

The Corporation of the Town of Milton

Report To:	Council
From:	M. Paul Cripps, P.Eng., Commissioner, Engineering Services
Date:	June 24, 2019
Report No:	ENG-021-19
Subject:	2019-2023 Milton Transit Service Review and Master Plan Update
Recommendation:	THAT Council endorse the 2019-2023 Milton Transit Service Review and Master Plan Update in principle, with recommended service adjustments considered as part of the annual budget process.

EXECUTIVE SUMMARY

The purpose of this report is to present the 2019-2023 Milton Transit Service Review and Master Plan Update (herein referred to as "Transit Plan") and seek endorsement of its recommendations in principle.

REPORT

Background

In August 2018, the Town retained WSP Canada Group to develop a **2019-2023 Milton Transit Service Review and Master Plan Update** (Transit Plan). The study provides an assessment of conventional and specialized transit services and updates Milton's longterm transit planning initiatives. The transit service review evaluates the following components:

- Market conditions, system performance
- Service levels, system deficiencies, rationalization opportunities
- Fare structure/policy and mobile fare payment options (e.g. paying fares via smart card, smart phone, etc.)
- Service and performance standards
- Accessibility considerations
- Partnership opportunities
- Strategic integration opportunities (e.g. GO Transit, cross-boundary, etc.)



- Financing/budget impacts
- Marketing and communications
- Future capital/operating service growth

The Transit Plan builds on previous initiatives of business planning to improve overall service efficiency and effectiveness alongside forecasted growth. The study explores introductory, transitional and full build-out service delivery programs for short, medium and long-terms. Service delivery considerations also included an evaluation of urban growth areas, including Boyne, Derry Green, Trafalgar Corridor and Agerton Employment Area, Britannia West and Milton Education Village (MEV).

The study also investigates new alternative service delivery (ASD) concepts including evaluating the role of New Mobility solutions with Transportation Network Companies (TNCs) such as Uber, Lyft and RideCo, to address unique service needs. Research included service delivery strategies, best practices and service warrants to develop appropriate recommendations in the Milton context, including delivery costs and anticipated performance.

Discussion

The Transit Plan provides a roadmap for the Milton Transit system to define service requirements and a framework for planning and decision-making. The overarching objective is to achieve a balanced and sustainable transit network that manages Milton's current and forecasted growth. The Transit Plan Executive Summary is available in Appendix 2 of this staff report, with the full document downloadable from www.miltontransit.ca.

Public and Stakeholder Engagement

Essential to the success of the study, public participation and involvement throughout the planning and development stages helped shape final recommendations. The approach incorporated a variety of traditional and innovative techniques to solicit feedback from residents and key stakeholders. This process included focused discussion with a variety of stakeholders including:

- Transit riders/non-riders
- Elected officials
- Milton staff from departments with links to Transit
- Business community and associations



- Educational institutions, public libraries
- Milton Advisory Committees (e.g. Milton Youth Advisory Committee)
- Government agencies (Halton Region, Metrolinx, etc.)
- Neighbouring transit service providers

Comprised of two (2) members of Council (Councillor Tesser Derksen, Councillor Malboeuf) and departmental/divisional staff representatives, a Project Steering Group helped guide Transit Plan development. The Project Steering Group met approximately monthly throughout the process, providing input and recommendations on key study deliverables.

There were two (2) phases of public engagement for the Transit Plan. Activities in the first round of engagement included:

- On the Move online survey on Let's Talk Milton (November-December 2018)
- Milton Youth Advisory Committee Meeting (December 3, 2018)
- Stakeholder Focus Group Meetings (December 4, 6, 2018)
- Community Input Session (December 5, 2018)

The first round of engagement occurred upon completion of the service review and market analysis components of the study. This phase gathered initial public and stakeholder feedback on current Milton Transit services and garner reaction to the market analysis and trends.

The second round of public engagement sought public and stakeholder feedback on draft recommendations. Activities in the second round included:

- Follow-up, interactive online survey on Let's Talk Milton (April 2019)
- Milton Youth Advisory Committee Meeting (April 8, 2019)
- Stakeholder Workshop (April 8, 2019)
- Community Input Sessions (April 9, 2019)

A summary of all consultation and engagement activities, with associated outcomes, is available in Appendix 3 of the Transit Plan document.

Recommendation Process

The recommendation process incorporated a number of inputs, including reviews of previous plans and transit service goals, evaluation of current service performance, market analysis, growth trends and public/stakeholder input. Preliminary recommendations were refined with the Project Steering Group relative to public and



stakeholder feedback. The following key principles guided the recommendation development process:

- **Define Expectations**: Strategically defining what Milton Transit is, what it is not, whom it serves and success factors.
- Build on Current Successes: Reviewing what has worked and what has not, and consider where Milton should position itself in the trade-off between valuesbased versus performance-based service (or, the trade-off between service coverage versus service frequency)
- Formalize Service Standards, Triggers and Warrants: Adopting objective standards to guide service allocation.
- **Remove Service Coordination Stresses with GO Transit**: Maintaining coordination of route schedules without frequent GO Train-meet adjustments.
- **Provide Business Case for New Services**: Demonstrating additional service introductions that demonstrate productivity, cost-effectiveness and/or other value-based goals.
- Champion a "Family of Services" Approach: Branding the growing diversity of services as a family under the Milton Transit brand to raise awareness of service availability.
- Adopt New Mobility/ASD Solutions: Implementing a strategy to address unique service areas as a transition to conventional service, when warranted.

Recommendations Summary

The Transit Plan provides a prioritized program of improvements to Milton Transit service and operations over the short, medium and long-term. Appendix 2 outlines recommendations details. In summary, service recommendation themes include:

- Improved services within Milton and connections to key destinations
- New, innovative service delivery models to cost-effectively meet transit needs in unique areas (e.g. low-density and developing areas)
- Defining service warrants to trigger service implementations/changes based on demonstrated demand, and a performance monitoring system to promote continuous improvement of service efficiency and effectiveness
- Strategic investments into new vehicles, passenger facilities and a Transit Operations Facility
- Applications of advanced technology to improve fare collection, customer information and service efficiency



• Expanded administrative staffing compliment to manage complex service delivery and customer service requirements

Next Steps

The Transit Plan provides a blueprint for improving Milton Transit in all areas of operation and management, positioning the system for forecasted population and employment growth. With feedback from key stakeholders and the public, the Transit Plan develops a short, medium and long-term plan, with subsequent capital infrastructure requirements, to increase the use of and access to transit, while improving overall service efficiency and cost-effectiveness.

Upon approval, recommended transit priorities from the Transit Plan will be refined and implemented as part of the annual service planning and budgeting processes.

Financial Impact

High-level capital and operating costs have been estimated for the transit programs that have been recommended through the 2019-2023 Milton Transit Service Review and Master Plan Update. All financial impacts and performance expectations are outlined in **Appendix 2 Executive Summary**, and summarized in the table below. These costs include several potential facilities such as a Transit Operations Facility as well as transfer terminals. All costs will require updating with inputs that are more fulsome as programs are budgeted and implemented through annual service planning processes.

	NET ANNUAL OPERATING BUDGET (\$million)	INITIAL CAPITAL COST (\$million)	ANNUAL RIDERSHIP		
Current State (Note 1)	\$4.2	N/A	619,000		
Transit Master Plan Incremental Impacts (Note 2)					
Short Term	+\$1.2 to \$1.4	+\$1.3	+400,000 to		
(2020-2022)			670,000		
Medium Term	+\$4.5 to \$4.9	+\$8.8 to \$9.3	+330,000 to		
(2022-2025)			360,000		
Transit Operations Facility	+\$1.5	+\$40	-		
Long Term	+\$3.1 to \$3.5	+\$4.5 to \$6.0	+280,000 to		
(2025+)			300,000		
Regional Fixed-Route	+\$5.3	+\$17.8	+1,250,000 to		
Transit Improvements			2,500,000		



Note 1: Current state reflects the approved 2019 Operating Budget and 2018 Ridership for conventional & specialized transit

Note 2: Incremental amounts are presented in current dollars and exclude future inflation.

Consideration and prioritization of service recommendations relative to resources available will be critical for service implementation. Council will consider implementation of priorities and recommendations from the 2019-2023 Milton Transit Service Review and Master Plan Update through the annual Capital and Operating Budget process. Although the Town will leverage to the greatest extent possible development charges for the initial capital costs and Provincial Gas Tax for the net operating costs (after fare revenue), the growth of Milton's transit service as envisioned in this master plan will result in the need for additional funding from property taxes.

Respectfully submitted,

M. Paul Cripps, P. Eng. Commissioner, Engineering Services

For questions, please contact:

Tony D'Alessandro, 905-878-7252 x2548 Manager, Transit

Attachments

Appendix 1. Council Presentation Appendix 2. Executive Summary

CAO Approval Andrew M. Siltala Acting Chief Administrative Officer

On the Move!

2019 - 2023 Milton Transit Service Review and Master Plan Update

Council Meeting June 24, 2019

Timothy Rosenberger, AICP WSP Transit Consultant



Project Purpose

- Evaluate how Milton Transit services meet current and future needs
- Recommend improvements to existing services
- Introduce new and innovative services
- Implement advanced technologies
- Update Transit Master Plan

Key Component:

 Public and stakeholder engagement to identify and confirm community needs













Strategic Direction

A Place of Possibility

- Transit is important part of building a Complete Community
 - A safe and healthy community
 - Enhanced transportation to move people efficiently
 - A community of education and innovation
 - Adequate funding to support infrastructure delivery
 - Changes to support long-term financial stability
- Living in a time of uncertainty, austerity, disruption
- Population and employment growth forecasts not changing in GTHA, Halton and Milton
- Advocacy for more GO Transit services
- Milton Transit to plan and grow alongside regional planning efforts, ensuring strategic coordination







Strategic Direction

2019-2023 Milton Transit Service Review and Master Plan Update provides a roadmap for the Milton Transit system, defining service requirements for both intra-and inter-municipal transit, regardless of operator







Ridership Trends

• Ridership growth outpacing service, population, administration growth





Market Analysis



Service and Performance Standards

- Important for measuring success, monitoring service
- Supports ongoing improvements, service delivery transitions
- Initial standards set beyond current performance
- Standards updated annually to align with improvements

Planning, Service Delivery

- Route classification; guidelines
- Service frequency, span, vehicle type
- Step-by-step transition process

Infrastructure, Passenger Amenities

- Stop location, spacing
- Shelter placement

Performance Measures

- On-time, capacity
- Ridership, utilization, productivity
- System vs route level





Public and Stakeholder Engagement







Guiding Principles

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Short Term (1-2 years)

Medium Term (3-5 years)

Long Term (5 years +) Define expectations, success

- Review existing service; build on successes
- Apply a "Family of Services" approach to service integration, marketing
- Reallocate services where practicable to improve performance; productivity
 - Research and apply alternative service deliveries (new mobility) to address unique service needs
- Align fare policy with local and regional goals
 - Provide a plan for service growth
 - Maintain financial sustainability

















Increase Service Productivity

- Reallocate service from low-to-high performing routes
- Modify and realign some fixed routes; pulse schedules
- Separate 1A/B Industrial into non-loop east and west branches
- Operate 1C Industrial during weekday middays
- Separate **2 Main** into east and west branches; naming convention
- Arrange schedules so that all routes "pulse" (arrive at same time every hour, half-hour, etc.)



Ridership





Introduce New Mobility Service

- Address coverage gaps with transitional Home-to-Hub service
- Introduce Home-to-Hub in unique service areas

Home-to-Hub concept

- Curb-to-curb, shared-ride service from specified areas to transfer point/Milton GO Station; pre-booking required
- Customers to transfer to Milton Transit routes, GO Transit
- Operated by Milton Transit specialized service and/or subsidized taxi/TNC (e.g. Uber, Lyft)
- Base fare same as fixed-route; free transfer
- Transitional service for areas where development density is too low to sustain conventional service
 - New residential and employment growth areas
 - Population and employment density targets



Ridership





Introduce New Mobility Service

- Address coverage gaps with transitional Home-to-Hub service
- Introduce Home-to-Hub in unique service areas

When to Implement Fixed-Route







Ridership

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 Introduce Cross-Boundary Service	Ridership	Cost
 Under cost-share, provide service to Halton Hills, Mississauga Toronto Premium Outlets, Lisgar GO Station Responds to customer and stakeholder requests Creates connections with Brampton Transit, MiWay 	++	++
Build On, Expand Specialized Services		
 Contract for dedicated delivery (2019 initiative) Work with surrounding transit operators to improve service Use vehicles and operators to deliver Home-to-Hub service 	++	++







Medium Term Recommendations (2022 - 2025)

Support Regional Fare Integration

- Transition Next Generation PRESTO fare card system
- Adjust fare policy to support local, regional interests
- Next Generation (2021) shifting to open payment, flexible pricing, integration with specialized transit, taxi, TNCs
- Discussions of common policies at GTHA levels
- Fare integration will make it easier to transfer between Milton Transit, GO Train and Bus, other transit systems, Home-to-Hub, taxis, TNCs
- Smart-card and mobile open payment speeds up boarding, speeds up buses



Ridership





	edium Term Recommendations		
$\dot{-}$	Expand New Mobility, Specialized	Ridership	Cost
	 Introduce Home-to-Hub in new development areas Transition service to fixed route when warrants met Align specialized services with demand 	++	++
	Extend Local Fixed Route Network		
	 Connect western routes to Velodrome, MEV Connect eastern routes to temporary transfer hub at Thompson and Louis St. Laurent Critical transfers for customers; operator layovers 	++	++
	Maintain Service Reliability, Assets		
	 Design and build transit garage facility Add service and vehicles to meet growing demand, traffic 	++	+++











Long Term Recommendations (2025+)







RECOMMENDATIONS	NET ANNUAL OPERATING BUDGET ¹	INITIAL CAPITAL COST ²	ANNUAL RIDERSHIP IMPACT		
Short Term Recommendations (2020 - 2022)					
Local Fixed-Rte Transit Improvements	-\$640,000	-	+100,000		
Milton-TPO-Lisgar Regional Route	+\$298,000 ³	+\$1.3 million ³	+250,000 - 500,000		
Home-to-Hub Service	+\$160,000 - \$350,000	-	+16,000		
Specialized Transit Improvements	+\$1 million	-	+20,000 - 40,000		
Next-Gen PRESTO (short- to long-term)	+8% of fare revenue & 8% of capital cost for future rehabilitation	+\$25,000	-		
Additional Staff (Town and/or Service Provider)	+\$310,000	-	-		
Marketing Improvements	+\$50,000	-	-		
Total Short Term	+\$1.2 - 1.4 million ⁴	+\$1.3 million	+400,000 - 670,000		
Medium Term Recommendations (2022 -	- 2025)				
Expand/Improve Local Fixed-Rte Network	+\$2.5 million	+\$7 million	+270,000 - 290,000		
Transfer Hubs (Velodrome, Bristol Park)	+\$11,000 - \$18,000	+\$750,000 - \$1.3 million	-		
Expand Home-to-Hub Service	\$330,000 - \$730,000	Included in Specialized	+33,000		
Specialized Transit Expansion	+\$1.1 million	+\$1 million	+20,000 - 40,000		
Additional Staff (Town and/or Service Provider) & Marketing	+\$540,000	-	-		
Additional Maintenance Vehicle	+\$14,000	+\$14,000 +\$100,000			
Total Medium Term	+\$4.6 - \$5.0 million	+\$8.8 - \$9.3 million	+330,000 - 360,000		
Transit Operations Facility	+\$1.5 million ⁵	+\$40 million ⁵	-		
Long Term Recommendations (2025+)					
Extend Fixed-Routes to Growth Areas	+\$1.5 million	+\$3.8 million	+230,000		
Expand Home-to-Hub Service	\$330,000 - \$730,000	Included under Specialized	+33,000		
Transfer Hub (Ontario - Britannia)	+\$7,000 - \$29,000	+\$500,000 - \$2 million	-		
Specialized Transit Expansion	+\$1.1 million	+\$1 million	+20,000 - 40,000		
Additional Staff (Town and/or Service Provider) & Marketing	+\$310,000	-	-		
Additional Supervisory Vehicle	+\$10,000	+\$75,000	-		
Total Long Term	+\$3.3 - \$3.7 million	+\$5.4 - \$6.9 million	+280,000 - 300,000		
Regional Fixed-Rte Transit Improvements	+\$5.3 million	\$17.8 million	+1.25 - 2.5 million		
	Assuming cost recovery ratio at 28% for fixed-route transit a	nd 12% for specialized transit.			



^[2] Excludes future rehabilitation and replacement capital costs that are financed by the contributions that are incorporated into the annual operating budget.

3 Includes half of the costs for Milton GO – TPO – Lisgar GO route

I Total net operating budgets do not include impact from the implementation of PRESTO

^[5] Subject to refinement through Facility Feasibility Study and detailed design process.

and includes an annual contribution for the future capital rehabilitation and replacement.

Net annual operating budget includes contribution for the future capital rehabilitation and replacement.



Thank you!

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TOWN OF MILTON | TRANSIT SERVICE STRATEGY

MILTON TRANSIT SERVICES REVIEW & MASTER PLAN UPDATE

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INTRODUCTION



The 2019-2023 Milton Transit Service Review and Master Plan Update (Transit Master Plan) was an all-inclusive evaluation and plan document that identifies current and future transit needs for the Town of Milton. Developed by WSP and its partners, the study provides an assessment of Milton Transit services and updates Milton's 5-year Transit Master Plan for the period of 2019-2023. Among other deliverables, the review evaluates service levels, system deficiencies, accessibility, financing / budget, fare structure / policy and advanced fare collection system (i.e. allowing dynamic fare discount solutions, open fare payment, etc.), partnership

opportunities, strategic integration opportunities, (e.g. GO Transit and cross-boundary connections), marketing / communications and future capital / operating growth requirements. The Transit Master Plan builds on previous planning initiatives to further develop short-, medium- and long-term ridership, financial and capital infrastructure plans to improve overall service efficiency and effectiveness.

The Transit Master Plan includes a comprehensive review of the conventional fixedroute and specialized transit services, and the markets they serve. The process includes a review of local and regional (Halton and Greater Toronto and Hamilton Area) strategic initiatives, with assessments of Milton Transit business practices, administrative staffing, fare policies and collection system, marketing and communications programs.

The Transit Master Plan provides a prioritized program of improvements to Milton Transit's service and operations, including:

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- Improved services within Milton and connections to key destinations in surrounding communities
- New and innovative service delivery models to cost-effectively meet transportation needs in lowerdensity and developing areas
- Service warrants to trigger implementation of new services based on demonstrated demand, and a performance monitoring system to promote continuous improvement of service efficiency and effectiveness
- Investments in new vehicles, new passenger facilities and a new vehicle storage and maintenance facility
- Applications of advanced technology to improve fare collection, customer information and service efficiency
- An expanded administrative staff to meet growing management and customer service needs
- Realignment of Milton Transit's marketing program around a "Family of Service" branding concept

STRATEGIC DIRECTION

Milton is a Place of Possibility. Strategic, long-range and service delivery plans emphasise the vision for building a Complete Community and articulate the collective values shared by residents:

- A Safe and Healthy Community
- Enhanced Transportation to Move People Efficiently
- A Community of Education and Innovation
- Adequate Funding to Support Infrastructure Delivery
- Changes to Support Long-term Financial Stability

We live in a time of unprecedented uncertainty. For public services, technology has created opportunities to improve service delivery, but has undermined existing governance and funding models. Agencies are under increased pressure to grow and adapt services in a timely manner, but continuously face uncertain funding envelopes that influence their ability to plan long-term improvements, while mitigating opportunity costs related to funding delays.

Public transit remains a critical component for building a complete community. Milton is the fastest-growing community in the fast-growing Halton Region and the GTHA. The population of Milton is projected to double by 2031; and since 2009, Milton Transit ridership has increased at more than twice the rate of population growth. Planned population and employment growth will continue to drive demand for transit service within Milton, as well as connections to surrounding jurisdictions and the GTHA regional transit network. Accommodating planned travel demand from population and employment growth will require Milton to:

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- Coordinate transit improvements with local and regional traffic operations, road, and active transportation improvements
- Enact transit-supportive land use policies that promote higher-density, mixed-use developments with walkable scale and highly developed pedestrian networks
- Commit to multi-year capital investments to expand Milton Transit's bus fleet and transit infrastructure, including passenger amenities, transfer hubs, and a new vehicle storage and maintenance facility
- Increase transit operating funding to:
 - enhance service levels in existing areas
 - extend transit routes to new, developing areas, and
 - improve specialized transit service

These are multi-year initiatives that require significant long-term commitments, and must begin immediately for Milton to meet future transit demand. Meeting this demand also will require strategic coordination with Halton Region, Metrolinx, and with Milton's surrounding communities. Bus routes connecting Milton to Halton Hills, Mississauga and Oakville, will be planned, operated and funded in cooperation with those communities. Milton also must advocate with Metrolinx and the Province for completion of the Milton GO station reconstruction, the new Trafalgar Road GO station, two-way all-day GO rail service, and GO bus service improvements. Continued funding of the Provincial gas tax and additional Provincial funding for local transit will be necessary to support future transit growth.

OUTLINE OF TRANSIT MASTER PLAN

The Transit Master Plan consist of the following chapters:

- Introduction
 - Introduce the background and purposed of the Transit Master Plan
- Existing Transit System Review
 - Evaluation of existing Milton Transit's route design, operation, performance, facility, and integration with the regional transit system – GO Transit
- Market Analysis
 - Evaluation of existing and projected demographics and employment trend, and planned development in Milton
- Service and Performance Standards
 - Proposed service and performance standards to plan, evaluate, and change existing transit service or to introduce new service in Milton
- Recommendations

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 Various strategic recommendations in service delivery, marketing, management, and technology that Milton Transit could implement in short-term (1-2 years), mid-term (3-5 years), and long-term (beyond 5 years)

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EXISTING TRANSIT SYSTEM REVIEW



Figure 1 | Milton Transit existing fixed-route system map

Milton Transit operates nine regular, allday fixed routes covering most of Milton's urban area, two peak-only fixed route services serving the 401 Business Park area, three special secondary school routes serving majority of the public schools and secondary schools, and three GO Drop-off, flex-route services to collect passengers after the last afternoon GO train service. Milton Transit also coordinates the Trans-Cab service that provides connections to and from Milton Transit via taxi at a designated transfer point on Millside Drive. The existing fixed-route transit system map is shown in Figure 1.

Milton's specialized service, Milton access+, provides door-to-door service

throughout Milton for disabled and elderly customers. The service has 280 registered users and carried about 20,000 trips in 2018.

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Metrolinx' GO rail service operates from the Milton GO Station, providing ten (10) inbound trains to Toronto during the morning peak period, and ten (10) outbound during the evening peak period. Four GO buses also serve Milton, providing

connections to Cambridge, Guelph, North York and Oakville. Milton GO rail station also serves as Milton Transit's transfer hub, and includes a park-and-ride lot with more than 1,000 parking spaces.

Shown in Figure 2, ridership on Milton Transit has grown rapidly in the past ten years, from around 120,000 annual trips in 2009 to nearly 600,000 in 2018, a



Figure 2 | Milton Transit ridership - from 2009 to 2018

compounded growth rate of more than 20% each year. This is more than three times the rate of population growth and more than twice the rate of growth in service volume. Milton is one of the few Canadian transit systems, large or small, that gained ridership in 2017 and 2018.



The Milton fixed-route system is moderately productive, carrying an average of about 12 trips per revenuehour of service. Most of the routes are delayed during the afternoon peak period, and several, as the school routes, experience crowding during the afternoon peak period. About half of the trips on the system are carried on three routes (route 2, 3 and 4). The four lowest

performing routes (1, 5, 9 and 10) carry about 20% of all trips. Ridership is highest during peak periods, and drops off sharply after 8:00pm. In Milton, as in Oakville and Burlington, there is a clear negative correlation between ridership and routes operating on arterial roadways, with the most productive routes in the system operating almost entirely on neighbourhood streets, and avoiding Milton's congested, access-challenged arterials.
Analyses of the fixed-route network provides some direction for potential changes to the routes and for design of future routes. The first of these is that destinations at both ends of the route are is very important to generating ridership. Route 2, the system's highest ridership route, has major destinations at both ends (Milton Hospital, Wal-Mart) and in the middle (Milton GO station, Bishop Redding High School), but its two-way operation through Milton GO can be confusing to customers. Routes 1A, 1B, and 10 have large one-way loop segments, which can be confusing for customers and, in the case of route 10 (where there is no route in the other direction, as with routes 1A and B) require customers using them to make a long, out of direction trip on their inbound or outbound trip.

Milton Access+ provides specialized door-to-door transit service for persons with disabilities for trips that originate/destined for the Milton urban area but are wholly within the Town of Milton. Milton Access+ operates from 5:20am to 11:10pm on weekdays and from 7:10am to 8:10pm on Saturdays – no Sunday or holiday service.

Milton's specialized transit utilization rate is significantly lower than its surrounding peers. Halton Hills and Oakville carry more than twice as many specialized transit trips per capita. This could be due to the lack of accessibility for the disabled on some taxi vehicles, or lack of public awareness of the service. Should specialized service demand grow to match that of Halton Hills or Oakville, specialized costs could skyrocket over the next 10-15 years.



MARKET ANALYSIS

Milton's population is projected to double in the next 10 to 15 years. Population is expected to grow in the existing developed areas of the Town, but much of the growth will be in areas with no existing transit service. Milton Transit will need to increase service levels within the existing developed areas to meet growing demand, and extend service to meet demand in newly-developing areas of Milton.



Milton's demographics indicate that the community is moderately affluent and has few transit-dependent people. Its most promising transit markets are GO commuters, students, and new workers, along with Milton's small transit-dependent population. Most rail commuters in Milton park-and-ride at the GO station.

Development of outparcels at the station, and redevelopment of the station itself, will reduce the number of available parking spaces in the next few years, offering Milton Transit an opportunity to capture more GO customers. Higher frequency service, operation on transit-priority facilities, improved on-time performance, and implementation of the PRESTO fare payment all will be critical to capturing a larger share of this market.

Milton Transit's school routes now operate at or above capacity during afternoon periods. Adding service to these routes, is the easiest and fastest way for Milton Transit to increase its ridership and productivity in the short-term. High school age and younger children are one of Milton's largest population groups, and marketing efforts to increase transit use by middle and high-school aged children also is a major opportunity. As these students age, serving those who remain at home while receiving further education, or as they take their first job, will be another potential growth market for Milton Transit.

Milton's employment base also is expected to grow significantly in the next ten years. Most of the employment growth will occur in areas that are geographically separated from the residential areas, and some growing employment sectors are a mismatch with Milton's relatively educated and affluent demographic. Milton Transit will increasingly be called upon to connect residents to employment lands, and to provide crossboundary connections to surrounding municipalities to provide access to a wider regional workforce.

Milton's population and employment density are projected to remain moderate except in the area around the Milton GO station, the Milton Education Village area, and the Trafalgar secondary plan area. Milton's suburban land use pattern is a formidable challenge for transit. Density will remain below levels considered optimal for operating transit service, pedestrian and transit modes are not prioritized, and land uses are not



mixed in ways that promote walking and cycling for many non-work travel purposes. Detailed plans are not yet in place for many of the subdivisions planned in newer areas of the Town, offering the opportunity that the mix of land uses, priorities of the roadway network and pedestrian access still can be modified.

A credible 65% of riders are using pre-paid fare products, but a significant percentage (35%) of the ridership still pay using cash. Students and Seniors comprise more than 44% of the ridership and also significantly lower the average passenger fare.

Recent traffic projections for Milton indicate that traffic congestion is expected to worsen over the next ten-to-fifteen years, making it more important to ensure that transit-related improvements are carried out on regional arterials like Britannia, Derry, Steeles and Trafalgar, and additional transit-related improvements are made on local roads to improve transit travel time and reliability.

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SERVICE STANDARDS AND PERFORMANCE MEASURES



Figure 3 | Example of using the number Home-to-Hub trips as a guide to implement fixed-route service for an area Service standards and performance measures provide the basis to objectively allocate and measure performance of transit service and facilities. Service standards provide guidance for service delivery and transit infrastructure (service frequency, stopshelter placement) to support ongoing improvement. Performance measures set goals for safety, service productivity, cost-effectiveness, cost recovery, customer convenience (including ontime performance and crowding) and other areas of operation related to Town goals and industry standards best practices. Initial standards are set based on existing performance and "reach" beyond the existing from examining performance of peer agencies, and are revisited annually to lock in progress and promote ongoing improvement. The standards provide step-by-step

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guidelines for starting new service and for "triggering" service improvements based on metrics such as ridership, population and employment density, and development density. An example of implementing fixed-route service based on the number Hometo-Hub trips is shown in Figure 3.

PUBLIC AND STAKEHOLDER ENGAGEMENT

Public and stakeholder input to the Master Plan began in 2017, with three (3) survey initiatives as background:

- 2017 "Let's Talk Transit Survey
- 2017/18 Budget Survey
- 2017 #Milton youth Engagement Survey

These surveys indicated support for expanded transit service as well as requests for specific service improvements, including connections to destinations in surrounding communities. Figure 4 displays a poster that Milton Transit distributed to encourage the public to participate in public meetings and surveys.

In addition to reviewing the results of these surveys and ongoing public comments and service requests, the plan process included two routes of stakeholder engagement. The first round was conducted after the Transit Master Plan's

MILTON TRANSIT

Let's Talk Transit: Community Input Session

What would you like to see for Milton Transit over the next five years?

Hop-On, Hop-Off Information Bus Mobile Wednesday, December 5, 2018 6:30 am – 8:30 am at the Milton GO Station

Online: www.letstalkmilton.ca/TransitMasterPlan

Wednesday, December 5, 2018 6:30 pm - 8:30 pm Milton Sports Centre (lobby)



Figure 4 | Milton Transit "On the Move" survey poster

Service and Market Review was completed, to gather initial public and stakeholder feedback on service and reactions to the service and market review.

Activities in the first round of public engagement included:

- Let's Talk Milton online platform launch (November 29, 2018)
- "On the Move" online survey (November-December, 2018)
- Milton Youth Advisory Committee (December 3, 2018)
- Stakeholder Focus Groups (December 4, 6, 2018)
- Community Input Session (December 5, 2018)

The public response in the first round of engagement was that more transit service is needed to meet growing and diversifying travel needs. The public requested more frequent and more direct services, better connections to GO Rail, and integration with the PRESTO fare payment system, which would ease transfers between Milton Transit

and GO services. Stakeholders also requested increased service, but had different priorities. Milton employers and agencies serving populations with disabilities and those who are transit dependent requested more frequency and coverage to serve employment areas and specific job locations. Employers facing shortages of entry-level workers also requested transit connections to adjacent communities, particularly Brampton and Mississauga, to provide access to potential employees who live in those communities.

The second round of public engagement sought public and stakeholder comments on draft recommendations. Activities included:

- Follow-up interactive online survey (April 2019)
- Milton Youth Advisory Committee (April 8, 2010)
- Stakeholder Workshop (April 8, 2019)
- Community Input Sessions (April 9, 2019)

Representatives of local employers and agencies, regional transportation agencies, and Youth Advisory Committee members were supportive by the proposed improvements, and eager to see them implemented.

 Public Input was received during display and presentation sessions at the Milton Public Library and at Milton Sports Centre, and from an interactive, on-line survey using the Metroquest public engagement tool. More than 250 survey responses were received in the two rounds of engagement.

One particular survey activity asked respondents to identify their preferred characteristics of transit services. Services to new areas and easier connections were rated high, while availability and affordability of service was of less concern. Users were then asked to rank proposed service improvements on a 1-5 scale. Service connecting to Toronto Premium Outlets and Mississauga received high ratings, while services targeted to





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youth and to employment areas ranked lower.

A game in which respondents were given a limited number of "chips" that could be used to fund a range of service improvements found that the two most popular improvements were more frequent service, and service to new areas. Shown in Figure 5, these two improvements together received almost 50% of all "chips" in the exercise.

RECOMMENDATIONS

The consultant team and transit staff developed recommended improvements for every aspect of the transit operation and facilities, and in the areas of technology, marketing and administration. These recommendations have been divided into short-, mediumand long-term phases. While these categories imply future time periods, the plan intends for recommendations to be implemented upon achievement of implementation "triggers" for adding or changing service based on performance of existing service and

development levels in the areas to be served, and when funding, staffing, vehicles, facilities and other resources are available.

RECOMMENDATION DEVELOPMENT PROCESS

Based on the issued identified in the Town's previous plans and transit service goals, the service and market review, and public and stakeholder input, Milton Transit staff and the consultant team developed recommendations using an interactive workshop process. The consultant team developed initial recommendations, which were refined in a series of workshop meetings with Milton Transit administrative staff and the Project Steering Group. Further refinements were made in response to stakeholder and public comments.

The following key principles guided the recommendations development process:

Define expectations: Carefully define what Milton Transit is, and is not, who it serves, and what represents success.

Build on current successes: Review what has worked, and what hasn't, and consider where Milton should position itself in the trade-off between values-based vs. performance-based service (or, the trade-off between coverage vs. frequency).

Formalize service standards, triggers and warrants to efficiently guide service allocation as Milton Transit grows.

Remove stresses for service coordination with GO Transit: Maintain coordination of Milton's routes with GO rail transit without frequent schedule changes.

Provide business case justification for new services: Demonstrating that they will make the system more productive and cost-effective, or will meet other goals that cannot be met by the existing system.

Champion "family of services" approach: Branding the growing range of services as a "family of services" under the Milton Transit brand to raise awareness of available services and ease the addition of new services as opportunities and needs arise.

Adopt new mobility / alternative service delivery (ASD) solutions.



SUMMARY OF RECOMMENDATIONS

Short-Term Recommendations (through 2021)

- Increase Service Productivity Create a High-Frequency Network by increasing peak headway on Route 2, 3, and 4 to 15-minute. Together with Route 6 and 7, this will create a 15-minute frequent network (existing map shown in Figure 7 and proposed map shown in Figure 8, on the next page) that covers most of Milton and eliminate the need to coordinate schedules with GO Rail service; reallocate less productive fixed-route resources by temporarily suspending routes 5, 9 and 10 and maintain transit service coverage with Home-to-Hub; expand School Service, adding trips to Secondary School Special services to relieve crowding; realign Route 1A/B into separate eastern and western bi-directional routes; operate 1C industrial during weekday middays; split Route 2 at the Milton GO Station into two through-routed routes; align schedules so all routes meet at the Milton GO Station.
- Introduce New Mobility Service Implement Home-to-Hub service that could be operated by Milton Transit specialized service, or by taxis / TNCs under subsidy, to serve low-demand and / or low-density areas for a base fare of \$3.75 per trip (concept illustrated in Figure 6); service could be used to address coverage gaps and to serve unique service areas, fixedroute transit service to be phased in when development density and / or Home-to-Hub trips reach a certain threshold.
- Introduce Cross Boundary Service from the Milton GO Station to TPO and Lisgar GO Station; will require four additional fullsized transit vehicles.
- Build On and Expand Specialized Service contract for dedicated delivery in 2019 using Milton-owned mini-buses, while seeking further specialized service collaboration and integration with surrounding municipalities; vehicles and operators could also be used to deliver Home-to-Hub service.



Figure 6 | Home-to-Hub concept

Market Family of Services Approach that applies consistent brand across all Milton Transit services; pursue low-cost, high-value strategies and direct outreach to key markets – current transit riders, transit employees, youth and senior population, and employers and developers; work with Halton District School Board to develop joint student pass program to broaden the use of student pass outside of school days/hours; develop Employer Transit Benefit Program with

Milton Chamber of Commerce; develop Transit Supportive Planning Toolkit to guide development and engage residential developers.

- Provide Supportive Administration adding personnel in the areas of planning, marketing and supervision
- Support Regional Fare Integration Initiatives implementing the PRESTO fare collection system when next generation service is rolled out by Metrolinx in 2021, to ease customer transfers with GO rail, GO bus and other regional operators.



Figure 7 | Left: Peak frequency of existing fixed-route system

Figure 8 | Right: Peak frequency of proposed fixed-route system



Mid-Term Recommendations (2021-2024)

- Expand New Mobility Service and Specialized Transit Service into New Growth Areas implementing Home-to-Hub as the initial transit service in new development areas; align specialized transit service with demand.
- Extend Local-Fixed Routes Network realigning local fixed routes on the western side of Milton to operate bi-directionally on local and collector roads and meeting at a secondary transfer at the Velodrome, or at Milton Education Village, when completed. Develop temporary secondary transfer hub, near the Metro shopping centre or Bristol District Park at Thompson Road and Louis St. Laurent Ave, and realign routes on the eastern side of Milton to operate bi-directionally and terminate at this hub. The additional transfer hubs provide not only critical transfers for customers, but also provide layover for the operators. Would require four additional vehicles. (map shown in Figure 9).
- Maintain Service Reliability and Assets adding running time and recovery time to certain routes, and align schedules to allow all buses to pulse at increments of every 15, 30, and 60 minutes; would require seven additional vehicles; design and build the transit garage facility to accommodate the additional transit vehicles.
- Continue Expanding Administrative
 Support adding managerial and planning staff to meet growing demand.
- Implementation all Mid-Term

Recommendations are expected to require thirty-nine (39) full-sized transit vehicles (15 more than 2019 fleet).



Figure 9 | Proposed mid-term fixed-route alignment





Long-Term Recommendations (Beyond 2024)

Figure 10 | Proposed regional transit routes operating on Halton Region transit priority corridors

- Expand New Mobility Service and Specialized Transit Service into New Growth Areas implementing Home-to-Hub as the initial transit service in new development areas; align specialized transit service with demand.
- Extend Local Fixed-Routes develop Permanent Secondary Transit Hub at Regional Road 25 and Britannia Intersection, extend fixed-route service to south of Louis St. Laurent and meet at new secondary transit hubs at Milton Education Village and at Regional Road 25 and Britannia Road; would require one full-sized bus (map showing in Figure 10); introduce Service to New Secondary Plan Areas, developing a local bus network in Agerton/Trafalgar Secondary Plan area; would require five additional full-sized buses.
- Support Regional Network with cross boundary routes extending to adjoining communities along Regional transit priority corridors – Britannia, Derry, Trafalgar Roads, Regional Road 25, and James Snow Parkway (map showing in Figure 11); would require twelve vehicles to operate all the routes at 30-minute headway all-day; partnership with adjacent communities / Halton Region / Metrolinx is required to fund these inter-municipal and inter-regional services.
- Implementation of all long-term recommendations (not including the additional cross boundary routes) is expected to add six (6) vehicles to Milton Transit's fleet, expanding the total number of fullsized buses to forty-five (45) vehicles (21 more than 2019 fleet).





Figure 11 | Proposed long-term fixed-route alignment

SUMMARY

Milton's population, employment and development growth over the past ten years has been nothing short of extraordinary. Milton Transit ridership has grown even faster, demonstrating that transit demand increases as places become larger, more densely populated, and more urban. Ridership most likely will continue to increase faster than population and employment growth over the next ten years. Indeed, every indicator of transit demand analyzed in the preparation of this plan – projected population, employment, and traffic growth; increased land use and development density; GO rail service expansion and station redevelopment; public and stakeholder requests for expanded service; and local and regional plan recommendations – points to increasing future transit demand. Maintaining and improving upon Milton Transit's high-quality service will be among the Town's major challenges as it grows and develops over the next 10-15 years.

As a well-administered contract operation, Milton Transit provides efficient, high quality service that is popular among its customers. However, the system is experiencing



growing pains as it consolidates its recent growth and prepares itself for its own – and Milton's – growth. Buses are well used but often run late as make more stops to carry more riders, and are delayed by Milton's growing traffic volumes. The bus storage and maintenance facility, adequate to the needs of several years ago, is too small and too functionally limited to serve a fleet of Milton's present size, let alone its likely size in 3, 6 or ten years. Lack of integration with the PRESTO fare payment system makes it less convenient for Milton Transit riders to access GO rail service, reducing potential ridership. The administrative staff, unchanged from when the system was operating a fraction of its present size, is challenged to meet the diversifying demands of a growing system.

The Transit Master Plan provides a blueprint for improving Milton Transit in every area of its operation and management while positioning Milton Transit for growth over the next 5-15 years. The plan recommends short-term changes to make routes easier to use, and to reduce the challenges of connecting with GO train schedules in the short-term, while preparing to extend and expand service on existing routes, and add new local and regional routes, to meet future demand. The plan also recommends development of new alternative service concepts to creatively serve customers and markets that are hard to serve efficiently with fixed-route service. New passenger and operating facilities are proposed to improve operation and meet future needs, and new technology applications, including integration in the PRESTO fare payment system, are recommended to improve operational efficiency and meet customers' expectations regarding service information and fare integration. A "family of services" marketing approach is recommended to integrate Milton Transit's growing range of services under a single marketing umbrella, and additional dispatching, and administrative staff will make Milton Transit more efficient and responsive to customer needs.

Implementing this plan over the next ten years will be a financial and administrative challenge for Milton, particularly as it continues to juggle priorities and develop other aspects of its operations to meet the growing needs for public services in a rapidly growing community. However, prompt implementation of many areas of the plan, including development of the new operations facility, securing land for a southern transit hub, and procurement of additional vehicles, will be necessary if Milton the public transit needs of those who live, work, study and do business in Milton as they grow and diversify over the next decade, and beyond.



COST SUMMARY

RECOMMENDATIONS	NET ANNUAL OPERATING BUDGET ¹	INITIAL CAPITAL COST ²	ANNUAL RIDERSHIP IMPACT		
Short Term Recommendations (2020 – 2022)					
Local Fixed-Route Transit Improvements	-\$640,000	-	+100,000		
Milton-TPO-Lisgar Regional Route	+\$298,000 ³	+\$1.3 million ³	+250,000 - 500,000		
Home-to-Hub Service	+\$160,000 - \$350,000	-	+16,000		
Specialized Transit Improvements	+\$1 million	-	+20,000 - 40,000		
Next-Gen PRESTO (short- to long-term)	+8% of fare revenue & 8% of capital cost for future rehabilitation	+\$25,000	-		
Additional Staff (Town and/or Service Provider)	+\$310,000	-	-		
Marketing Improvements	+\$50,000	-	-		
Total Short Term	+\$1.2 – 1.4 million ⁴	+\$1.3 million	+400,000 - 670,000		
Medium Term Recommendations (2022 – 2025)					
Expand/Improve Local Fixed-Route Network	+\$2.5 million	+\$7 million	+270,000 – 290,000		
Transfer Hubs (Velodrome, Bristol Park)	+\$11,000 – \$18,000	+\$750,000 – \$1.3 million	-		
Expand Home-to-Hub Service	\$330,000 - \$730,000	Included in Specialized	+33,000		



¹ Assuming cost recovery ratio at 28% for fixed-route transit and 12% for specialized transit, and includes an annual contribution for the future capital rehabilitation and replacement.

² Excludes future rehabilitation and replacement capital costs that are financed by the contributions that are incorporated into the annual operating budget.

 $^{^{\}rm 3}$ Includes half of the costs for Milton GO – TPO – Lisgar GO route

⁴ Total net operating budgets do not include impact from the implementation of PRESTO

RECOMMENDATIONS	NET ANNUAL OPERATING BUDGET ¹	INITIAL CAPITAL COST ²	ANNUAL RIDERSHIP IMPACT
Specialized Transit Expansion	+\$1.1 million	+\$1 million	+20,000 - 40,000
Additional Staff (Town and/or Service Provider) & Marketing	+\$540,000	-	-
Additional Maintenance Vehicle	+\$14,000	+\$100,000	-
Total Medium Term	+\$4.6 – \$5.0 million	+\$8.8 - \$9.3 million	+330,000 - 360,000
Transit Operations Facility	+\$1.5 million⁵	+\$40 million⁵	-
	Long Term Recommend	lations (2025+)	
Extend Fixed-Routes to Growth Areas	+\$1.5 million	+\$3.8 million	+230,000
Expand Home-to-Hub Service	\$330,000 - \$730,000	Included under Specialized	+33,000
Transfer Hub (Ontario - Britannia)	+\$7,000 - \$29,000	+\$500,000 – \$2 million	-
Specialized Transit Expansion	+\$1.1 million	+\$1 million	+20,000 - 40,000
Additional Staff (Town and/or Service Provider) & Marketing	+\$310,000	_	-
Additional Supervisory Vehicle	+\$10,000	+\$75,000	-
Total Long Term	+\$3.3 - \$3.7 million	+\$5.4 - \$6.9 million	+280,000 - 300,000
Regional Fixed-Route Transit Improvements	+\$5.3 million	\$17.8 million	+1.3 - 2.5 million

⁵ Subject to refinement through Facility Feasibility Study and detailed design process. Net annual operating budget includes contribution for the future capital rehabilitation and replacement.

