

This is a summary of the Burlington Transit Five-Year Business Plan peer review, vision and growth plan initiatives. The Business Plan document will be based on the details in this summary, with a focus on the implementation of the growth plan initiatives, including their phasing and financial impacts.

Dillon Consulting requests the City of Burlington Council provide feedback on these sections, so that any changes may be incorporated into the final Business Plan.

1. Introduction

The 2020 – 2024 Burlington Transit Business Plan will guide the implementation of transit service improvements over the next five years. The Business Plan starts with a policy framework that defines a clear direction for Burlington Transit, and clear steps on how to get there. Burlington Transit is working on a vision statement that will be part of the final Five-Year Business Plan.

It is important to note that a Business Plan does not provide details service or operational planning. The primary purpose of the plan is to ensure individual strategies, projects and activities are aligned and contributing to the Burlington Transit's vision and policy objectives. This includes prioritizing and staging key decisions to fit within the City's financial guidelines. The Business Plan is also an important communication tool for Burlington Transit that will clearly set out steps required to move towards the long-term direction of the City. Over the next five-years, the Business Plan will form the guiding document in which all other operational decisions and financial budgets should be built around.

2. Growth Forecast

The Path Forward

A key focus of the business plan is to identify the strategies and resources required to meet transit ridership growth targets. Ridership growth objectives for Burlington were identified in the 2011 Halton Region Transportation Master Plan, which targets a morning peak period internal transit mode share of 13.4 percent within the City of Burlington by 2031. This represents a significant growth from the 4.6 percent transit mode share that is forecasted to be achieved by the end of 2019 (a 216 percent increase in ridership, from 3,209,091 annual rides in 2019 to 10,763,637 annual rides in 2031).

Over the five year life of this business plan, transit mode share is targeted to reach 8.3 percent by 2024, translating to 6,356,818 annual rides (a 98 percent growth in ridership from 2019; or 19.6 percent per year). To put this into context, over the past five years, Burlington Transit's ridership growth averaged 1.9 percent per year, while other systems in Burlington Transit's peer group averaged 4.3 percent per year. The 2024 target identified for Burlington represents a significant rate of growth over past performance and above what Burlington Transit's peers have achieved over the past five years. This will be difficult to achieve in a short period of time without significant investment in transit, a focus on customer service and culture change, including a change in how transit services are delivered.

As illustrated in **Table 1**, the ridership growth target will move Burlington Transit ahead of many of its peers and in line with peer systems that have U-Pass agreements with post-secondary institutions (e.g. Kingston Transit, Guelph Transit and St. Catharines Transit). This suggests that the growth strategy should not only focus on supply-based solutions (e.g. increasing service levels), but also on solutions that influence demand.

TABLE 1: PEER COMPARISON OF BURLINGTON TRANSIT 2024 RIDERSHIP GROWTH

	2024	2017				
	Burlington	Oakville	Barrie	Kingston	Guelph	St. Catharines
Peak Bus	64	72	37	55	65	55
Revenue Hours	280,800	212,008	171,130	238,688	205,820	168,774
Revenue Hours per Capita	1.48	1.09	1.26	1.97	1.56	1.11
Ridership	6,356,818	2,945,877	2,677,396	6,145,809	6,476,108	5,124,463
Ridership per Capita	33.6	15.18	19.75	50.74	49.14	33.73
Riders / Hour	20.3	13.9	15.6	25.7	31.5	30.4

While population growth will also help grow ridership, Burlington’s population is only projected to grow by 3.7 percent by 2031¹. Between 2019 and 2024, the population is projected to grow by 3,259 people (from 185,911 in 2019 to 189,170 in 2024). If the existing trip rate (boardings per capita) is applied to new residents over this period, this would only result in 56,255 new rides (1.8 percent of the ridership growth target) being attributed to new residents. This means that to achieve this ridership target, existing and new residents will need to ride transit much more, creating a greater culture of transit use in the city.

Service Hour and Fleet Investment (2020 – 2024)

To accommodate the planned growth in ridership, Burlington will need to invest in the level of service provided to accommodate both an increased demand for service and to change travel behaviour. This will require an increase in the amount of service and the fleet required to deliver the service.

The City of Burlington Development Charges Transit Background Study (2019) identifies that Burlington Transit’s fleet will need to grow by 38 vehicles between 2019 and 2028 to meet transit mode share target. Phased in over the five-year life of this business plan, this represents a growth in 19 vehicles by 2024 (from 60 to 79). Service hours will also need to grow to reach the mode share target. Work by Burlington Transit to support the Development Charges Study estimated that an investment in 100,800 annual revenue service hours is required over the next five years. This represents a 56 percent growth

¹ Note: Population forecasts to 2031 provided in the 2018 Burlington Development Charges Transit Background Study

in service levels, which is a little lower than the 66 percent ridership growth, recognizing that ridership growth can lag behind investment by two to three years. The projected fleet, service hour and utilization growth is detailed in **Table 2**. Ridership numbers were calculated based on achieving Burlington Transit’s 13.37 percent mode share target in 2031, based on the ridership figures used in the Development Charges Study. These targets were used as a guide to determine the growth strategy for transit.

TABLE 2: PLANNED INVESTMENT IN BURLINGTON TRANSIT (2020 – 2024)

Year	2020	2021	2022	2023	2024
Peak Buses	50	54	58	62	65
Mode Share	5.34%	6.07%	6.80%	7.53%	8.26%
PM Peak Rides	24,377	27,708	31,039	34,370	37,700
Annual Revenue Hours	214,240	230,880	247,520	264,160	280,800
Annual Ridership	3,838,636	4,468,182	5,097,727	5,727,273	6,356,818
Rides per Revenue Hour	20.8	18.6	18.6	19.3	20.3

3. Growth Strategies

One of the primary purposes of a business plan is to focus actions taken by an organization so they are aligned with the vision, goals and strategies directions of a system. Burlington Transit has a mandate to significantly expand ridership in line with the mode share targets identified in the 2011 Halton Transportation Master Plan. As identified in **Section 2**, forecast ridership is targeted to increase from 3,209,091 trips in 2019 to 6,356,818 trips by 2024. To achieve this growth target, Burlington Transit must provide mobility to residents, employees and visitors of the city. In doing so, Burlington Transit must:

- be Customer-Focused in every aspect of how service is delivered
- be Forward-Thinking in how services are planned and delivered
- be Business-Minded and aligned with municipal directions

The following section identifies a number of growth strategies that will be the focus for staff over the next five years. These reflect the Burlington Transit the vision, mission and strategic directions noted in the policy framework and will be supported by an updated organizational structure and an implementation and financial plan. These growth strategies are organized into the following themes:

1. Service Structure and Delivery
2. Mobility Management
3. Customer Experience
4. Travel Demand Management

1. Streamline Service Structure and Delivery

The way services are structured and delivered defines the primary customer aspects of any transit system. Where services go, how often vehicles are scheduled, how long the trip takes, how accessible are stops, and how the service is delivered (focus on customer service) are all key factors in residents choosing not only which services to take, but if transit is an option for them at all.

There are a number of strategic directions that will be implemented over the next five years to move towards this ridership growth target. These are described in more detail below:

Strategy 1A: Move to a More Direct Grid-Based System

Burlington Transit has already recognised the benefits that grid-based systems can bring and is making its first steps towards this goal in its September 2019 service change. In order for the grid network to be successful, there must be continued emphasis on:

- Intensification of land use along the arterial roadway network;
- Connectivity to the arterial grid to expand the market within a five-minute walk of the network;
- Improvements to the pedestrian environment at and connected to bus stops; and
- Investments in service levels to limit waiting times for customers that must now transfer between two arterial routes.

The remaining Burlington Transit network was developed largely on a grid arterial system, focused on key population and employment areas, with links to the GO Rail network. Key north-south corridors like Brant and Walkers link the established southern areas to growing northern areas. Such grid systems allow for more direct routes on arterial roads that are faster, resulting in quicker journeys that attract more riders. While there is a role for local services, the focus of Burlington Transit's future investment should be on services where they can generate the greatest ridership per invested service hour.

This service realignment works towards Burlington Transit's Strategic Direction #3 (Be Business-Minded and aligned with municipal directions), particularly Objective 3.1 (Effectiveness), in ensuring that services operated are as effective as possible. Where gaps are left in the network, alternative service delivery options (Strategy 1A) should be explored as a more cost-effective solution to fill them in.

Recommendations:

- Delete circuitous peak-only and after-hours only routes.
- Consider the deletion of circuitous local routes. The removal of these routes should only be considered in concert with the exploration of alternative service delivery options (Strategy 1A).
- Strengthen key arterial corridors and connections to GO Transit stations. Focus on east-west connectivity, with strategic north-south corridors.

Strategy 1B: Increase Service Levels to Support Higher Ridership Growth

Implementing high-frequency service on Burlington's arterial network may be a challenge given the limited pedestrian connectivity. A number of arterial roads are characterised by rear-lot residential, or long blocks with limited pedestrian connections into interior neighbourhoods. This makes providing a frequent service on all of the grid-routes a challenge. Since frequency improvements are necessary to facilitate transfers between north-south and east-west routes, Burlington Transit should work with the City's Planning and Development Department to improve pedestrian connectivity (including road crossings) between arterial transit routes and local neighbourhoods and identify opportunities for mixed-use intensification.

This increase in service levels aligns with Burlington Transit's Strategic Direction #3 (Be Business-Minded and aligned with municipal directions), particularly Objective 3.1 (Investment), in acknowledging that investment in mobility can improve broader quality of life, achieve economic development and produce environmental benefits.

Recommendations:

- Continue to improve frequencies on Burlington's arterial grid roads, particularly on the east-west corridors of Plains / Fairview and New, as well as the north-south corridor along Brant. These corridors are planned to see the most mixed-use, commercial and high density development in Burlington's Official Plan (2018).
- Work with the City of Burlington Planning and Development Department to increase and enhance pedestrian connectivity between arterial transit routes and local neighbourhoods and identify opportunities for mixed-use intensification along arterial routes.

Strategy 1C: Introduce Transit Priority Features to Improve System Reliability

Transit signal priority works by prioritising the flow of transit vehicles at controlled intersections. Transponders are fitted to vehicles, which notify traffic light systems of their presence, and request that a green light be extended when transit vehicles are delayed (passive transit signal priority) or that a dedicated signal phase is dedicated to an approaching transit vehicle (active transit signal priority).

Queue jump lanes are transit-only lanes on the approach to, and immediately after, intersections. These lanes allow transit vehicles to 'jump the queue' at intersections when they are paired with an active transit signal priority features.

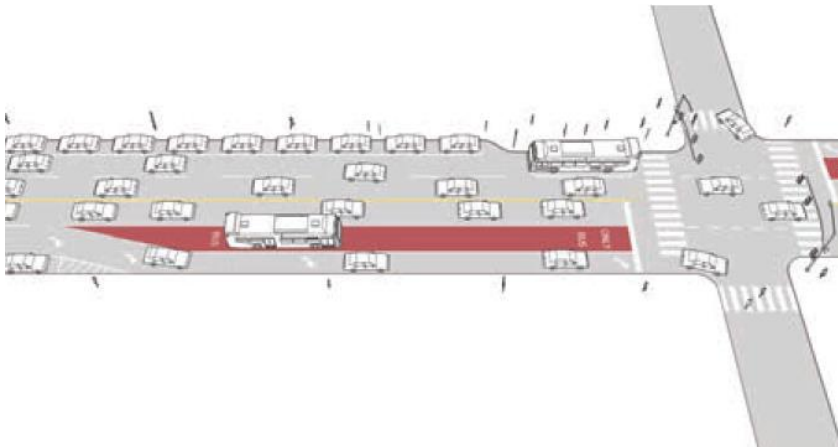


FIGURE 1: TRANSIT QUEUE JUMP LANE (SOURCE: NACTO TRANSIT STREET DESIGN GUIDE)

Queue jump lanes and signal priority would be appropriate treatments for important transit arterial routes that see less delays and travel time variability, or operate less frequently. Such corridors include Guelph Line north of the QEW or Appleby Line.

Burlington Transit has already undertaken investigations to pilot transit signal priority on the Plains / Fairview corridor. It is intended that this corridor will act as a pilot for the future implementation of such a system across the broader network. This pilot will be implemented in the first year of the business plan and it is expected that an expansion of transit priority measures will occur within the five year life of the plan.

In addition to potential transit priority measures for Burlington Transit services, Metrolinx's 2041 Regional Transportation Plan includes transit priority along Dundas Street to central Burlington and Frequent Regional Bus services using HOV lanes on Highway 407. While these measures are focused on regional trips, the Dundas Street priority will also provide direct benefits to Burlington Transit.

This increase in service levels aligns with Burlington Transit's Strategic Direction #1 (Be Customer-Focused in every aspect of how service is delivered), particularly Objective 1.1 (Service Excellence) and Objective 1.3 (Travel Time) by exploring transit priority measures to achieve faster and more reliable journeys. It also aligns with Burlington Transit's Strategic Direction #2 (Be Forward-Thinking about how Services are Planned and Delivered), particularly Objective 2.1. (Technology) by exploring new technology to improve reliability and travel time.

Recommendations:

- Implement currently-planned pilot transit priority project on Plains / Fairview corridor.
- Conduct a study of transit priority needs in both the short and long term in Burlington. The study should include a prioritization of potential projects following the pilot.

- Initiate discussions with Metrolinx and advocate for the implementation of transit priority on Dundas Street and Brant Street as part of the overall Dundas BRT project. Ensure that their plans align with Burlington Transit's needs and complement other transit priority projects.

Strategy 1D: Improve Connections to the GO Transit Network

Services from these stations connect Burlington to Toronto as often as every 5-10 minutes during peak periods and every 30 minutes during non-peak times. Limited peak service is also provided to Hamilton. Almost all of Burlington Transit's routes currently connect to at least one GO Station, providing a logical transfer point between Burlington Transit routes and links to destinations outside of Burlington. As noted in the Business Plan Working Paper #1, only between 3 - 12 percent of GO Rail passengers in Burlington use Burlington Transit to connect to GO Rail services at each of its stations. This suggests that there is room to grow this market to reach Burlington Transit's ridership growth targets.

By 2025, Metrolinx plans to improve all-day frequencies on the Lakeshore West Line between Aldershot GO Station and Union Station to every 15 minutes, as part of the "Regional Express Rail" initiative. This will also see travel times between Burlington GO and Union Station reduced by up to 19 minutes, as well as 2 minute savings between Burlington GO and Appleby GO. Regional Express Rail will increase the attractiveness of the service for trips to Union Station as well as other mid-line stations along the Lakeshore West line.

This partnership works towards Burlington Transit's Strategic Direction #3 (Be Business-Minded and aligned with municipal directions), particularly Objective 3.2 (Partnerships) as it seeks to achieve better and more cost effective options for passengers by working with other transit providers.

Recommendations:

- Improve frequency of direct connections to GO Rail stations with the introduction of RER.
- Explore on-demand alternative service delivery strategies to connect to all GO Train trips that do not conveniently connect to a fixed-route Burlington Transit bus.
- Explore integration opportunities to better utilize the RER network for local express trips within the City. This should include improvements to trip planning tools, marketing and communications and well as service integration.
- Investigate the implementation of a fully-integrated single fare with GO Transit. This would require local trips to be priced on the basis of distance.

Strategy 1E: Increase Service Integration with Neighbouring Transit Systems

There is also a significant travel demand between Burlington and Hamilton and Burlington and Oakville that should be addressed as a key strategy to grow ridership. This can be done through improved coordination and service integration that will reduce duplication of service and create a more seamless experience for the customer.

Burlington Transit already offers a level of fare integration with its neighbouring systems. Transfers from Hamilton Street Railway and Oakville Transit are accepted on some services, both in paper form or automatically calculated by Presto. As part of increased utilization of and integration with GO Train services, there exists the opportunity to further reduce fare friction in the region, by adopting a single fare system across multiple systems.

There is an opportunity to strengthen and add to these links with Hamilton and Oakville through service integration. Such a shared service model could provide Burlington with cost savings for the provision of services at its borders and improve seamless passenger connections.

This initiative aligns with Burlington Transit's Strategic Direction #3 (Be Business-Minded and aligned with municipal directions), particularly Objective 3.2 (Partnerships) as it seeks to achieve better and more cost effective options for passengers through working with other transit providers.

Recommendations:

- Meet with HSR and Oakville Transit to identify opportunities to further integrate services through sharing and coordinated timetabling and routing.
- Investigate the implementation of a fully-integrated single fare with neighbouring systems and GO Transit (see Strategy 2D). This would require local trips to be priced on the basis of distance.

2. Mobility Management

Mobility Management acknowledges all the ways that people can travel in a community and all of the different ways that these modes can be operated; bringing them together for the benefit of the customer. While Burlington Transit primary focus over the next years will be the delivery of public transit services, it is important to start investing and rethinking how Burlington Transit thinks about mobility as a whole.

Strategy 2A: Implement On-demand Alternative Service Delivery Models

On-demand transit (or microtransit) is a traditional form of mobility that is experiencing a resurgence with the help of technology. On-demand transit has four components that differentiate it from conventional fixed-route transit:

- Flexible routing and/or scheduling designed based on customer demand;
- Newly-emerged "mobility brokers" who use mobile apps to connect supply and demand;
- Use of smaller, more flexible vehicles; and
- Connecting multiple transportation services to complete a trip (using a mobile app).

On-demand transit can be differentiated from conventional transit in the way that it caters to individual needs. In an On-demand Transit model, the transit service adapts to its customers, while in conventional transit service models, transit customers must adapt to the service offered. In many cases, this provides

greater convenience and customization – moving towards some of the favourable characteristics of private automobile travel. On-demand transit offers a level of flexibility, convenience, and individualism somewhere between regular fixed-route transit (“public collective transport”) and private individual transport.

There are several advantages to exploring the implementation of On-demand transit services:

- **Cost Effective:** On-demand transit services are typically planned in areas where there is low ridership in a larger geographic area. This allows the transit agency to reduce the number of resources required to provide service.
- **Improved Coverage:** On-demand transit services offer a significant advantage in terms of coverage area. Since the vehicle is not tied to a fixed-route, this increases the number of residents within a five-minute walk of an on-demand transit pick-up or drop-off point.
- **Early Introduction of Service:** On-demand transit service allows for early introduction of transit service in newly developing areas without committing significant resources to provide mobility for new residents.

On-demand transit services do not entirely replace the need for fixed-route services. Fixed-route transit services require customers to make travel decisions based on pre-set transit routes and schedules. This model is effective when:

- Residents are in close proximity to a service;
- The route provides relatively direct service with minimal deviations that increase travel times;
- Higher frequencies are provided to increase the flexibility of the service; and
- There is a high demand for service between similar origins and destinations, which requires a high capacity vehicle to service.

This initiative works towards Burlington Transit's Strategic Direction #2 (Be Forward-Thinking in how services are planned and delivered), particularly Objective 2.2 (Alternative Service Delivery), by exploring and seeking to implement on-demand alternative services.

Recommendations:

- Further explore the use of On-demand transit services as a replacement of certain fixed-route services. This should include a review of both dedicated and non-dedicated service models.
- Develop an On-demand transit service model and business case for low demand areas and operating periods, allowing customers to use a mobile app to book a shared-ride demand-responsive service to connect to the fixed-route service. This should coincide with the modifications to the existing route network to more of a grid-like structure (see Strategy 2A).

Strategic Direction 2B: Explore Partnerships with Other Mobility Providers

To address this expanding world of mobility, Burlington Transit needs to continue to evolve and see themselves as not only an operator of transit services, but as a partner and collaborator of sustainable mobility services. This means making it easier for customers to take all sustainable mobility options available to them or integrating services to allow customers to easily transfer between multiple modes.

Over the next five years, it is recommended that Burlington Transit continue to explore partnerships with TNCs, bike sharing companies, carpooling companies, taxi operators and other sustainable mobility providers to promote integration with Burlington Transit services. This could include:

1. Information Sharing and Promotion
2. Data Sharing
3. Trip Planning Integration
4. Service Integration
5. Fare Integration

This strategy aligns with Burlington Transit's Strategic Direction #3 (Be Business-Minded and aligned with municipal directions), particularly Objective 3.2 (Partnerships), by seeking to partner with providers to improve efficiency, systems and lower cost.

Recommendations:

- Expand the role of a senior member of the Burlington Transit administration and management team to include the exploration of partnership approaches with other sustainable mobility service providers.
- Promote sustainable mobility services through awareness, marketing and education campaigns to inform residents of alternatives to driving alone in private vehicles.

Strategic Direction 2C: Integration of Specialized Transit and On-demand Transit Service

A key strategic direction will be to better integrate specialized transit trips with On-demand transit trips. If Burlington Transit uses its own fleet to deliver On-demand transit services, it is recommended that the Specialized Transit logo be removed from all its specialized transit vehicles, replaced with a Burlington Transit logo. This will allow the same vehicle to be used to provide both specialized transit and On-demand Transit Services. The goal is to provide more flexibility in utilizing the right vehicle for the right type of trip, irrespective of whether a customer is registered for specialized transit service. This strategy helps support the integration of customers on vehicles that were traditionally reserved for specialized transit customers and will allow for more efficient scheduling and increase the available capacity to all Burlington Transit customers.

Under the integrated service model, a vehicle used to provide specialized transit service can also be used to provide On-demand transit service, and vice versa. This means that the services would be

“comingled”, and specialized transit and On-demand transit service customers may share vehicles if it provides greater efficiency in the delivery of their trips. The decision to integrate trips will be based on the ability to utilize existing in-vehicle capacity and provide a better level of service to customers.

It should be noted that specialized transit will continue to operate as a core service for registered customers and any integration with On-demand transit service should not reduce the level of service for registered specialized transit customers.

Integration helps to achieve Burlington Transit's Strategic Direction #3 (Be Business-Minded and aligned with municipal directions), particularly Objective 3.3 (Efficiency), as it allows for the delivery of similar on-demand services to combined, thereby reducing unnecessary administrative and operational duplication.

Recommendations:

- Explore the concept of integrating specialized transit services with On-demand transit services. A prerequisite of this approach is demand-response software in place to support the functions required by customers and staff.

3. Customer Experience

Burlington Transit already offers real-time trip information and an acceptable level of comfort, accessibility and shelter. However, more in-depth real-time operational information and proactive communication would give passengers certainty and a sense of reliability. Improved accessibility and increasing the provision of shelters help to remove barriers to transit use, making it an option for more members of the community. Finally, enhanced digital connectivity builds on one of transit's competitive advantages – the ability to dedicate attention to digital devices to get work done and stay connected while travelling.

Customer experience enhancements can encourage new customers to transit and, importantly, keep existing customers on the system.

Strategy 3A: Improve Communications

Beyond real-time trip information, communications regarding planned and unplanned disruptions is the next most important information that passengers need to improve their comfort in using the service. Burlington Transit currently publishes their planned disruptions on their website, but there is little integration of this information with trip planning services. An analysis of Burlington Transit's staffing levels and discussions with key staff members have indicated that there are less on-road operations supervisors than necessary to provide full coverage of all services.

While operational recovery from disruptions is paramount, affected passengers need to be made aware of the problem, its outlook and their alternatives as soon as possible. To ensure that customers are aware of the actual operating environment on the routes and services they need to take, a service

Appendix A: Transit's Five-Year Business Plan Update

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standard should be set to publish unplanned disruptions on the Burlington Transit website and provide the information to the open data (Google Transit) API within 15 minutes of them occurring. This will require additional operations staff to address disruptions and better communication with Customer Service.

These initiatives align with Burlington Transit's Strategic Direction #2 (Be Forward-Thinking in how services are planned and delivered), particularly Objective 2.1 (Technology) as they work to harness existing and new technologies to deliver a better customer experience.

Recommendations:

- Establish a new service standard to ensure that all disruptions and unplanned events are published on Burlington Transit's website, to the open data (Google Transit) disruptions API and social feeds within 15 minutes of them occurring.
- Hire operations administrative dispatch clerks to support on-road operations supervisors and enhance communications with Customer Service.
- Investigate partnerships with third-party trip planning apps to provide riding assistance to new customers.

Strategy 3B: Improve Comfort and Accessibility at the Stop

To continue to progress towards a more accessible system, Burlington Transit is finalizing a 2019 Accessibility Plan, which forms part of the City of Burlington's Multi-Year Accessibility Plan 2019-2024. The Accessibility Plan outlines actions to remove barriers and improve accessibility. Many items in this business plan echo initiatives in the accessibility plan, including improved frequency, improved communications and improved links with neighbouring municipalities. The plan also includes a bus stop upgrade program and the additional of real-time information screens at the Burlington GO Station and the Downtown Terminal. In addition, Burlington Transit has recently formalized new bus stop design standards (see Strategy 3C), which define dimensions, access, orientation and other requirements for accessible transit stops and shelters.

Recommendations:

- Continue to implement key actions in the 2019-2020 Accessibility Plan.
- Develop updates to the Accessibility Plan for each year subsequent year during the business plan period.
- Expand the bus stop upgrade program to include accessible shelters (see Strategy 3C).

Strategy 3C: Shelters

A customer's perception of the transit experience starts before they board a vehicle. One of the first interactions with the system on the day of travel is waiting for the service at a stop. Shelters provide customers with a place to take refuge during inclement weather (rain, snow and strong winds) or shade during hot summer days. They also provide a source of information about the service and a sense of permanency of a transit system, particularly on routes that provide direct, frequent and rapid service.

As Burlington Transit continues to expand its service and build on the grid-network, the expansion of shelters should be considered as a key part of improving the customer experience prior to boarding the bus. This could involve a number of key actions:

1. Improve Existing Shelters
2. Develop Shelter Placement Criteria
3. Work with the Burlington Parks and Recreation Department to Increase Natural Shelters at Stops

Shelter improvements work towards Burlington Transit's Strategic Direction #1 (Be Customer-Focused in every aspect of how service is delivered), particularly Objective 1.6 (Accessibility) as can improve the customer experience and accessibility at the qualifying stops.

Recommendations:

- Continue to conduct bus shelter condition assessments for all existing stops with shelters.
- Create a shelter policy, dictating how stops qualify for shelters and how to prioritize the roll-out of new shelters.
- Work with Burlington Parks and Recreation Department to increase natural shelters at stops.

Strategy 3D: Digital Connectivity

One of the benefits to taking transit is that riders are free to engage in activities that are not possible when driving. Staying connected is increasingly important and it is common to see transit passengers using smartphones and tablets during their journeys. To improve the experience of customers using electronic devices during their travels, Burlington Transit could consider providing charging facilities and wifi. This allows customers to use their time more productively while on longer transit routes, access social media and music streaming services and use their mobile devices to access trip planning tools and be informed in real-time of disruptions in the system.

In the shorter term, implementing USB power outlets on buses and wifi at facilities are relatively simple and effective ways to encourage passenger connectivity when using transit. The implementation of these amenities should be on a pilot basis and focused on routes and facilities with higher ridership, to maximize their usefulness and the amount of feedback received.

Connectivity improvements align with Burlington Transit's Strategic Direction #2 (Be Forward-Thinking in how services are planned and delivered), particularly Objective 2.1 (Technology) as they work to harness existing and new technologies to deliver a better customer experience.

Recommendation:

- Include USB charging points on all new bus deliveries. Charging ports should be located strategically throughout buses, which could be assigned to a single longer-distance route or used

- throughout the network. Customer feedback and uptake by route and time of day should be collected to optimize the number and location of charging points on future deliveries.
- Implement a wifi pilot at major stations and transfer points (excluding GO Transit stations).

4. Travel Demand Management

Travel demand management are the tools that transit agencies can employ to encourage and influence demand, through affordability, incentivisation and holistic land use planning.

Travel demand management can be used to move demand or encourage growth during non-peak times, such as the midday, evenings and weekends. This frees up peak capacity and increases resource utilization during those less busy periods. In this way, growth can be accommodated at a lower cost and overall efficiency improved.

Strategy 4A: Free Midday Travel for Seniors

In March 2019 the City of Burlington Council directed Burlington Transit to implement a pilot program of offering seniors free travel between 9:00am and 2:30pm on weekdays. This pilot has become effective in June 2019 and run until 31 December 2020.

It should be noted that free transit also applies to seniors who use specialized transit. The AODA requires fare parity between conventional and specialized services, which will see an increase in demand on the specialized transit system. Unlike conventional transit, specialized transit peaks during the midday period and has less capacity to accommodate an increase in demand (due to the small vehicle size and on-demand door-to-door service delivery model). Therefore, the introduction of this policy is expected to see an increase in specialized transit service hours and vehicle requirements, including an increased operating and capital cost. The extent of this increase is currently unknown, but should be monitored over the course of the pilot, with a plan in place to increase operations during the midday period to maintain an acceptable trip accommodation rate.

This fare change aligns with Burlington Transit's Strategic Direction #1 (Be Customer-Focused in every aspect of how service is delivered), particularly Objective 1.8 (Affordability), in promoting access to transit for all residents of Burlington.

Recommendations:

- Monitor the impacts of the free midday travel for senior's pilot project on ridership, technology, customer service, revenue and operating costs for the course of the pilot before implementing further changes or mitigation measures.
- Budget to increase specialized transit service levels during the pilot project to maintain an acceptable trip accommodation rate.

Strategy 4B: Affordability

In conjunction with the City's decision on senior's fares, Council also agreed to change the Subsidized Passes for Low-Income Transit (SPLIT) subsidized pass program from a 50 percent fare reduction to a free monthly pass, effective May 1, 2019.

The existing SPLIT pass has been in place for almost nine years and has provided a 50 percent fare subsidy to residents of Burlington that are low income. The program is administered and initially funded by Halton Region Social Services. The change in the program to a free pass will see the City of Burlington cover the remaining 50 percent difference in the pass. Since the number of pass holders are relatively small, this change is not expected to have a significant impact on Burlington Transit's operations or revenue. However, Burlington Transit should report to Council how this has affected their budget and seek additional funding to cover lost revenue.

This fare change aligns with Burlington Transit's Strategic Direction #1 (Be Customer-Focused in every aspect of how service is delivered), particularly Objective 1.8 (Affordability), in ensuring access to transit for all residents of Burlington.

Recommendation:

- Monitor the usage of the new SPLIT pass and report the amount of lost revenue to Council.

Strategy 4C: Free Transit for Children

As of March 9, 2019, kids 12 and under were permitted to ride for free on GO Transit. The program has an estimated cost of \$8 million dollars of lost revenue. This does not take into account an increase in ridership and revenue from adults that use the service more often as it is more affordable to travel as a family unit. Much of this additional ridership occurs during the off-peak periods such as weekend family travel or school trips during the day.

Currently in Burlington, children under 5 ride for free whereas children between 6 and 12 pay \$3.50 cash or \$1.90 with Presto. Currently, children 6 to 12 represents 0.05 percent of total ridership on Burlington Transit. Using Presto data, it is estimated that 16,723 children under 12 are current Burlington Transit customers, with an estimated revenue of \$30,938.

Having a similar fare structure is important to improve the legibility of the system of passengers travelling with children using both GO Transit and Burlington Transit, as the same fare rules would apply between the two systems. This will become increasingly important with the introduction of RER, when the GO Rail network is further integrated with Burlington Transit routes and services (see Strategy 3D). In the short-term passengers travelling with children connecting between the two systems still receive a reduced fare through the co-fare agreement between Metrolinx and Burlington Transit (70 cents), allowing Burlington Transit to maintain an important revenue source. The challenge will be to integrate the service with Presto and to identify which passengers boarding a Burlington Transit bus as a GO Rail station are eligible for the co-fare payment between Burlington Transit and GO Transit.

This fare change aligns with Burlington Transit's Strategic Direction #1 (Be Customer-Focused in every aspect of how service is delivered), particularly Objective 1.8 (Affordability), in ensuring access to transit for all residents of Burlington.

Recommendations:

- Continue to maintain same child fare policy in the short-term to maintain revenue stream from the co-fare agreement.
- Monitor ridership and revenue changes that have occurred on other GTHA systems that have implemented a similar child fare policy (e.g. Durham Region Transit).
- Implement the child fare policy in the medium-term, with the introduction of RER and subject to Strategy 1D, or prior, depending on the results of the review of the impact from other GTHA systems noted above.

Strategy 4D: Discount Student Pass

Secondary school students offer a significant opportunity to encourage transit familiarity, increase ridership and establish travel patterns that may continue into post-secondary student and adult life. To maximize this opportunity, Burlington Transit, Council and the school boards within the City of Burlington are in the process of investigating a secondary student strategy. This strategy should include transit familiarization outreach for grade 7, 8 and/or 9 students and a discount secondary student pass. If the 'free child fare' program is extended to age 12, this student pass program should begin at age 13 (grade 7 students) for ease of administration and to ensure a continuous fare program during middle school years.

Ridership growth that occurs with these types of programs may also result in service improvements required to accommodate an increase in demand, particularly around school bell times. The ridership growth plan does account for increases in service frequency over the five year business plan (Strategy 1B), which should provide enough capacity to meet increased peak demands. If demand does exceed the planned increase in service, some strategies to off-set potential operating and capital cost increases include:

- a. Only allow free or discounted travel on weekends, holidays or after 4:00pm on weekdays (so that students do not use the service to go to/from school);
- b. Partner with school boards to receive partial funding for lost revenue;
- c. Work with the school board to ensure there is no reduction in yellow-school bus services without a corresponding increase in funding to support the student pass program; and/or
- d. Develop a formal booking process for formal school group excursions to ensure Burlington Transit is aware of these trips and that it occurs during periods or on routes where there is sufficient capacity to accommodate the trip.

This program will help to achieve Burlington Transit's Strategic Direction #3 (Be Business-Minded and aligned with municipal directions), particularly Objective 3.8 (Demand Management), by promoting long term behaviour change with younger transit users.

Recommendations:

- Implement a grade 9 transit outreach program in the short term to ensure transit literacy. If the free child fare program is extended to age 12, consideration should be made to extend this to grade 7 or 8.
- Further investigate a discounted or free middle and secondary student program, involving financial contributions from local school boards to cover a portion of predicted lost revenue. If the 'free child pass' program is extended to age 12, this program should be started for grade 7 students (13 years of age and older).
- Monitor program for a year-long period and extend to other grades for subsequent years.
- Partner with school boards to receive partial funding for lost revenue.

Strategy 4E: Employer Partnerships

Targeting employees that regularly commute represents a good opportunity to increase ridership on Burlington Transit. Employers that have standard office hours are typically located along key arterial corridors that have direct service, with start and end times that typically coincide with peak transit frequencies. Since service levels are high, the strategy for office employees is typically to target communications and marketing of the service and work with employers to offer an emergency ride home program if midday or evening service levels are not attractive.

Large industrial/warehousing employers, retail service employers and other employers located in areas not well serviced by Burlington Transit provide another employer partnership opportunity. These types of opportunities typically involve some degree of employer funding to provide more tailored service to meet employee requirements. This could include free or discounted transit passes, emergency ride home programs, and/or shuttle or on-demand services from transit hubs to work locations.

Burlington Transit staff time would be required to develop these programs and establish partnership with key employers. It is recommended that Burlington Transit staff first target a key employment area (e.g. the industrial area along Harvester Road) prior to developing a city-wide employer strategy.

This initiative aligns with Burlington Transit's Strategic Direction #3 (Be Business-Minded and aligned with municipal directions), particularly Objective 3.2 (Partnerships), by working with employers to generate mutually beneficial outcomes.

Recommendations:

- Explore opportunities for partnerships with employers and evaluate alternative service delivery models to provide service to employees (Strategy 2A). Target one employment area first for a year to assess level of effort relative to uptake and ridership growth.

- Look at whether regular service can be supplemented by on-demand alternatives during off-peak travel times and/or emergency ride home programs (see Strategy 2A and 2B).
- In the longer term, explore an Employee Pass Program that offers discounts on transit passes based on enrollment in the program.

Strategy 4G: Improve Coordination with Other City Departments

Transit's biggest asset is the land use and community design it operates in. Transit services that operate along mixed-use high density corridors with good connectivity to the places where people live, work and play offer the highest potential to grow ridership. In this way, transit and land use development are inexorably linked and therefore land use planning should always give strong consideration to transit needs, and vice versa. Ensuring the alignment of land use and transit will help create sustainable, mixed-use communities and also drive ridership by placing transit where residents and employees are located.

The City of Burlington has a number of plans to intensify around key transit corridors and mobility hubs. This is primarily focussed around the Burlington and Appleby GO Stations and the downtown terminal. In addition, the City of Burlington Official Plan (2018) identifies several corridors for mixed-use development and increased intensification. These include Brant Street south of Highway 407, the Plains Road and Fairview Street corridor and Appleby Line. The City is also currently conducting an Interim Control Bylaw review to assess the appropriate density and land use around downtown Burlington, the Burlington GO Station and the section of Brant Street connecting these two nodes.

Burlington Transit's growth should largely be focussed on these corridors, which aligns with the arterial focus of Strategy 1A. As recognised in Strategy 1A, access between transit stops and this increased development will be key to ensuring that the potential transit ridership growth is achieved.

While improved planning integration between land use, roadway planning and transit is unlikely to result in measurable ridership growth in the short-term, it will pay dividends as development patterns evolve over time.

Improved integration with land use planning is the core of Burlington Transit's Strategic Direction #2 (Be Forward-Thinking in how services are planned and delivered), particularly Objective 2.6 (Transit Oriented Development), as it facilitates better planning and delivery of transit services.

Recommendations:

- Play an active role in strategic land-use planning decisions, highlighting the need for high levels of pedestrian amenity and access to the arterial grid network.
- Continue to work with City of Burlington staff on the alignment of development, growth and employment areas with transit investment and service by reviewing development applications and secondary plans.
- Develop and formalize a Service Development Plan for Burlington Transit that outlines where service investment is expected in the future. This should be a living document that can help inform land use planning decisions to support transit.

Appendix A: Transit's Five-Year Business Plan Update

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- Develop a proximity service standard with the City of Burlington's Planning and Development Department. This standard should define a five-year target from proximity to transit once the grid-network has been established and place the onus on the Planning and Development Department to achieve the target based on growth.
- Continue to work with Transportation Services Department to coordinate transit interests in roadway capital improvement programs (e.g. new stops, shelters, accessibility improvements, transit priority features).
- Work with Transportation Services Department as a key stakeholder in the Integrated Mobility Master Plan and identify strategies to help meet the transit mode share target.