and contracted taxi service	 Majority of service is contracted to the taxi industry and there is no capital requirement as a result of expansion. No specialized transit service vehicle expansion included as part of the capital forecast. 	-	-
Milton TransCAB Service	Service operating in areas of low demand (contracted to the taxi industry)	Service is contracted to the taxi industry and there is no capital requirement as a result of expansion	-	-



