



The Corporation of the Town of Milton

Report To: Council

From: Tony D'Alessandro, Director – Transit Services

Date: June 7, 2021

Report No: COMS-005-21

Subject: Transit Alternative Service Delivery Strategy

Recommendation: **THAT Council approve the Alternative Service Delivery Strategy as outlined in this report.**

EXECUTIVE SUMMARY

- Alternative Service Delivery (ASD) aligns with the Council-Staff Work Plan (ES-009-20), and is recommended by the Transit Master Plan (ENG-021-19).
- The intent of ASD is to leverage a Family of Services approach to rightsize transit services throughout the current serviceable area.
- A key component of ASD is OnDemand service: a technology-enabled, demand-responsive service that uses a mobile application to allow customers to reserve transit trips in real time. Council received a presentation and demonstration of the Spare Labs OnDemand platform on April 26, 2021.
- The Milton Transit OnDemand Pilot was implemented on May 31, 2021, and will run until September 4, 2021. The goal of the pilot is to test the software and address any challenges using a small sample size of riders and a select service area prior to the expansion of ASD, which will begin in September.
- The pilot program will run at a net-zero incremental cost, leveraging current and projected vehicle capacity/service from the specialized transit budget.
- ASD will be used primarily in new service areas until ridership reaches the thresholds identified in this report to support the transition to conventional fixed-routes. ASD may also be used to replace existing conventional transit routes based on established criteria. All fixed-routes will undergo a service rationalization exercise with any changes communicated to Council in advance.
- The implementation of ASD (including any changes from conventional fixed-route service to OnDemand) in 2021 will be based on available capacity within existing fleet and contract cost structure, and therefore have no net-new incremental costs.
- The cost differential of running a fixed route service versus ASD is approximately \$76 per day or approximately \$23,000 annually per route based on utilization of the existing specialized fleet
- The continued expansion of OnDemand service would be incorporated into 2022 and future budgets through growth in specialized transit and reallocation opportunities of conventional fixed-route service.



EXECUTIVE SUMMARY

- This purpose of this report is to provide further context of the ASD program, project implementation phases and business case/financial considerations for long-term service adoption and sustainability.

REPORT

Background

The purpose of this report is to provide Council with an Alternative Service Delivery (ASD) strategy and implementation plan to establish the basis for supplementary and/or adjunct transit services. The ASD strategy and implementation plan support the Council-Staff Work Plan priority of an Integrated Transit Strategy, within the goal of Community Attractiveness and Competitiveness (ES-009-20).

The Transit Master Plan (ENG-021-19) recommended ASD to strategically right size service to address coverage issues in areas that have not yet satisfied ridership requirements for efficient, conventional fixed-route transit. This concept would also provide service reallocation opportunities to concentrate fixed-routes along corridors of higher trip demand and/or increased ridership/revenue generation potential.

Additionally, the Transit Master Plan recommended improvements to the specialized transit program (Milton access+) including the continued implementation and growth of dedicated services using Town-owned fleet within the existing service delivery contract, as originally approved by Council via ENG-015-18. Implemented in 2020, these changes have resolved previous vehicle accessibility issues from non-dedicated services (e.g. taxis), while improving customer relations and experience. Enhancements have also facilitated a Family of Services delivery approach under a consistent Milton Transit brand. This approach achieves improved resource productivity by integrating accessible conventional and specialized services using whatever vehicles and modes (or combination) to meet desired trip needs. Family of Services also provides a reliable customer experience no matter the service-type offered by Milton Transit.

The 2020 Capital Budget included an ASD platform to facilitate continued specialized service optimization and growth, as well as implement OnDemand services (also known as microtransit or new mobility). Through a competitive procurement process, Spare Labs was awarded a two (2) year contract (CORS-058-20). The intent of the capital project is to:

1. Define a scope of services that addresses current delivery needs, and
2. Deploy ASD to facilitate long-term service rightsizing and reallocation of cost avoidance.

Discussion

Alternative Service Delivery (ASD) in the municipal context is the delivery of public services through non-traditional formats, usually as a third party contracted arrangement, while maintaining key principles of service effectiveness, efficiency, productivity and customer-focused

Discussion

performance. In principle, the Town has informally adopted ASD to deliver Milton Transit services via a contracted approach, with service provided in an array of formats, including:

- Conventional, accessible fixed-route service
- Specialized (Milton access+) service
- Secondary school special service – additional capacity linked to school bell times
- GO shuttle service – additional capacity linked to GO Train arrivals not serviced by fixed-routes
- Trans-cab service – supplementary service with trips destined or originating in the Hwy 401 Industrial Park employment area

The advancement of scheduling technologies has provided further opportunities for the Town to explore service optimizations and rightsizing through ASD. Additionally, mobile technologies have facilitated increased access to real-time trip information, individualized trip planning/itineraries, better service adaptation/flexibility, multi-modal connectivity and increased fare integration possibilities. The Town is well positioned from a labour relations perspective to test and adopt ASD, given recently negotiated contract parameters with our current service provider Diversified Transportation - PW Transit.

ASD Strategy

a) Strategy Development

Staff have scanned the marketplace to ascertain industry best practices associated with successful ASD development and implementation. While ASD approaches vary based on fulfilling unique/local objectives, fundamentals of ASDs remain consistent, including the following key principles:

- Defining what transit is; managing expectations
- Championing a Family of Services (system-based) approach
- Providing flat fares and applying same Fare Policy concessions; transfers
- Integrating new mobility technology
- Leveraging dedicated services for consistent customer experiences
- Adapting to changes in performance and/or service objectives

Staff continue to promote Milton Transit services as a shared-ride concept to maximize vehicle capacity and use. However, recommendations for new service typologies are also subject to meeting performance thresholds and/or value-based objectives. In other words, different service scenarios may call for different service delivery solutions.

It is important to note that under the Integrated Accessibility Standards Regulation (IASR-191-11), Accessibility for Ontarians with Disabilities Act (AODA), the Town is legislated to provide



Discussion

specialized services for persons with disabilities who are not able to regularly access the conventional system. Specialized transit must be equivalent to conventional transit in service availability and pricing/fares (service and fare parity). As a result, specialized transit will remain a constant service offering, independent of how ASD is applied.

b) OnDemand Service

A key component of ASD is OnDemand service: a technology-enabled, demand-responsive service that uses a mobile application to allow customers to reserve transit trips in real time. The OnDemand concept can be an origin-to-destination service (similar to a taxi or rideshare) or an adjunct/supplementary service that connects with the conventional network at a transfer point. While OnDemand can be delivered through third party Transportation Network Companies (TNCs), staff believe that a dedicated service approach leveraging available capacity on existing Town specialized vehicles delivered through the service delivery contract would promote consistency, accessibility and meet key ASD principles.

c) Service Standards

The proposed strategy uses service standard thresholds identified in the Transit Master Plan as the main factor in determining whether to provide an OnDemand or conventional fixed-route service. Table 1 illustrates the utilization thresholds that will be applied moving forward based on weekday trips achieved.

Table 1. Service Utilization Thresholds (6-9 month period)¹

Average Weekday Trip Threshold (actual/projected)	Service Delivery Approach
Less than 150	<ul style="list-style-type: none"> Implement OnDemand service
151-250	<ul style="list-style-type: none"> Consider conventional fixed-route service
251-300+	<ul style="list-style-type: none"> Implement conventional fixed-route service

While the service utilization statistic provides a primary threshold based on service capacity and demand, other factors may play a role in determining service phasing, transitioning, build-out and associated timelines. Other considerations for determining the optimal transit service delivery model include:

- Meeting cost-benefit and productivity objectives

¹ Derived from the Transit Master Plan (ENG-021-19).



Discussion

- Meeting strategic and/or value-based objectives
Complexities of rationalizing/replacing fixed-routes that are integrated with GO services and/or other fixed-routes
Propensity of transit use in growth areas
Uniformity/irregularity of development
Customer adaptation willingness and associated communication complexities

While ASD will primarily be used as the bridge to the implementation of future conventional routes in growth areas, staff will also be reviewing established conventional routes and applying the service standards listed above to determine if there are opportunities to transition routes to the alternative model.

It is important to note that while COVID-19 will continue to play a role in overall trip demand and distribution, it does present an opportunity to initiate and test the on-street functionality of the OnDemand platform using a scaled approach.

d) Financial Considerations

The current business model for the Milton Transit family of services incorporates costs of administration, operations and maintenance, offset by a combination of user fees (fares), subsidy programs/grants (Provincial Gas Tax), advertising revenue and the property tax base.

- No net-new incremental costs for OnDemand service delivery
Future budget of OnDemand services considered through growth of specialized transit program and all net reallocation opportunities of conventional fixed-route services

Table 2 provides a sample contract cost rate comparison between the conventional and specialized service delivery approach, using a 1:1 route/vehicle comparison.

Table 2. Sample Service and Contract Cost Comparison

Table with 3 columns: Measure, Conventional, Specialized/OnDemand. Row 1: Vehicle, One (1) 12 metre bus (38 seated capacity), One (1) 7/8 metre bus (5 seated capacity)



Discussion

Service Availability	5:15 a.m. – 10:11 p.m.	5:15 a.m. – 10:11 p.m.
Service Area	Static Limited to fixed-route design	Flexible Spans beyond fixed-route reach
Service Level	30 minute service frequency, all day	Same day booking service available
Daily Service Hours	16.90	16.90
Maximum daily seated capacity available	1,284	169 (assumes trip can be completed in average of 30 minutes)
2021 Contract Rate	\$46.94/hour	\$42.45/hour
Daily Contract Cost*	\$793	\$717
Cost Difference (1:1)	\$76 (approx. 10%)	

*Fixed costs excluded and assumed as constant for contract comparison purposes

The costing in Table 2 highlights the savings on a per vehicle basis between the two methods of service delivery. In addition, savings in the area of maintenance, fuel usage and lifecycle replacement costing are also be expected to be realized through the use of smaller vehicles in the OnDemand service as opposed to conventional 12 metre buses, and the overall number of vehicles involved in service delivery will differ.

As part of the Transit Master Plan, the overall financial difference between conventional and OnDemand service was forecasted. It showed that the potential savings from the reduction of low performing conventional routes may be sufficient to both fund the OnDemand service as well as to enhance high performing conventional routes. These projections can be further validated through the pilot and measured as future service changes are considered and implemented.

Implementation Plan

As per Council’s request, the 2021 Transit Work Plan accelerated ASD implementation as a transitional means to rightsize select transit services based on trip demand and meeting utilization thresholds. The following provides a summary of project phases and scope:

Phase 1: Specialized Transit Service Optimization

- Implementation: May 3, 2021 - COMPLETE
- Description: platform transition to incorporate administration, scheduling, dispatching and online trip booking capabilities
- New customer features: extended booking hours, trip confirmation text/voice messaging, mobile booking and trip management

Phase 2: OnDemand Service Pilot

Discussion

- Implementation: May 31 – September 4, 2021
- Description: OnDemand service in a newly developed neighbourhood to connect to the Milton Transit conventional network via transfer points (see Appendix 1 Milton Transit OnDemand Pilot - Service Plan Concept)
- Customer features: same day booking via mobile application, integration with Transit app Trip Planner and Token Transit mobile fare payment platforms.

Phase 3: Official Launch of OnDemand Transit Services

- Implementation: September 7, 2021
- Description: Continued OnDemand service in pilot area with expansion subject to available capacity on the specialized system and/or conventional fixed-route service rationalization/reallocation
- Any changes to conventional fixed routes will be made using the established Service Standards and communicated to Council a minimum of 2 weeks prior to implementation
- Customer features: same day booking via mobile application, integration with Transit app trip planner and Token Transit mobile fare payment platforms

Marketing and Communications

Messaging will be focused on promoting OnDemand service as a sustainable, convenient, and connected transit option. Communications goals include:

- To inform residents in the service area about the availability of Milton Transit OnDemand services
- To create simple and informative communication materials that explain the purpose of OnDemand and how to book trips and access transit
- To showcase Milton transit as a modern, viable transit option

Efforts will consist of digital and print communications, including, but not limited to:

- Web updates, news release, social media campaign
- Flyers and mail drops

Key public-facing communication messages for the OnDemand Pilot include:

- Milton Transit OnDemand is a new way to provide transit service to communities that currently do not have traditional bus service. This pilot project offers on demand, shared-ride transportation to connect riders to/from the conventional transit network.
- Milton Transit OnDemand is a transportation option, which uses smartphone technology and a fleet of dedicated vehicles to provide trips within the service boundaries with no fixed schedules or routes.



Discussion

- Milton Transit OnDemand does not operate on a fixed-route like conventional transit services. It lets riders request trips in real-time through the app or over the phone by selecting a pickup point and destination.

Staff will publically communicate in advance of any service adjustments of significance, including transitional service delivery adjustments (e.g. shifting from conventional fixed-route to OnDemand service). Residents will be notified of subsequent adjustments through various Town communication channels.

Financial Impact

The 2021 Operating budget included the use of specialized transit to provide OnDemand services beginning in 2021. Also included in the 2021 budget was a \$300,000 contribution from the Tax Rate Stabilization Reserve, to realize a portion of the expected gross savings from a planned reallocation of low performing routes. Any savings achieved in 2021 related to route reallocation would be used to reduce the contribution from reserve and reported to Council through a future operating variance report.

The Transit Master Plan recommended that low performing routes be replaced with OnDemand service along with increasing service on more well-established routes in line with demand. The pandemic has resulted in a shift in timing of the roll out of the multiple phases of route reallocation. While certain low performing routes may be eliminated in 2021, resulting in cost savings, the associated increase in service on high performing routes is not expected to be implemented until ridership returns to a more typical level following the pandemic which would result in cost increases in future years. These financial impacts would be considered as part of future annual budget processes along with potential recommendations to manage the fluctuations using the Tax Rate Stabilization reserve.

The continued expansion of OnDemand service would be incorporated into 2022 and future budgets through growth in specialized transit and reallocation opportunities of conventional fixed-route service.

Respectfully submitted,

Kristene Scott
Commissioner, Community Services

For questions, please contact: Tony D'Alessandro, MCIP, RPP Phone: Ext. 2548
Director, Transit Services



The Corporation of the Town of Milton

Report #:
COMS-005-21
Page 9 of 9

Attachments

Appendix 1.- Milton Transit OnDemand Pilot Service Plan

CAO Approval
Andrew M. Siltala
Chief Administrative Officer

Appendix 1. Milton Transit OnDemand Pilot – Service Plan

Milton Transit is building upon current Alternative Service Delivery (ASD) solutions to introduce new mobility applications that can address diverse service needs, goals and objectives. These solutions will support the development and implementation of an integrated Family of Services model for Milton Transit in the short and long-term.

The pilot program will take place from May 31-September 4, 2021 and will focus on the delivery of an OnDemand solution within a defined service area zone in order to test the technology and address any challenges prior to any further expansion.

Milton Transit OnDemand

Milton Transit OnDemand is a flexible, shared-ride transit service that connects to existing bus routes without following a fixed route or schedule. Customers can reserve transit trips by phone or by using a mobile app to:

1. Travel within a designated zone
2. Transfer to/from Milton Transit fixed-route service outside a designated zone

Milton Transit uses dedicated, fully accessible mini-buses to deliver OnDemand services. Regular Milton Transit fares and concessions apply.

Phase 2 Milton Transit OnDemand Pilot

Service Objectives

1. To test the functionality of the Spare the platform for Milton Transit OnDemand service within a designated zone, with transfer location(s) to/from current fixed-route service;
2. To deliver OnDemand service at no additional cost via existing specialized transit vehicles and within dedicated specialized service budget
3. To test platform and technology integrations (Transit App, Token Transit) functionality and performance including:
 - a. Mobile app and telephone-based booking process
 - b. Trip management
 - c. Connectivity, ease of transfers
 - d. Service efficiency, optimization, running times
 - e. Customer satisfaction
 - f. Ease of access to fares and fare information
 - g. Other applicable measures
4. To improve service and vehicle productivity

Service Concept and Parameters

- Shared-ride, dedicated service using Milton Transit specialized vehicles
- Virtual stop-to-stop service
- Travel within a designated zone
- Transfer to/from Milton Transit fixed-route service outside a designated zone
- Equivalent and current Milton Transit fares, concessions and Fare Policy (e.g. 2 hour Universal Transfer)
- OnDemand trips to be booked minimum of 15 minutes in advance

COMS-005-21 Appendix 1 – Milton Transit OnDemand Pilot Service Plan

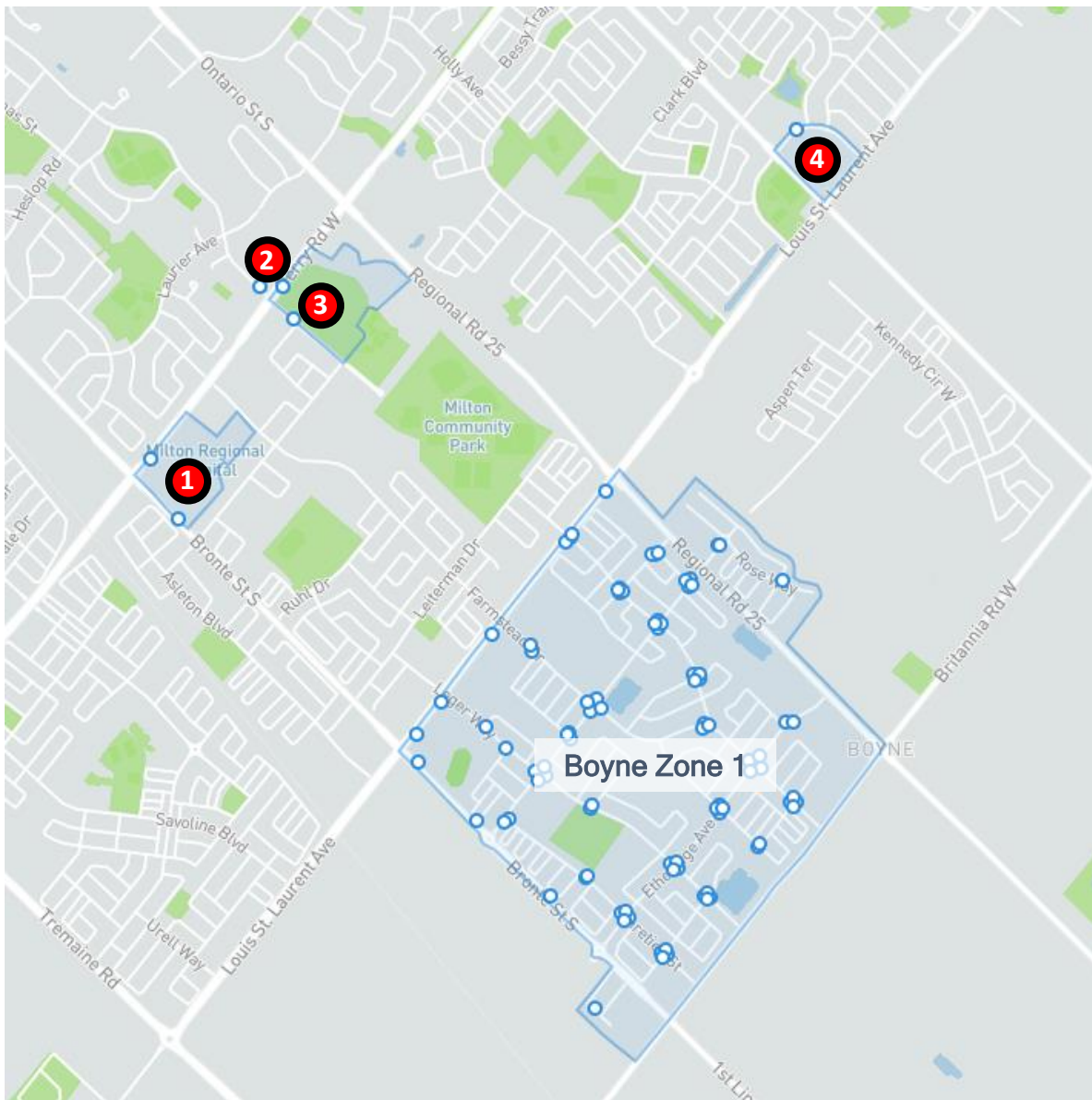
- OnDemand trip duration no longer than 15 minutes
- Trips and Token Transit fares integrated via Transit App

Service Availability

The service is available Monday to Friday from 5:15 a.m. to 10:11 p.m. and on Saturdays from 7:10 a.m. to 7:40 p.m.

Service Area/Zone

- Called: **Boyne Zone 1**



Transfer Zones/Points

1. **Milton District Hospital**
 - Bronte at Derry

COMS-005-21 Appendix 1 – Milton Transit OnDemand Pilot Service Plan

- Connects with Milton Transit Route 10
- Derry at Bronte
 - Connects with Milton Transit Route 7 and Route 2

2. Commercial Street

- Commercial at Derry
 - Connects with Milton Transit Route 2

3. Milton Sports Centre

- Santa Maria at Derry
 - Connects with Milton Transit Route 8
- Derry at Santa Maria
 - Connects with Milton Transit Route 7

4. Milton East Shopping Centre

- Kennedy Circle at Bennett
 - Connects with Route 4

Launch and Duration

- Monday, May 31 – Saturday, September 4, 2021

Performance Measures

Objective	Metric	Goal	Actual
Ridership	Total revenue passenger trips	N/A	
	Average weekday trips	50-150 trips	
	Average trips per hour per vehicle (utilization)	2.5 - 4.5 (at end of pilot)	
	Shared Rides %	25%	
Customer Experience	Average customer rating	4.8 out of 5.0	
	Average wait time	< 15 minutes	
	On time pick up %	95%	
	Average KMs per trip (trip distance)	N/A	
	Average minutes per trip (trip duration)	N/A	
	App downloads	N/A	
	Call centre trips	N/A	
	App trips	N/A	

*Goal relative to system averages to reflect COVID impacts.