



2021 Annual Service Plan

Date: December 15, 2020
To: TTC Board
From: Chief Strategy & Customer Officer

Summary

This report presents the TTC's 2021 Annual Service Plan (2021 ASP) which is our blueprint for transit service in Toronto as we restart, recover and rebuild.

The 2021 ASP advances the TTC's first 5-Year Service Plan & 10-Year Outlook (5YSP) and sustains the principles that were used to develop the TTC's demand-responsive service plan. Based on these plans as well as customer and stakeholder guidance, the 2021 ASP has been developed around the following focus and three key priorities.

Our focus is to continue to respond to customers' dynamic and evolving demand for public transit service in 2021.

Our priorities are to:

1. Sustain the demand-responsive service plan
 - Sustain some flexible service to respond dynamically to customer demand
 - Ensure the TTC is ready for fluctuations in COVID-19 cases
2. Improve regular scheduled service by reallocating and restructuring services
 - Balance service levels, on all routes, at all times of day, based on demand
 - Improve service reliability to reflect actual operating conditions as they evolve
 - Address travel patterns and capacity requirements by restructuring services
3. Advance key strategic initiatives
 - Continue implementing surface transit improvements
 - Advance service integration with neighbouring municipalities
 - Pilot the automated transit shuttle and connect with microtransit shuttle services

Using the 5YSP's 20-point action plan as a framework, these priorities are advanced in 2021 through 22 initiatives. The 2021 ASP ensures that the TTC continues to deliver safe, accessible and reliable public transit service which is critical to the recovery and prosperity of Toronto and the region.

The 2021 ASP can be found in **Attachment 1**.

Recommendations

It is recommended that the TTC Board:

- 1) Approve the 2021 ASP including the 20-point action plan that identifies 22 initiatives including:
 - a) Optimizing capacity on all routes, in all times of day, to accommodate demand by continuing to apply COVID-19 modified capacity thresholds of 50% capacity (e.g. 25 per bus) and adjusting to 70% capacity (e.g. 35 per bus) as ridership increases by year end, as projected.
 - b) Reallocating capacity on the Wilson Avenue and Kingston Road corridors to provide community access in neighbourhood improvement areas as described in **Attachment 3** by scheduling:
 - i) Local bus service in the peak periods, from Monday to Friday, to connect the Stanley Greene neighbourhood to Line 1 Yonge-University at Wilson Station.
 - ii) Midday service on the 12D Kingston Rd and the 119 Torbarrie by applying an equity-lens to service planning.
 - c) Routing changes to the 107 St. Regis and 117 Alness-Chesswood in York University Heights's employment lands to improve performance as described in **Attachment 3**.
 - d) Routing changes to the 121 Fort-York Esplanade in the Downtown to improve performance as outlined in **Attachment 3**.
 - e) Routing changes to the 54 Lawrence East, 86 Scarborough, 95 York Mills, 116 Morningside, 905 Eglinton East Express and establishing the 178 Brimorton and 938 Highland Creek Express to improve travel times, community access and capacity, based on demand, for customers in Scarborough East as outlined in **Attachment 3**.
- 2) Direct staff to include the funding requirements noted in the Financial Summary of this report for consideration in the TTC 2021 Operating and 2021-2030 Capital Plan deliberations.
- 3) Direct staff to forward the 2021 ASP to all City Councillors, the Deputy City Manager, Infrastructure and Development Services, General Manager of Transportation Services, Chief Planner, all members of the City Mobility Table, as well as the General Managers of Brampton Transit, Durham Region Transit, Metrolinx, MiWay and York Region Transit.

Financial Summary

The 2021 ASP identifies 22 initiatives for the coming year which have the following funding requirements.

2021 Operating Budget

The 2021 ASP proposes 9,359,000 annual service hours for regular (operating) service and a further 138,000 hours to mitigate service delays associated with Eglinton and Finch West LRT construction.

Regular operating service will decrease by 303,000 annual service hours as compared to the budgeted annual service hours in 2020, as seen in **Figure 1**. The decrease in annual service hours result in an operating cost savings of approximately \$20.5 million in the 2021 Operating Budget relative to the 2020 Operating Budget. This operating cost savings will be included in the TTC 2021 Operating Budget, to be considered by the TTC Board on December 21, 2020.

As also seen in **Figure 1**, supplementary bus service to mitigate delays and disruptions due to Eglinton Crosstown and Finch West construction (i.e. lane closures, road closures and intersection closures) is being reduced as the projects advance and the need to sustain service levels subside. For the 2020 operating budget, the cost of this service was budgeted to be funded through a Metrolinx recovery. Consistent with the terms of settlement approved by the TTC Board on September 24, 2020, these costs will be funded though the operating budget going forward, with anticipated settlement proceeds as the funding source for 2021.

Figure 1: 2021 annual operating service hours by mode (regular service)

Mode	2020 Budget	2021 Plan	Change in Service Hours
Bus	7,416,000	7,358,000	(58,000)
Streetcar	1,048,000	921,000	(127,000)
Subway	1,198,000	1,080,000	(118,000)
Total (Regular Service)	9,662,000	9,359,000	(303,000)
LRT Construction (supplemental bus)	199,000	138,000	(61,000)
Total (Regular Service + LRT Construction)	9,861,000	9,497,000	(364,000)

* 101% of regular bus service is budgeted in 2021 vs. 2020.

Figure 1 presents a change on a “budget to budget” basis, but it is important to note that the 2021 ASP outlines a plan to operate at current pandemic service levels, at a minimum. The reduction of 303,000 annual service hours in regular service includes 77,000 annual service hours that do not result in a decrease in service capacity. This includes implementing the following operating efficiencies and other changes:

- Open McNicoll Garage which reduces deadhead service hours
- Implement RapidTO on the Eglinton East corridor
- Partial implementation of Automatic Train Control on Line 1
- Conversion of low-capacity bus service to high-capacity streetcar service
- Adjustments for calendar changes (2020 was a leap year)

In 2021, annual service hours for bus services excludes enhancements for service reliability which were included in the 2020 Operating Budget, but never implemented.

However, it should be noted that in-year adjustments were made across the bus network to provide additional capacity on high demand routes and these changes have been incorporated in the 2021 Operating Budget. These changes are incorporated in initiatives to match service capacity with demand.

A summary of the change in annual service hours is presented in **Figure 2**.

2021-2030 Capital Plan

The 2021 ASP includes initiatives to meet the transit needs of our City. In 2021, vehicles are available to implement the plan, however, capital funding is required to begin procuring replacement and growth vehicles in future years, improve key stop areas as well as implement transit priority measures.

The 2021 ASP requires approximately \$282.7 million in capital costs. Of this, \$173.6 million will be requested as part of the TTC’s 2021-2030 Capital Plan, while \$109.1 million is not funded due to funding constraints. The majority of the unfunded amount is for the procurement of 47 additional streetcars required in outer years, additional streetcar maintenance and storage capacity and targeted operational improvements at key bus stop locations which excludes improvements to upgrade stops for accessibility and to accommodate articulated buses which is planned to proceed.

Figure 2: Summary of change in annual service hours for regular service

Category	Item	Bus	Streetcar	Subway	Total
Pandemic Service Changes	Match Capacity with Demand	59,000	(147,000)	(100,000)	(188,000)
Pandemic Service Changes	2020 Service Enhancement (resources not required)	(38,000)	0	0	(38,000)
Pandemic Service Changes	Sub-total	21,000	(147,000)	(100,000)	(226,000)
Service Efficiencies (no effect on service capacity)	New Streetcars Deployed (replace buses with streetcars)	(34,000)	23,000	0	(11,000)
Service Efficiencies (no effect on service capacity)	McNicoll Garage Opens (less deadhead)	(4,000)	0	0	(4,000)
Service Efficiencies (no effect on service capacity)	Automatic Train Control (faster operating speeds)	0	0	(14,000)	(14,000)
Service Efficiencies (no effect on service capacity)	RapidTO (faster operating speeds)	(15,000)	0	0	(15,000)
Service Efficiencies (no effect on service capacity)	Sub-total	(53,000)	23,000	(14,000)	(44,000)
Calendar Change (no effect on service capacity)	Calendar Changes (2020 was a leap year)	(26,000)	(3,000)	(4,000)	(33,000)
Calendar Change (no effect on service capacity)	Sub-total	(26,000)	(3,000)	(4,000)	(33,000)
All	Grand total	(58,000)	(127,000)	(118,000)	(303,000)

The interim Chief Financial Officer has read this report and agrees with the financial impact information.

Equity/Accessibility Matters

The TTC is making Toronto's transit system barrier free by implementing changes that will make all of its services and facilities accessible to all our customers. The TTC strongly believes that all customers should enjoy the freedom, independence and flexibility to travel anywhere on its transit system. The TTC's commitment to providing accessible transit is also at the forefront of its 2018-2022 Corporate Plan.

The 2021 ASP focuses on ensuring that the transit network remains reliable with service capacity matched to demand, which is critical for members of equity seeking groups who need to get to and from essential work, school, health services and other mobility needs. The 2021 ASP will also implement many of the specific initiatives contained in the 5YSP, which will help support and advance the Wheel-Trans Family of Services delivery model and the 2019-2023 Multi-Year Accessibility Plan. Initiatives such as developing new wayfinding strategies, improving customer amenities at stops and applying an equity lens to service planning will help achieve a modern, inclusive and accessible transit system for all.

The TTC recognizes the importance of reaching out and consulting with customers who are traditionally underrepresented in the planning process and are also disproportionately affected by planning decisions. To facilitate these discussions as part of the development of the 2021 ASP, TTC recruited local youth leaders to help seek feedback from members of equity-seeking communities.

As identified in the 5YSP, the TTC is applying equity considerations in the service planning process by applying a different weight to ridership in Neighbourhood Improvement Areas. For 2021, this has led to off-peak period service along Kingston Road.

Decision History

The 5YSP is the overarching business plan that identifies a 20-point action plan to improve public transit between 2020 and 2024. The TTC Board approved the plan on December 12, 2019.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2019/December 12/Reports/16 5 Year Service Plan and 10 Year Outlook.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2019/December%2012/Reports/16%205%20Year%20Service%20Plan%20and%2010%20Year%20Outlook.pdf)

In response to the COVID-19 pandemic, the TTC presented its demand-responsive service plan to the Board on May 13, 2020.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2020/May 13/Reports/4 %20TTCs Response to COVID 19 Staff Presentation.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2020/May%2013/Reports/4%20TTCs%20Response%20to%20COVID%2019%20Staff%20Presentation.pdf)

At the May 2020 Board meeting, the TTC Wayfinding Strategy was approved.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2020/May 13/Reports/12 TTC Wayfinding Strategy.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2020/May%2013/Reports/12%20TTC%20Wayfinding%20Strategy.pdf)

A recovery plan was prepared to guide the TTC to restarting regular service for customers as ridership and the economy rebounded. A tiered approach to returning capacity was introduced, and this report was approved by the Board on June 17, 2020. http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2020/June_17/Reports/4_COVID_19_Transitioning_from_Response_to_Restart_and_Recove.pdf

As part of the 5YSP, improving transit priority was identified as a major pillar of opportunity. Along with partners at the City of Toronto, the TTC advanced this initiative as part of RapidTO and developed a Bus Lane Implementation Plan that was approved by the Board on July 14, 2020.

http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2020/July_14/Reports/5_Bus_Lane_Implementation_Plan.pdf

The TTC presented an update on the COVID-19 recovery plan that included an outlook through the rest of 2020 and 2021. This report was approved by the Board on September 24, 2020.

http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2020/September_24/Reports/5_COVID_19_Restart_and_Recovery_Update_Updated.pdf

Issue Background

5-Year Service Plan & 10-Year Outlook

The 5YSP is a business plan that identifies the service, resource and funding needs to improve transit between 2020 and 2024. The plan focuses on making improvements that enhance the TTC’s core-competency: mass transit – moving large volumes of customers safely, reliably and swiftly across Toronto. The plan identifies five pillars of opportunity that enhances every step of our customers’ journeys on the transit system (see **Figure 3**). The pillars in the 5YSP translate to a 20-point action plan that are implemented through annual service plans over the next five years. The implementation of the initiatives is contingent on a number of interdependent factors, including an assessment of when resources will be available and the assumption that major projects will be implemented as planned.

Figure 3: Five pillars of opportunity



2020 service review

In response to rising cases of COVID-19, the TTC implemented the demand-responsive service plan to serve our customers and their evolving demand for public transit service. The plan was developed based on the following two principles:

1. Regular scheduled service will focus on protecting high-ridership corridors and service to essential employment areas, grocery stores, pharmacies, healthcare facilities and neighbourhood improvement areas. Service will continue to be provided in all areas of the city every 30 minutes or better based on demand.
2. Flexible bus service will be available daily to deploy to routes where additional capacity is required to meet known and growing demand.

Ridership has increased since a low in April and is approximately at 31% of pre-COVID levels as of the week ending November 27. Recognizing that one customer may board multiple vehicles to complete their journey, the TTC also measures boardings by mode to plan service. **Figure 4** presents average weekday boardings and service levels by mode for the week ending November 27.






Figure 4: Average weekday boardings by mode (week ending Nov. 27, 2020)

Mode	Pre-COVID (March 2-6)	Current (Nov 23-27)	% of Pre-COVID Demand	% of Pre-COVID Service Level
Bus	1,381,000	615,000	45%	97%
Streetcar	350,000	99,000	28%	86%
Subway	1,492,000	395,000	26%	86%
Total	3,223,000	1,109,000	34%	95%

Our outlook for 2021, based on available and evolving information, is that ridership will steadily increase from 35% to 50% of pre-COVID levels. We estimate that ridership will increase above 50% when mass vaccinations begin and the pandemic subsides.

The 5YSP established a 20-point action plan to deliver various initiatives between 2020 and 2024. In 2020, we planned to deliver 16 initiatives. Overall, six initiatives were implemented, six have been started and four have been deferred due to the COVID-19 pandemic. **Figure 5** presents a status summary for all initiatives planned for implementation in 2020.

Figure 5: 2020 action plan – status summary

	Action	Status	Initiative
	1.1: Accommodate population and employment growth		
	1.2: Implement new services to address travel patterns	Implemented	1. New branch of 43 Kennedy to Village Green
	1.3: Open Line 5 – Eglinton		
	1.4: Relieve crowding on Line 1		
	1.5: Open Line 6 – Finch West		
	1.6: Enhance streetcar network	Implemented	2. New streetcars deployed on 505 Dundas
	1.7: Apply an equity lens to service planning	Implemented	3. Youth-led engagement process as part of 2021 ASP
	2.1: Expand customer amenities at stops	Deferred	4. Deferred to 2021 due to COVID-19
	2.2: Improve wayfinding at stops	Started	5. Wayfinding Strategy started to guide improvements
	2.3: Improve placemaking at key stop areas	Deferred	6. Deferred to 2021 due to COVID-19
	3.1: Improve surface transit schedules	Started	7. Ongoing schedule refinement throughout COVID-19
	3.2: Mitigate delays & disruptions to service	Implemented	8. Flexible buses added in January and continue to operate
	4.1: Explore bus transit lanes	Implemented	9. RapidTO on Eglinton East corridor
	4.2: Implement more queue jump lanes	Started	10. Surface Transit Network Plan completed to guide future work
	4.3: Implement more transit signal priority	Started	11. Developed MoveTO Plan
	5.1: Expand service integration	Started	12. Multi-agency service plan is being developed
	5.2: Integrate microtransit services	Deferred	13. Deferred to 2021 due to COVID-19 pandemic
	5.3: Enhance integration with cycling	Implemented	14. Expanded bike share and bike parking at stations
	5.4: Enhance pedestrian pathways to TTC	Started	15. Study complete: pathways in North York
	5.5: Implement Mobility as a Service (MaaS) strategy	Deferred	16. Deferred to 2021 due to COVID-19 pandemic

Comments

Introduction

Since March 2020, the TTC has focused on supporting customers' transit needs through the COVID-19 pandemic. The TTC implemented a demand-responsive plan along with other strategies to move customers safely on public transit. The 2021 ASP will focus on transit strategies to continue to respond to the COVID-19 pandemic and recovery as well as refining the initiatives approved last year by the TTC Board in the 5YSP. **Attachment 1** presents the 2021 ASP.

Customer and stakeholder consultation

Consultation on the 2021 ASP followed a three-round process. The first round (June-July 2020) consisted of a customer preference survey that provided insight on how customers' priorities have changed since the pandemic. Indicative plans and proposals were prepared based on this insight and initiatives from the 5YSP were re-evaluated. The second round presented the plans and proposals to customers and stakeholders through virtual meetings and online, mail and phone engagement.

The customer engagement included three surveys promoted via social media, posters installed at approximately 300 bus shelters and stations and a video hosted on a dedicated engagement website. The third round presented the final recommendations after being refined from the previous rounds of consultation.

Throughout the development of the 2021 ASP, it was important for the TTC to reach out to customers who are traditionally underrepresented in the public engagement process, but are also more likely to be affected by transit service changes. To improve our reach to these customers, the TTC undertook a new approach by establishing a youth-led engagement initiative.

A diverse team of four youth from Neighbourhood Improvement Areas in the east and west ends of Toronto were recruited and trained to engage their local communities. The youth team were provided paid work and skill development opportunities to lead consultations about select 2021 ASP initiatives that they considered the most important in their communities. Youth team members designed, delivered and documented an engagement process seeking feedback from their local communities. Overall, the one common theme that all youth engagement team members shared was that the TTC should focus on improving service reliability. For more information, please see **Attachment 2 – Customer and Stakeholder Engagement Executive Summary**.

Focus and priorities for 2021

The 2021 ASP has been developed around the following vision and three priorities based on the 5YSP, public health guidance, service and operational reviews and customer and stakeholder guidance. Our focus is to continue to respond to customers' dynamic and evolving demand for public transit service. Our priorities are to:

1. Sustain the demand-responsive service plan
 - Sustain some flexible service to respond dynamically to customer demand
 - Ensure the TTC is ready for fluctuations in COVID-19 cases
2. Improve regular scheduled service by reallocating and restructuring services
 - Balance service levels, on all routes, at all times of day, based on demand
 - Improve service reliability to reflect actual operating conditions as they evolve
 - Address travel patterns and capacity requirements by restructuring existing services and introducing new services
3. Advance key strategic initiatives
 - Continue implementing surface transit improvements
 - Advance service integration with neighbouring municipalities
 - Pilot the automated transit shuttle and connect with microtransit shuttle services

Using the 5YSP's pillars of opportunity and 20-point action plan as a framework, these three priorities are advanced in 2021 through the following 22 initiatives.

Pillar 1 – Transit network

Pillar 1 focuses on actions that help customers get to where they want to go, when they want to go. In 2021, we have identified the following seven initiatives that sustain the demand-responsive service plan and improve regular scheduled service through reallocating and restructuring services:

1. Optimize capacity by rebalancing service levels
2. Improve route productivity and performance by modifying schedules
3. Implement service changes in Scarborough East that adjust capacity and access
4. Restore most Express Bus services
5. Continue to modernize the streetcar network with SOGR work
6. Make transit accessible in neighbourhood improvement areas
7. Expand equity-based consultations as part of 2022 ASP

Pillar 2 – Customer experience at key surface transit stop areas

Pillar 2 includes actions that focus on our customers' experiences at key surface stop areas. These actions provide our customers with a pleasant experience that begins before they get on a vehicle. In 2021, we have identified three initiatives at key stop areas:

8. Implement accessibility improvements and identify customer amenities at stops
9. Implement wayfinding strategy system-wide
10. Identify placemaking improvements on key corridors

Pillar 3 – Service reliability

Pillar 3 identifies actions to provide a reliable service that our customers can count on. In 2021, we have identified three initiatives that continue to improve regular scheduled service and provide customers with a predictable travel experience:

11. Improve weekday schedules to reflect actual operating conditions
12. Minimize non-revenue service to maximize capacity
13. Minimize customer inconvenience during planned and unplanned disruptions

Pillar 4 – Surface transit priority

Pillar 4 aims to provide fast service that values our customers' journey time. In 2021, we have identified three initiatives to advance this key strategic initiative:

14. Advance consultation, community outreach and analysis on key corridors
15. Implement queue jump lane at Lake Shore and Brown's Line
16. Install 100 Advanced Transit Signal Priority at key locations over 2 years

The RapidTO initiative is intended to improve bus service on the busiest routes in the city. This includes Eglinton East, Jane, Dufferin, Finch East, and Steeles West. On October 11, 2020 the TTC and City introduced Toronto's first RapidTO corridor on Eglinton East.

Jane Street is the second corridor to be reviewed based on high ridership, slow transit speeds and challenges with service reliability. City and TTC staff briefed local Councillors along the Jane corridor and received information regarding a number of challenges that must be addressed to ensure successful implementation of improved transit priority measures along the corridor. City and TTC staff are continuing technical analysis and will share options with local Councillors before initiating stakeholder consultations and community outreach in 2021.

Pillar 5 – Integration with transit partners and complementary modes

Pillar 5 focuses on integration with regional transit partners and complementary modes of transportation so that our customers experience a seamless connection to and from our services. In 2021, we have identified six initiatives:

17. Advance service integration "pilot" with partner agencies
18. Implement automated shuttle trial
19. Improve connections with private microtransit shuttle providers
20. Integrate cycling and transit with more bike parking and 10 shelters at stations
21. Advance design work to implement "missing links" pathways in 2022
22. Establish Mobility as a Service working group

A summary of the 2021 action plan and proposed 22 initiatives is presented in **Figure 6**.

For more information, please see **Attachment 1 – 2021 Annual Service Plan** that describes the 22 initiatives in greater detail. **Attachment 3 – Technical Assessment** presents detailed information supporting service changes.

Figure 6: 2021 action plan

Action	Initiative
1.1: Accommodate population and employment growth	1. Optimize capacity by rebalancing service levels 2. Improve route productivity and performance by modifying schedules
1.2: Implement new services to address travel patterns	3. Implement service changes in Scarborough East 4. Restore most Express Bus service
1.3: Open Line 5 – Eglinton	• Opening of Line 5 has been deferred to 2022
1.4: Relieve crowding on Line 1	
1.5: Open Line 6 – Finch West	
1.6: Enhance streetcar network	5. Continue to modernize the streetcar network with SOGR work
1.7: Apply an equity lens to service planning	6. Make transit accessible in neighbourhood improvement areas 7. Expand equity-based consultation as part of 2022 ASP
2.1: Expand customer amenities at stops	8. Implement accessibility improvements & identify customer amenities at stops
2.2: Improve wayfinding at stops	9. Implement wayfinding strategy system-wide
2.3: Improve placemaking at key stop areas	10. Identify placemaking improvements on key corridors
3.1: Improve surface transit schedules	11. Improve weekday schedules by reflecting actual operating conditions 12. Minimize non-revenue service to maximize capacity
3.2: Mitigate delays & disruptions to service	13. Minimize customer inconvenience during planned and unplanned disruptions
4.1: Explore bus transit lanes	14. Advance consultation, community outreach and analysis on key corridors
4.2: Implement more queue jump lanes	15. Implement queue jump lane at Lake Shore and Brown's Line
4.3: Implement more transit signal priority	16. Install 100 Advanced Transit Signal Priority at key locations over 2 years
5.1: Expand service integration	17. Advance service integration "pilot" with partner agencies
5.2: Integrate microtransit services	18. Implement automated shuttle trial 19. Improve connections with private microtransit shuttle providers
5.3: Enhance integration with cycling	20. Integrate cycling and transit with more bike parking and 10 shelters at stations
5.4: Enhance pedestrian pathways to TTC	21. Advance design work to implement "missing links" pathways in 2022
5.5: Implement Mobility as a Service (MaaS) strategy	22. Establish Mobility as a Service working group



2021 investment summary

The 2021 ASP proposes 9,359,000 annual service hours for regular (operating) service and a further 138,000 hours to accommodate service delays associated with Eglinton and Finch West LRT construction. Regular operating service will decrease by 303,000 annual service hours as compared to the budgeted annual service hours in 2020, as seen in **Figure 1**. The decrease in annual service hours result in an operating cost savings of approximately \$20.5 million in the 2021 Operating Budget relative to the 2020 Operating Budget. This operating cost savings will be included in the TTC 2021 Operating Budget, to be considered by the TTC Board on December 21, 2020.

The 2021 ASP includes initiatives to meet the transit needs of our City. In 2021, vehicles are available to implement the plan, however, capital funding is required to begin procuring replacement and growth vehicles in future years, improve key stop areas as well as implement transit priority measures.

The 2021 ASP requires approximately \$282.7 million in capital costs. Of this, \$173.6 million will be requested as part of the TTC's 2021-2030 Capital Plan, while \$109.1 million is not funded due to funding constraints. The majority of the unfunded amount is for the procurement of 47 additional streetcars required in outer years, additional streetcar maintenance and storage capacity and targeted operational improvements at key bus stop locations which excludes improvements to upgrade stops for accessibility and to accommodate articulated buses which is planned to proceed.

Contact

Eric Chu, Senior Planner – Transit Service
416-393-2153
eric.chu@ttc.ca

Signature



Kathleen Llewellyn-Thomas, P. Eng.
Chief Strategy & Customer Officer

Attachments

Attachment 1 – 2021 Annual Service Plan
Attachment 2 – Customer and Stakeholder Engagement Executive Summary
Attachment 3 – Technical Assessment

2021 ANNUAL SERVICE PLAN

RE: 2021

RESTART, RECOVER, REBUILD





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1. From the Chair



I am pleased to present the TTC's 2021 Annual Service Plan.

The COVID-19 pandemic has underscored the critical importance of safe, accessible and reliable public transit service. Going forward, the TTC will play an integral role in Toronto's restart and recovery.

Throughout the pandemic, the TTC and City of Toronto have adapted and innovated to advance key improvements to our transportation network. In 2020, priority bus lanes were introduced on the Eglinton East corridor, new streetcars were deployed on 505 Dundas and bike parking has expanded at stations across the city. At the same time, the TTC has advanced critical state-of-good-repair work on our subway and streetcar infrastructure to ensure that our transit system continues to be safe and reliable for years to come.

The 2021 Annual Service Plan is the TTC's blueprint for public transit service over the coming year. The Plan advances actions identified in the 5-Year Service Plan & 10-Year Outlook and makes adjustments to respond to our customers' dynamic and evolving needs.

This Plan is based on technical analysis, operational insights and extensive consultation with transit riders and stakeholders. Through this process, TTC passengers have made their priorities clear: sustain the demand-responsive service plan, improve regular scheduled service and advance key strategic initiatives.

I would like to thank TTC staff for their excellent work on the 2021 Annual Service Plan. I would also like to thank my colleagues on the TTC Board for their continued support.

The 2021 Annual Service Plan will be an important road map for the TTC as we navigate Toronto's recovery over the next year.

A handwritten signature in black ink that reads "Jaye Robinson". The signature is written in a cursive, flowing style.

Jaye Robinson
TTC Chair
December 2020

2. From the Chief Executive Officer



The COVID-19 pandemic has impacted the lives of all residents in Toronto and the region. And while demand for public transit has decreased significantly, we recognize that safe, accessible and reliable public transit service is critical to the recovery and prosperity of our great city.

The TTC has implemented important measures during the COVID-19 pandemic to ensure the health and safety of our customers and employees. We are cleaning and sanitizing our buses, streetcars and trains daily, we have made masks mandatory for customers and employees, and we have implemented workplace protocols, such as COVID-19 screening, to ensure our workforce is healthy and ultimately available to continue to deliver high-quality public transit service to our customers.

We have also implemented a demand-responsive service plan to ensure that transit is accessible and reliable across the city. The demand-responsive service plan allows us to adjust service capacity in response to evolving customer demand.

The 2021 Annual Service Plan outlines our focus and priorities for the coming year. Our focus is to continue to respond to customers' dynamic and evolving demand for public transit service by:

- Sustaining demand-responsive service to provide flexibility and protect against fluctuations in COVID-19 cases.
- Improving regular scheduled service to optimize capacity, improve service reliability and address customer travel patterns.
- Advancing key strategic initiatives including surface transit priority measures, service integration with neighbouring transit agencies and piloting an automated shuttle service.

I am proud of the work we have accomplished in this difficult year. I am also confident that this plan will continue to dynamically respond to customer demand while pushing forward with initiatives that provide both immediate and long-term benefits for our customers across Toronto and throughout the region.

A handwritten signature in black ink, appearing to read "Richard J. Leary". The signature is fluid and cursive, written in a professional style.

Richard J. Leary
Chief Executive Officer
December 2020

3. About the plan

We developed our first 5-Year Service Plan & 10-Year Outlook (5YSP) in 2019. The 5YSP is a blueprint to improve our customers' journeys and a business plan that identifies the resource and funding requirements to do it.

The 5YSP identifies a vision that focuses on improvements that enhance the TTC's core-competency: mass transit – moving large volumes of customers safely, reliably and swiftly across Toronto. The vision takes shape around five pillars of opportunity:

1. Enhance the transit network
2. Enhance customer experience at key surface transit stop areas
3. Improve service reliability
4. Prioritize surface transit
5. Accelerate integration with transit partners and complementary modes of transport

Figure 1: Five pillars of opportunity



Each pillar of opportunity has specific action items. In total, there are 20 action items that include various initiatives to be implemented between 2020 and 2024. This report presents the 2021 Annual Service Plan (2021 ASP) which applies the framework established in the 5YSP while sustaining the principles of the demand-responsive service plan that was implemented in 2020 in response to the COVID-19 pandemic.

3.1 Plan preparation

The 2021 ASP is our blueprint for transit service over the next year. The 2021 ASP is not a business as usual plan. It has been developed through technical analysis, operational insights and customer and stakeholder discussions. In addition to this, the 2021 ASP takes into account other important factors such as public health guidance for mass transit during the pandemic and new funding challenges brought on by reduced ridership revenue and sustained operating costs to maximize capacity for customers. Overall, the 2021 ASP includes initiatives previously identified in the 5YSP and new initiatives that have emerged in 2020 over the course of the global pandemic.

3.2 Customer and stakeholder engagement

The 2021 ASP has been prepared with customers and stakeholders through an extensive engagement program, as shown in **Figure 2**.

Figure 2: Customer and stakeholder engagement facts



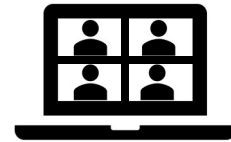
3,560+

customers and stakeholders



12+

weeks of engaging customers through online, mail, e-mail, phone and youth-led consultations



4

virtual meetings with stakeholders

88%

of customer and stakeholder survey respondents highly support the 2021 ASP's focus and priorities

"Thank you very much for providing me the opportunity to provide my feedback. I believe if the TTC can reduce passenger overcrowding across its network with new express services, it would allow riders to feel safe, comfortable and enjoy a positive travel experience. I feel that if TTC also considers further service integration between subway, streetcars and buses, and along with GO Transit services, more people will use the TTC to travel. I hope these major improvements can be implemented as soon as possible to maximize these benefits for people".

– Survey respondent

"Keep up the good work. I understand the difficulties of keeping this essential service running especially during a pandemic. So, thank you very much for all you have done and continue to do".

– Survey respondent

"Based on the current situation these priorities will help much more with travellers' safety. Yes, I regularly travel (everyday) the need for more flexible resources that will accommodate us without comprising health, this will be our most important priority at this time and through the following years. "Safety" by putting more resources to help more people is desperately needed. This will help passengers to travel comfortably without worrying about their health."

– Survey respondent

The 2021 ASP engagement program reached approximately 3,500 customers and stakeholders through four online surveys, mail-in survey, email, phone and youth-led consultations. Approximately 60 representatives of stakeholder groups and transit advocates participated in four stakeholder meetings in September and November.

Customers and stakeholders expressed strong support for the 2021 ASP's focus, priorities and initiatives. Customers and stakeholders also suggested that they would like to see the following initiatives prioritized:

- Greater capacity on busy corridors to support customers' health and safety
- Improve service reliability and increase service frequency
- Re-instate operation of express bus service as they are valuable to customers and the effects of their temporary suspension during the pandemic were felt
- Improve service accessibility and equity-focused approaches to planning and delivering transit service given that low-income and marginalized communities tend to be more affected by these decisions
- Improve communication and outreach with customers about service updates and service changes before they are implemented
- Improve service integration with neighbouring transit agencies and other modes

Customers were also asked about RapidTO through dedicated surveys. Highlights of their feedback include:

- **Eglinton East:** Participants generally prefer service that combines local routes serving local stops and express routes serving major stops to support the travel needs of local residents and customers travelling long-distances. There was also mixed support for the consolidation of local bus stops and some concerns over the priority bus lanes' impact on traffic.
- **Jane Street:** Participants want to see local service reliability balanced with increased speed of express service. They also want to see long-standing service issues addressed and accessible service provided for high-density residential areas and lower-income communities along Jane Street.

Youth-led engagement

The youth-led engagement initiative is one way we are applying an equity lens to our service planning process. The approach is new and intended to engage young people between the ages of 18 to 29, a demographic typically underrepresented in city-building consultations. A diverse team of four youth from Neighbourhood Improvement Areas in the east and west ends of Toronto were recruited and trained to engage their local communities. The youth team were provided paid work and skill development opportunities to lead consultations about select 2021 ASP initiatives that they considered the most important in their communities. Within two weeks of consultation, more than 130 people were engaged by the youth team through social media, online surveys, in-neighbourhood posters and online discussion tools. Overall, the one common theme that all youth engagement team members shared was to focus on improving service reliability. One youth team member shared this insight: "The TTC has a major influence on how people feel throughout the day – if you start your day with a bad experience, it stays with you."

4. 2020 service review

In response to rising cases of COVID-19, in mid-March the Province and City of Toronto declared a state of emergency and implemented measures to protect the health and well-being of residents. To minimize the spread of COVID-19, the majority of businesses, education and cultural activities shifted to a virtual format that continued for the remainder of 2020 and is expected to continue well into 2021, in effect decreasing demand for public transit service.

Despite ridership declining to 14% of pre-COVID demand at its lowest point in April, the TTC continued to carry more than 200,000 customers per weekday with customers making trips to access essential destinations.

This section provides a summary of our demand-responsive service plan, a ridership update and outlook for 2021 and a summary of improvements implemented in 2020 that will benefit customers today as well as in the future.

4.1 Demand-responsive service plan

In the spring, the TTC implemented the demand-responsive service plan to serve our customers and their evolving need for public transit service. The plan was developed based on the following two principles:

1. Regular scheduled service will focus on protecting high-ridership corridors and service to essential employment areas, grocery stores, pharmacies, healthcare facilities and Neighbourhood Improvement Areas. Service will continue to be provided in all areas of the city every 30 minutes or better based on demand.
2. Flexible bus service will be available daily to deploy to routes where additional capacity is required to meet known and growing demand.

The demand-responsive service plan initially delivered approximately 85% of pre-COVID service hours at the outset of the pandemic and through the summer. In fall 2020, service increased to approximately 95% of pre-COVID service hours with variation by mode based on demand. **Figure 4** shows a map of the demand-responsive service network highlighting essential destinations.

4.2 Ridership update and outlook

Revenue ridership has increased since its low in April and is at approximately 31% of pre-COVID levels as of the week ending November 27. Revenue ridership indicates the number of customers the TTC serves. Recognizing that one customer may board multiple vehicles to complete their journey, we also measure boardings by mode. The number of boardings indicates the amount of service needed by customers. **Figure 3** presents average weekday boardings and service levels by mode for the week ending November 27.

Figure 3: Average weekday boardings by mode (week ending Nov. 27, 2020)

Mode	Pre-COVID (March 2-6)	Current (Nov 23-27)	% of Pre-COVID Demand	% of Pre-COVID Service Level
Bus	1,381,000	615,000	45%	97%
Streetcar	350,000	99,000	28%	86%
Subway	1,492,000	395,000	26%	86%
Total	3,223,000	1,109,000	34%	95%

Early on in the pandemic, it became evident that customer demand for bus service was greater than other modes. Our bus network serves the city’s neighbourhood improvement areas and industrial employment lands where essential work continues through the pandemic while our streetcar and subway network serves, for the most part, the downtown where the majority of work has shifted to a virtual format. **Figure 5** and **Figure 6** present customer demand by mode by planning district comparing the week ending October 2, 2020 to pre-COVID demand as a baseline.

We are monitoring demand and capacity utilization daily on all modes with particular attention to bus services to inform where we deploy flexible buses and where additional capacity is required for customers. This includes bus trips with more than 15 people per bus at any given time (i.e. 30% of regular capacity) and bus trips with more than 25 people per bus at any given time (i.e. 50% of regular capacity). As of the week ending November 27, more than 75% of trips were below the 30% capacity threshold and nearly 95% of trips were below the 50% capacity threshold.

Our outlook for 2021, based on available and evolving information, is that ridership will steadily increase from 35% to 50% of normal levels by year end. We estimate that ridership will increase above 50% when COVID-19 vaccinations begin and the pandemic subsides. Demand will continue to vary by mode with bus service being the greatest until activity in the downtown core significantly increases. **Figure 7** presents our activity-based ridership projection.

4.3 2020 action plan

The 5YSP established a 20-point action plan to deliver improvements between 2020 and 2024. In 2020, we identified 16 initiatives. Overall, six initiatives were implemented, six have been started and four have been deferred. **Figure 8** presents a status summary for initiatives planned for 2020. Of all the initiatives implemented, the introduction of priority bus lanes on the Eglinton East corridor, known as RapidTO, has been the greatest achievement. This transit priority measure will improve the overall journey for customers by increasing service reliability and decreasing in-vehicle travel time. **Figure 9** presents the expected customer benefits.

Figure 4: Demand-responsive service plan

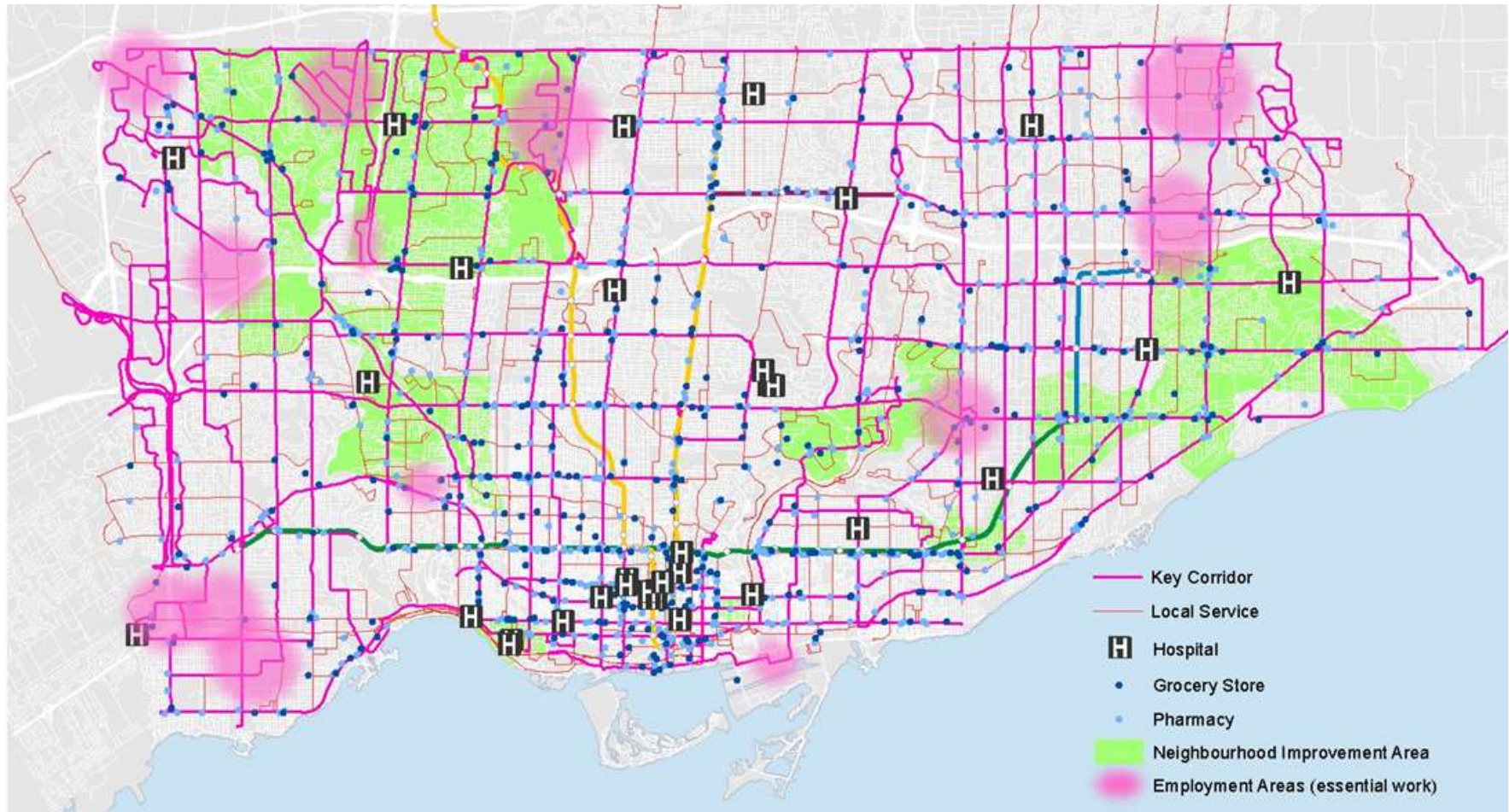


Figure 5: Bus and streetcar demand by planning district (PRESTO taps, week ending Oct. 2, 2020 vs. pre-COVID)

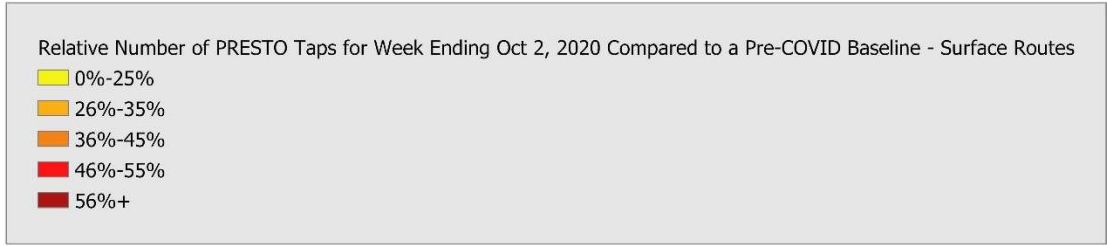
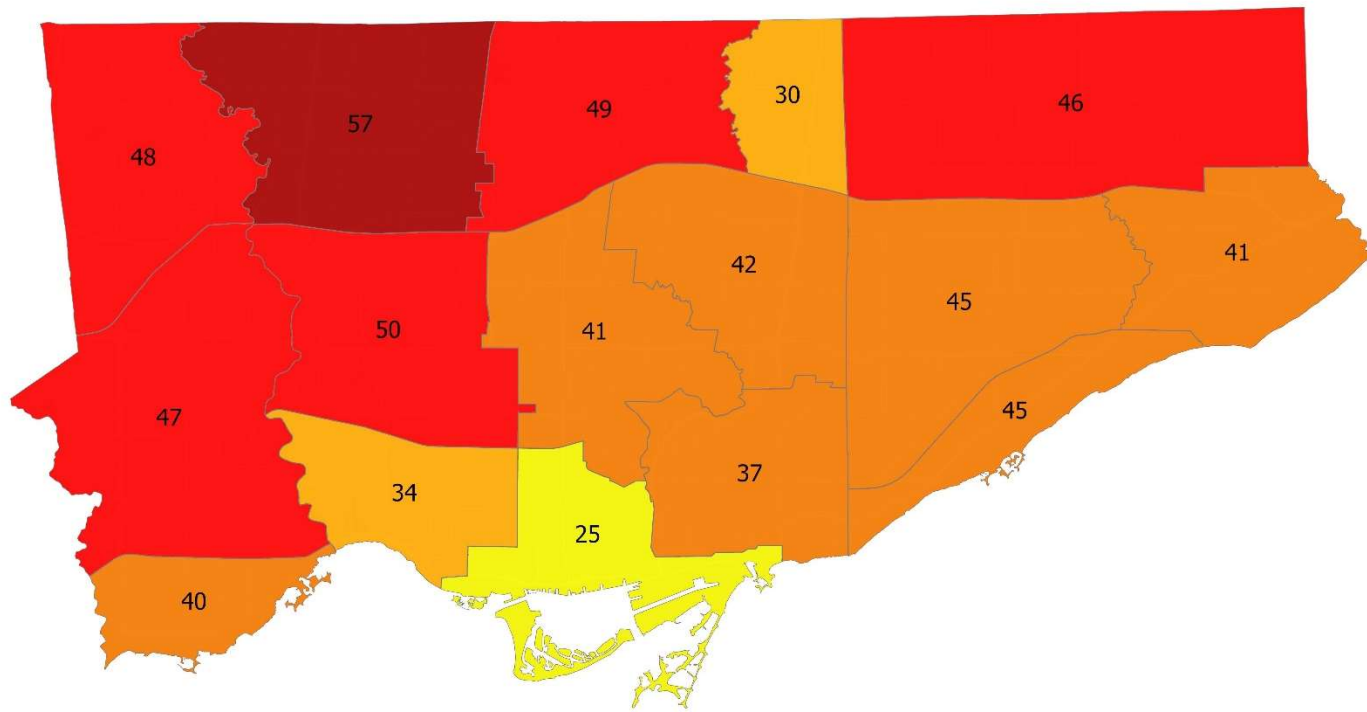


Figure 6: Subway demand by planning district (PRESTO taps, week ending Oct. 2, 2020 vs. pre-COVID)

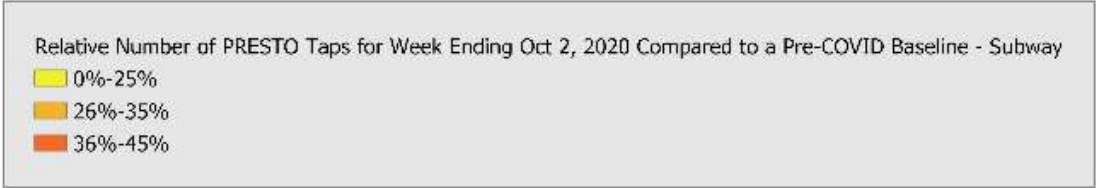
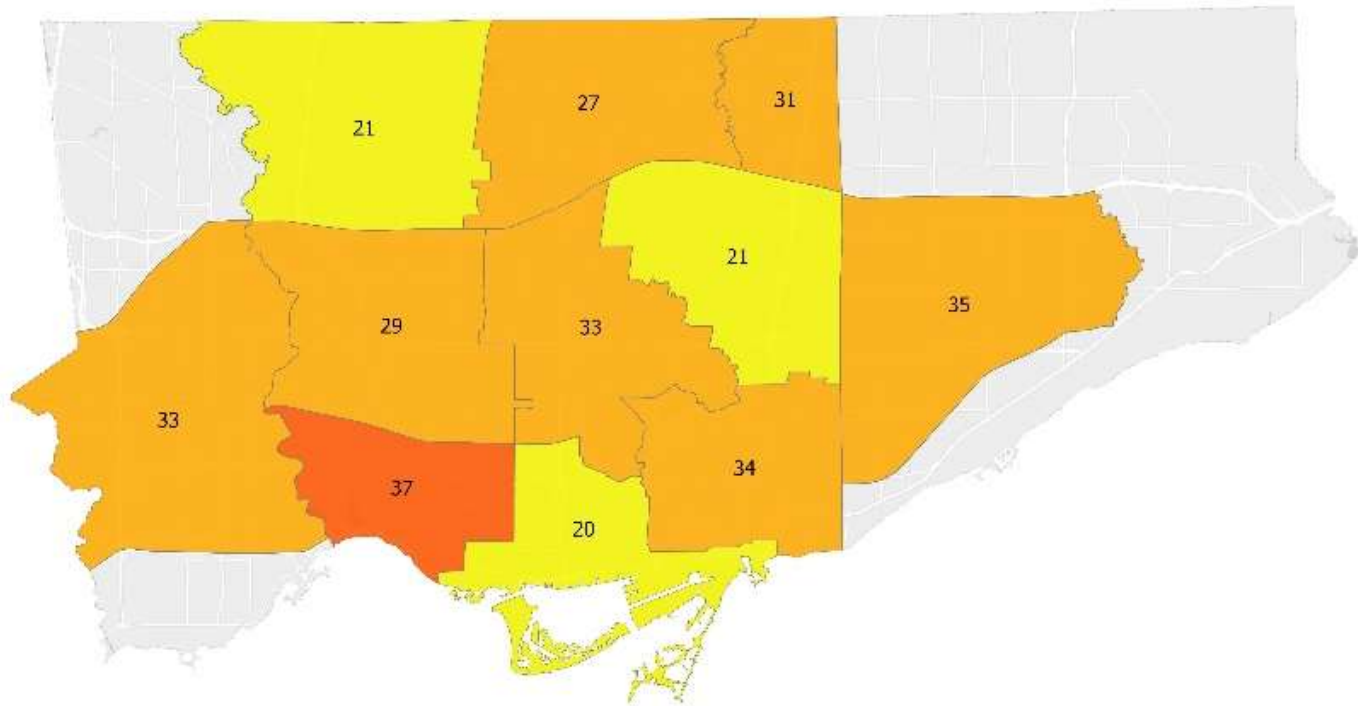


Figure 7: Activity-based ridership projection

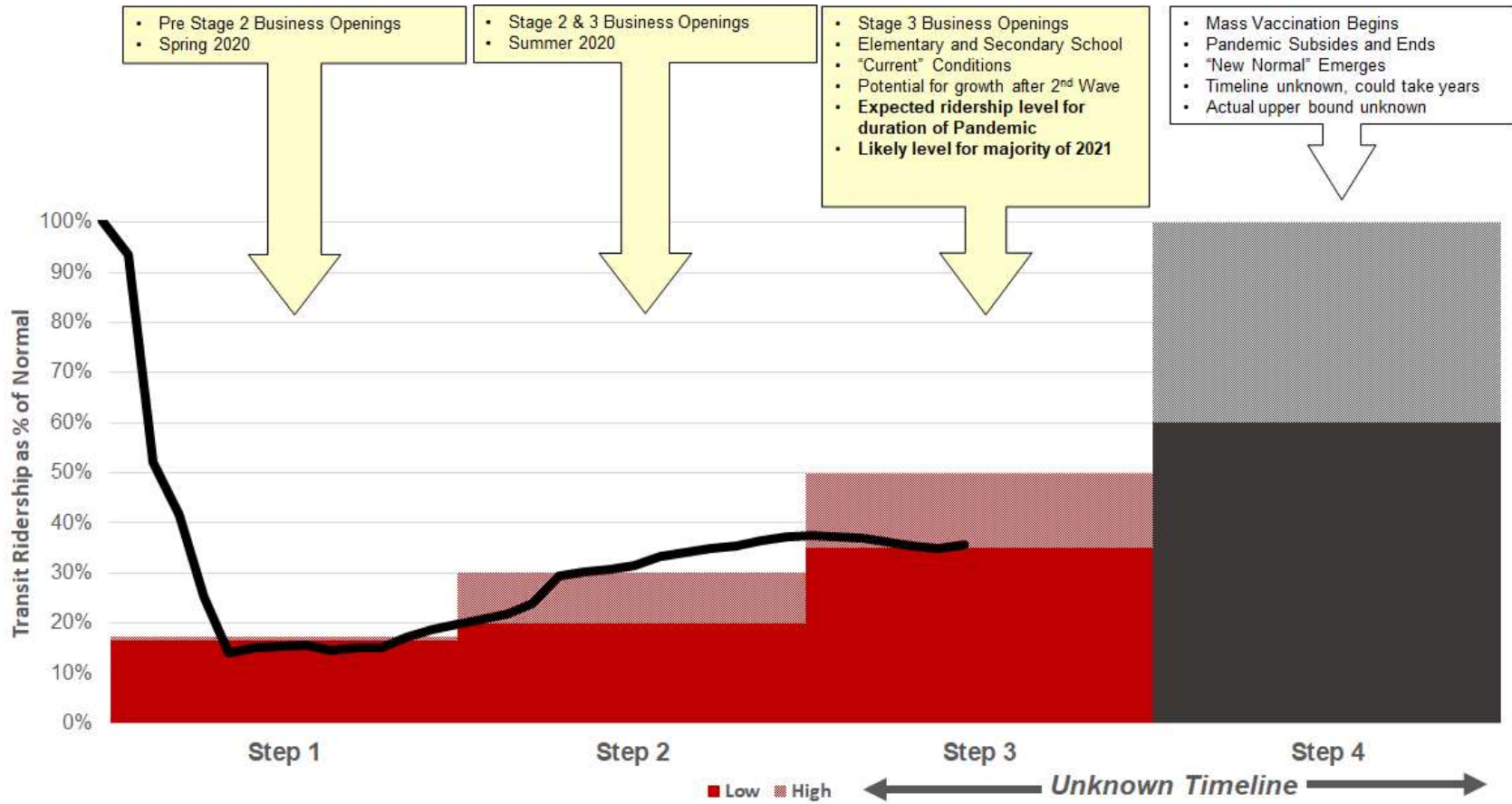








Figure 8: 2020 action plan – status summary

Action	Status	Initiative
1.1: Accommodate population and employment growth		
1.2: Implement new services to address travel patterns	Implemented	1. New branch of 43 Kennedy to Village Green
1.3: Open Line 5 – Eglinton		
1.4: Relieve crowding on Line 1		
1.5: Open Line 6 – Finch West		
1.6: Enhance streetcar network	Implemented	2. New streetcars deployed on 505 Dundas
1.7: Apply an equity lens to service planning	Implemented	3. Youth-led engagement process as part of 2021 ASP
2.1: Expand customer amenities at stops	Deferred	4. Deferred to 2021 due to COVID-19
2.2: Improve wayfinding at stops	Started	5. Wayfinding Strategy started to guide improvements
2.3: Improve placemaking at key stop areas	Deferred	6. Deferred to 2021 due to COVID-19
3.1: Improve surface transit schedules	Started	7. Ongoing schedule refinement throughout COVID-19
3.2: Mitigate delays & disruptions to service	Implemented	8. Flexible buses added in January and continue to operate
4.1: Explore bus transit lanes	Implemented	9. RapidTO on Eglinton East corridor
4.2: Implement more queue jump lanes	Started	10. Surface Transit Network Plan completed to guide future work
4.3: Implement more transit signal priority	Started	11. Developed MoveTO Plan
5.1: Expand service integration	Started	12. Multi-agency service plan is being developed
5.2: Integrate microtransit services	Deferred	13. Deferred to 2021 due to COVID-19 pandemic
5.3: Enhance integration with cycling	Implemented	14. Expanded bike share and bike parking at stations
5.4: Enhance pedestrian pathways to TTC	Started	15. Study complete: pathways in North York
5.5: Implement Mobility as a Service (MaaS) strategy	Deferred	16. Deferred to 2021 due to COVID-19 pandemic



Figure 9: Benefits of Eglinton East priority bus lanes



	<p>Tactical Transit Improvements</p>	<p>Convert HOV & general purpose lane with red paint, signage</p>
	<p>Increased Access</p>	<p>Faster travel times allow longer distance travel</p>
	<p>Real Improvements for Existing Customers</p>	<p>Improved reliability and speed for 56,000 customers</p>
	<p>Advance Equity Initiatives</p>	<p>Advances Poverty Reduction Strategy by serving 7 of 8 NIA's in Scarborough</p>
	<p>Improve Transit Speed</p>	<p>Average travel time savings of 2-5 minutes per trip</p>
	<p>Advance Approved Strategic Documents and Action Plans</p>	<p>TransformTO, Resilience Strategy, Corporate Strategic Plan, TTC Corporate Plan, 5YSP, MoveTO, Surface Transit Network Plan</p>

5. 2021 Annual Service Plan

5.1 Focus and priorities

The 2021 ASP has been developed around a specific focus and three key priorities based on the 5YSP, public health guidance, technical analysis and customer and stakeholder guidance.

Our focus is to continue to respond to customers' dynamic and evolving demand for public transit service.

Our priorities are to:

1. Sustain the demand-responsive service plan
 - Sustain some flexible service to respond dynamically to customer demand
 - Ensure the TTC is ready for fluctuations in COVID-19 cases
2. Improve regular scheduled service by reallocating and restructuring services
 - Balance service levels, on all routes, at all times of day, based on demand
 - Improve service reliability to reflect actual operating conditions as they evolve
 - Address travel patterns and capacity requirements by restructuring existing services and introducing new services
3. Advance key strategic initiatives
 - Continue implementing surface transit improvements
 - Advance service integration with neighbouring municipalities
 - Pilot the automated transit shuttle and connect with microtransit shuttle services



5.2 Pillar 1 – Transit network

Pillar 1 focuses on actions that help customers get to where they want to go, when they want to go.

Optimize capacity by rebalancing service levels

In 2021, we will balance service levels across the network to match capacity with demand. Customer engagement throughout the 2021 ASP identified the increased importance of continuing to provide adequate capacity for customers on transit vehicles through the pandemic and during recovery. At the outset of the pandemic, we applied a capacity threshold of 30% of pre-COVID levels (e.g. 15 customers per bus). As ridership increased, we adjusted to 50% of pre-pandemic levels (e.g. 25 customers per bus).

Moving into 2021, we will focus on rebalancing and optimizing capacity on all routes, in all times of day. As shown in **Figure 10**, there is sufficient opportunity to reallocate from low demand to high demand routes in all periods of the day. As ridership increases, we will increase the capacity threshold to 70% of pre-COVID levels (e.g. 35 customers per bus) and continue the process of rebalancing capacity to meet customer demand.

Improve route productivity and performance by modifying schedules

In 2021, we are adjusting service to improve performance on low-demand routes. Every year we review the productivity of our services through the annual performance review process to ensure we are allocating resources efficiently. Every route, in every period of operation, is assessed to identify opportunities for improvement as seen in **Figure 11**. This evaluation identifies changes that can be made to route structures or to hours of operation. In some instances, where service is no longer financially sustainable, service is discontinued.

In 2021, we will make routing changes to improve the productivity and performance on the following routes: 107 St Regis, 117 Alness-Chesswood and 121 Fort York-Esplanade. We will also modify hours of operation by scheduling the “last bus” earlier on the following routes: 28 Bayview South, 33 Forest Hill and 167 Pharmacy North. And, we are continuing to suspend service on the following routes to continue to allocate these resources to flexible demand-responsive buses: 141 Downtown Mt Pleasant Express, 142 Downtown Avenue Rd Express, 143 Downtown Beach Express, 144 Downtown Don Valley Express, and 145 Downtown Humber Bay Express.

Restore most Express Bus service

In 2021, we are restoring most express services to improve customer travel times. Customers have continuously told us that they value express bus services because they are simply faster than their local bus counterpart. In 2021, we will restore the majority of the express bus network that was suspended early in the pandemic and implement express service on Kennedy Road and Warden Avenue to optimize capacity efficiently on these corridors, as noted in the 5YSP. As express bus services are restored, we will review service levels, as noted by customers and stakeholders, to ensure that capacity matches demand on shared corridors where both express and local buses operate.

Figure 12 shows the 2021 Express Bus Network.

Implement service changes in Scarborough East

In 2021, we are making service adjustments in Scarborough East to improve travel times, increase access and optimize capacity for customers. The service changes make use of the RapidTO improvements on the Eglinton East corridor and maximizes connections to major activity centres in the community. As shown in **Figure 13**, these route improvements include:

- Extending service on Lawrence Avenue East to Morningside Avenue and extending bus service to the Kingston Road and Sheppard Avenue East area.
- Proving bus service along Brimorton Drive to improve transit accessibility.
- Adjusting local service to the Scarborough Golf Club Road and Manse Road areas.
- Implementing express service to the Conlins Road area and along Ellesmere Road to connect to University of Toronto Scarborough Campus from Scarborough Centre Station.

Continue to modernize streetcar network

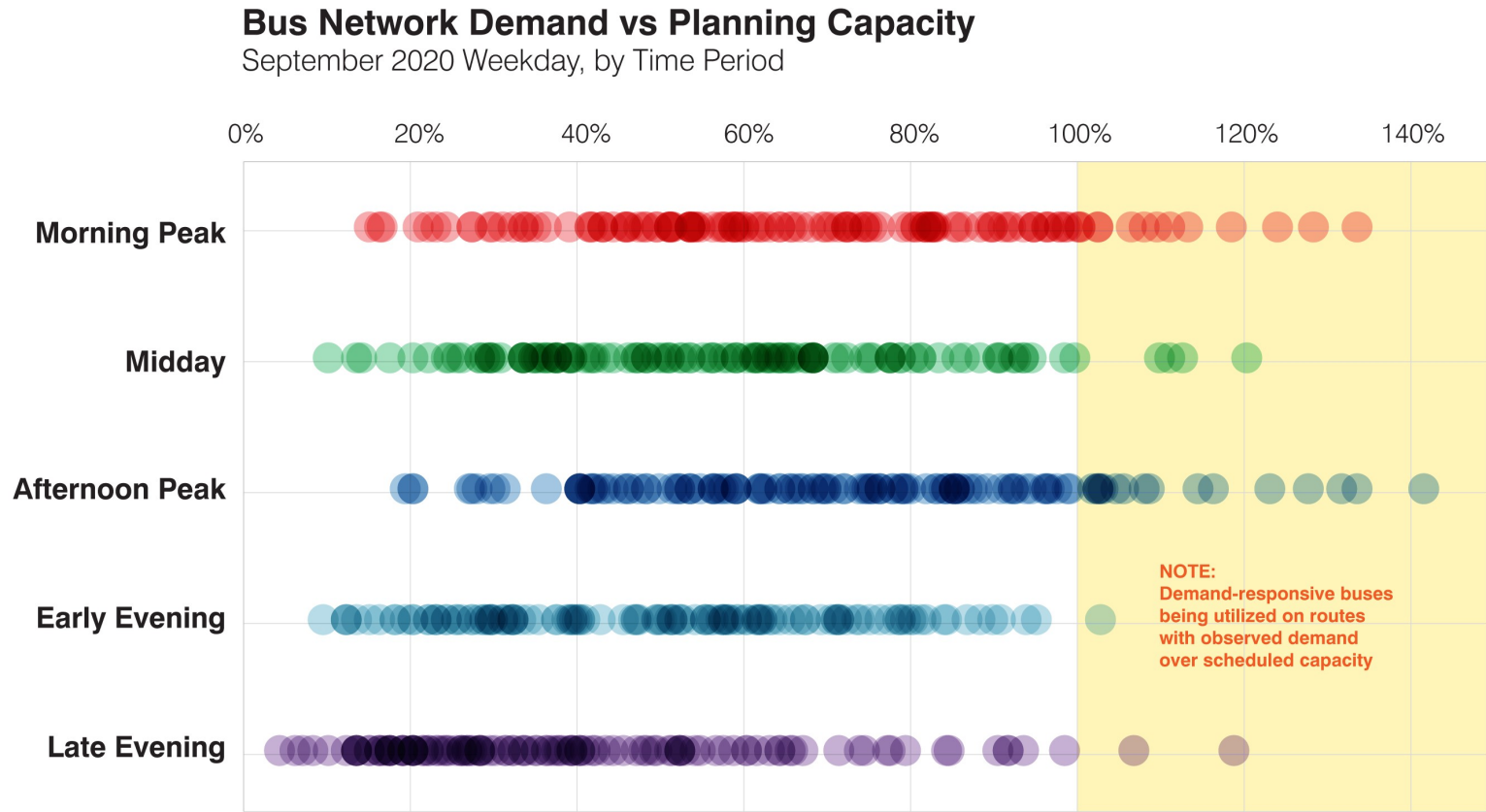
In 2021, we will continue to modernize the streetcar network to ensure streetcar service is reliable and its infrastructure is in a state-of-good-repair. There are a number of projects planned for 2021 that include upgrading overhead power and replacing streetcar tracks. During construction, the streetcar service network will be modified with alternate construction-related service throughout the year. These services are intended to maintain connections and minimize inconvenience for customers. **Figure 14** shows the planned capital projects in 2021.

Apply an equity lens to service planning

In 2021, we will implement service changes and expand our customer and stakeholder engagement program. In 2021, we will increase corridor capacity and community access to Neighbourhood Improvement Areas by adding service to the Stanley Greene neighbourhood and midday service on 12D Kingston Rd and 119 Torbarrie bus routes. We also recognize the importance of reaching out and consulting with customers who are traditionally underrepresented in the planning process and may also be disproportionately affected by planning decisions. In 2021, we will expand our youth-led engagement initiative as we develop the 2022 Annual Service Plan.

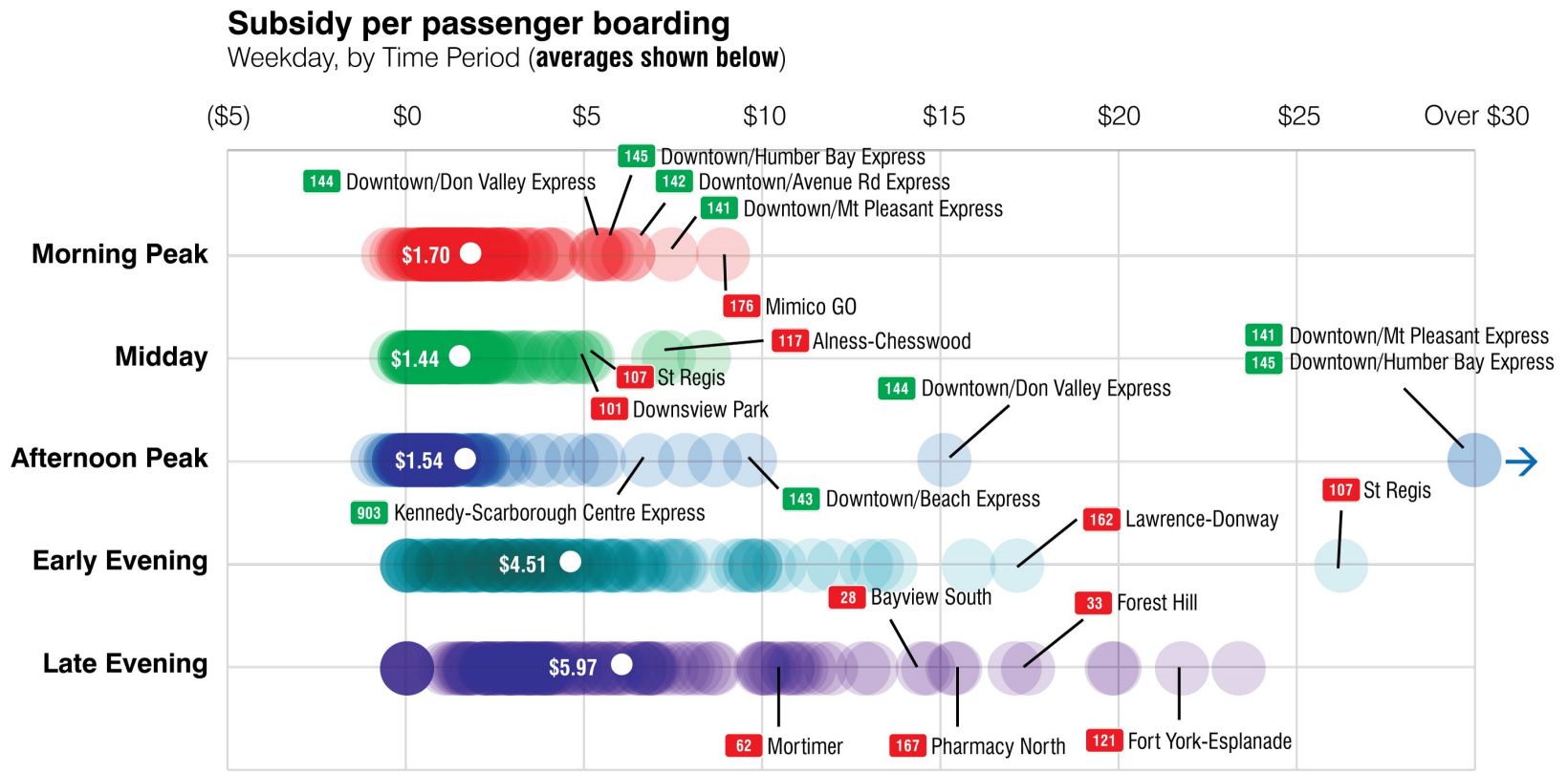


Figure 10: Weekday bus network demand and planning capacity, as of September 2020



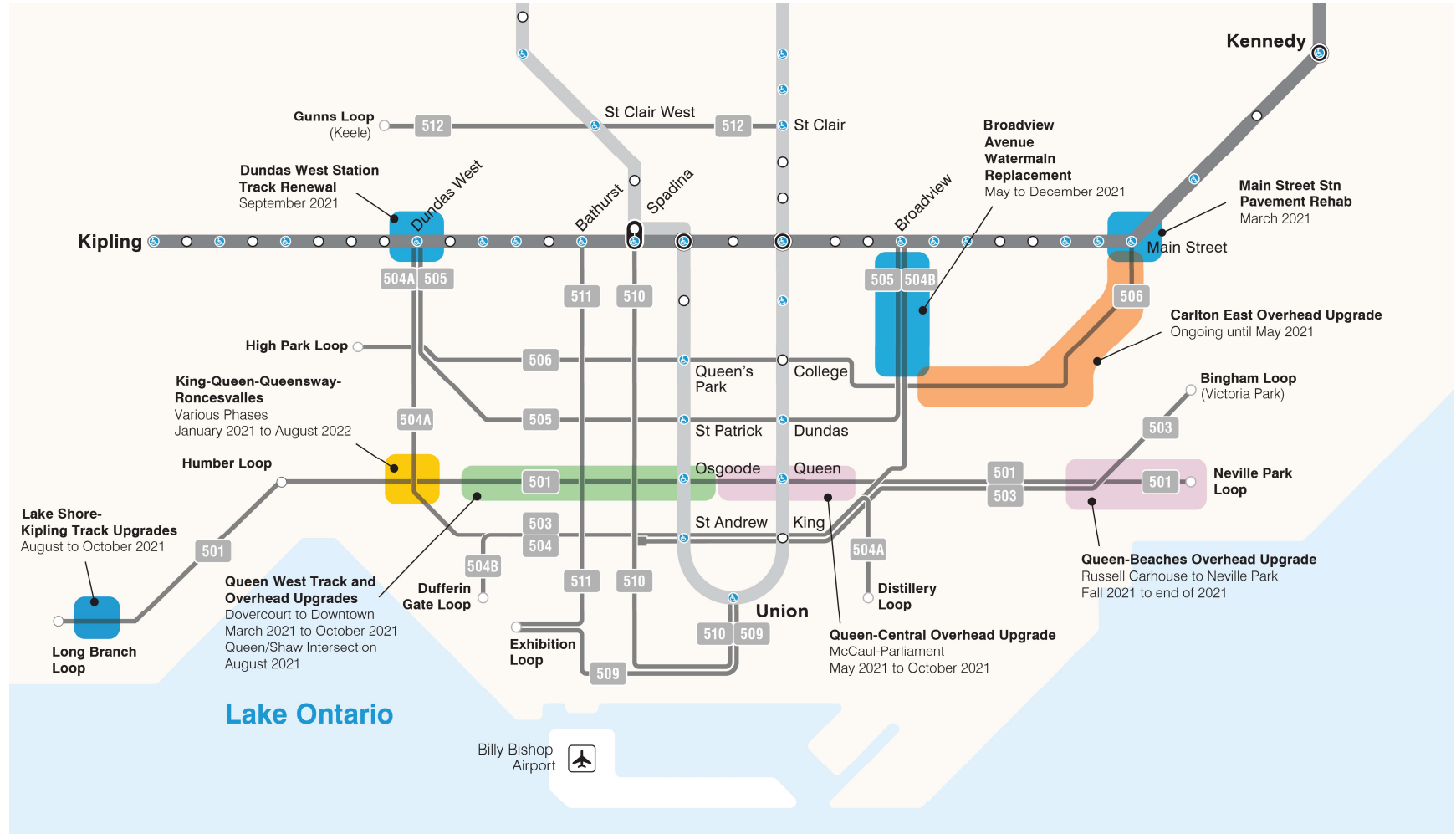
September 2020 Planning Capacity = 25 (12m bus) and 39 (18m bus)
 Demand based on observed September 2020 automatic passenger counter system data, each circle represents one route
 Planning capacity is determined by observed demand and policy, such as minimum 30-minute service and frequent service standards

Figure 11: Weekday operating periods net cost per passenger, as of October 2019



NOTE: Statistics reflect pre-pandemic ridership and service levels
 Each circle represents one route operating in the weekday service time period

Figure 14: Streetcar capital projects in 2021



5.3 Pillar 2 – Customer experience at key surface transit stops

Pillar 2 focuses on actions that improve customer experience at key surface stop areas, providing our customers with a pleasant experience that begins before they get on a vehicle.

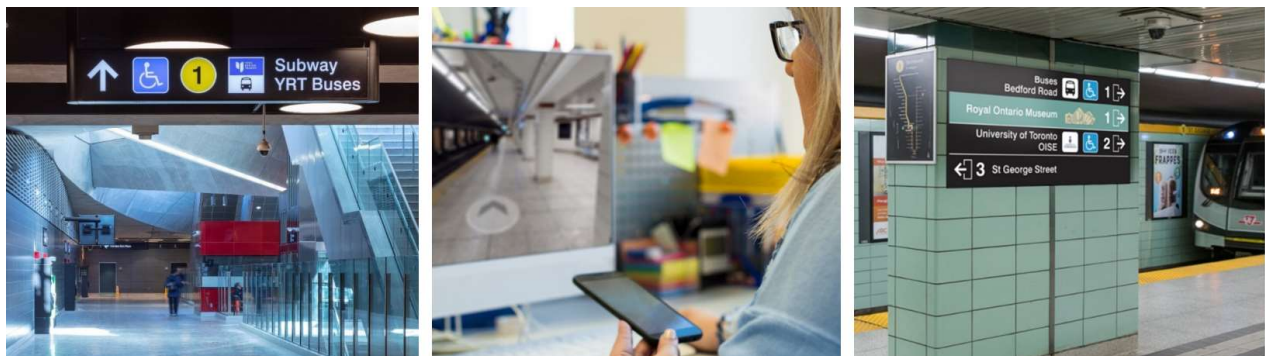
Implement accessibility improvements and identify customer amenities at stops

In 2021, we will implement accessibility and operational improvements at stops and identify customer amenities at key stops across the city. In 2021, customers will benefit from 16 Access Hubs that were installed and opened across Toronto in 2020 to facilitate comfortable connections between Wheel-Trans and conventional route services. In addition, in order to support customers during winter months, Transportation Services staff, in consultation with the TTC, are testing the efficacy of heated transit shelters in 5 locations across the City, and will determine whether the program has been sufficiently successful to add additional locations. We will also upgrade 220 stops to improve accessibility and accommodate approximately 68 new high-capacity articulated buses that are scheduled to be delivered starting in 2022.

In 2021, we will also continue to work with our City partners to plan and prioritize customer amenities to be implemented in 2022 and beyond. We will review feedback received through the 2021 ASP customer and stakeholder engagement process where customers identified that shelter from precipitation was the most important aspect for customers at transit stops followed by lighting, protection from traffic, shelter from wind, accessibility and cleanliness. In 2021, we will also work with partners at the City to identify placemaking improvements on key corridors.

Implement wayfinding strategy system-wide

In 2021, we will improve wayfinding information to help customers find where they want to go. Our Wayfinding Strategy identifies wayfinding-related improvements to be made to the TTC system. The strategy's scope includes key priorities intended to provide customers with improvements that promote an optimal customer experience while using public transit in Toronto and the surrounding region. In 2021, the strategy complements ASP initiatives with improvements to system route maps, updates to out-of-date signage, the introduction of virtual models of TTC stations and improved wayfinding between the TTC and its transit partners at busy regional hubs like Kipling Station.



5.4 Pillar 3 – Service reliability

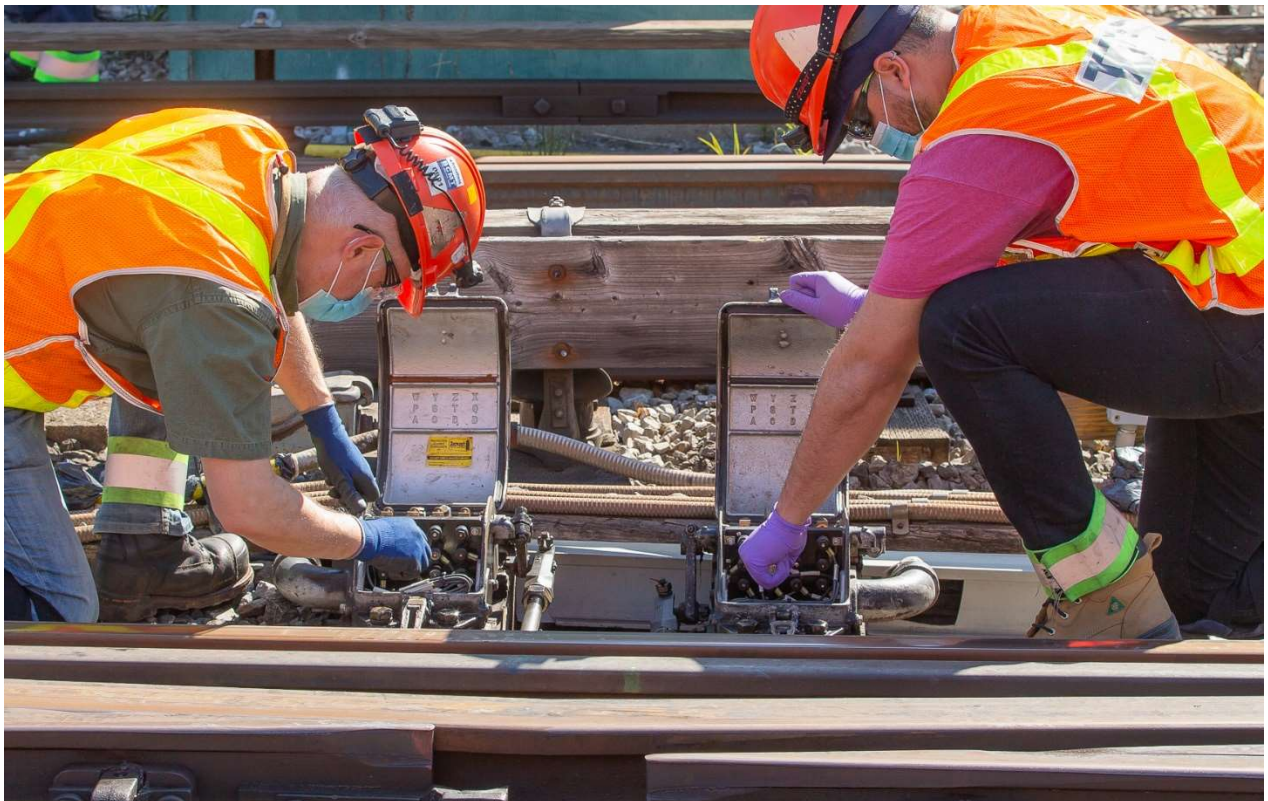
Pillar 3 identifies actions to provide a reliable service that our customers can count on.

Improve surface transit schedules

In 2021, we will improve weekday bus and streetcar schedules to ensure we deliver the service we advertise. Throughout the 5YSP and 2021 ASP process, customers consistently indicated that improving service reliability is a key improvement that would result in a predictable experience. We will achieve this by updating schedules to reflect actual operating conditions that account for shifts in traffic patterns during the pandemic. We will also reduce non-revenue service when vehicles leave and return to maintenance facilities to maximize capacity for our customers. And, we will begin exploring opportunities to pilot “timed bus connections” at high-demand locations on the overnight network to reduce customer wait times.

Mitigate disruptions to service

In 2021, we will continue to mitigate the impacts of planned and unplanned service disruptions. More buses will be available to sustain service while late-evening and weekend subway closures advance state-of-good-repair work that is critical to keep our subways operating safely and reliably. More buses will be available to respond to unplanned service disruptions, such as short-term road works, collisions and emergencies. Our goal is to minimize the effects of service disruptions on our customers’ journeys.



5.5 Pillar 4 – Surface transit priority

Pillar 4 aims to provide fast service that values our customers' journey time.

Explore bus transit lanes or a bundle of priority measures on key corridors

In 2021, we will advance work on exploring transit priority measures on key corridors. On October 11, 2020 the TTC and the City introduced Toronto's first RapidTO corridor on Eglinton Avenue East, Kingston Road and Morningside Avenue. The priority bus lanes are reserved for buses and bicycles 24-hours a day, seven days a week and identified using red road markings and signage. Jane Street is the second corridor to be reviewed based on high ridership, slow transit speeds and challenges with service reliability. In 2021, we will focus on consultation, community outreach and technical analysis. We will examine the section from Steeles Avenue West to Eglinton Avenue West which serves seven Neighbourhood Improvement Areas and York University. The Jane Street corridor is among our most heavily used corridors and, even during COVID-19, continues to play a significant role in moving people around the city.



Implement more queue jump lanes

In 2021, we will continue to work with our partners at the City to build queue-jump lanes at key locations. These short lane extensions allow bus and streetcar customers to bypass traffic congestion at major intersections, while speeding up service and improving reliability. We will work closely with City staff to build these cost-effective and targeted transit improvements starting in 2021, with a streetcar queue jump lane at Lake Shore Boulevard and Brown's Line (westbound) followed by three bus queue jump lanes per year for the next three years.

Implement more transit signal priority

In 2021, we will work with the City and trial new transit signal priority technology in an effort to improve bus and streetcar service. As part of the City's new MoveTO action plan, we will continue to collaborate with City staff on the rapid roll-out of Advanced Transit Signal Priority (ATSP) at locations with high transit ridership and along key TTC routes identified in the City's Surface Transit Network Plan (STNP). The strategy will integrate smart traffic signal technologies with our vehicle location system to provide advanced transit signal priority. The initial trial installation of ATSP will be at 100 locations over the next two years where our legacy transit priority system has not been installed. The objective is to develop a strategy to enable ATSP at all traffic signals along TTC routes within Toronto.

5.6 Pillar 5 – Integration with transit partners and complementary modes

Pillar 5 focuses on accelerating integration with regional transit partners and complementary modes of transportation so that our customers experience a seamless connection to and from our services.

Advance service integration with partner agencies

In 2021, we will advance service integration with regional transit partners to improve cross-boundary trips for the 15% of TTC customers that either start or end their trip outside of the city. We will start where the opportunity is greatest and expand on the concept that is already in place today; the TTC working in collaboration with York Region and Mississauga to optimize service along key regional corridors. We will expand this concept to integrate service with all of our neighbouring transit agencies including Brampton Transit, Durham Region Transit, MiWay and York Region Transit. There are more than 20 shared corridors where improvements to cross-boundary service will benefit customers by providing a more seamless service and providing transit agencies with efficiencies that can be reinvested across the region. In 2021, we will advance work to pilot cross-boundary service integration with regional transit partners.

Integrate microtransit services

In 2021, we will implement an automated shuttle trial with partner agencies and improve connections with private microtransit shuttle providers. On October 14, 2020, the City announced that it had signed an agreement with Local Motors to provide the temporary trial service with an automated shuttle called the Olli 2.0. While the Automated Shuttle Trial has been delayed as the City continues to respond to COVID-19, we are working with our partners towards implementation in spring 2021.

Also in 2021, we will improve connections with private microtransit shuttle services, such as employee, condominium and retail shuttles to and from TTC subway stations. This includes implementing physical improvements to improve traffic flow at Don Mills Station's passenger pick up and drop off area and improvements to wayfinding, such as signage and integrating retail shuttle schedules on the TTC website.



Integrate cycling and transit networks

In 2021, we will enhance integration with the cycling network. We will continue to partner with the Toronto Parking Authority with whom we installed new Bike Share stations at five TTC subway stations (St Clair West, Jane, Pape, Greenwood and Rosedale) in 2020. In 2021, we will continue to work with Bike Share Toronto and Transportation Services to identify further opportunities to integrate cycling and transit trips for customers by coordinating and maximizing connections between the cycling network and transit network.

In 2020, we expanded bike parking at stations across the city. In 2021, we will complete the installation of high-capacity bike racks, bike repair stations and 10 bike shelters at stations.

Improve pedestrian pathways to TTC stations and key stops

In 2021, we will continue to partner with the City to identify improvements to pedestrian pathways to subway stations and key stops. Earlier this year, in partnership with the City, we completed a spatial review of the pedestrian network, the desire lines and sidewalk gaps within an 800 metre radius of subway stations and key stops. Areas with apparent pedestrian footpaths through unpaved routes and missing sidewalks were assessed and identified. The following gaps/missing links were identified:

- Sheppard West Station
- Finch West Station
- York University Station
- McCowan Station
- Ellesmere Station
- Downsview Park Station
- Jane Street and Finch Avenue West
- Don Mills Road and Finch Avenue East
- Ellesmere Road and Markham Road
- Keele Street and Wilson Avenue

In 2021, we will continue to evaluate the pedestrian network with our partners at the City to identify missing links/gaps in the network to improve overall connections to our services. Funding requirements for improvements will be identified in the 2022 Annual Service Plan.

Implement Mobility as a Service (MaaS) strategy

MaaS brings together mobility services like transit, taxi, bike share and parking under one smartphone app to plan trips, get real-time info and make payments. In 2021, we will establish a MaaS working group with partners at the City. The establishment of a MaaS working group was deferred in 2020 as our efforts were focused on responding to the global pandemic.

5.7 2021 action plan

In 2021, our focus is to continue to respond to customers' dynamic and evolving demand for public transit service and our priorities are to sustain the demand-responsive service plan, improve regular scheduled service and advance key strategic initiatives. To achieve this, we plan on implementing 22 initiatives over the course of the year. **Figure 15** presents the 2021 action plan.

Figure 15: 2021 action plan



Action	Initiative
1.1: Accommodate population and employment growth	1. Optimize capacity by rebalancing service levels 2. Improve route productivity and performance by modifying schedules
1.2: Implement new services to address travel patterns	3. Implement service changes in Scarborough East 4. Restore most Express Bus service
1.3: Open Line 5 – Eglinton	• Opening of Line 5 has been deferred to 2022
1.4: Relieve crowding on Line 1	
1.5: Open Line 6 – Finch West	
1.6: Enhance streetcar network	5. Continue to modernize the streetcar network with SOGR work
1.7: Apply an equity lens to service planning	6. Make transit accessible in neighbourhood improvement areas 7. Expand equity-based consultation as part of 2022 ASP
2.1: Expand customer amenities at stops	8. Implement accessibility improvements & identify customer amenities at stops
2.2: Improve wayfinding at stops	9. Implement wayfinding strategy system-wide
2.3: Improve placemaking at key stop areas	10. Identify placemaking improvements on key corridors
3.1: Improve surface transit schedules	11. Improve weekday schedules by reflecting actual operating conditions 12. Minimize non-revenue service to maximize capacity
3.2: Mitigate delays & disruptions to service	13. Minimize customer inconvenience during planned and unplanned disruptions
4.1: Explore bus transit lanes	14. Advance consultation, community outreach and analysis on key corridors
4.2: Implement more queue jump lanes	15. Implement queue jump lane at Lake Shore and Brown's Line
4.3: Implement more transit signal priority	16. Install 100 Advanced Transit Signal Priority at key locations over 2 years
5.1: Expand service integration	17. Advance service integration "pilot" with partner agencies
5.2: Integrate microtransit services	18. Implement automated shuttle trial 19. Improve connections with private microtransit shuttle providers
5.3: Enhance integration with cycling	20. Integrate cycling and transit with more bike parking and 10 shelters at stations
5.4: Enhance pedestrian pathways to TTC	21. Advance design work to implement "missing links" pathways in 2022
5.5: Implement Mobility as a Service (MaaS) strategy	22. Establish Mobility as a Service working group



6. 2021 investment summary

The 2021 ASP identifies 22 initiatives that sustain the demand-responsive service plan, improve regular scheduled service and advance key strategic initiatives. This section presents annual service hours, fleet and facility, operating budget and capital budget requirements in 2021.

6.1 Annual service hours

The 2021 ASP identifies initiatives based on current and projected demand and travel behaviour trends by mode. These initiatives will be implemented by reallocating capacity from low-demand to high-demand service areas.

The 2021 ASP proposes 9,359,000 annual service hours for regular (operating) service and a further 138,000 hours to mitigate service delays associated with Eglinton and Finch West LRT construction, as seen in **Figure 16**. Regular operating service will decrease by 303,000 annual service hours as compared to the budgeted annual service hours in 2020. Of this, 226,000 annual service hours are related to capacity based service adjustments on streetcar and subway services and, 77,000 annual service hours are related to implementing operating efficiencies and other changes that do not result in a decrease in service capacity. This includes the following:

- Open McNicoll Garage which reduces deadhead service hours
- Implement RapidTO on the Eglinton East corridor
- Partial implementation of Automatic Train Control on Line 1
- Conversion of low-capacity bus service to high-capacity streetcar service
- Adjustments for calendar changes (2020 was a leap year)

Figure 16: 2021 annual operating service hours by mode (regular service)

Mode	2020 Budget	2021 Plan	Change in Service Hours
Bus	7,416,000	7,358,000	(58,000)
Streetcar	1,048,000	921,000	(127,000)
Subway	1,198,000	1,080,000	(118,000)
Total (Regular Service)	9,662,000	9,359,000	(303,000)
LRT Construction (supplemental bus)	199,000	138,000	(61,000)
Total (Regular Service + LRT Construction)	9,861,000	9,497,000	(364,000)

6.2 Fleet and facility

In the coming year, the required number of buses, streetcars and subway trains are available to deliver the 2021 ASP. Beyond 2021 and over the next five years, we plan to operate more vehicles in-service as outlined in the TTC Fleet Procurement Strategy and Plan.

As seen in **Figure 17**, we will operate more buses, streetcars and trains on Line 1 & 2 and new trains on Line 5 Eglinton and Line 6 Finch West, based on demand. We will also expand our maintenance and storage capacity with the opening of the McNicoll Bus Garage in 2021 and a future facility to support more streetcars, if funded.

Figure 17: Planned in-service vehicles

Mode	2021	2022	2023	2024	2025
Buses	1650	1650	1660	1660	1660
Streetcars	145	168	190	214	214
Line 1 - Trains (6 cars)	65	68	68	70	70
Line 2 - Trains (6 cars)	46	46	46	48	48
Line 3 - Trains (4 cars)*	5	5	5	5	5
Line 4 - Trains (4 cars)	4	4	4	4	4
Line 5 - Trains (2 cars)		17	18	18	20
Line 6 - Trains (1 car)			15	15	15

* Line 3 life extension is currently under review



6.3 Financial summary

2021 Operating Budget

The 2021 ASP identifies a decrease of 303,000 annual service hours that results in an operating cost savings of approximately \$20.5 million in the 2021 Operating Budget relative to the 2020 Operating Budget.

2021-2030 Capital Plan

The 2021 ASP includes initiatives to meet the transit needs of our City in 2021. Vehicles are available to implement the 2021 ASP, however capital funding is required to procure replacement and growth vehicles in future years, improve key stop areas and implement transit priority measures.

Approximately \$282.7 million is required in 2021. Of this, \$173.6 million will be requested as part of the TTC's 2021-2030 Capital Plan, while \$109.1 million is not funded due to funding constraints. The majority of the unfunded amount is related to the procurement of 47 additional streetcars, additional streetcar maintenance and storage capacity as well as major operational improvements at key bus stop locations which excludes improvements to upgrade stops for accessibility and to accommodate articulated buses which is planned to proceed.



7. Outlook

Looking ahead, we must continue to improve the speed, reliability and frequency of our service to ensure we remain a competitive travel option in Toronto. This will ensure we are doing our part to achieve the City's goals: keep Toronto moving, invest in people and neighbourhoods and tackle climate change and build resilience. The following section outlines planned surface and rapid transit improvements over the next 10 years.

7.1 Near-term improvements

Line 5 Eglinton

In 2022, we will begin to operate Line 5 Eglinton which will offer customers a new fast and frequent east-west rapid transit service across Toronto's Eglinton Avenue from Etobicoke to Scarborough. We will also modify service on more than 50 bus routes to connect to the 25 new Line 5 stations to maximize connectivity. The opening of Line 5 and changes to the surrounding bus network will have a transformational effect on our customers' journey – more frequent, faster and reliable service. The conversion from bus to train service will also allow us to reinvest buses back into the network.



Line 6 Finch West

In 2023, we will begin to operate Line 6 Finch West between Humber College and Finch West Station. More than 20 bus routes will connect at 18 new stations. The new light rail service will reduce travel times and make service more comfortable for customers living in the Neighbourhood Improvement Areas it serves.

7.2 Long-term improvements

Beyond these near-term rapid transit improvements, there are planned improvements to the streetcar network and rapid transit over the next 10 years.

The streetcar network will grow with a number of new expansion projects that will necessitate additional streetcars, a new facility and modifications to existing terminals and loops.

Several key streetcar projects would improve service along Toronto's waterfront. These include improvements to the streetcar loop at Union Station; extension of streetcar service east along Queens Quay to the East Bayfront area, and beyond; a new streetcar connection between Exhibition Loop and Dufferin Street, serving the GO and Ontario Line station; and future improvements in the Humber Bay, West Donlands and Portlands areas.

The rapid transit network will grow with a number of planned expansion projects requiring additional fleet and facilities and new connections to TTC surface routes.

Four provincial priority rapid transit projects are being planned, funded and delivered by the Province and would be operated by the TTC. These projects would expand the rapid transit network in Toronto.

Ontario Line

This line would provide new rapid transit service between Eglinton and Don Mills and Exhibition Place, connecting with Line 5, Line 2, Line 1, the downtown core and the Lakeshore East and West GO lines. The line would provide vital relief to crowding on Line 1 and bring new rapid transit to many Toronto neighbourhoods

Line 1 Yonge Subway Extension

This subway extension would extend Line 1 from Finch Station up to Highway 7. The project would expand the rapid transit network along the Yonge Street corridor and would improve connections to the TTC bus network.

Line 2 East Extension

This subway extension of Line 2 would replace Line 3 Scarborough with a three-stop extension of Line 2 from Kennedy Station to McCowan Road and Sheppard Avenue. The project would expand the rapid transit network in Scarborough and would improve connections to the TTC bus network.

Line 5 Eglinton West Extension

This extension of Line 5 Eglinton would extend service on the under-construction Eglinton line west of Mount Dennis Station to Renforth, and Pearson Airport. The project would expand the rapid transit network in Etobicoke. These projects will support the GTA's growth and build stronger regional connections.

There are a number of other surface and rapid transit projects in the planning stage that improve the speed, access and reliability for customers in the city and region.

SmartTrack/GO Expansion

Up to 12 new GO Transit rail stations are planned to be built in Toronto. These stations would be served by more-frequent GO trains, would improve access to higher order transit and would offer excellent connections to TTC rapid transit, streetcar and bus services. Some of the stations would be funded by the City of Toronto as part of the SmartTrack project.

Line 5 Eglinton East Extension

This extension of Line 5 Eglinton would extend service on the under-construction Eglinton line east of Kennedy Station to the University of Toronto Scarborough, Sheppard Avenue and the Malvern neighborhood. The project would expand the rapid transit network in Scarborough.

Durham-Scarborough Bus Rapid Transit

This bus rapid transit corridor is currently being planned by Metrolinx and the Region of Durham. The project involves the provision of a higher order bus rapid transit facility along Highway 2 and Ellesmere Road to Scarborough Centre Station. The corridor would be used by TTC, Durham Region Transit and GO Transit buses.

Dundas Bus Rapid Transit

This bus rapid transit corridor, which is currently being planned by Metrolinx and the City of Mississauga, involves the provision of a higher order bus rapid transit facility along Dundas Street through Mississauga to Kipling Station. The corridor would be used by MiWay, GO Transit and TTC buses.

Bloor-Yonge Capacity Improvement project

This project would provide crucial upgrades to Bloor-Yonge Station, the busiest in the subway system. Expanding capacity and improving passenger circulation is required to safely accommodate future transit expansion and projected growth in demand. Other benefits of the project would include less frequent overcrowding, reduced train dwell time and support for more frequent trains on Line 1 and Line 2.

Airport Transit Hub

The Greater Toronto Airports Authority (GTAA) plans to build a new Regional Transit Centre (RTC) at Toronto Pearson International Airport. TTC is working with the GTAA and other transit partners to plan and design the future requirements for transit connections at the RTC.



TTC 2021 Annual Service Plan

Customer and Stakeholder Engagement Executive Summary August – November 2020

November 2020

Written for the Toronto Transit Commission by Swerhun Inc.



Engagement Process Overview

Due to COVID-19 physical distancing requirements, the 2021 Annual Service Plan (ASP) engagement process offered a range of virtual and asynchronous ways for stakeholders and TTC customers to learn about and share feedback on the 2021 ASP, including:

- Four virtual stakeholder meetings
- A dedicated engagement website including text, images, and a video
- A Discussion Guide with four topic-specific inserts, available via download or, by request, the mail (along with a pre-paid envelope to return feedback)
- Four online surveys
- A dedicated phone line and email address
- Posters installed in approximately 300 TTC shelters and stations, with a focus on routes that have continued to experience high ridership during the COVID-19 pandemic
- Virtual meetings and discussions, including discussions convened by the TTC, their engagement team, and a youth engagement team

The 2021 ASP engagement process followed a three-round process. Environics Research led the first round of engagement and Swerhun Inc. led the second and third round of engagement.

The first round took place between June and July 2020. It consisted of a service standards survey of the general public. The purpose of this survey was to learn if and how customers' priorities have changed to make sure the 2021 ASP is based on an up-to-date understanding.

The second round took place between August and October 2020. It consisted of three public surveys, two stakeholder meetings, and a youth-led engagement process. The public surveys shared and sought feedback about the RapidTO Eglinton East Priority Bus Lane, RapidTO Jane Street Priority Bus Lane, and the 2021 ASP's emerging priorities and initiatives. The stakeholder meetings included an overview and discussion about the 5-Year Service Plan, a 2020 service update, and emerging priorities and initiatives for the 2021 ASP. The youth-led engagement consisted of a diverse team of four youth from Neighbourhood Improvement Areas in the east and west ends of the city where bus routes continued to have high ridership during the COVID-19 pandemic. The youth team's role was to design, deliver, and document an engagement process seeking feedback from their local communities about select 2021 ASP initiatives they considered most important. The youth engagement work was a paid work and skill development opportunity that took a deliberate approach to engaging youth aged 18 – 29, a demographic typically under-represented in city-building consultations.

The third round took place in November 2020. It consisted of two stakeholder meetings and focused on sharing and seeking feedback on the proposed final recommendations for the 2021 Annual Service Plan.

Over 3,500 members of the public and approximately 60 representatives of stakeholder groups and transit advocates participated in over 12 weeks of extensive engagement for the 2021 Annual Service Plan.

Feedback Highlights

Stakeholders and public participants generally expressed strong support for the priorities and initiatives identified in the 2021 Annual Service Plan. Key feedback participants said they would like to see prioritized and considered in the 2021 Annual Service Plan are:

- Increased service to reduce crowding on busy corridors to support customers' health and safety
- Improve service reliability and increase service frequency
- Re-instate operation of express bus service as they are valuable to customers and the effects of their temporary suspension during the pandemic were felt
- Improve service accessibility and equity-focused approaches to planning and delivering transit service given that low-income and marginalized communities have been hit hardest by the pandemic and where bus crowding is an issue
- Improve communication and outreach with customers about service updates and service changes before it is implemented
- Improve service integration with neighbour transit agencies and other modes of transport

As a major initiative for 2021, customers were consulted through dedicated surveys for RapidTO. Highlights of feedback received about RapidTO include:

- For Eglinton East, participants generally prefer service that combines local routes serving local stops and express routes serving major stops to support the travel needs of local residents and customers travelling long-distances. There was also mixed support for the consolidation of local bus stops and some concerns over the priority bus lanes' impact on traffic.
- For Jane Street, participants want to see local service reliability balanced with increased speed of express service. They also want to see long-standing service issues addressed, and accessible service provided for high-density residential areas and lower-income communities on Jane.

Summaries

Individual summaries of each engagement activity led by Swerhun will be available on the [TTC's 2021 Annual Service Plan webpage](#). These summaries are not intended to be a verbatim transcript; rather they are intended to capture key feedback and discussion points shared. These summaries do not assess the merit or accuracy of any of these perspectives, nor do they indicate an endorsement of any of these perspectives on the part of the TTC.

The summaries include:

1. Stakeholder Meeting Round 1, Session 1
2. Stakeholder Meeting Round 1, Session 2
3. Eglinton East Priority Bus Lane Public Consultation Summary
4. Jane Street Priority Bus Lane Public Consultation Summary
5. 2021 Annual Service Plan Public Consultation Summary
6. Stakeholder Meeting Round 2, Session 1
7. Stakeholder Meeting Round 2, Session 2
8. Youth Engagement Team Reports

Attachment 3: Technical Assessment

The 2021 Annual Service Plan (2021 ASP) focuses on continuing to respond to customers' dynamic and evolving demand for public transit service over the coming year. Our priorities are to sustain the demand-responsive service plan, improve regular scheduled service and advance key strategic initiatives.

The 2021 Action Plan includes 22 initiatives. The following report presents the technical analysis supporting the following initiatives:

- Improve route productivity and performance by modifying schedules
- Restore most Express Bus service
- Make transit accessible in neighbourhood improvement areas
- Implement service changes in Scarborough East

In addition, this report presents a post-implementation review for the following service changes implemented between 2017 and 2019:

- Bus route changes resulting from the Line 1 Extension to Vaughan
- Express bus network improvements
- Other new routes

1. 2021 initiatives

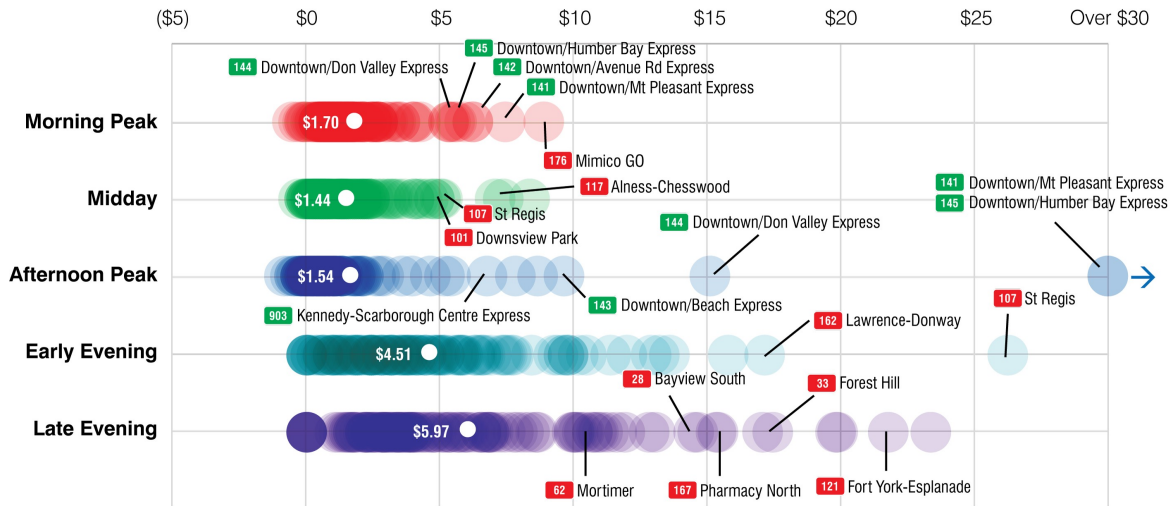
1.1 Improve route productivity and performance

While the TTC regularly evaluates the performance of its services, a detailed annual performance review provides a process to review every service for productivity and efficiency through metrics like net cost per passenger. As set out in the service standards, this review includes evaluating the bottom 10% of services with the goal of identifying possible improvements which include modifying service by restructuring the route or modifying schedules.

The 2021 annual performance review is based on ridership before the COVID-19 pandemic in October 2019.

A table providing the net cost per passenger of all routes, in all periods of operation can be found below. Routes with high net cost per passenger are evaluated for changes that may improve the productivity of the service by either adjusting the service to attract more riders to boost revenue or reducing the cost of providing the service. The following routes are among the highest cost services, aggregated over multiple operating periods, and specific actions are identified to improve the net cost per passenger metric. The overall recommendations for these routes are consistent even after accounting for changes from the pandemic and reduced ridership.

Subsidy per passenger boarding
Weekday, by Time Period (averages shown below)



NOTE: Statistics reflect pre-pandemic ridership and service levels
Each circle represents one route operating in the weekday service time period

101 Downsview Park

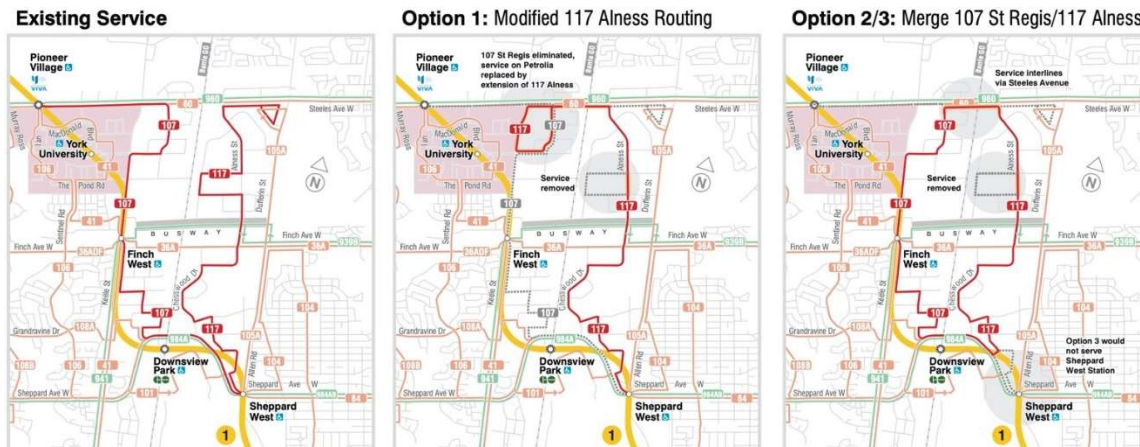
The Downsview Park area is planned for growth and development, as identified in City plans like the Downsview Area Secondary Plan. This bus route supports that growth by providing direct bus access for customers to rapid transit service on Line 1. In 2019, Centennial College opened a new Downsview campus and ridership on this route has increased since then and prior to the pandemic. Although this route is in a Neighbourhood Improvement Area and even though ridership has increased the route is still very costly to operate.

In 2021, improvements to the routing will be investigated as part of the 2022 Annual Service Plan (2022 ASP) process. The 101 Downsview Park currently operates a large on-street looping along Sheppard Avenue West, John Drury Drive and Carl Hall Road. This duplicates the westbound service on Sheppard Avenue West already provided by other routes like the 84 Sheppard West/ 984 Sheppard West Express, 106 Sentinel, 107 St Regis and 108 Driftwood. This routing only provides eastbound service through the Downsview Park area and is less convenient for customers to get to. Two-way service through the area, along Carl Hall Road instead of Sheppard Avenue West, would provide better travel times for customers and improve convenience. For these reasons, the TTC will hold this service change for further review.

107 St Regis and 117 Alness-Chesswood

The 107 St Regis and 117 Alness-Chesswood provide transit service to the DUKE Heights employment area. Particularly in the off-peak periods, these routes are among the highest cost services for the TTC to provide. Although these routes are in NIAs, even with equity-weighted boardings the routes remain very costly. As part of the 2021 ASP, options to change the two routes to help reduce costs were presented to customers for feedback. The majority of customers preferred a service concept that

merged the two routes together and maintained the connection to Sheppard West Station (Option 3 below). Based on this preference, in 2021, the TTC will merge the two routes and improve the efficiency of resources in the area. This includes removing transit service on Martin Ross Ave, Flint Rd and Supertest Rd in order to provide more direct and faster service through the Alness employment area.



121 Fort York-Esplanade

The 121 Fort York-Esplanade service was implemented in June 2016. The eastern portion of the route replaced existing service on route 172 Cherry Street, while the western portion of the route was a new service expansion. Initially, the extension into Fort York increased route ridership by approximately 500 daily customer-trips, but more recent counts, from before the pandemic, have indicated that ridership in the Fort York area has fallen to approximately 300 daily customer-trips. Meanwhile, based on ridership from before the pandemic, the eastern portion of the route, serving Esplanade and Distillery District, remained relatively unchanged at approximately 400 daily customer-trips.

A possible reason for the decline in ridership in Fort York, pre-pandemic, may be due to improvements from the surrounding streetcar network, as the 121 Fort York-Esplanade routing is located, at certain parts, only 300 metres to parallel streetcar lines. With the introduction of new higher capacity streetcars on 509 Harbourfront in Spring 2017, and the major improvements to 504 King through the King Street Transit Priority Corridor in Fall 2017, customers originally using the 121 route may have opted to walk further to a more spacious and more frequent service on the streetcar corridors. Furthermore, the 121 service west of Union Station is often affected by diversions from special events, which leaves the service undependable for customers to access.

The two distinct ridership patterns can be observed in the service productivity (boardings per service) table below. This is based on ridership data from October 2019.

Period	121 Full Route	121 East of Union Station	121 West of Union Station	Service standard
AM peak	17	20	15	20
Midday	14	19	10	10
PM peak	13	18	9	20
Early evening	9	11	8	10
Late evening	5	6	5	10

Overall, 121 Fort York-Esplanade did not meet the service productivity standard in all weekday periods but midday. However, when service productivity is divided for portions east and west of Union Station, the east portion of the route met the service standards in all periods, while the west portion of the route was underperforming in all periods.

Due to the continual decline in productivity of the 121 route west of Union Station, even before the impacts of reduced ridership from the pandemic, it is recommended that service west of Union Station to be eliminated.

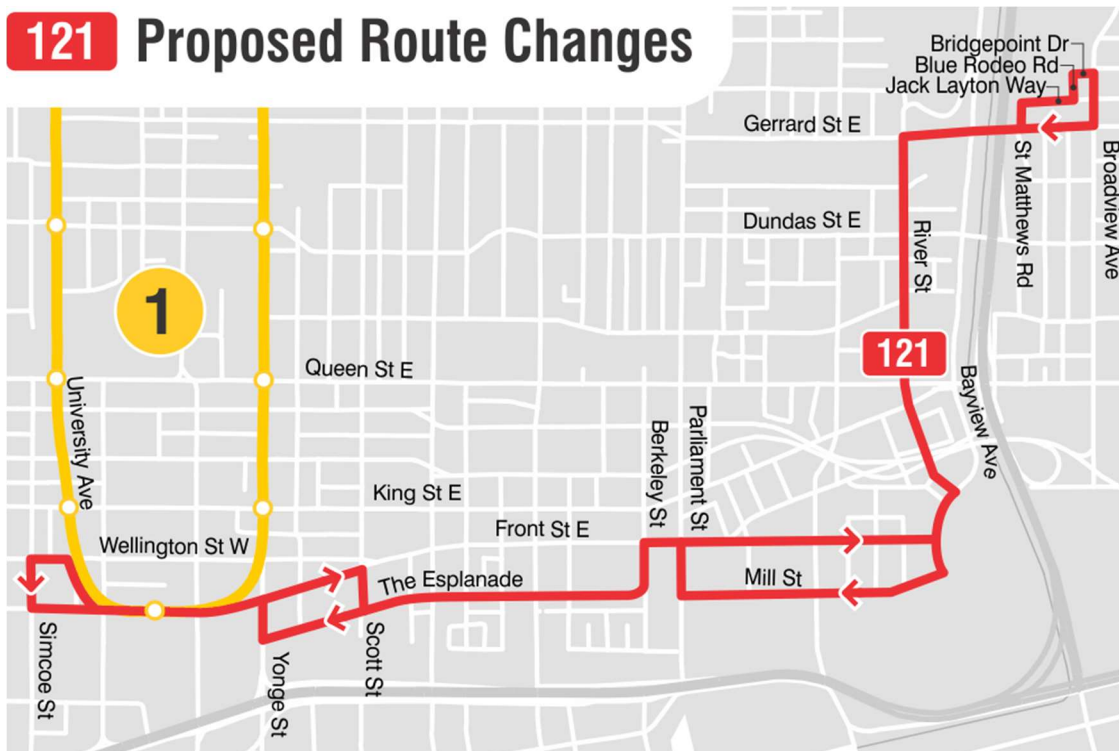
The resources from eliminating the service west of Union Station is recommended to be reallocated for an eastern extension of this route. This includes removing bus service west of Union Station, on Front St. West, Blue Jays Way, Bremner Blvd., Fort York Blvd., Fleet St., Lake Shore Blvd., Strachan Ave., due to low ridership. This also includes extending bus service to the Corktown and Regent Park neighbourhoods, on Front St. East, Mill St., Lawren Harris Square, Lower River St., River St., Gerrard St. East, St Matthews Rd., Blue Rodeo Rd., Bridgepoint Dr., Broadview Ave., and Jack Layton Way.

This will allow the TTC to provide transit access to the growing neighbourhoods of Corktown Commons and Regent Park, as well as Bridgepoint Hospital. A trial service is recommended to operate in all periods to provide a new north-south connection parallel to Parliament Street and the Don River, and also connect the neighbourhoods to the subway and regional transit at Union Station.

Based on pre-pandemic data, approximately 1,000 daily customer-trips are projected from the new route extension.

The implementation of this route extension will require signage changes and adjustments to turn-restrictions at the Bayview Avenue and Lawren Harris Square intersection. The TTC will work with partners at Transportation Services to make these adjustments to successfully implement the routing extension to better serve customers.

121 Proposed Route Changes



162 Lawrence-Donway

The 162 Lawrence-Donway connects the Don Mills community and Lawrence Station, and it also provides transit service to the Bridle Path neighbourhood. As of 2019, this route had, on average, approximately 830 daily customer-trips. While the community along The Donway on the eastern portion of this route has grown in recent years with higher density developments, the ridership growth in this area has been relatively slow as more customers are likely drawn to the more frequent services along the major corridors on Don Mills Road and Lawrence Avenue East.

It is recommended that the routing for this route be re-evaluated in 2021 in conjunction with bus network changes in the area for the opening of Line 5 Eglinton in 2022 to assess if improvements can be made to better serve more customers. As this route provides vital transit accessibility to the Bridle Path neighbourhood, who would otherwise be out of transit coverage, no changes are recommended to the service in this area. For these reasons, the TTC will hold this service change for further review.

176 Mimico GO

Also see Section 2 for post-implementation review of the 176 Mimico GO. Since the routing was extended on this route, it is recommended that it continue to operate and be re-evaluated as part of the 2022 ASP process.

900 Airport Express

Based on pre-pandemic ridership, the 900 Airport Express is among the top 10% of highest cost services in most periods of operation. This route has similar operating characteristics to the Downtown Express routes in that it is largely a point-to-point service and is designed to have limited opportunity for customers to board and alight. But, unlike the Downtown Express routes, this is the most direct route to the airport. Some opportunities may be available to reduce service frequency on this route, if supported by ridership demand and the service standards, to reduce operating costs. This will be evaluated in 2021 with more updated ridership information.

903 Kennedy-Scarborough Centre Express

The 903 Kennedy-Scarborough Centre Express bus route was introduced as an alternative to Line 3 Scarborough in order to add capacity for customers travelling between Kennedy and Scarborough Centre stations. The average daily ridership on this route was approximately 620 customer-trips, based on pre-pandemic data. By contrast, the ridership on Line 3 which it is supposed to help supplement had over 35,000 daily customer-trips, based on pre-pandemic data. Although ridership and customer up-take on this route has been stagnant for many years, it is recommended that this link be maintained until a decision has been made on the life-extension of Line 3 Scarborough.

Late evening service review

The TTC recognizes the need to support the travel of customers who may need to work non-traditional hours. This was one of the main principles of establishing the All-Day-Every-Day Network in 2015. Over 130 periods of service were added as part of this initiative with over half of it being late evening service. Notwithstanding the above, late evening operation is among the highest-cost service for the TTC to provide, and based on pre-pandemic ridership data, some adjustments to high-cost routes with low ridership are required to improve their financial performance.

As part of the 2021 ASP, schedules on the following late evening services are recommended to be modified, seven-days-week: 28 Bayview South, 33 Forest Hill, and 167 Pharmacy North (Monday to Friday only). The bus service on these routes will end after approximately 11 p.m. (after approximately 11:30 p.m. on the 167 Pharmacy North), instead of 1 a.m. Ridership on these late evening services has been consistently low since their introduction, and the costs to operate these services should be reduced to improve financial accountability. Trips made by customers in the late evening service are generally the return trips on their journeys, and as a result, trips in other parts of the day may also be affected by these changes. We will monitor ridership changes on these routes and will refine the routes as required as part of the regular service monitoring and adjustment process.

The approximate number of customer-trips impacted by this change is shown in the table below:

Weekday late evening customer-trips after 11 p.m.	Pre-pandemic ridership (October 2019)	Ridership (as of October 2020)
28 Bayview South	15	0
33 Forest Hill	10	0
167 Pharmacy North (after 11:30 p.m.)	20	10

Late evening service was also considered to be reduced on 62 Mortimer as part of this review. However, a review of ridership since the pandemic began indicated that late evening ridership has not changed for the 62 Mortimer – an indication that customers may be using this route for essential travel during this period. This route also has a direct connection to Michael Garron Hospital. Given the pandemic situation, TTC will re-evaluate this service as part of the 2022 ASP.

Downtown Express review

Consistent with previous analysis from the Express Bus Study, the routes with the highest net cost per passenger are the Downtown Express routes. These routes provide direct, point to point, connections for customers, and as a result, they have relatively low ridership and don't have the opportunity for more boardings and alightings which help make a route more productive. In light of the pandemic and alternate and parallel services being available, the Downtown Express routes have been suspended since March 2020. Throughout 2021, the TTC will continue to suspend these services.

1.2 Restore most Express Bus service

In 2021, we are restoring most express services (with the exception of the Downtown Express routes, as noted above) and adjusting services to improve customer travel times and add corridor capacity in an efficient manner. Express routes provide capacity at major stops with less resource requirements as compared to local service.

Restructuring service in periods of operation on existing routes


Existing express route schedules will be added to efficiently add capacity to corridors as part of the optimizing capacity across the network initiative through resource reallocation.

The *Express Bus Study* recommended that express service on the Dufferin corridor could be supported on weekends, but was not implemented along with the introduction with the route due to constraints. Current ridership projections, based on pre-pandemic data, continue to support expanding express service. As part of the optimization of service levels initiative, the TTC will implement weekend daytime express service on the 929 Dufferin Express in 2021 to optimize corridor capacity.

Also in-line with the plan set out in the *Express Bus Study*, midday service on the 941 Keele Express is justified. Based on pre-pandemic ridership, off-peak periods of service can also be justified on the 953 Steeles East Express and 960 Steeles West Express. The table below summarizes the express routes with possible periods of service. The implementation of these periods of service will be examined in 2021 as part of the optimization of service levels initiative.

Table of periods of operation on express routes

Day	Periods of operation	929 Dufferin Express	941 Keele Express	953 Steeles East Express	960 Steeles West Express
Monday to Friday	AM peak	✓	✓	✓	✓
	Midday	✓	✓	✓	✓
	PM Peak	✓	✓	✓	✓
	Early evening	✓		✓	✓
	Late evening				
Saturday	Morning	✓		✓	✓
	Afternoon	✓		✓	✓
	Early evening				
	Late evening				
Sunday	Morning	✓		✓	✓
	Afternoon	✓		✓	✓
	Early evening				
	Late evening				

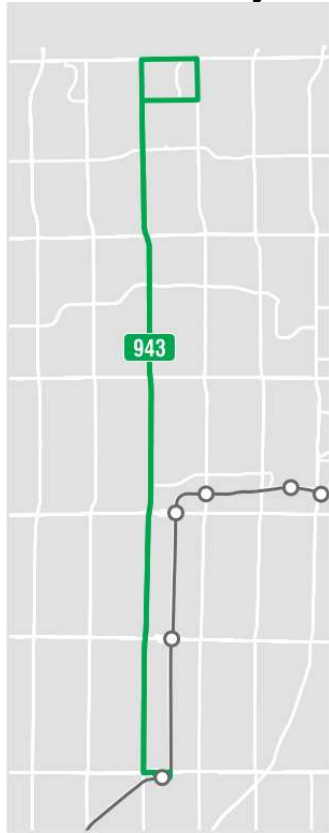
 New period of operation

Reallocating capacity on Kennedy Avenue and Warden Avenue

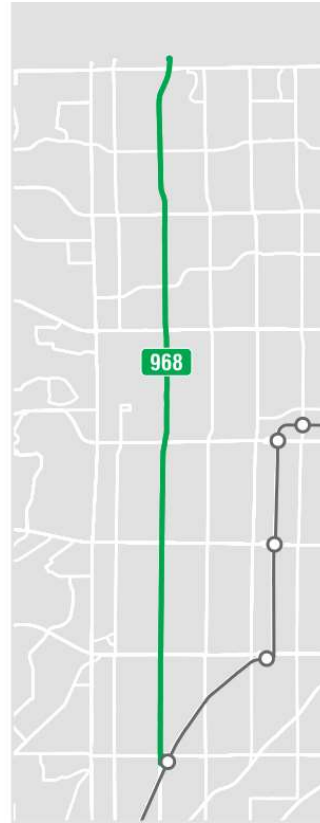
The *Express Bus Study* presented a long-term express bus network that could be developed to facilitate projected future travel demands that will change due to rapid transit projects. The 2021 ASP recommends the implementation of express service on the Kennedy Road and Warden Avenue corridors through a reallocation of resources. This will add more capacity to those corridors and optimize service levels for customers.

Peak period express service on the Kennedy Road corridor would operate between Steeles Avenue East and Kennedy Station. On the Warden Avenue corridor, express bus service would operate between Steeles Avenue East and Warden Station. Both routes would only serve major stops along the corridor in order to minimize travel time for customers.

943 Kennedy



968 Warden



Proposed express stops on Kennedy:

- Kennedy Station
- Lawrence Avenue East
- Ellesmere Road
- Progress Avenue/ Glamorgan Avenue
- Antrim Crescent
- Village Green Square
- Sheppard Avenue East
- Finch Avenue East
- McNicoll Avenue
- Steeles Avenue East
- Midland Avenue

Proposed express stops on Warden:

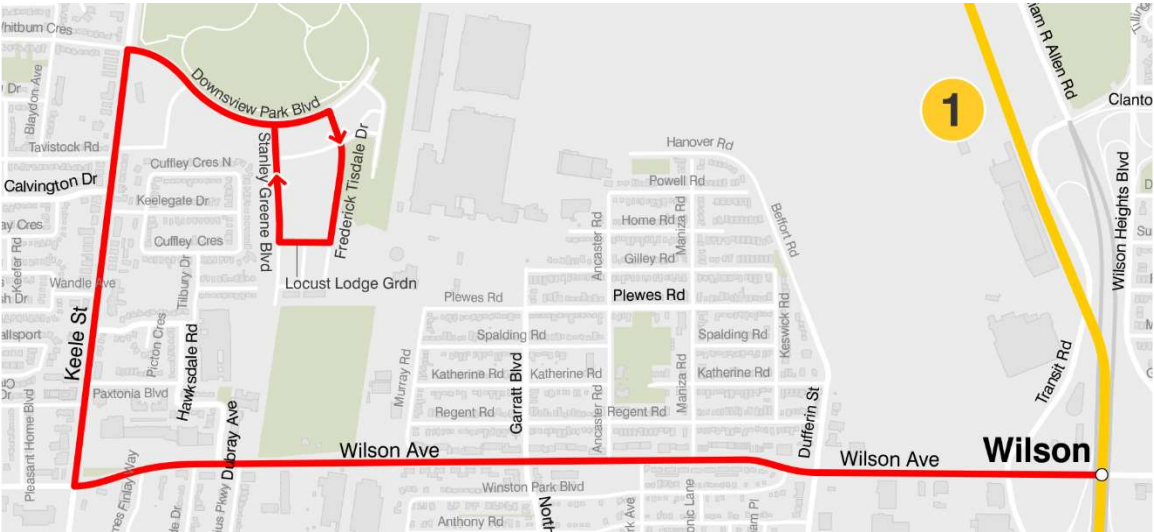
- Warden Station
- Fairfax Crescent
- Eglinton Avenue East
- Ashtonbee Road
- Lawrence Avenue East
- Ellesmere Road
- Sheppard Avenue East
- Finch Avenue East
- McNicoll Avenue
- Steeles Avenue East

1.3 Make transit accessible in neighbourhood improvement areas

The following section outlines service changes in Neighbourhood Improvement Areas.

Service to Stanley Greene

As outlined in the 5-Year Service Plan, we will serve the growing neighbourhood south of Downsview Park. A trial service is recommended to operate in the peak periods, on weekdays only, to support commuter travel and add capacity on the Wilson Avenue corridor. Based on pre-pandemic data, approximately 600 daily customer-trips are projected for this service within the unique catchment area of Stanley Greene. Subject to approval of the 2021 ASP, this service will be implemented in 2021.



Midday Service on 119 Torbarrie

As outlined in the 5-Year Service Plan, introducing midday service on the 119 Torbarrie is recommended. Peak period service was introduced in 2008 to serve a community that was under development east of Highway 400 and the established employment lands west of Highway 400 that continue to be active during the pandemic. Since 2008 ridership on this route has grown and ridership has stayed strong through this pandemic. Based on pre-pandemic data, approximately 240 daily customer-trips are projected for this new service. Subject to approval of the 2021 ASP, this service will be implemented in 2021.

Applying equity lens to service planning

In December 2019, the TTC Board approved a change to TTC’s Service Standards that allows TTC to pilot new service in Neighbourhood Improvement Areas (NIAs). The new policy applies a 125% factor to customer-trips (boardings + alightings / 2) at NIA stops (e.g. 4 boardings = 5 weighted boardings). This new policy has two effects. It potentially sustains low performing routes, and it potentially justifies new service which would otherwise not meet standards.

As part of the performance review, all low performing routes in NIAs were reviewed for equity considerations. However, even with equity-weighted boardings (for example, on the 101 Downsview Park, 107 St Regis and 117 Alness-Chesswood) maintaining service as currently operated was not justified.

In addition, staff reviewed areas of the city where new service could be justified with this new policy. This includes recommendation for new periods of operation of 12D Kingston Road and 86D Scarborough.

As seen in section 1.4, the Scarborough East study seeks to improve the surface network in the identified area. The current 86D only provides service to the West Hill neighbourhood in the daytime period, from Monday to Saturday, staff identified that this route operates in a NIA and used this opportunity to investigate if additional periods of service can be offered. Based on pre-pandemic ridership projections, service on the Beechgrove Drive, Coronation Drive and Manse Road loop could support additional service and this will be investigated through the implementation of bus route changes in Scarborough East.

As seen in section 2.3, the post implementation review of 12D service resulted in the PM peak performing just below thresholds. With the application of equity-weighted boardings the PM peak service passes the productivity standard. In addition, new periods of service were investigated and the Monday-Friday midday service projection, based on pre-pandemic data.

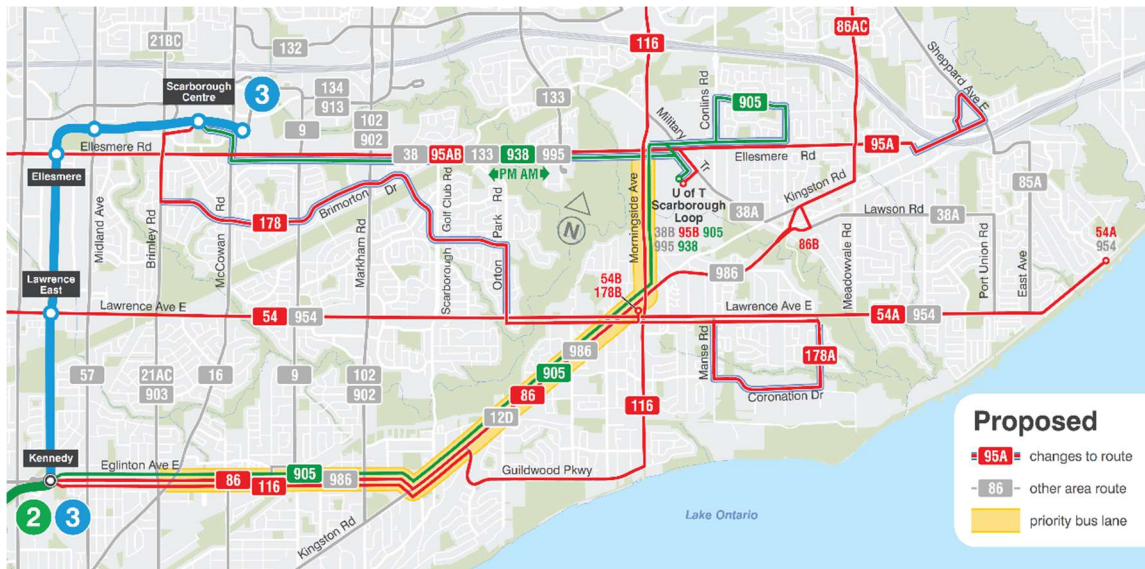
1.4 Scarborough East

In spring 2017, the TTC conducted a customer survey to better understand customer travel patterns in the Scarborough East area. Customer feedback was also collected on existing services to identify concerns for customers. The following key issues were identified:

- Need for improved express service
- Reduce wait times, trip duration and crowding
- Service reliability concerns, such as bus bunching and gaps
- More frequent service on Kingston Road and Lawrence Avenue East

In response to these concerns, a number of improvements are recommended:

- Operate peak period express service on 38 Highland Creek
- Operate service on Brimorton Drive connecting to Scarborough Centre Station, which will also replace 86 Scarborough service to Beechgrove Drive
- Extend the 905 Eglinton East Express to Conlins Road and replace the 116A Morningside service
- Extend the 95 York Mills to Sheppard Avenue East at Kingston Road
- Extend the 54 Lawrence East frequent service from Scarborough Golf Club Road to Morningside Avenue



Scarborough East express services

Scarborough East riders travel longer distances and have expressed the need for additional express services as well as modifying current express services to make even fewer stops. Most express bus routes save customers approximately 20% in travel time compared to their local counterparts. Based on the foregoing, peak period express service is recommended on the 38 Highland Creek between Scarborough Centre Station and U of T Scarborough through a reallocation of resources. In the morning peak, the service will operate as express eastbound from Scarborough Centre Station to U of T Scarborough, then local to Rouge Hill GO. In the afternoon peak, the service will operate as express westbound from U of T Scarborough to Scarborough Centre Station.

The 905 Eglinton East Express to U of T Scarborough will also be extended to the Conlins Road area via Kingston Road on weekdays during all service periods. This will replace the 116A Morningside service to Conlins Road. Based on pre-pandemic projections, this is estimated to generate 90 new daily riders.

Scarborough East frequent service

In order to connect customers along the Lawrence East corridor to the new RapidTO service along Morningside Avenue and Kingston Road, more frequent service is recommended to operate along the 54 Lawrence East route. The 54B short-turn branch at Scarborough Golf Club Road is recommended to be extended to Kingston Road and Morningside. As part of RapidTO implementation, more frequent service will also now operate in most periods on the 86 Scarborough to the Highland Creek area. Overall, based on pre-pandemic projections, approximately 6,000 customer-trip will have more frequent service.

Customers have also requested an increase in the number of buses coming from the Meadowvale Road, Ellesmere Road and Kingston Road area going to and from the subway and closing a gap in the grid network. As part of the 2021 ASP, we recommend extending the 95 York Mills to Sheppard Avenue East at Kingston Road. Bus service will operate on Durnford Road and Rylander Boulevard. This will allow customers in the Ellesmere and Kingston Road vicinity to connect to services such as the 85 Sheppard East. Based on pre-pandemic projections, this is estimated to generate 60 new riders daily.

Community access

Service is recommended on Brimorton Drive to provide customers with transit coverage. This route will connect Scarborough Centre Station and the Manse Road and Coronation Drive area. Direct bus service will be removed along Scarborough Golf Club Road, but many existing customers will be within walking distance to the new bus service along Brimorton Drive. Existing customers on Scarborough Golf Club Road will also have the benefit of more frequent service on Lawrence Avenue East compared to the current routing. Based on pre-pandemic projections, this local service is estimated to generate 160 new daily riders. Ridership was also estimated for the West Hill neighbourhood to Manse Road and Coronation Drive, and based on pre-pandemic ridership data, could be supported for expanded periods of operation in the evening, from Monday to Saturday, and all-day on Sunday, subject to the optimization initiative.

2. Post-implementation reviews

Every new service that the TTC introduces is initially operated for a trial period of at least twelve months, during which the service is promoted and a consistent ridership level becomes established. Monitoring is performed at regular intervals to ensure that the new service is trending towards the appropriate standard, and a formal evaluation is conducted after at least twelve months to review its performance.

In this section, post-implementation reviews are completed associated with:

- Bus route changes resulting from the Line 1 Extension to Vaughan
- Express bus network expansion
- Other new routes

2.1 Bus Route Changes resulting from the Line 1 Extension to Vaughan

The Toronto-York Spadina Subway Extension (TYSSE) is an 8.6 km extension of the TTC's Line 1 subway from Sheppard West Station northwest to Vaughan Metropolitan Centre, with six new stations.

In May 2017, the TTC Board approved changes to the bus routes near the new subway extension in order to connect customers to the new stations and improve their journey times. The changes included:

- New on-street connections with Downsview Park Station for bus routes along Sheppard Avenue West
- New connections to the bus terminal at Finch West Station for bus routes in the Keele Avenue and Finch Avenue West area
- The relocation of the majority of TTC bus services at York Commons in York University to the bus terminal at Pioneer Village Station
- New connections to the stations in York Region by partner transit agencies

As part of the 2021 ASP, these changes are subject to post-implementation review to ensure the routes are operating within TTC Board-approved service standards and overall goals are achieved using 2019 data.

Overall, the bus route changes resulted in travel time improvements for customers. The subway extension added new rapid transit access for customers in northwest Toronto and reduced their travel times to connect to rapid transit. Especially at Pioneer Village Station and Finch West Station, where new bus facilities were built, customers are now able to connect to rapid transit faster than before.

Average daily bus customers at Line 1 Extension Stations (2019)

Customer-trips at new TYSSE subway stations	Route	Average daily customer-trips
Pioneer Village Station	35 Jane	1,790
	41 Keele	600
	60 Steeles West	4,400
	84 Sheppard West	110
	106 Sentinel	720
	107 St Regis	170
	108 Driftwood	1,100
	935 Jane Express	980
	960 Steeles West Express	570
Finch West Station	36 Finch West	9,490
	41 Keele	870
	107 St Regis	170
	939 Finch Express	3,010
	941 Keele Express	280
Downsview Park Station	84 Sheppard West	160
	101 Downsview Park	10
	106 Sentinel	50
	107 St Regis	10
	108 Driftwood	70
	984 Sheppard West Express	110

While multiple bus routes provide on-street connections at Downsview Park Station with Line 1, the strong majority of customers prefer to connect at Sheppard West Station. This likely owes to the fact that Sheppard West Station has a bus terminal that provides transfers to other bus routes and a sheltered environment for boarding and alighting.

The 107 St Regis and 117 Alness-Chesswood are among the highest cost services for the TTC to operate. Changes to these routes are proposed as part of this post-implementation review and the performance review (see section Error! Reference source not found.)

2.2 Express Bus Network

In June 2017, TTC's Express Bus Network Study was submitted to the TTC Board and recommended eight new express bus routes. These routes were implemented in late 2018 and early 2019 to enhance the existing transit network and provide additional service capacity for customers travelling on busy corridors. The new express routes introduced were:

- 902 Markham Road Express
- 913 Progress Express
- 929 Dufferin Express
- 937 Islington Express
- 952 Lawrence West Express
- 984A Sheppard West Express (extension to Weston Road)
- 985B Sheppard East Express (new branch to Meadowvale Road)
- 989 Weston Express

As part of the 2021 ASP, these new express routes are subject to post-implementation review to ensure that the new routes are operating within service standards, and overall strategic goals are achieved.

TTC's Board-approved service standards lists minimum service levels, service productivity, and speed improvements that express services should meet. The following subsections compare each route against the service standard criteria to assess their effectiveness as express services, and also recommends future improvements if necessary to meet service standards. This analysis was based on pre-pandemic data.

The ridership data and performance statistics are based on information from fall 2019, before service was suspended on express routes during the pandemic response. Future analysis will be required to reflect new post-pandemic ridership numbers, once all express services are reintroduced and corridor ridership stabilizes.

902 Markham Rd Express

The 902 Markham Rd Express was introduced in September 2018. This north-south express route operates parallel to the 102 Markham Rd, from Warden Station to Sheppard Avenue and Markham Road, via Centennial College Progress Campus, and operates in the daytime from Monday to Friday.

Prior to the pandemic, scheduled service levels on 902 Markham Rd Express operated every 10 minutes in the peak periods and every 15 minutes in the midday.

Based on pre-pandemic data, service productivity on 902 Markham Rd Express performed above average compared to its class – the net cost per passenger on this route was \$0.57 per passenger.

The operating speed of 902 Markham Rd Express was higher than the local route, and met the service standard during the peak periods, and was close to meeting the standard in midday. Significant slowdown was observed between Eglinton and Lawrence, and will require investigation and intervention to improve speeds in this area.

Based on 2019 ridership data, service levels on the 902 Markham Rd Express and 102 Markham Rd could be rebalanced in the peak periods – some of the express service can be moved to the local service to better meet customer demand. In 2021, the TTC will optimize all service levels to ensure capacity is allocated based on demand.

With the introduction of 902 Markham Rd Express, ridership on the corridor, prior to the pandemic, increased by 19%. This indicates that corridor ridership has responded very positively to the additional express service, with the majority of gains seen in the midday and afternoon peak periods, coinciding with the general student travel to Centennial College.

902 Markham Rd Express Scorecard			
<i>Week day Headway (mins)</i>			
Period	Target	Current	Status
AM	15	10	✔
MD	n/a	15	✔
PM	15	10	✔
<i>Service Productivity (Rides/Service Hr)</i>			
Period	Target	Current	Status
AM	40	67	✔
MD	n/a	81	✔
PM	40	88	✔
<i>Net Cost per Passenger</i>			\$ 0.57
<i>Speed Improvements</i>			
Period	Target	Current	Status
AM	20%	23%	✔
MD		19%	✘
PM		20%	✔
<i>Local and Express Crowding</i>			
Period	Local	Express	Status
AM	113%	81%	⚠
MD	107%	103%	✘
PM	103%	69%	⚠
<i>% Change in Corridor Ridership</i>			19%

913 Progress Express

The 913 Progress Express was introduced in September 2018. This express route operates between Scarborough Centre and Centennial College Progress Campus, replacing eastbound 134C Progress in the morning peak period, and replacing westbound 134C Progress in the afternoon peak period. This service operates Monday to Friday.

Prior to the pandemic, service levels on 913 Progress Express operated every 4 to 5 minutes in the peak periods.

Based on pre-pandemic data, service productivity performed above average compared to its class, and the net cost per passenger on this route breaks even.

Based on pre-pandemic data, the operating speed of 913 Progress Express was higher than the local route and exceeded the target for express operating speed. There were some slowdowns observed between Markham Road and Centennial College, which could be due to lack of terminal space at the college. Staff have worked with Centennial College to address terminal capacity issues as a separate project. Average travel speeds for customers can be further improved by changing the routing to operate on Progress Avenue, Grangeway Avenue, and Bushby Drive instead of Corporate Drive, Consilium Place and McCowan Road, in both directions. This formal change to the routing is recommended as part of the 2021 ASP.

Prior to the pandemic, express service accounted for 100% of the hourly capacity provided on the corridor, in the counter-peak direction. All customers travelling from Scarborough Centre Station to Centennial College in the morning peak and from Centennial College to Scarborough Centre in the afternoon peak were accommodated with express trips. Prior to express implementation, approximately 90% of customers travelled exclusively between the two termini. Ridership data from pre-pandemic showed that average crowding on the route was within crowding standards.

With the introduction of 913 Progress Express, ridership on the corridor increased by 3% prior to the pandemic. This indicates that corridor ridership was stable even after express bus implementation.

913 Progress Express Scorecard			
<i>Week day Headway (mins)</i>			
Period	Target	Current	Status
AM	15	4.25	✓
PM	15	5	✓
<i>Service Productivity (Rides/Service Hr)</i>			
Period	Target	Current	Status
AM	40	92	✓
PM	40	121	✓
<i>Net Cost per Passenger</i>			\$ (0.00)
<i>Speed Improvements</i>			
Period	Target	Current	Status
AM	20%	24%	✓
PM		52%	✓
<i>Local and Express Crowding</i>			
Period	Local	Express	Status
AM	-	76%	✓
PM	-	69%	✓
<i>% Change in Corridor Ridership</i>			3%

929 Dufferin Express

The 929 Dufferin Express was introduced in October 2018. This north-south express route operates parallel to the 29 Dufferin, from Wilson Station to Dufferin Gate Loop. This service operates Monday to Friday, from morning peak to early evening.

Before the pandemic, scheduled service levels on 929 Dufferin Express operated every 8 to 10 minutes throughout the day.

Based on pre-pandemic data, service productivity on 929 Dufferin Express performed above average compared to its class. The net cost per passenger on this route was \$0.28 per passenger, and was not identified as a low performance route.

Based on pre-pandemic data, the operating speed of 929 Dufferin Express was higher than the local route, but did not meet the standard of 20% increase in all periods. Significant congestion was observed between Bloor and Dundas, and will require investigation and intervention to increase speeds in this area.

With the introduction of 929 Dufferin Express, ridership on the corridor grew by 2% in 2019. This indicated that corridor ridership was stable even with express implementation, and that further improvements, such as speed increase and improved service levels, may be required before corridor ridership can grow further.

929 Dufferin Express Scorecard			
<i>Week day Headway (mins)</i>			
Period	Target	Current	Status
AM	10	8.75	✓
MD	15	10	✓
PM	10	10	✓
EE	15	10	✓
<i>Service Productivity (Rides/Service Hr)</i>			
Period	Target	Current	Status
AM	40	78	✓
MD	30	81	✓
PM	40	115	✓
EE	30	60	✓
<i>Net Cost per Passenger</i>			\$ 0.28
<i>Speed Improvements</i>			
Period	Target	Current	Status
AM	20%	26%	✓
MD		15%	✗
PM		14%	✗
EE		16%	✗
<i>Local and Express Crowding</i>			
Period	Local	Express	Status
AM	112%	101%	✗
MD	109%	96%	✗
PM	98%	106%	✗
EE	110%	122%	✗
<i>% Change in Corridor Ridership</i>			2%

937 Islington Express

The 937 Islington Express was introduced in September 2018. This north-south express route operates parallel to the 37 Islington, from Steeles Avenue to Islington Station. This service operates Monday to Friday, peak periods only.

Prior to the pandemic, service levels on 937 Islington Express operated every 11 to 12 minutes in the peak periods.

Based on pre-pandemic data, service productivity on 937 Islington Express performed slightly below the class average. The net cost per passenger on this route is \$1.75 per passenger, and was not identified as a low performance route.

The operating speed of 937 Islington Express was higher than the local route, but did not meet the standard of 20% improvement in all periods. The average local speed was already above the system average speed, and significant speed improvements from the express route were not expected on this corridor.

With the introduction of 937 Islington Express, ridership on the corridor has remained unchanged in 2019.

937 Islington Express Scorecard			
<i>Week day Headway (mins)</i>			
Period	Target	Current	Status
AM	15	11.5	✓
PM	15	12	✓
<i>Service Productivity (Rides/Service Hr)</i>			
Period	Target	Current	Status
AM	40	44	✓
PM	40	47	✓
<i>Net Cost per Passenger</i>			\$ 1.98
<i>Speed Improvements</i>			
Period	Target	Current	Status
AM	20%	16%	✗
PM		16%	✗
<i>Local and Express Crowding</i>			
Period	Local	Express	Status
AM	86%	78%	✓
PM	80%	64%	⚠
<i>% Change in Corridor Ridership</i>			0%

952 Lawrence West Express

The 952 Lawrence West Express was introduced in October 2018. This east-west express route operates parallel to the 52 Lawrence West, from Lawrence Station to Pearson Airport. This service operates Monday to Friday, peak periods only.

Before the pandemic, scheduled service levels on 952 Lawrence West Express operated every 11 to 12 minutes in the peak periods.

Based on pre-pandemic data, service productivity on 952 Lawrence West Express performed above average compared to its class. The net cost per passenger on this route is \$1.11 per passenger, and is not identified as a low performance route.

In 2019, the operating speed of 952 Lawrence West Express was higher than the local route, but did not meet the standard of 20% increase in all periods. Significant slowdowns were observed eastbound from Scarlett to Yonge, and westbound from Dufferin to Scarlett. Further investigation and intervention will be required to increase speeds in this area.

With the introduction of 952 Lawrence West Express, ridership on the corridor increased by 19% in 2019. This indicated that corridor ridership responded very positively to the additional express service. Improvements to corridor speed will continue to improve ridership uptake and enhance the customer experience on express service.

952 Lawrence West Express Scorecard			
<i>Week day Headway (mins)</i>			
Period	Target	Current	Status
AM	15	11	✓
PM	15	12	✓
<i>Service Productivity (Rides/Service Hr)</i>			
Period	Target	Current	Status
AM	40	58	✓
PM	40	63	✓
<i>Net Cost per Passenger</i>			\$ 1.06
<i>Speed Improvements</i>			
Period	Target	Current	Status
AM	20%	13%	✗
PM		4%	✗
<i>Local and Express Crowding</i>			
Period	Local	Express	Status
AM	102%	107%	✗
PM	95%	97%	⚠
<i>% Change in Corridor Ridership</i>			19%

984A Sheppard West Express (extension to Weston Road)

The 984 Sheppard West Express was introduced in September 2018, replacing 84E Sheppard West, and adding new peak period express service from Sheppard West Station to Weston Road. The new branch, 984A, operates Monday to Friday, peak periods only.

Before the pandemic, scheduled service levels on 984A Sheppard West Express operated every 9 to 10 minutes.

Based on pre-pandemic data, service productivity on 984A Sheppard West Express performs above average compared to its class. The net cost per passenger on this route is \$0.26 per passenger, and is not identified as a low performance route. The net cost per passenger improved significantly with the introduction of the express service extension to Weston.

The operating speed of 984A Sheppard West Express was higher than the local route, but did not meet the standard of 20% increase in all periods. In the section west of Sheppard West Station, eastbound speed was significantly lower than the westbound speed during operating periods. Further investigation and intervention will be required to increase speeds in this area.

With the introduction of 984A Sheppard West Express, ridership on the corridor increased by 20% in 2019. This indicated that corridor ridership responded very positively to the additional express service to Weston Road.

984A Sheppard West Express Scorecard			
<i>Week day Headway (mins)</i>			
Period	Target	Current	Status
AM	15	9.5	✓
PM	15	9	✓
<i>Service Productivity (Rides/Service Hr)</i>			
Period	Target	Current	Status
AM	40	87	✓
PM	40	95	✓
<i>Net Cost per Passenger</i>			\$ 0.27
<i>Speed Improvements</i>			
Period	Target	Current	Status
AM	20%	19.8%	✗
PM		19.3%	✗
<i>Local and Express Crowding</i>			
Period	Local	Express	Status
AM	92%	87%	✓
PM	90%	74%	⚠
<i>% Change in Corridor Ridership</i>			20%

985B Sheppard East Express (new branch to Meadowvale Road)

The 985 Sheppard East Express was introduced in September 2018, replacing 190 Scarborough Centre Rocket, and adding new peak period express service from Midland Avenue to Meadowvale Road. The new branch, 985B, operates Monday to Friday, peak periods only.

Prior to the pandemic scheduled service levels on 985B Sheppard East Express operated every 10 to 12 minutes.

Based on pre-pandemic data, service productivity on this route performed above average compared to its class. The net cost per passenger on this route was \$0.57 per passenger, and is not identified as a low performance route. The net cost per passenger improved slightly with the introduction of the express service extension to Meadowvale.

The operating speed of 985B Sheppard East Express was higher than the local route, but did not meet the standard of 20% increase in all periods. Service slowdowns were observed throughout the corridor, which may be due to the density of express stops on the corridor. Further investigation and intervention will be required to increase speeds in this area.

Based on ridership data from 2019, service levels on the 985 Sheppard East Express and 85 Sheppard East could be rebalanced during the peak periods, as more customers were observed to prefer the local service over the express service. In 2021, the TTC will optimize all service levels to ensure capacity is allocated based on demand.

With the introduction of 985B Sheppard East Express, ridership on the corridor has increased by 2% in 2019. This indicates that corridor ridership remained stable with express implementation, and that further improvements, such as speed increase and service level changes, may be required before corridor ridership can grow.

985B Sheppard West Express Scorecard			
<i>Week day Headway (mins)</i>			
Period	Target	Current	Status
AM	15	12	✓
PM	15	10	✓
<i>Service Productivity (Rides/Service Hr)</i>			
Period	Target	Current	Status
AM	40	73	✓
PM	40	79	✓
<i>Net Cost per Passenger</i>			\$ 0.60
<i>Speed Improvements</i>			
Period	Target	Current	Status
AM	20%	3%	✗
PM		8%	✗
<i>Local and Express Crowding</i>			
Period	Local	Express	Status
AM	99%	70%	⚠
PM	98%	67%	⚠
<i>% Change in Corridor Ridership</i>			2%

989 Weston Express

The 989 Weston Express was introduced in October 2018. This north-south express route operates parallel to the 89 Weston, from Keele Station to Steeles Avenue. This service operates Monday to Friday, peak periods only.

In 2019, scheduled service levels on 989 Weston Express operates every 13 to 15 minutes.

Based on pre-pandemic data, service productivity on 989 Weston Express performed slightly below the class average. The combined productivity for the peak periods on this route met the targets in the service standards.

The net cost per passenger on this route is \$1.61 per passenger, and was not identified as a low performance route.

The operating speed of 989 Weston Express was higher than the local route and exceeded the target for express operating speed.

Based on ridership data from 2019, service levels on the 989 Weston Express and 89 Weston could be rebalanced during the peak periods, as more customers were observed to prefer the local service over the express service. In 2021, the TTC will optimize all service levels to ensure capacity is allocated based on demand.

With the introduction of 989 Weston Express, ridership on the corridor increased by 11%. This indicates that corridor ridership has responded positively to the additional express service.

989 Weston Express Scorecard			
<i>Week day Headway (mins)</i>			
Period	Target	Current	Status
AM	15	14.5	✓
PM	15	13.5	✓
<i>Service Productivity (Rides/Service Hr)</i>			
Period	Target	Current	Status
AM	40	39	✗
PM	40	48	✓
<i>Net Cost per Passenger</i>			\$ 1.61
<i>Speed Improvements</i>			
Period	Target	Current	Status
AM	20%	22%	✓
PM		23%	✓
<i>Local and Express Crowding</i>			
Period	Local	Express	Status
AM	107%	75%	⚠
PM	109%	62%	⚠
<i>% Change in Corridor Ridership</i>			11%

2.3 Other new routes implemented in 2018

The following section presents post-implementation reviews for the following routes that were implemented in 2018.

12D Kingston Rd

Since October 2018, the TTC piloted a new bus service that provided more continuous service along Kingston Road. The 12D Kingston Rd branch operates only in the peak periods, between Victoria Park Station and University of Toronto Scarborough Campus. Based on pre-pandemic data, approximately 390 daily customer-trips were made on the unique portion of the 12D service.



Based on the ridership data from the peak periods in 2019, the combined boardings per service hour in the peak periods met the TTC's service standards, and as a result, should be formally adopted as a part of the TTC's service network.

Ridership in periods of operation were also examined on the 12D to expand coverage in the midday and evening on weekdays and provide capacity on the corridor. Ridership projections for the off-peak periods are shown below:

Period	12D boardings per service hour	12D boardings per service hour (equity weighting)	Service standard for boardings per service hour
AM peak	29	36	20
Midday	10*	12.5*	10
PM peak	18	23	20
Evening	9*	11*	10
	*projected	*projected	

As previously noted, the projected evening service does not meet the service standards; however, with the equity-weighted boardings applied the evening service does pass. Midday service, as a start, is recommended as an equity service pilot with a review of operations in the 2022 ASP. This change will be made in conjunction with the optimization exercise based on demand.

123F Sherway

Since September 2018, the TTC piloted a new bus service that operated peak period service on The West Mall south of Dundas Street West to expand transit service to a growing employment area. The trial service operates as a branch of the 123 Sherway, and in February 2019, service was extended in the afternoon peak period to meet the demands of shift work along the corridor. In September 2019, approximately 200 daily customer-trips were made on the unique portion of the 123F service. Based on the ridership distribution in the peak periods, the unique portion of the service in both the peak periods do not meet the TTC's service standards for customer boardings per service hour.

Period	123F boardings per service hour (Unique portion of the route)	Peak standard for boardings per service hour
AM peak	12	20
PM peak	10	20

However, the service on the 123F branch as a whole in both the peak periods meet the TTC's service standards for customer boardings per service hour with approximately 740 daily customer-trips. This is likely due to the fact that 123F branch has the shortest round trip travel time from Kipling Station to Sherway Gardens Mall (4 minutes less in the morning peak period and 7 minutes less in the afternoon peak period than the other branches), likely resulting in customers taking the 123F branch instead of the other branches.

Period	123F boardings per service hour (whole branch)	Peak standard for boardings per service hour
AM peak	40	20
PM peak	40	20

In addition, the introduction of the 123F branch made significant improvements to the headway for customers travelling to the mall from every 8 to 9 minutes in the peak periods to every 5 to 6 minutes in the peak periods. The ridership on 123 Sherway has also grown from approximately 5,470 daily customer-trips in April 2018 to approximately 6,520 customer-trips in September 2019. There are currently developments under review along The West Mall that are also anticipated to further increase ridership on this route and improve the boardings per service hour on the unique portion of service.

Given the above, it is recommended that service in both peak periods on the 123F continue to operate. Service on this route may be reallocated to better optimize travel times for more customers travelling to Sherway Gardens. This route will be re-evaluated as part of the 2022 ASP to review the service to employment area on The West Mall.

175 Bluffer’s Park

Since May 2018, the TTC piloted a new bus service that operated new seasonal bus service to Bluffer’s Park. The bus service was introduced to provide a sustainable alternative for the growing number of visitors to the park. Ridership has responded favourably to this seasonal service – on Saturday, the average total daily ridership is approximately 1,860 customer-trips, and on Sunday, the average total daily ridership is approximately 2,290 customer-trips.

Day	Period	175 Bluffer’s Park boardings per service hour	Service standard for boardings per service hour
Saturday	Morning	19	10
	Afternoon	59	10
	Early evening	44	10
Sunday	Morning	25	10
	Afternoon	72	10
	Early evening	50	10

Since this service meets the service standards, it is recommended to be made part of the TTC’s regular service offerings for seasonal services. Given the positive reception of the weekend service, ridership projections were made for weekday periods of operation and found that service could be justified in the daytime.

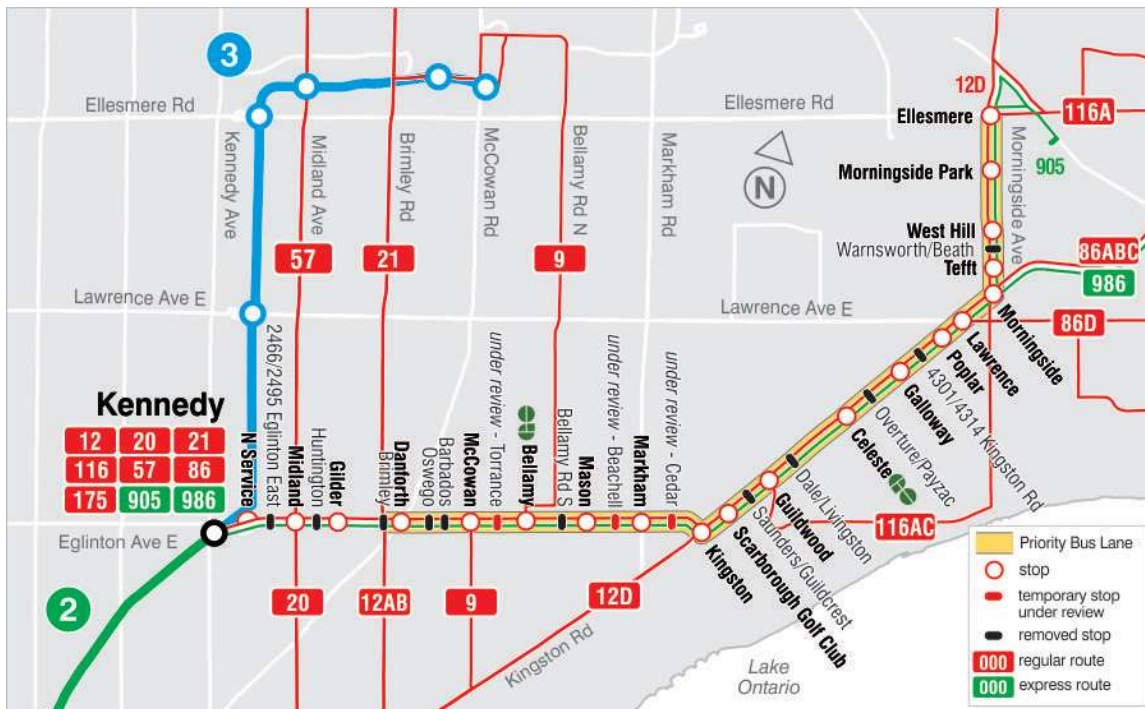
176 Mimico GO

Since June 2018, the TTC piloted a new bus service that operated peak period service in the Humber Bay Shores area to connect customers with Mimico GO Station. The trial service operates in the peak periods only, from Monday to Friday. The service was designed to meet the scheduled GO train departures and arrivals on the Lakeshore West line – a unique characteristic on the TTC network. In August 2019, the routing was extended to include more coverage into the Humber Bay Shores area by operating around the Marine Parade Drive loop.

By the end of 2019, approximately 190 daily customer-trips were made on the route. Based on the TTC's service standards for boardings per service hour, this route meets the productivity standard. As a result, it is recommended to be included as part of the TTC's regular surface network. Given the peak period ridership, new off-peak period service is not projected to meet the TTC's service standards, and is not recommended at this time. Given that GO Transit ridership is approximately a tenth of normal, the TTC will continue to suspend this service.

2.4 RapidTO: Eglinton East

RapidTO is a joint initiative with the City of Toronto to establish extensive transit priority measures on five key corridors identified through TTC's 5YSP. The first corridor, Eglinton East, began operation in October 2020, and included bus and bike lane demarcation, stop relocation and consolidation, and service level improvements. These changes are expected to benefit customers by providing shorter travel times, shorter wait times, and better service reliability.



Public consultation focusing on the stop relocation, stop consolidation and service concepts was performed, via a third party consultant, through an online survey and direct customer feedback. Overall, 520 responses were received through online survey, 104 responses were received from e-mail and TTC's Customer Service, and 2 petitions were received from the local community. Feedback is still being received and collected through direct means.

Some key themes from the feedback received includes:

- Importance of frequent, reliable, and evenly spaced service;
- Preference for service hierarchy on the corridor (distinct express and local service);
- Mixed support for removal of local bus stops; and
- Concerns over traffic impacts on Kingston Road and Morningside Avenue

Based on the feedback received, six stops previously planned to be removed (eastbound and westbound at Torrance and Eglinton, Beachell and Eglinton, and Cedar and Eglinton), have been reintroduced on a trial basis.

A thorough post-implementation review will occur in 2021, which will assess corridor performance of all transportation modes, as well as evaluate performance of the stop locations (including trial stops listed above).