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The Regional Municipality of Durham Report

To: Durham Region Transit Executive Committee
From: General Manager, Durham Region Transit
Report: #2021-DRT-25
Date: October 6, 2021

Subject:

Demand Responsive Service

Recommendation:

That the Transit Executive Committee recommends

- A) That report #2021-DRT-25 and the Durham Region Transit Demand Responsive Transit Study, be received for information;
 - B) That the amalgamation of Specialized Services and On Demand into a single Demand Responsive Service, be approved; and
 - C) That the General Manager provide regular updates to the Transit Executive Committee on the status of the transition to Demand Responsive Service.
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Report:

1. Purpose

This report summarizes the findings of the Durham Region Transit Demand Responsive Transit Study funded by the Government of Ontario through the Audit and Accountability Fund. The study recommends that Durham Region Transit (DRT) amalgamate On Demand and Specialized Services into a single Demand Responsive Service to achieve a more spontaneous, equitable, reliable, and customer-focused service.

2. Background

- 2.1 On September 21, 2020, the Phase 1 service plan was launched as part of DRT's ridership recovery framework. The service plan included On Demand, a demand responsive service, operating in low ridership zones within urban areas and rural areas across the Region. DRT On Demand was supported by the launch of a new technology platform encompassing TEC approved recommendations arising from the rural transit review in June 2020, and current industry best practices.
- 2.2 DRT On Demand enhanced transit services across the Region of Durham by providing all residents access to frequent and reliable. Residents within urban On Demand zones are accessing transit within 30 minutes of requesting a trip; rural residents are accessing On Demand within 45 minutes of trip requests. Trip requests are scheduled in real time and the technology platform optimizes available resources and system productivity. Weekly On Demand ridership increased to over 2,400 passengers, with the 100,000th passenger trip being delivered August 28, 2021.
- 2.3 Specialized Services, operating since DRT was formed in 2006, is also a demand responsive service. Registered customers generally telephone a booking agent a minimum of 24 hours and up to seven days in advance of their intended time of travel. Trips are scheduled through a scheduling platform and the daily manifests of trips are assigned to internal and external resources by midnight for the following day. Same day trip bookings may be available pending the availability of vehicle capacity.
- 2.4 The successful launch of DRT's On Demand service in September 2020 enabled customers in low ridership zones to plan and book their trip in real-time and access a frequent and reliable transit service regardless of where they live, work or travel within the Region. Staff recognized the opportunities and synergies with specialized services that would enable all customers to benefit from a unified demand responsive service model that's customer-centric, equitable, and seamless. The Region and DRT are committed to removing barriers to travel such as ongoing investments in accessible buses and onboard systems, infrastructure, building features and pedestrian road crossings. Demand Responsive transit will further foster an inclusive public transit environment in the Region.

2.5 Audit & Accountability Funding

- a. In February 2021 the Government of Ontario, through the Audit and Accountability Fund, approved the DRT funding application for up to \$100,000 towards a Transit Demand Responsive Transit Study. The work was required to be completed by an independent third-party reviewer and to deliver a final report with specific and actionable recommendations for cost-savings and efficiencies by October 15, 2021.
- b. Ernst and Young LLP (EY) was the independent third-party reviewer selected for this work. The provincially approved objective of the work was to make findings and recommendations to help DRT:
 1. Ensure compliance with the *Accessibility for Ontarians with Disabilities Act* (AODA) requirements specific to Specialized Services.
 2. Reorder demand responsive services (On Demand and specialized services) as required to be client centric, and outcome focused.
 3. Ensure that equity of access of Specialized Transit is comparable to scheduled and On Demand service models.
 4. Recalibrate the roles and responsibilities of parties throughout the transit system.
 5. Identify opportunities for efficiencies and value.
 6. Ensure the service model aligns with the strategic priorities of the Region and DRT.

3. Durham Region Transit (DRT) Demand Response Transit Study

- 3.1 The final report from EY (Attachment #1) highlights that the mobility landscape and public transit customer expectations are rapidly shifting, which has been accelerated by the global pandemic and advances in technology. EY evaluated the current state of demand response services at DRT and developed recommendations supporting a single Demand Responsive service model.
 - a. Integrate Specialized and On Demand services in compliance with AODA, including operations, scheduling, booking and customer support.
 - b. Review internal communications for effectiveness, invest in cross-training of staff, and implement new feedback mechanisms to drive ongoing dialogue and improvements across DRT.
 - c. Invest in technologies that enable Customer Relations Management, workforce management, and analytics while negotiating for better access to third party data.

- d. Engage stakeholders to review the future state model and design for Demand Responsive transit and allow time to implement educational initiatives and marketing campaigns.
- e. Establish a “One DRT” transit strategy with underlying objectives and Key Performance Indicators (KPIs), while strengthening cross-boundary partner collaboration and further embedding social equity principles into delivery.

3.2 Summary of current state findings

a. Service delivery and operations

- The process and options available for scheduling and booking spontaneous trips is different depending on the customer’s travel ability
- Current contracts with third party operators do not have clear performance standards and metrics to drive a consistent, desired customer experience

b. Culture and collaboration

- Legacy ways of working and structure are driving a relatively siloed approach to scheduled, specialized and On Demand services and reducing organizational agility
- Third party contactors who deliver a component of On Demand service are not yet accepted as key members of the DRT service delivery team

c. Technology and analytics

- The current suite of enterprise and operational technologies do not have the functionality needed to enable the desired customer service experience or an ability to track operational and financial performance in an efficient manner
- Data collection, analysis and reporting requires significant manual effort by the analytics and service design teams, and limits the ability to derive real-time insights

d. External communications and education

- Increased community outreach efforts will be needed to define customer needs more clearly for the Demand Responsive service
- DRT branding does not accurately reflect the organization’s vision and aspirations to deliver a customer-centric, Demand Responsive service

- Customer awareness and understanding of DRT's services and how they are expected to change is low
- e. Strategy and key partnerships
 - A clear set of strategic objectives, target outcomes, and KPIs for delivery of Demand Responsive service that integrates current and On Demand and Specialized service offerings are yet to be defined

3.3 Jurisdictional scan of leading practices

The study reported on several leading practices for DRT to consider from Australia, Switzerland, Spain, United States, Norway, and Germany.

- a. Combining Specialized services within On Demand service offering and share fleet, operators, and booking that includes an accessible and simple interface
- b. Expand service design and optimize trips by considering high-uptake areas
- c. Consider notifications and COVID screening protocols built into future Demand Responsive app could support contact tracing and transparency for passengers' journeys
- d. Pre-booking options are possible through various software solutions which provides a flexible experience to meet users' needs and necessary in an amalgamated Specialized/On Demand model.
- e. Rethink the user experience and digital interfaces to cater to seniors and other specific populations may create a more customized and simplified experience for customers.
- f. Integrating the DRT On Demand app with the Transit app is already being done – expanding payment options for riders without bank accounts or smartphones could be explored

3.4 Recommended future state of Demand Responsive Services

The study recommends that DRT move forward to implement a Demand Responsive service that amalgamates the existing Specialized and On Demand services, resulting in a service that is more spontaneous, equitable, reliable, and customer focussed.

- a. Service delivery and operations
 - Further integrate Specialized and On Demand services and allow for advanced trip bookings

- Develop robust contract management capacity, streamline operational processes, and improve integration of third-party operators with DRT employed operators to drive a “One DRT” experience
 - Continue maintenance and improvements of bus stops with attention to transfer points to maximize comfort/coordinate with other services and authorities to minimize transfer times
- b. Culture and collaboration
- Establish a clear plan for “One DRT” across the organization, emphasizing integrated operations, booking, dispatch, and fleet management
 - Drive support for “One DRT” through a comprehensive and transparent internal change management strategy centered on actionable goals and defined responsibilities focused on enhancing the user experience
 - Cross-train staff in accordance with an integrated “One DRT” service offering, centered around the customer experience
- c. Technology and analytics
- Analyze the moments that matter across the customer journey by ensuring the new Customer Relations Management software that can best capture and report this customer information
 - Implement an automated dispatching software and related app that allows for the seamless integration of On Demand and Specialized trip bookings that can satisfy both customer and business/operational requirements
 - Invest in new or upgraded operational and enterprise solutions, paying close attention to data accessibility, interoperability, and exportability of data from those systems
- d. External communications and education
- Reimagine how public engagement and consultation is conducted in a post-pandemic world, testing new communication channels and feedback mechanisms
 - Prepare to rebrand DRT services to reflect One DRT vision and customer charter before extending it to infrastructure, fleet, uniforms, and other external facing assets

- Targeted marketing campaigns to educate customers, the community, and members of social equity groups
- e. Strategy and key partnerships
- Establish One DRT strategy and performance management framework that can be used to monitor progress
 - Increase communication and collaboration between neighboring transit partners and key stakeholder groups with special attention to cross-boundary Specialized Service experience

3.5 Evaluation framework of the future state Demand Responsive Service model

The future state model was evaluated through a framework to highlight benefits and drawbacks.

- a. Customer
- Provides more seamless, efficient, and equitable movement of people across the Region, resulting in improved customer experience as a result of more direct travel, shorter journey's, reduced wait times, and simplicity of trip planning.
- b. Equity
- Users with different abilities will ride together and everyone will have greater access to transit and reduced wait times. Overall, users will have more choice when it comes to where they are able to live, work and play.
- c. Service Delivery
- A Demand Responsive transit service provider is more equipped to action Regional objectives and improve service delivery, facilitating regional mobility on a larger, more integrated, and more equitable scale.
- d. Financial
- Initially generates operational efficiencies and eventually provide cost saving opportunities to consider for reinvestment in services.

- e. Economic
 - Improves the connectivity and economic growth of the Region by increasing access to employment opportunities, retaining talent, and enhancing the Region's investment profile.
- f. Environmental
 - Allows for the more efficient deployment and management of assets across the network to reduce waste and emissions across the system and supports a mode shift away from personal vehicles thereby reducing overall environmental impact to the Region.

3.6 Financial analysis

The study modelled four scenarios to estimate the operational costs of the future state service delivery costs. The preferred initial/near term scenario is a transition to the Demand Responsive Transit service using the existing resource model of internal and external contracted resources. Maintaining the existing resource model during the transition period will enable DRT to focus on the significant change management considerations and operational improvements related to contract management, controls, processes, communications, information, training, branding and technology.

Following a successful change management program and as the Demand Responsive service matures over the next 24 months, there will be opportunities to realize further efficiencies by considering alternative service delivery models.

3.7 Accessibility and Accessibility for Ontarians with Disabilities Act (AODA) considerations

The study also reviewed current Specialized Services practices which customers and the community have commented are not in compliance with the AODA. The study confirmed that the following practices comply with the AODA.

- a. Application of AODA criteria for unconditional, conditional, and temporary eligibility
- b. Origin to destination services using integrated services approach that includes delivering a trip using a combination of specialized service and scheduled service
- c. Mandatory requirement for a customer to provide and travel with an attendant (or support person) when the customer is unable to use the service independently

- d. Current booking practice requiring pre-booking of trips

4. Path Forward

Staff will thoroughly review, prioritize, and implement the appropriate tactical actions highlighted in the report to support the transition to the Demand Responsive Service model. Key transition activities are summarized below.

Activity	Estimated Timing
Formalize service delivery strategy, metrics, and transition project plan	Q4 2021
Continue collaboration through Ministry of Transportation Fare and Service Integration table, including emphasis on cross-boarder demand responsive trips	Q3 2021 – Q2 2022
Establish performance management framework and key performance indicators (KPI's)	Q4 2021 – Q1 2022
Branding and vehicle livery	Q1- Q2 2022
Realign internal structure and responsibilities, process, and policies	Q2 2022
Market and communicate Demand Responsive Transit to stakeholders and the broader community, including educational materials and collateral to support customers	Q2-Q4 2022
Training and development for staff and third-party service provider(s) for updated procedures, processes, and responsibilities	Q2-Q3 2022
Implement Demand Responsive technology platform within Specialized and On Demand services	Q3 – Q4 2022

Activity	Estimated Timing
Launch Demand Responsive Service	Q3 – Q4 2022
Monitor KPI's and feedback, adjust processes to realize operational efficiencies	Q4 2022 – Q2 2023
Evaluate effectiveness of Demand Responsive Transit and recommend next steps	Q3 2023

5. Previous Reports and Decisions

- 5.1 2020-DRT-12 Review of transit services in rural Durham, June 3, 2020
- 5.2 2021-DRT-19 General Manger Report, September 8, 2021
- 5.3 Transit Executive Meeting Agenda, September 8, 2021, Presentation by Josh Colle, Executive Director for Government and Public Sector practice, Ernst and Young LLP re: Durham Region Transit Demand Responsive Transit Study, Executive Summary

6. Relationship to Strategic Plan

- 6.1 Environmental Sustainability
 - 1.4 Demonstrate leadership in sustainability and addressing climate change
- 6.2 Service Excellence
 - 5.1 Optimize resources and partnerships to deliver exceptional quality services and value
 - 5.2 Collaborate for a seamless service experience
 - 5.3 Demonstrate commitment to continuous quality improvement and communicating results
 - 5.4 Drive organizational success through innovation, a skilled workforce, and modernized services

7. Conclusion

- 7.1 Transition to a single Demand Responsive Service will provide customers a spontaneous, equitable, reliable, and customer-focused service. Amalgamating Specialized and On Demand services will be supported by an effective change management and transition program and education, information, and engagement with stakeholders, customers, and the community. The transition to a mature and accepted service is expected to be achieved by 2024.
- 7.2 Demand Responsive service will generate efficiencies by leveraging a single fleet, co-mingling of demand response riders, centralized operator pools, maintaining a single technology platform, and other staff and resource efficiencies.
- 7.3 Although the service will leverage innovative systems and platforms to realize efficiencies and enhance the experience of customers, existing technologies such as the telephone will continue to be important to support residents who are unable or hesitant to adopt new technologies.

8. Attachments

Attachment #1: Durham Region Transit Demand Responsive Transit Study, Final Report, EY

Respectfully submitted,

Original signed by

Bill Holmes
General Manager, DRT

Recommended for Presentation to Committee

Original signed by

Elaine C. Baxter-Trahair
Chief Administrative Officer