



Wheel-Trans Transformation Program 2023 Update

Date: July 12, 2023
To: TTC Board
From: Chief Transportation and Vehicles Officer

Summary

The purpose of this report is to provide a status update on the implementation of the Wheel-Trans 10-Year Strategy and highlight accomplishments since the last update to the TTC Board in June 2022.

This report outlines accomplishments, impacts, and next steps, including the operationalization of Family of Services (FOS), Travel Training, Access Hubs and the rollout of new technology. It also provides an update on the staff review of the Reservations Contact Centre and Wheel-Trans fleet replacement efforts.

Key accomplishments since the last update, which are described in detail throughout the report, include:

- FOS expansion, bringing the total network to 81 FOS routes and 508 vehicle transfer stops.
- 602,881 FOS trips completed by Wheel-Trans customers in 2022.
- Solution assessment completed establishing a path forward for Phases 5 to 8 of the Reservations, Scheduling and Dispatching software system upgrades.
- Continued Contact Centre performance improvements, resulting in an average wait time of two minutes and 10 seconds for 2022.
- Continued fleet replacement, bringing the total to 230 new ProMaster vehicles in service.

Wheel-Trans will focus on customer re-registration, fleet replacement, Contact Centre performance and procurement efforts for Phases 5 to 8 of the Reservations, Scheduling and Dispatching software system upgrades throughout the rest of 2023 and into 2024.

Recommendations

It is recommended that the TTC Board:

1. Forward a copy of this report to City Councillors for information.

Financial Summary

The Wheel-Trans Transformation Program (WTTP) was originally approved by the TTC Board on November 21, 2016, and by City Council on February 15, 2017. The WTTP includes a wide range of activities, from technology and infrastructure investments to service improvements.

Funds for this expenditure are included in the TTC’s 2023-2032 Capital Budget and Plan under Program 3.9 Buildings and Structures, as approved by the TTC Board on January 9, 2023, and by City Council on February 15, 2023.

The estimated total project cost for the WTTP is \$49.8 million, comprising of life to date costs to the end of 2022 of \$32.6 million and funding of \$17.2 million cash-flowed between 2023 and 2027 as presented in Table 1 below:

Table 1: Wheel-Trans Transformation Program Actual and Budgeted Costs

Project Name	LTD Actuals to 2022	2023 Budget	2024	2025	2026	2027	2028-2032	10-Year Total	Total Project Cost
Wheel-Trans 10-Year Transformation Program (\$ 000s)	32,640	646	3,500	6,132	6,132	744	-	17,155	49,795

The WTTP is expected to be on budget with an estimated final cost of \$49.8 million.

The WTTP formed part of the list of projects approved for the Federal Public Transportation Infrastructure Fund (PTIF) funding program, with the receipt of \$9.8 million in PTIF funding from 2017 to 2020.

Based on long-term continued growing demand for accessible transit services, the WTTP has been essential in avoiding significant operating costs, estimated at \$24.4 million in 2022 and a cumulative total of \$89.7 million. This estimate is based on Family of Services rides which used a combination of Wheel-Trans and accessible-conventional services for a rider to reach their destination as well as an estimate of rides taken entirely on the conventional system by Wheel-Trans registrants.

Finally, the Contact Centre overflow model has significantly reduced call wait times and abandoned call rates. In addition, the contract with TELUS has provided a cost savings of \$1.8 million and a cost avoidance of \$4.6 million to date for the TTC.

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

Equity/Accessibility Matters

The goal of the Wheel-Trans 10-Year Strategy is to help make the TTC more accessible, equitable, inclusive, and sustainable for existing and future customers. In accordance with the Integrated Accessibility Standards Regulation (IASR) under the

Accessibility for Ontarians with Disabilities Act (AODA), Wheel-Trans service and eligibility criteria have been expanded to include any persons who have a disability that prevents them from consistently using conventional transit for all or part of their trip.

The Family of Services (FOS) delivery model integrates specialized service into the TTC's broader suite of accessible-conventional transit services, providing Wheel-Trans customers with greater access, flexibility, and spontaneity of travel options. While some customers will continue to require door-to-door Wheel-Trans service as their primary or sole means of travel, others can access a combination of services and support tools through the FOS model.

The TTC has consulted extensively with Wheel-Trans customers, members of the public, community organizations, and other stakeholders (i.e. University Health Network, Ontario Human Rights Commission, Local Health Integration Network, Ontario Medical Association, etc.), including the TTC's Advisory Committee on Accessible Transit (ACAT), to ensure the Wheel-Trans 10-Year Strategy is carried out in a manner that is accessible and inclusive.

Work with regional service providers also continues for the purpose of ensuring the elimination of barriers to cross-boundary travel. A guiding principle of the AODA and the IASR is to provide equitable access to services. The TTC wants to ensure that entering into a cost-share agreement is done equitably with all neighbouring regional transit service providers so that a consistent service level is available for all Wheel-Trans customers. All regional transit providers are committed to improving transfer locations, ensuring that they are safe and secure, and that they support all transfers, including FOS transfers. This has been a priority for all accessible service providers through the work being done in the Greater Toronto and Hamilton Area (GTHA) Specialized Transit Working Group.

Decision History

In 2012, the Auditor General performed an Audit Work Plan, which included a review of Wheel-Trans operations with the objective to assess its effectiveness and efficiency, and identify areas of improvement.

[2012 Auditor General's Report – "Review of Wheel-Trans Services – Sustaining Level and Quality of Service Requires Changes to the Program"](#)

In February 2016, the Wheel-Trans 10-Year Strategy was first introduced and approved by the TTC Board.

[Wheel-Trans 10-Year Strategy – February 2016 Update](#)

The TTC Board was provided with a TTC Wheel-Trans 10-Year Strategy progress update in September 2016, and approved changes to Wheel-Trans eligibility, the ACAT mandate, commencement of the FOS pilot, and the FOS migration plan for existing customers.

[Wheel-Trans 10-Year Strategy – September 2016 Update](#)

The 2017 Accessibility Plan status update was presented to and approved by the TTC Board with the direction to have annual status updates on the progress of the Multi-Year Accessibility Plan, which includes the Wheel-Trans 10-Year Strategy and Transformation Program.

[2017 Accessibility Plan Status Update](#)

In April 2018 the TTC Board considered an update on the Wheel-Trans 10-Year Strategy. Subsequent updates have been provided in each year since.

April 2018 Update: [Wheel-Trans 10-Year Strategy Update](#)

May 2019 Update: [Wheel-Trans 10-Year Strategy Update](#)

In May 2019, the TTC Board considered the 2019-2023 TTC Multi-Year Accessibility Plan, which includes several Wheel-Trans 10-Year Strategy objectives. Further updates to the Accessibility Plan were considered by the TTC Board in July 2020 and May 2021.

[2019-2023 TTC Multi-Year Accessibility Plan](#)

At its meeting on October 24, 2019, the TTC Board considered a report on the Wheel-Trans Cross-Border Travel Study.

[Wheel-Trans Cross-Border Travel Study](#)

Regular updates have also been provided through the following reports:

- 2020 Accessibility Plan Status Update: [2020 Accessibility Plan Status Update](#)
- July 2020 Update: [Wheel-Trans 10-Year Strategy Update](#)
- 2021 Accessibility Plan Status Update: [2021 Accessibility Plan Status Update](#)
- June 2021 Update: [Wheel-Trans 10-Year Strategy Update](#)
- 2022 Accessibility Plan Status Update: [2022 Accessibility Plan Status Update](#)
- June 2022 Update: [Wheel-Trans 10-Year Strategy Update](#)

Issue Background

In 2012, the City of Toronto Auditor General (AG) reported on the level and quality of Wheel-Trans service. The AG issued 23 recommendations that focused on the integration of Wheel-Trans customers into the accessible-conventional network, opportunities for improvements to the customer contact centre and overall service, and the need to control forecasted escalation of capital and operating costs.

In addition to the AG recommendations, specific eligibility requirements were legislated for specialized transit under the IASR. Specifically, the IASR under the AODA states that as of January 1, 2017:

Every specialized transportation service provider shall have three categories of eligibility to qualify for specialized transportation services:

- (a) unconditional eligibility;
- (b) temporary eligibility; and
- (c) conditional eligibility. O. Reg. 191/11, s. 63 (1)

Furthermore, it states:

A specialized transportation service provider may deny requests for specialized transportation services to persons who are categorized as having temporary eligibility or conditional eligibility if the conventional transportation service is accessible to the person and the person has the ability to use it. – O. Reg. 191/11, s. 63 (3).

As a result of the AG recommendations and the IASR/AODA legislation, the Wheel-Trans 10-Year Strategy was established in 2017. It provides guidance for the service and operational improvements as well as necessary changes that are essential for the TTC and Wheel-Trans to ensure long-term sustainability.

The strategy also addresses the need to improve the customer experience by providing Wheel-Trans users spontaneity of travel, expanded travel opportunities and inclusiveness in the community.

This strategy was approved by the Board at the November 21, 2016 Board meeting, and the resulting Wheel-Trans Transformation Program is currently in its seventh year of implementation.

The Wheel-Trans Transformation Program includes nine initiatives:

1. Re-Registration
2. Family of Services
3. Travel Training
4. Access Hubs
5. Modernization of Technology
6. Contract Centre Review
7. Wheel-Trans Policy Updates
8. Community Bus Enhancements
9. Fleet Replacement

Significant progress has been made on all nine initiatives and the TTC is on schedule to complete the transformation program by the end of 2026 (reference Appendix 1). Related to the Wheel-Trans Transformation Program, are the Easier Access Program and the TTC's Green Fleet Plan. Combined, these programs provide financial and environmental benefits to ensure the TTC's Wheel-Trans service remains a viable and sustainable option.

Comments

All nine initiatives/projects that make up the Wheel-Trans Transformation Program address recommendations and/or changes to the AODA and IASR.

Initiative 1 – Re-Registration

Eligibility and associated processes for specialized transportation services are subject to legislative requirements in the IASR under the AODA. New requirements to include

any person who has a disability that prevents them from taking conventional transit for all or part of their trip, including persons who have cognitive, sensory and/or mental disabilities, which came into effect on January 1, 2017. In addition, the IASR under the AODA, mandated that as of January 1, 2017 paratransit organizations in Ontario must have three levels of eligibility:

1. **Unconditional service** for customers who have a disability that always prevents them from using the TTC's accessible-conventional services. These customers will require door-to-door service for all of their trips.
2. **Conditional service** for customers who have a disability that limits their ability to consistently use the TTC's accessible-conventional services. These customers may be able to use accessible-conventional transit for all or part of a trip, but may also qualify for door-to-door service under specific circumstances (i.e. weather or travelling to an inaccessible location).
3. **Temporary service** is provided to customers who have a temporary disability that prevents them from using the TTC's accessible-conventional services. Customers will be provided Wheel-Trans for all or part of a trip for a defined period of time (i.e. following an injury or surgery).

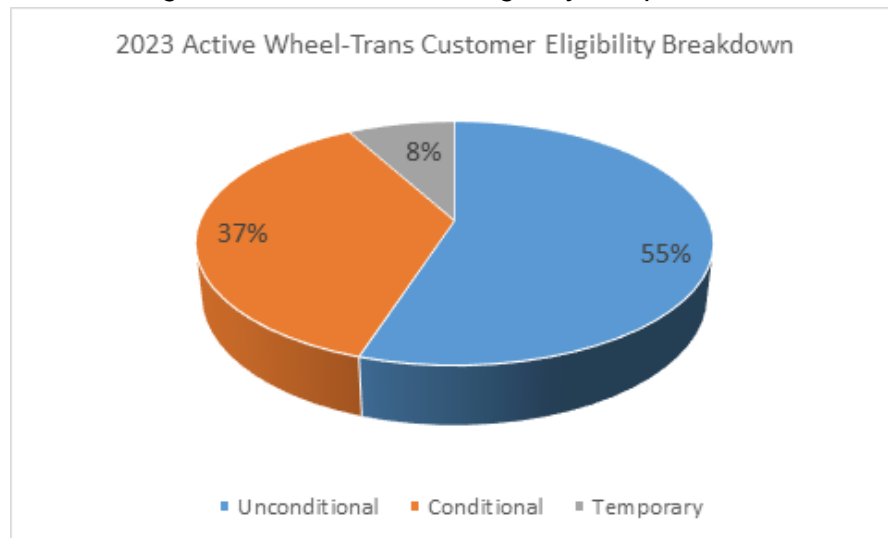
In order to be compliant with legislation, Wheel-Trans required customers eligible for Wheel-Trans services prior to January 1, 2017, to re-register. Re-registration was necessary to determine the new eligibility status with respect to required service level of each customer.

A detailed process to re-register these customers was developed while working closely with key stakeholders, including ACAT and the TTC's Legal, Diversity and Human Rights departments. Wheel-Trans has Customer Service Representatives available by phone or e-mail to assist customers through this process and that is communicated to customers when they are advised of the need to re-register. In addition, by way of public forums, TTC websites, newsletters, information packages, and most recently, personalized letters, customers have been provided with the information as to why there is a need to re-register and what supports are in place to assist them through this process. Customers have been reassured that they will continue to have access to Wheel-Trans service after completing the re-registration process. These new eligibility categories are being assigned to all new customers from the effective date moving forward.

To date, more than 8,000 customers have voluntarily re-registered and this process will continue for the remaining 11,000 legacy customers who have yet to do so. In 2023, the breakdown of eligible customers for each level of service is as follows and shown in Figure 1 below:

- Customers eligible for unconditional service: 55% (18,986)
- Customers eligible for conditional service: 37% (12,619)
- Customers eligible for temporary service: 8% (2,909)

Figure 1: 2023 Customer eligibility composition



Re-registration is expected to continue through 2025. It is expected that 3,000 customers will re-register in 2023 and an additional 5,000 customers will do so in 2024. The remaining customers are expected to re-register in 2025. As re-registration continues, the TTC ensures equity and compliance with legislative requirements while also improving service by offering customers trip options that are more suitable to their needs and abilities.

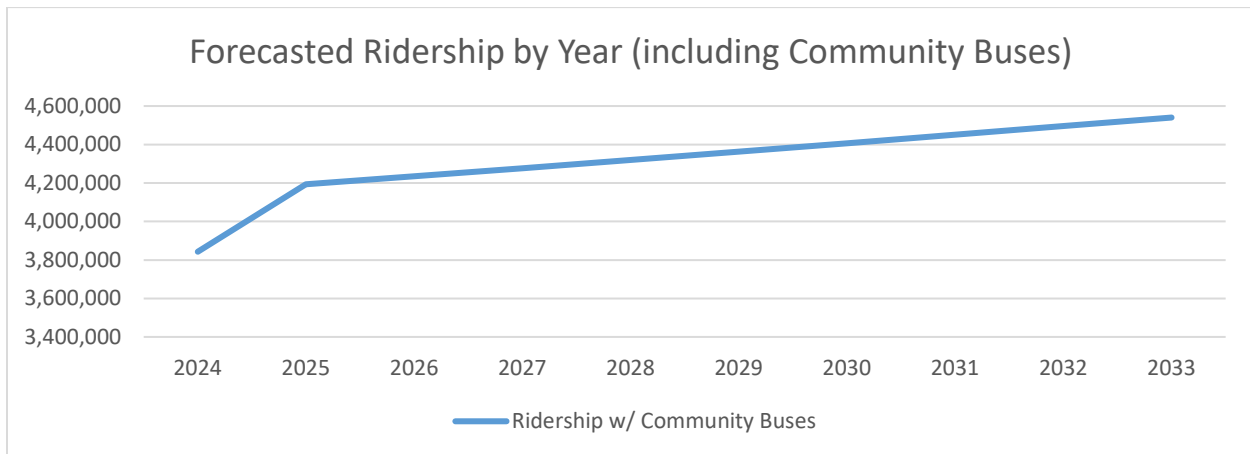
Initiative 2 – Family of Services

The cornerstone of the Wheel-Trans Transformation Program is the Family of Services (FOS) business model, which was enabled by the eligibility changes enacted on January 1, 2017. FOS provides Wheel-Trans customers with the option of using accessible-conventional transit service (bus, streetcars and subways) for all or part of their trips.

The TTC has made substantial investments to improve the accessibility of its conventional transit services. To date, 56 stations have been made accessible and 16 are remaining under the Easier Access Program. This has created the opportunity for Wheel-Trans to implement the FOS delivery model.

The inclusion of cognitive and mental health disabilities as barriers to using accessible-conventional transit in the AODA and Toronto’s aging population has resulted in an increase to Wheel-Trans ridership forecasts. Wheel-Trans ridership forecasts over the next 10 years are shown in the following graph:

Figure 2: Wheel-Trans Ridership Demand Forecast 2024-2033



The introduction of FOS will help curb the need to significantly increase the number of specialized Wheel-Trans resources (facilities, vehicles, dispatchers and operators) to meet growing demand. Customers can choose to use accessible-conventional transit as a part or for all of their trip as opposed to door-to-door Wheel-Trans trips.

FOS travel remains voluntary at this time. Conditional customers can choose to opt out of a FOS trip if they are offered one at the time of booking. Implementation of mandatory FOS travel for conditional customers, when none of their conditions are present, was delayed due to the COVID-19 pandemic. A new launch date is yet to be determined. Currently, customers with unconditional and temporary eligibility will always be offered a door-to-door trip, but the customer will be able to request a FOS trip if they prefer.

If a customer does choose to use FOS, the TTC has made it more convenient by introducing FOS routes and transfer stops. FOS routes are accessible frequent service arteries that allow customers to safely transfer between Wheel-Trans and the conventional service via accessible transfer stops along the route. Transfer stops are identified as safe, convenient and accessible-conventional system bus and streetcar stops, where customers can transfer between Wheel-Trans vehicles and TTC service.

In 2022, Wheel-Trans continued the process of FOS expansion, bringing the total to 81 FOS routes and 508 vehicle transfer stops in the FOS network (reference Appendix 2). In addition, many non-vehicle transfer (walking) stops to reduce the need for customer/Wheel-Trans vehicle transfers were incorporated, bringing the total number of non-vehicle transfer stops to 4,500. The TTC also produced an educational customer-facing [video](#) on FOS travel as an additional tool to assist customers and demonstrate the accessibility of the conventional system.

Over the next year, Wheel-Trans will continue adding surface routes, stops and stations to the FOS network to increase coverage across the city. The goal is to reach approximately 100 FOS routes and 600 vehicle transfer stops across the network within the next three years. Wheel-Trans will also launch a FOS pilot in Q3 2023 where up to 50 volunteer customers will travel for several weeks using FOS at least twice per week.

This will allow for valuable data collection, customer feedback and lessons learned. A significant amount of customers have already chosen to travel via FOS. A total of 602,881 FOS trips were taken by Wheel-Trans customers in 2022. This marks a significant increase from 349,572 FOS rides taken in 2021.

Initiative 3 – Travel Training

The TTC developed and implemented a new Travel Training program to help ensure customers eligible for conditional service under the FOS business model are prepared, comfortable and confident when taking accessible-conventional transit.

The Travel Training program was developed and piloted in 2018 with volunteers from the Wheel-Trans community. The program provides customers with information about accessibility features on the TTC conventional system, familiarization with stations and vehicles, and offers one-on-one training to customers with a member of TTC staff – a travel training specialist. As part of the training program customers also receive a Travel Training Handbook.

The Travel Training Handbook is an instructional guide for customers with disabilities on how to use the TTC's accessible-conventional network. The handbook describes the various accessibility features found throughout the TTC system, and provides instructions and helpful travel tips to assist customers with varying disabilities and needs. The Travel Training Handbook is used as a supplemental resource for customers with disabilities to be able to travel on the TTC to the best of their abilities, safely and independently.

A hard copy of the Travel Training Handbook is given to customers during in-person travel training sessions. It can also be requested through Wheel-Trans Customer Service, TTC Customer Service or found via the following link below:

[TTC Travel Training Handbook.](#)

The Travel Training Handbook was last updated in 2022 and it touches upon the following topics:

- Plan an accessible trip (Triplinx, Google Maps, TTC Customer Information).
- Understanding maps, signage and wayfinding features.
- Resources with up-to-date service information (Lift Line, e-alerts, social media, Next Vehicle).
- Accessibility features onboard TTC vehicles and in stations (ramps, elevators, emergency buttons, DWA, internal/external announcements, etc.).
- Different operators and staff that can provide assistance throughout a customer's trip.
- Priority seating and boarding/disembarking (with or without a mobility device).
- Fare payment, PRESTO and proof of payment.
- Emergency procedures and handling the unexpected (closures, turn backs, service changes).

Since its rollout, more than 652 customers have requested and participated in the Travel Training Program. Ninety-five of those 652 customers participated in the training

in 2022. To date, customer feedback and testimonials have been positive. This suggests the training is effective in familiarizing customers and increasing their confidence in using the TTC system.

Initiative 4 – Access Hubs

In addition to transfer stops outlined in Initiative 2 (Family of Services), Wheel-Trans customers can comfortably and smoothly transfer from traditional Wheel-Trans services and the conventional transit network (and vice versa), via newly constructed Access Hubs. These are spacious, well-lit, heated and completely accessible shelters that support FOS travel. A total of 16 Access Hubs were built between 2017 and 2020 and they are included as part of the transfer stop network (reference Appendix 3).

There are no plans at this time to build additional Access Hubs. However, the TTC continues to identify additional transfer stops on current and future FOS routes.

Initiative 5 – Modernization of Technology

Modernizing the supporting technology is a fundamental component in ensuring the TTC's ability to deliver on the vision and commitments of the Wheel-Trans 10-Year Strategy. Technology includes the following:

Reservations, Scheduling and Dispatching System

A Wheel-Trans customer's journey and experience begins with the booking of their trip. Needed improvements to the online trip booking website were identified in order to improve Wheel-Trans service and the customer experience. In addition, to support the FOS model, this online tool needed to be upgraded to offer an automated multi-modal trip booking system that could handle a high volume of requests.

To accomplish these improvements, upgrades to the existing Reservations, Scheduling and Dispatching (RSD) software system were designed. Implementation of these improvements was scheduled in eight phases and included the launch of a new Self-booking Website for customers (reference Appendix 4). The Self-booking Website offers trips to customers based on their eligibility. This is known as Conditional Trip Matching (CTM). In 2022, more than 80% of trips were booked using the Self-booking Website.

Each phase of the upgrades to the RSD system improved user interface by introducing customers to new tools and functionalities to support the FOS business model.

Staff commenced implementation of Phase 4 in 2021. Implementation of this phase continued in 2022, which included testing of a new Mobile Application for customers. The focus of Phase 4 is scheduling optimization, whereby trips will be based on real-time vehicle availability. This allows Wheel-Trans to be more efficient, which will result in more trip availability for customers and makes room for spontaneous, same-day bookings.

Other enhancements completed in 2022 as part of Phase 4 included:

- Option to request an early pick-up time.
- Ability to see estimated “real-time” pick-up time, when GPS is available.
- Ability to select SMS as a notification preference.
- Improvements in screen designs, with address drop-down options for entrances and buildings with the same address.
- Additional, and more user-friendly, help pages, FOS routes, walking stops and stop details.
- New features that included:
 - “Where is My Ride” that displays vehicle status and allows customers to track a vehicle on a map on the Self-booking Website and Mobile App.
 - “Customer Service Web Chat” option that allows customers to instantly get assistance through a chat box.

Phases 5 to 8 are scheduled to be completed from 2023 to 2026. These phases will:

- Enhance the existing Scheduling and Dispatch system with additional features.
- Replace the current end-of-life Mobile Data Terminal/Automatic Vehicle Location (MDT/AVL) system through competitive procurement process.
- Replace the current legacy Interactive Voice Response (IVR) system with a modern solution through competitive procurement process.
- Leverage the in-flight SAP Program’s Time and Attendance project’s second release to digitize the Wheel-Trans Operator’s scheduling and bidding process. The SAP Release 2 project is planned to go live by Q3 2024.

Customer Relationship Management (CRM) System

As part of the modernization of technology, Wheel-Trans introduced a new Customer Relationship Management (CRM) system. This system improves the storage and processing of customer information. It is also now integrated with the RSD software. Integration of the two systems allows Customer Service Representatives to better serve customers as they are now able to access detailed and specific information about the customer’s trip and disability from one source.

As part of the CRM rollout and upgrades to the RSD system, Wheel-Trans launched a new Self-Serve Portal in 2021. The portal allows customers to register or re-register online, eliminating the need for customers to fax or mail a paper application. Customers can also appeal their eligibility decision through the Self-Serve Portal. In 2022, 7% of Wheel-Trans customers used the Self-Serve Portal to apply for service.

Reporting and Analytics System

Improvements were also made to Wheel-Trans’ reporting and data analytics systems. Starting in 2020, a new Reporting and Analytics system was delivered in multiple phases. This included the introduction of a new reporting technology application along with more robust data collection, storage processes and hardware. Also included was the conversion of existing Excel-based Wheel-Trans operations management reports to the new dynamic reporting tool.

Lastly, the introduction of new Key Performance Indicators (KPI) to better manage existing Wheel-Trans operations and to support expanded FOS capabilities was completed in 2021. The full Reporting and Analytics system was launched in June 2022, which includes 10 KPI dashboards. These new dashboards include:

- Dashboard 1 – No Show and Cancellations at the Door
- Dashboard 2 – CRM (Complaints)
- Dashboard 3 – FOS
- Dashboard 4 – Mean Distance Between Failure
- Dashboard 5 – Daily Service Summary
- Dashboards 6, 7 – Ridership
- Dashboards 8, 9 – Operational Efficiency (Passengers per Hour)
- Dashboard 10 – On-Time Performance

Staff is now using these dashboards to better track and manage service. For example, Dispatch management staff and supervisors are now able to monitor on-time performance throughout the day in real-time and make necessary operational adjustments based on the information they are seeing. This produces a more efficient operation and provides better service to customers. Wheel-Trans is now able to consistently maintain an on-time performance of more than 90% and an increased rate of passengers per hour.

Moving forward, Wheel-Trans plans to complete the Mobile Application pilot and fully implement this software to all users by Q3 2023. In addition, staff will continue reviewing opportunities to modernize and enhance software tools, such as the RSD system to better serve customers.

Initiative 6 – Contact Centre Review

The need to improve the ability for Wheel-Trans customers to reserve trips in a timely manner was one of the recommendations outlined in the 2012 AG report. Historically, the Wheel-Trans Reservations Contact Centre had a call abandonment rate and an average wait time well above industry averages.

A review of the Wheel-Trans Reservations Contact Centre identified the need to increase staff to handle the high volume of calls and to improve performance. To address this challenge, a Wheel-Trans Reservations Overflow Contract was established with TELUS. This contract provides support to Wheel-Trans reservationists with the goal of reducing call wait times and call abandonment rates.

On December 13, 2020, after a successful three-week soft launch period, Wheel-Trans and TELUS implemented a full launch of the call transfer solution. This allowed more calls to be routed to the overflow with TELUS answering approximately 20% of Reservations calls. This number has now increased to over 80% of Reservations calls as we continue to see attrition of internal Reservations staff.

In 2020, the Wheel-Trans Reservations Contact Centre had an abandonment rate of 26% and an average wait time of nine minutes and 22 seconds prior to the launch of the Overflow Contract. The figures were even higher in 2019 with an average wait time of

20 minutes and an abandonment rate of 35%. Since the launch of this contract, the performance of the Wheel-Trans Reservations Contact Centre has significantly improved. In 2022, the average wait time was two minutes and 10 seconds while the average abandonment rate was 10.6%.

Additionally, through this new business model, Wheel-Trans is able to quickly meet changing market conditions as the Overflow Contract provides a scalable and flexible business solution.

Wheel-Trans has realized significant cost benefits by transitioning to this nimble model, saving \$1.8 million since inception. This is based on a comparison between maintaining the Wheel-Trans approved 2020 headcount and in-house model versus actual overflow model spending from 2020 to 2022. In addition to savings realized to date, this model has avoided costs, estimated at \$4.6 million to date, which would have been required to achieve the improvements in average wait time and abandonment rates, using in-house model.

Wheel-Trans will continue to strengthen its partnership with TELUS over the remaining three years of the five-year contract in order to continue to improve performance and reduce operating costs.

Initiative 7 – Wheel-Trans Policy Updates

The Wheel-Trans 10-Year Strategy aims to create an experience that provides customers with freedom, dignity, and spontaneity of travel. A new Wheel-Trans Customer Experience Strategy was developed to ensure consistency and clarity in customer interaction and employee service delivery. The strategy is supported by new customer-centric policies that define a clear and transparent set of expectations from trip booking through to trip delivery. Wheel-Trans strives to create policies that are simple and flexible, and to provide a safe and respectful environment for all Wheel-Trans customers/users or for everyone using Wheel-Trans services. By defining clear rules and guidelines for all persons using TTC Wheel-Trans, customers will know what to expect and how Wheel-Trans will support them on their journey.

A total of 20 updated customer-facing policies have been implemented (reference Appendix 5). Each policy was designed in consultation with ACAT and with the TTC's Legal, Diversity and Human Rights departments. Wheel-Trans customer policies are divided across four categories: eligibility, trip booking, travelling with Wheel-Trans and safety.

Policy implementation began in 2017 and continued through 2021. In 2022, there were no updates to policies and there are no planned revisions for 2023.

Initiative 8 – Community Bus Enhancements

Diverting customer trips to an enhanced and expanded Community Bus service was identified as an important element of the Wheel-Trans Transformation Program.

Community Bus service lends itself well to use by seniors and persons with disabilities due to the vehicle type used and the strategic placement of stops at locations, such as plazas, supermarkets, hospitals, senior residences and other community service locations. Furthermore, in addition to stopping at all conventional bus stops along the route, the Community Bus can be hailed or waved down so customers do not have to worry about reaching the stop in time. The Community Bus service is completely accessible and is available to all TTC customers.

Following recommendations made by Stantec Consultants on industry best practices, a pilot was launched in Q3 2017 to enhance two of the five existing Community Bus routes. Subsequently, an assessment of the pilot and next steps were presented to the TTC Board in December 2019 as part of the TTC's 5-Year Service Plan and 10-Year Outlook. Based on the assessment, the Board approved service modifications to the 400 Lawrence Manor, 402 Parkdale, 404 East York and 405 Etobicoke Community Bus routes. Implementation of these changes were delayed due to the pandemic, but was successfully implemented in September 2021.

The Community Bus program remains a beneficial service for the communities it serves. In 2022, total Community Bus ridership was 29,711. In Q2-Q3 2023, the TTC will be launching a marketing campaign to better advertise this service. This will involve advertising at local community centres, subway stations and via social media.

Initiative 9 – Fleet Replacement

Wheel-Trans has continued diversification of its fleet mix to match new customer profiles, trip patterns, and travel behaviour. There was a concerted effort made to purchase replacement vehicles, which would improve ride comfort and vehicle reliability, reduce Greenhouse Gas (GHG) emissions and reduce fuel consumption. The decision was made to purchase six-metre (6m) ProMaster vehicles as the first step in fleet replacement. Currently, there are 147 6m ProMaster vehicles in service. These mini-buses are smaller, more comfortable, and more fuel efficient, and can easily access more destinations than the older 'Friendly' vehicles. They are also gasoline-powered, significantly reducing GHG emissions.

As a next step, the TTC explored the option of a vehicle that would supplement the 6m ProMaster mini-bus. In order to provide service efficiencies, the emphasis of the search requirements was to maintain a smaller-sized vehicle while increasing customer capacity. Through the joint procurement process with Metrolinx, a seven-metre demo bus was reviewed by ACAT, the Joint Health and Safety Committee (JHSC) and the Operational Training Centre (OTC) in January 2020. ACAT members were taken for test rides in February 2020 and approved the concept vehicle for consideration.

Ultimately, with ACAT endorsement and Board approval, a procurement of 138 seven-metre (7m) ProMaster vehicles was placed in 2020. Similar to the 6m vehicle, the 7m ProMaster bus is gasoline-powered and offers increased ride comfort for customers, reduced GHG emissions, fuel efficiency and vehicle reliability improvements. It allows for additional vehicle capacity versus the mini-bus to support fleet mix needs to match trip patterns and travel behaviour. Currently, there are 83 7m ProMaster vehicles in service. Please refer to Appendix 6 for images of ProMaster vehicles.

The GHG emissions reduction associated with the 6m ProMaster vehicle is approximately 24.8%. The 7m ProMaster delivers similar environmental benefits with a GHG emissions reduction of approximately 18.5%.

Furthermore, the 2023 approved Wheel-Trans Fleet Plan requires the procurement of 52 6m Wheel-Trans vehicles for delivery in 2024 and 2025, in keeping with asset management practices. These units are scheduled to replace vehicles reaching the end of their useful life. At its meeting in May 2023 the TTC Board approved the procurement of 52 6m Wheel-Trans buses.

As a next step, in order to transition to a zero-emissions Wheel-Trans fleet, the TTC is planning to procure up to 10 battery-electric buses (eBuses) from multiple vendors to:

- Evaluate the eBuses through a pilot program within the TTC's operating environment;
- Leverage lessons learned from the pilot program to inform technical and commercial specifications for future procurements; and
- Share our findings with the broader transit community through a peer exchange of best practices to assist with the planning and adoption of zero-emissions vehicles.

These electric Wheel-Trans vehicles are required to be delivered in 2025 to meet the Wheel-Trans Fleet plan needs.

Benefits Realization

The TTC is in its seventh year of the Wheel-Trans 10-Year Strategy. To date, the strategy has been highly effective in modernizing Wheel-Trans operations, improving the quality of service and customer experience, and minimizing costs due to a growing customer base. In addition, the implementation of FOS has ensured the TTC remains compliant with revisions to the IASR/AODA. Wheel-Trans will continue to consult with customers through the annual TTC Public Forum on Accessible Transit, annual Wheel-Trans Customer Satisfaction survey, and ACAT in an effort to continue to make improvements which provide the greatest benefit to customers.

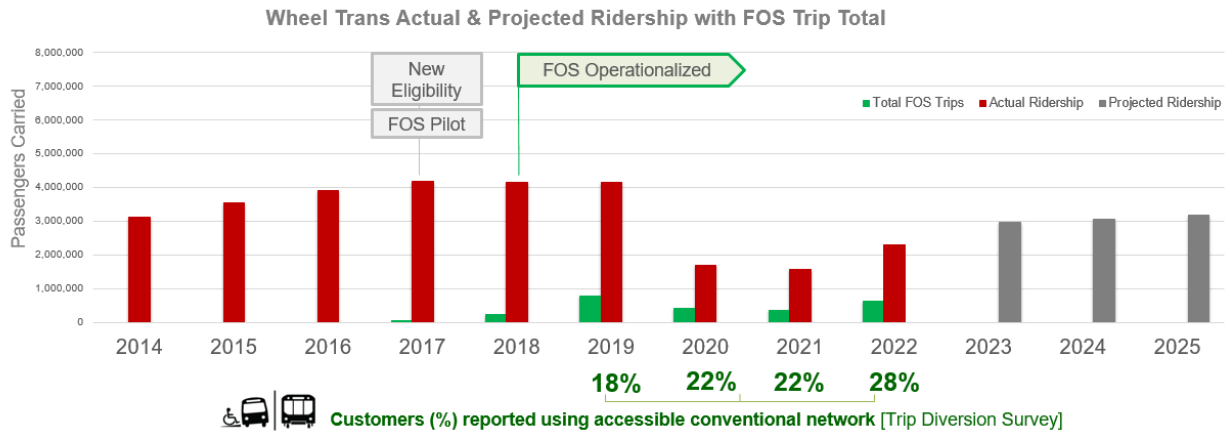
Upgrades to existing software systems, such as the RSD and CRM systems have improved customers' ability to quickly book trips. New customer tools, such as the Self-Serve Portal, Self-booking Website, Conditional Trip Matching, online chat features, customer e-mail/text/mobile alerts and the Mobile Application have enhanced the Wheel-Trans customer experience.

The Contact Centre overflow model has significantly reduced call wait times and abandoned call rates. In addition, the contract with TELUS has provided a cost savings of \$1.8 million and a cost avoidance of \$4.6 million to date for the TTC.

Finally, the new FOS business model that addresses pressures due to a growing customer base has resulted in a total cost avoidance of \$89.7 million by providing Wheel-Trans users the option to use TTC accessible services as part or all of their trips.

Table 2: Estimated Total Cost Avoidance (in millions) from all FOS trip types from 2017 to 2022

FOS: Benefits Realization



(In Millions)	2017	2018	2019	2020	2021	2022	TOTAL
Total Cost Avoidance (From all FOS trip types)	\$ 1.45	\$ 6.50	\$ 25.28	\$ 17.17	\$ 14.91	\$ 24.37	\$ 89.70

Next Update

Significant work has been completed in 2022 to advance the Wheel-Trans 10-Year Strategy. Staff will continue implementing the plans identified in the road map to ensure completion by the end of 2026.

The TTC expects to return to the Board and provide another update on the Wheel-Trans Transformation Program in Q2 2024, which will cover:

- FOS/re-registration status;
- Contact Centre performance;
- Ongoing fleet replacement; and
- Status of technology modernization efforts.

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Attachments

Appendix 1 – Wheel-Trans Transformation Program Initiatives Status

Appendix 2 – Family of Services (FOS) Routes

Appendix 3 – Access Hubs

Appendix 4 – Modernization of Technology

Appendix 5 – List of Updated Wheel-Trans Policies

Appendix 6 – Fleet Replacement

Appendix 1 Wheel-Trans Transformation Program Initiatives Status

Table 1 – Wheel-Trans Transformation Program Initiatives Status

No.	Program / Project Name	Milestone	Forecast End Date	Status	Pre 2023	2023				2024				2025				2026			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Re-Registration	Re-Registration of all Legacy Customers	Dec-25	On Schedule													✓				
2	Family of Services (FOS)	Full Implementation	Dec-26	On Schedule																	✓
3	Travel Training	Program launched, training ongoing	Dec-26	Ongoing																	✓
4	Access Hubs	16 Access Hubs installed	Dec-20	Completed	Dec-20																
5	Modernization of Technology	Phase 1-4	Dec-22	Completed	Dec-22																
		Phase 5-8	Dec-26	On Schedule																	✓
6	Contract Centre Review	Overflow solution launched	Nov-20	Completed	Nov-20																
7	Wheel-Trans Policy Updates	Initial policies completed, review ongoing	Dec-21	Completed	Dec-21																
8	Community Bus Enhancements	Enhancements complete, marketing campaign in progress	Dec-23	On Schedule					✓												
9	Fleet Replacement	Fleet Replacement Complete	Dec-23	On Schedule					✓												

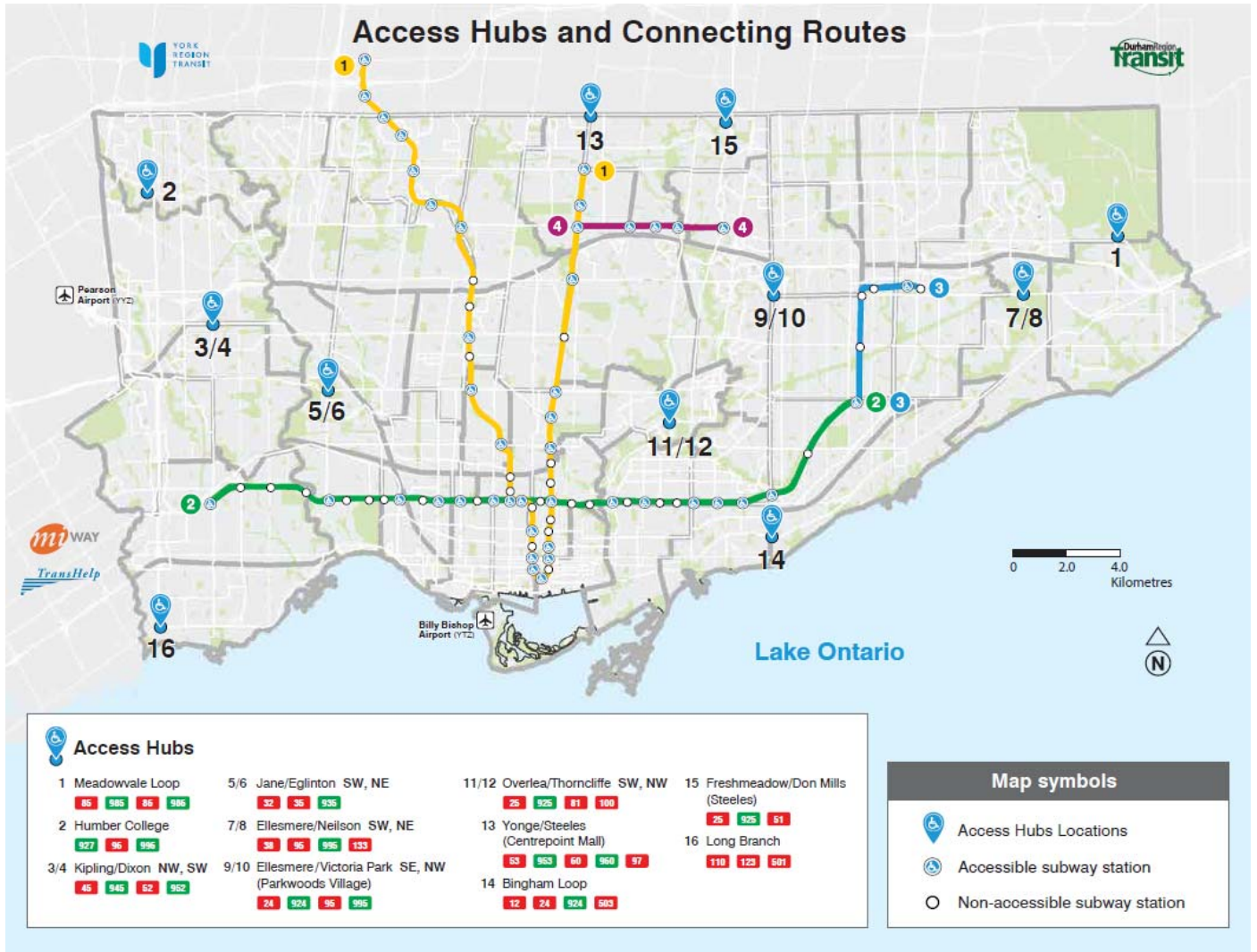
Appendix 2 Family of Services (FOS) Routes

Table 2 – FOS Routes with Transfer Stops and Access Hubs

Current FOS Routes		
100 Flemington Park	47 Lansdowne	927 Highway 27 Express
102 Markham Rd	49 Bloor West	929 Dufferin Express
104 Faywood	501 Queen	935 Jane Express
106 Sentinel	504 King	937 Islington Express
108 Driftwood	506 Carlton	939 Finch Express
11 Bayview	509 Harbourfront	945 Kipling Express
111 East Mall	510 Spadina	95 York Mills
112 West Mall	511 Bathurst	952 Lawrence West Express
116 Morningside	512 St Clair	953 Steeles East Express
12 Kingston Rd	52 Lawrence West	96 Wilson
123 Sherway	53 Steeles East	960 Steeles West Express
129 McCowan North	54 Lawrence East	97 Yonge
131 Nugget	57 Midland	984 Sheppard West Express
133 Neilson	60 Steeles West	985 Sheppard East Express
134 Progress	63 Ossington	986 Scarborough Express
16 McCowan	68 Warden	995 York Mills Express
161 Rogers Rd	7 Bathurst	996 Wilson Express
165 Weston Rd North	70 O'Connor	
168 Symington	71 Runnymede	Future
17 Birchmount	72 Pape	36 Finch
20 Cliffside	73 Royal York	41 Keele
22 Coxwell	76 Royal York South	21 Brimley
23 Dawes	79 Scarlett Rd	67 Pharmacy
24 Victoria Park	81 Thorncliffe Park	113 Danforth
25 Don Mills	84 Sheppard West	64 Main
	85 Sheppard East (East of Don Mills)	
29 Dufferin		161 Rogers
31 Greenwood	86 Scarborough	51 Leslie
35 Jane	87 Cosburn	122 Gradon Hall
37 Islington	88 South Leaside	26 Dupont
38 Highland Creek	89 Weston	50 Burnhamthorpe
39 Finch East	900 Airport Express	126 Christie
40 Junction-Dundas West	902 Markham Rd Express	127 Davenport
42 Cummer	913 Progress Express	13 Avenue Rd
43 Kennedy	92 Woodbine South	171 Mount Dennis
44 Kipling South	924 Victoria Park Express	
45 Kipling	925 Don Mills Express	

Appendix 3 Access Hubs

Figure 1 – Map of Access Hubs



This chart shows the locations of the Access Hubs on a map of Toronto along with some connecting routes.

Figure 2 – Meadowvale Access Hub



Photo 1 (left) is a picture of the Meadowvale Access Hub taken from outside the Access Hub. There is one customer using a wheelchair inside the Access Hub and another customer with their guide dog entering the Access Hub.



Photo 2 (left) is a picture of the same customers taken from inside the Access Hub. In both pictures there is a Wheel-Trans ProMaster mini-bus in the background.

Appendix 4 Modernization of Technology

Table 3 – Implementation Phases for RSD System Upgrades

Phase	Description of Upgrade
<p>1</p> <p>Implemented December 9, 2018</p>	<p>Focused on enhancing the customer trip booking website functionality to include easier and simpler navigation with the ability to book FOS trips (up to 500 trips/day) as an option.</p> <p><i>Customer benefits:</i></p> <ul style="list-style-type: none"> • Improved ability to do their own trip planning, rather than relying on a booking agent. • No longer have to wait for a Reservationist to book a FOS trip. • Ability to book FOS trips at any time at their convenience and available 24/7. • Faster and quicker way to book trips, review, update, and/or cancel existing bookings. • Map view – customers are able to see a map when looking up addresses. • More user-friendly. Customers can: <ul style="list-style-type: none"> ○ View up to 18 months of trip history. ○ Change their own website password. • Customer Help Pages and videos were created and posted online.
<p>2</p> <p>Implemented June 7, 2020</p>	<p>Further enhanced the customer trip booking website with a redesign of the trip booking page and immediate trip booking results, if available, of regular trip requests. A new mobile smartphone application pilot was started and changes were made to the dispatch and scheduling systems to allow for improved management of FOS trips during service events and disruptions.</p> <p>The scheduling system was expanded by adding more accessible-conventional routes with the ability to support 3,000 FOS trips daily.</p> <p>The scheduling system was upgraded to allow for Conditional Trip Matching and to ensure customers who are capable of using the conventional network can only book FOS trips if the decision is made in the future to implement mandatory FOS.</p> <p><i>Customer benefits:</i></p> <ul style="list-style-type: none"> • Updated website trip booking page. • Able to receive immediate trip results for regular bookings. • Ability to book monthly regular trips. • Receive e-mail notifications.

	<ul style="list-style-type: none"> • See vehicle location arriving to pick them up in real-time (pilot of buses only). • Receive service alerts. • Receive e-mail messages. • Receive phone “Call Ahead” when vehicle is within 10 minutes. • Receive a phone call if the customer has been “No-Showed”. • A telephone call will be made to the Receiving Person of the Customer. • Ability to reset passwords.
<p style="text-align: center;">3</p> <p style="text-align: center;">Implemented January 24, 2021</p>	<p>Further expanded FOS trips with more stops to support more transfers between fixed routes, and more defined eligibility conditions to improve trip matching, as well as other software improvements.</p> <p><i>Customer benefits</i></p> <ul style="list-style-type: none"> • More connections between accessible-conventional services. • Users can book more complex FOS trips. • Improved FOS solutions provided. • Cross-Boundary Regional Trips transfers are scheduled at the time of booking. • Real-time service updates available via phone in addition to the mobile application and e-mail notifications. • Option to set up notifications and edit communication preferences over the phone and on the website. • <u>Option to change e-mail addresses and contact phone numbers online.</u>
<p style="text-align: center;">4</p> <p style="text-align: center;">Implemented November 28, 2021</p>	<p>The focus of this phase was scheduling optimization, whereby trips will be based on real-time vehicle availability. This allows Wheel-Trans to be more efficient, which will result in more trip availability for customers and makes room for spontaneous, same-day bookings.</p> <p>Enhancements include:</p> <ul style="list-style-type: none"> • Option to request an early pick-up time. • “Where is My Ride” feature, which displays vehicle status and allows customers to track a vehicle on a map on Self-booking Website. • Ability to see estimated “real-time” pick-up time, when GPS is available. • “Customer Service Web Chat” option. • Ability to select SMS as a notification preference. • Improvements in screen designs, with address drop-down options for entrances and buildings with the same address. • Additional, and more user-friendly, help pages, FOS routes, walking stops and stop details. <p>In addition, the improved integrated Customer Relationship Management software will support online customer applications and allow Customer Service Agents to better serve customers as they are now able to access detailed and specific information about the customer’s trip and disability</p>

	<p>from one source. As well, customers are able to communicate directly with a Reservationist via an online chat feature on the booking website.</p> <p>Phase 4 expanded FOS trips with more stops and the ability to transfer between fixed routes. The scheduling system was further expanded and capable of scheduling and supporting 5,000 FOS trips/day.</p> <p><i>Customer benefits:</i></p> <ul style="list-style-type: none"> • Expand FOS trip capability. • Customers are able to use accessible-conventional transit for more than one leg of their FOS trip. • More accessible-conventional routes and stops added for improved trip solutions. • More trip availability and spontaneity.
<p>5-8</p> <p>Implementation 2023-2026</p>	<ul style="list-style-type: none"> • Further enhance the existing RSD system. • Replace the current end-of-life Mobile Data Terminal/Automatic Vehicle Location (MDT/AVL) system through a competitive procurement process. Integrate with RSD system. • Replace the current Interactive Voice Response (IVR) system with a modern solution through a competitive procurement process. Integrate with RSD system. • Leverage the in-flight SAP Program’s Time and Attendance project’s second release to digitize the Wheel-Trans Operator’s scheduling and bidding process. The SAP Release 2 project is planned to go live by Q3 2024.

Appendix 5

List of Updated Wheel-Trans Policies

1. Code of Conduct
2. Door-to-Door
3. Travelling using Mobility Aids and Assistive Devices
4. Late Cancellation/No Show Policy
5. Vehicle Exception
6. Carry-on Items
7. Environmental Sensitivity
8. Support Person
9. Companion
10. Service Animals and Pets
11. Severe Weather
12. Service Disruption and Irregular Operations
13. Food and Beverage
14. Lost and Found
15. DNLU (Do Not Leave Unattended) Policy
16. Family of Service Travel
17. Fare Payment
18. Cross-Border Travel
19. Travelling with Children or Infants
20. Layover and Multiple Stop

Appendix 6 Fleet Replacement

Figure 3: Dodge six-metre ProMaster mini-bus



Figure 4: Seven-metre ProMaster bus

