



Durham Region Transit (DRT) Demand Responsive Transit Study

Final Report

September 2021



EY

Building a better
working world



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Executive Summary

Executive Summary

The mobility landscape and public transit customer expectations are rapidly shifting, which has been accelerated by the global pandemic and advances in technology. In response to these changes, DRT has begun to explore and pilot an On Demand transit service. To advance this initiative, DRT contracted EY to evaluate the current state and provide future state recommendations for a Demand Responsive service model. The future state model and recommendations were evaluated against the following accounts under EY's Transit Evaluation Framework: customer, equity, service provider, financial, economic and environmental. A series of recommendations were generated from this study.

Key Recommendations

1

Further integrate Specialized and On Demand services in compliance with AODA, including scheduling, booking and customer support

2

Examine existing workforce communication channels and tools for effectiveness, invest in cross-training, and implement new feedback mechanisms to drive ongoing dialogue and improvements

3

Carefully consider and plan for investments in technologies that enable CRM, workforce management, and analytics while negotiating for better access to 3rd-party data

4

Engage stakeholders to assess the proposed future state model and design for Demand Responsive transit and allow time to implement educational initiatives alongside marketing campaigns and rebranding efforts

5

Establish a "One DRT" strategy with underlying objectives and KPIs, while strengthening cross-boundary partner collaboration and further embedding social equity principles into delivery

The results of this study confirm that DRT should move forward with implementing an AODA compliant integrated Demand Responsive service that is more spontaneous, equitable, reliable, and customer-focused.

Project overview and approach

Context and objectives

The scope of this study was to examine how Demand Responsive services are delivered today and to determine how they can be optimized going forward to deliver a customer-centric, equitable service

Context



- ▶ Durham Region Transit (DRT) delivers a full suite of transit services across Durham Region, including Scheduled, On Demand, and Specialized service offerings
- ▶ In September 2020, DRT successfully launched On Demand service, enabled by the Transit app and DRT On Demand app, which together provide customers with trip planning and real-time booking information about on-demand rides available in their area
- ▶ In launching this new service, DRT affirmed the objective of On Demand service and Specialized service are similar in that they provide flexible, personal service, yet there are opportunities to improve customer service in how they are delivered
- ▶ DRT therefore has initiated this study to examine what the optimal Demand Responsive service delivery model is for On Demand and Specialized service to provide equitable, customer-centric, and spontaneous travel to customers of all abilities

Study Objectives

- ▶ The primary objective of this study is to inform how DRT can continue to improve the quality of service delivered to customers (current and potential) and value to the Region by optimizing how Demand Responsive service is delivered
- ▶ This study will examine what is working well and where there are opportunities to improve service delivery against the backdrop of a review of jurisdictional comparators, leading practice, and analysis of Durham Region customers
- ▶ It will include recommendations that highlight opportunities to improve equity, accessibility, customer experience and operational efficiency, including a proposed future state service delivery model and anticipated change impacts
- ▶ To assess the benefits and viability of the proposed model, it will be assessed against an EY Transit Evaluation Framework via customer, equity, service delivery, financial, economic, and environmental lenses
- ▶ An implementation roadmap will articulate the tactical steps recommended to transition to a more optimized model

Approach to conducting this study

The recommended future state service delivery model was informed, developed, tested, and validated under this approach



Documentation Review

Reviewed documentation provided by Durham Region Transit and the Region of Durham, including (but not limited to):

- ▶ The Transit By-law, Section IV of the Accessibility for Ontarians with Disabilities Act (AODA) and policy listing
- ▶ DRT Organizational chart, top-line budget figures, and recent reports to Transit Executive Committee (TEC)
- ▶ On Demand transit pilot results, customer feedback, and various Durham Region strategic action plans



Current state assessment

- ▶ Conducted 13 interviews to directly engage and gather input from 18 stakeholders from across DRT and the Region
- ▶ Performed a customer analysis using various DRT, government, and 3rd-party sources to assess regional demographics, understand On Demand ridership, and highlight important equity considerations
- ▶ Compared DRT Demand Responsive practices with those of peer comparators across Canada and around the world



Future state design

- ▶ Formulated a set of design principles that were prioritized by DRT staff and leadership, and used to shape the design of a future state service delivery model for Demand Responsive transit
- ▶ Developed recommendations and tactical implementation actions to address current state findings
- ▶ Detailed the proposed model and recommendations with input from two workshops with staff and leadership



Evaluation and considerations

- ▶ Tailored the EY Transit Evaluation Framework to structured analysis of the proposed future state service delivery model across six accounts: financial, transit user, equity, economic, service provider, and environmental lenses
- ▶ Conducted financial modelling to estimate the potential cost / savings of transitioning to the future state model
- ▶ Analyzed and documented the top organizational and customer change impacts anticipated by the transition



Implementation planning

- ▶ Discussed current DRT priority initiatives and target timelines (e.g. procurement of vehicle operator services)
- ▶ Determined the major work packages required to implement future state recommendations and model
- ▶ Articulated the key milestones, high-level activities, estimated durations, and potential dependencies as part of an implementation roadmap for consideration by DRT leadership

Current state assessment

Overview of current state findings

While major progress has been made in offering an On Demand service, there are five key areas of opportunity for DRT in moving to an integrated Demand Responsive Service

| THEME | 1 Service Delivery & Operations | 2 Culture & Collaboration | 3 Technology & Analytics | 4 External Comms & Education | 5 Strategy & Key Partnerships |
|----------------------------|---|--|---|--|---|
| | <p><i>“What services we provide and how we deliver them”</i></p> | <p><i>“How we work together to deliver customer-centric service”</i></p> | <p><i>“What tools enable our work and understanding of customers”</i></p> | <p><i>“How we meaningfully connect with external stakeholders”</i></p> | <p><i>“How we position and enable our services to deliver value”</i></p> |
| RECENT PROGRESS | <p>DRT provides 100% service coverage, is launching 24/7 service in the Fall, owns a fully accessible fleet, and continues to see increases in both service demand and use of PRESTO card payment.</p> | <p>DRT has a rich transit history, a complementary mix of new and tenured staff, and culture that prioritizes quality customer service, innovative approaches, and a desire to be a leader in public transit.</p> | <p>DRT was among the first to deploy an integrated app for digital trip planning and booking that includes Demand Responsive service, and is looking for opportunities to tap into better customer insights.</p> | <p>DRT provides multiple avenues for customers to learn about and book On Demand service, despite limitations related to tech, rural access to broadband, and engagement during the pandemic.</p> | <p>DRT envisions spontaneous travel to customers of all abilities, has established social equity principles, and forged relationships with various organizations and advocacy groups.</p> |
| KEY CURRENT STATE FINDINGS | <p>For a more seamless, inclusive customer experience, DRT can extend existing booking and scheduling capabilities to current customers of Specialized service.</p> <p>To increase service quality, DRT would benefit from building contract management skills and capacity to better guide 3rd-party operators.</p> | <p>More effective, two-way channels of communication and feedback are needed to enhance coordination and consistency of how DRT service offerings are messaged and understood.</p> <p>Despite recent organizational changes, there continues to be value in breaking down siloes, cross-training, and knowledge sharing across the business.</p> | <p>There are limitations to the quality of customer, financial, and operational data that can be extracted from DRT’s existing suite of technology tools and solutions, which result in significant manual effort to derive meaningful insights.</p> <p>3rd-party data is largely transactional and manually compiled, analyzed and reported on.</p> | <p>Increased public and targeted engagement is needed to inform the design of a seamlessly integrated, inclusive Demand Responsive service offering.</p> <p>While DRT plans to refresh branding at the same time, a relatively larger effort will need to be expended on educating beneficiaries of the service on the new offering.</p> | <p>Further work can be done to articulate the vision and strategic objectives for the future of Demand Responsive transit, including what specific initiatives and KPIs should be used to measure the success of the service for both DRT and key partners.</p> |



What we heard

“Increase operational efficiency and the equity of the service will follow”

“Booking trips in advance needs to balance elements of flexibility, reliability and spontaneity”

“Processes and policies for On Demand need to be updated to reflect what has been learned”

Key observations

55%

INCREASE IN DAILY ON DEMAND BOOKING AGENT CALLS

100%

SERVICE COVERAGE IN DURHAM REGION

FULLY

ACCESSIBLE FLEET OF DRT OWNED VEHICLES

15-25%

CANCELLATION RATE FOR PRE-BOOKING 7 DAYS IN ADVANCE FOR SPECIALIZED

C1.1 The process and options available for scheduling and booking spontaneous trips is different depending on the customer’s travel ability.

While On Demand customers can book a trip in real-time, current customers of Specialized Service must book their trip at least one day in advance. The current On Demand service uses a 15-45 minute pick up window with an ability to see in real-time where the vehicle is on its way; however, Specialized service riders have limited access to online booking and staff must manually book trips in the back-end. Customers of the Specialized service are penalized for “no-shows” whereby their ability to book a trip is suspended after a certain number of points accumulate when trip cancellations are made less than four hours before the time of their trip.

C1.2 Current contracts with 3rd-party operators do not have clear performance standards and metrics to drive a consistent, desired customer experience.

Many customer complaints originate when an On Demand customer is being served by a 3rd-party operator. In 2021, 3rd-party operators were 17% more likely to incur a complaint than DRT operators. This often occurs when the customer requires specific support the operator may not be trained to provide (e.g. assistance entering/exiting a vehicle). Existing contracts for these operators do not appear to specify performance standards in detail, and training for 3rd-party operators is not yet available. Moreover, capacity for service quality inspections is limited

C1.3 There are opportunities to improve the accessibility of physical infrastructure (e.g. Hub stops, shelters and places of drop-off/pick-up).

Hub / integrated stops are important transfer points between services; however there are few across the network. Despite major investments, some bus stops remain to be ‘islands’ and require involvement of partners to improve. Availability of car seats and bike racks on smaller vehicles represent other current barriers to first mile / last mile mobility experience.

For a more seamless, inclusive customer experience, DRT can extend existing booking and scheduling capabilities to current customers of Specialized service. To increase service quality, DRT would benefit from building contract management practices and capacity to better guide 3rd-party operators.



What we heard

“Complexities drive service siloes: culture, labour relations, target populations, and more”

“DRT needs to show responsibility for 3rd-party contractors and the service they provide”

“Service design does not seem interested in insights from customer service”

Key observations

57%

ON DEMAND TRIPS PROVIDED BY CONTRACTOR / TAXI

55%

INCREASE IN DAILY ON DEMAND BOOKING AGENT CALLS

C2.1 A combination of remote working and speed of roll-out of On Demand service has resulted in an appetite for more collaboration and training.

Across divisional teams, the need for refreshed training on current service offerings (On Demand and Specialized service), succession planning, and cross-training was highlighted as a key opportunity, along with more lead time on cascading service changes from internal to external stakeholders. Customer service and service design teams also expressed a desire for more regular collaboration and knowledge sharing, which both teams agree would help to better manage customer expectations.

C2.2 Legacy ways of working and structure are driving a relatively siloed approach to Conventional, Specialized and On Demand service and reducing organizational agility.

Internal processes, policies, and common definitions of what customer service should ‘look like’ for each function are still catching up to the evolution of business needs and service offerings which carry with them a rich history and mature collective agreement. This has led to variations in customer service approaches, siloed service delivery, and a tendency by some to “revert back to what they know.”

C2.3 3rd-party contractors who deliver a component of On Demand service are not yet accepted as key members of the DRT service delivery team.

While PWT and other contractors have supported the delivery of Scheduled and Specialized service for years before On Demand service was implemented, some DRT staff do not view taxi operators as key members of the DRT extended team. A lack of prominent DRT branding and any customer complaints received may, in part, be contributing to a perception that this service is inferior to others.

More effective, two-way channels of communication and feedback are needed to enhance coordination and consistency of how DRT service offerings are messaged and understood. Despite recent organizational changes, there continues to be value in breaking down siloes, cross-training, and knowledge sharing across the business.



What we heard

"The current CRM limits how customer service is delivered"

"PRESTO card payments and GO integrations lack modernity"

"The request for better data insights grows every year, but the funding and resources does not"

"Without reliable data, customer strategies are limited"

Key observations

90 - 95%

PRESTO USAGE FOR ON DEMAND TRIPS

ON DEMAND TRANSIT APP

ALGORITHM ALLOWS FOR AUTOMATED TRIP PLANNING

C3.1 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.

In particular, the customer resource management tool (CRM) is outdated and cannot be configured to effectively to capture On Demand customer service information. Secondly, there is a lack of a centralized workforce management tool to integrate forecasting, planning and scheduling activities and could be used to drive efficiencies. Furthermore, systems do not capture and consolidate key operational and financial data related to vehicle maintenance, overhead costs, kilometers driven, workforce costs, and revenue received, which reduces organizational agility by making it at times challenging and time-consuming to consolidate and report on this information.

C3.2 Technologies used to enable operations do not fully integrate across neighbouring transit systems and service offerings.

For example, PRESTO and Trapeze are not designed to adequately integrate with all of DRT's 3rd-party service providers, creating inconsistencies in customer experiences and limiting analysis. Similarly, the open air land-based radio process used to contact operators is increasingly being replaced by VOIP systems, which can improve service and communication efficiencies.

C3.3 Data collection, analysis and reporting requires significant manual effort by the analytics team and limits the ability to derive real-time insights.

In many cases customer experience and satisfaction must be inferred from the analysis of transactional data which requires considerable manipulation and cleansing due to a lack of data standardization, which can be improved through negotiation and inclusion of terms written into future contracts with 3rd-parties.

There are limitations to the quality of customer, financial, and operational data that can be extracted from DRT's existing suite of technology tools and solutions, which results in significant manual effort to derive meaningful insights. 3rd-party data is largely transactional and manually compiled, analyzed and reported on.



What we heard

"On Demand is still not visible or well understood by many residents"

"We need to balance the idea that we're an affordable, public transit offering but not an NPO or social service"

"It's important for riders to see One DRT with no difference in service (even if that's the case)"

Key observations

BOOKING KIOSKS

PILOT LAUNCHING SUMMER 2021 TO ENABLE SENIORS AND VULNERABLE POPULATIONS TO BOOK ON DEMAND WITH IPADS

DIGITAL DIVIDE

INVEST DURHAM'S 2020 BROADBAND SURVEY REVEALED DURHAM INTERNET SPEEDS FALL BELOW CRTC MEDIAN STANDARDS

C4.1 Increased community outreach efforts will be needed to more clearly define customer needs for an integrated Demand Responsive service offering.

Public and targeted engagement and On Demand service education has been relatively limited to public info sessions, website and social media updates, and promotion of the app, which may not be effectively reaching rural populations, marginalized groups, or other target segments.

C4.2 DRT branding does not accurately reflect the organization's vision and aspirations to deliver a customer-centric, Demand Responsive service.

As DRT is transformed around the customer - through a well-articulated vision, organizational structure, integrated processes, refreshed policies, and performance management framework - there will be an opportunity for DRT to reimagine how its identity is communicated through a comprehensive approach to branding - both physical and digital. However, resources will limit in-person opportunities to promote the brand.

C4.3 Customer awareness and understanding of DRT's services and how they are expected to change is low.

While DRT's vision for spontaneous travel and emphasis on customer service exists today, some stakeholders are unclear as to how existing current service offerings are changing, who new services are intended to serve, and are confused by nomenclature surrounding these services. There is a lack of a clear definition as to what Demand Responsive service is and what benefits it will provide to customers of varying abilities. This hinders service uptake and creates a potential resistance to adopt the new service. Specifically, Specialized customers and advocates need more information on changes and messaging on how the evolution of Demand Responsive services actually provides them with more spontaneous booking, among other benefits they did not previously have access to.

Increased public and targeted engagement is needed to inform the design of a seamlessly integrated, inclusive Demand Responsive service offering. While DRT plans to refresh branding at the same time, a relatively larger effort will need to be expended on educating beneficiaries of the service on the new offering.



What we heard

"Everyone has the right to travel efficiently and competitively"

"It would be good to have a consistent scorecard approach to DRT services and contractors"

"By March 2022, Demand Responsive service will include On Demand and Specialized service as the vendor contract ends"

Key observations

1ST

TRANSIT AGENCY IN CANADA TO DEVELOP SOCIAL EQUITY TRANSIT REPORT

CROSS-BORDER

TRANSIT TRANSFERS FOR TTC WHEEL TRANS PICKUP PRESENT AS A MAJOR PAINPOINT FOR USERS OF SPECIALIZED SERVICE

C5.1 A clear set of strategic objectives, target outcomes, and KPIs for the delivery of Demand Responsive service that integrates current On Demand and Specialized service offerings are yet to be defined.

While the introduction of an integrated Demand Responsive service (with On Demand and Specialized offerings) serves to further several key priorities in the Durham Region Strategic Plan (e.g. 1.1, 1.5, 3.3, 4.4), an exercise has yet to be taken to articulate in simple terms "what" it is meant to achieve and "why" which can then be used as a communication tool with internal and external stakeholders.

C5.2 Special attention will be required to hone in on points of integration and alignment required with key partners.

DRT's efforts to coordinate with the TTC, YRT, and other local transit providers on delivering a more integrated transit network are critical to the success of an expanded Demand Responsive delivery model. Continued participation at Provincial Fare & Service Integration forums and GTHA regional transit tables will similarly reinforce DRT's efforts to develop an optimal service delivery model. The success of Demand responsive service will be significantly influenced by the future of the GO service and PRESTO payment solutions and could potentially position DRT to move past barriers customers experience with cross-border travel.

Other key partners, such as local universities, major employers, etc. can also accelerate DRT's Demand Responsive strategic initiatives.

Further work can be done to articulate the vision and strategic objectives for the future of Demand Responsive transit, including what specific initiatives and KPIs should be used to measure the success of the service for both DRT and key partners.

Analysis of potential customer base | Durham Region demographics

NEW RESIDENTS

5 of 7
new residents to Durham that moved in the last 5 years are immigrants

- 1. Ajax (30.7%)**
- 2. Pickering (20.6%)**

Have the highest immigrant population

ETHNICITY

- 1. Black (7.0%)**
- 2. South Asian (5.7%)**
- 3. Filipino (2.0%)**




Are the most racialized population ethnicities

HOME LANGUAGE

(other than English)

| | | |
|---------------|--------------|--------------|
| Urdu 13% | Tamil 6.9% | Polish 6% |
| Persian 12.1% | Spanish 6.5% | Tagalog 5.2% |

AGE

| | | |
|--|---|---|
|  32% 18-34 |  30% 35-55 |  28% 55+ |
|--|---|---|

OCCUPATION

| | |
|------------|-------|
| Employed | 69% |
| Student | 16% |
| Retired | 9% |
| Unemployed | 8% |
| Disabled | 2% |
| Homemaker | 3.54% |

TRANSPORTATION HABITS TO WORK

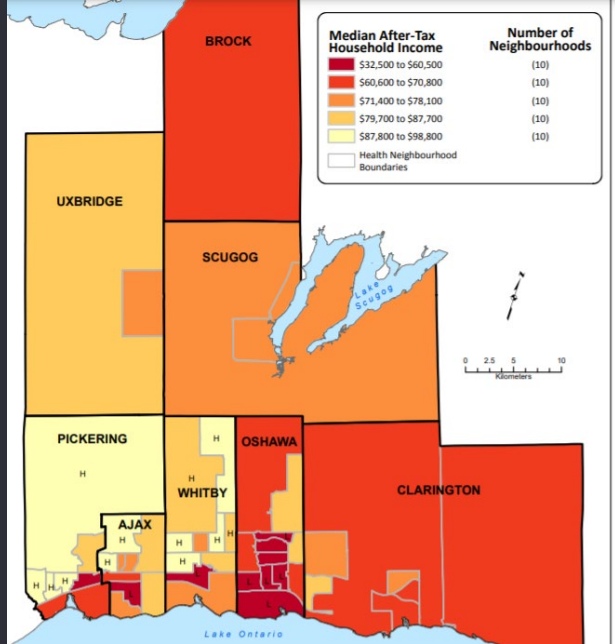
| | | |
|--|-------------------------------------|---------------------|
| 84% Use as a car, 78% as drivers | 11.3% Used public transit | 3% Walked |
|--|-------------------------------------|---------------------|

INCOME

\$106,886 Average household income 2015

9.7% Prevalence of low income

Median After-Tax Household Income 2011: Disparities still present for central / South Oshawa, Clarington, downtown Whitby, Ajax, Pickering and northern Durham



When considering factors that influence access to transit, such as financial resources, ethnicity, ability to work, and proximity to available work, evidence suggests that social and economic factors have a high potential to exacerbate inequitable access to public transit services given the high rate of population growth and diversity of residents in Durham Region.

Analysis of potential customer base | Equity considerations

Adapted from Durham Region Transit's Social Equity Report 2021

| | | |
|---|--|---|
| <p>Ability to pay</p> <p>9.7%</p> <p>Prevalence of low income across Durham Region population</p> | <p>Lone parent families</p> <p>18%</p> <p>of households are lone parent families with female parents heading up 80% of these households</p> | <p>New residents, immigrants, refugees</p> <p>Consideration of</p> <ul style="list-style-type: none"> • Limited car ownership for new residents • Linguistic, cultural differences and new geography for residents |
| <p>Indigenous communities</p> <p>2%</p> <p>Of total population comprised of Indigenous identities (First Nations, Inuit, Métis)</p> | <p>Language diversity</p> <p>80%</p> <p>Of people in Durham claimed English as their mother tongue</p> | <p>Age</p> <p>13.7%</p> <p>Of residents are aged 65+ as of 2016</p> |
| <p>Cultural differences</p> <p>Consideration of</p> <ul style="list-style-type: none"> • Cultural differences and distrust of authority and public services from historically disadvantaged communities | <p>Gender</p> <p>Consideration of</p> <ul style="list-style-type: none"> • Security and the creation of safe spaces on transit • High rates of gender-based violence in private and public spaces | <p>Abilities*</p> <p>70,000</p> <p>Residents estimated to have a disability in 2016</p> |

'Priority Neighbourhoods' as deemed by DRT, include 90,000 residents

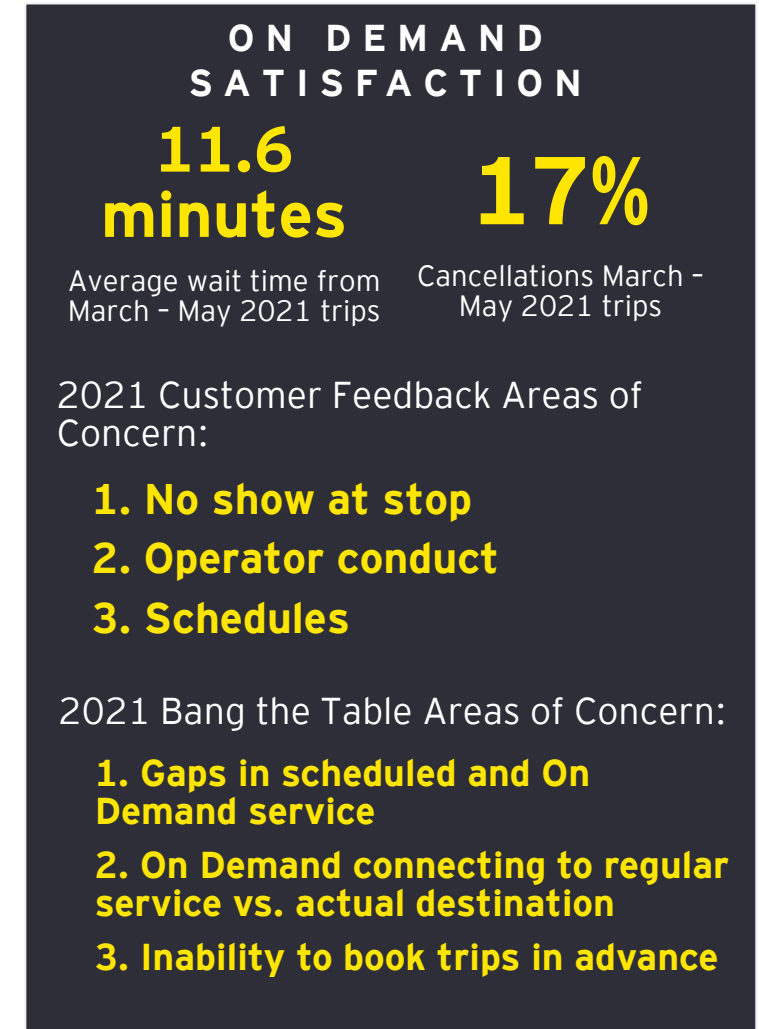
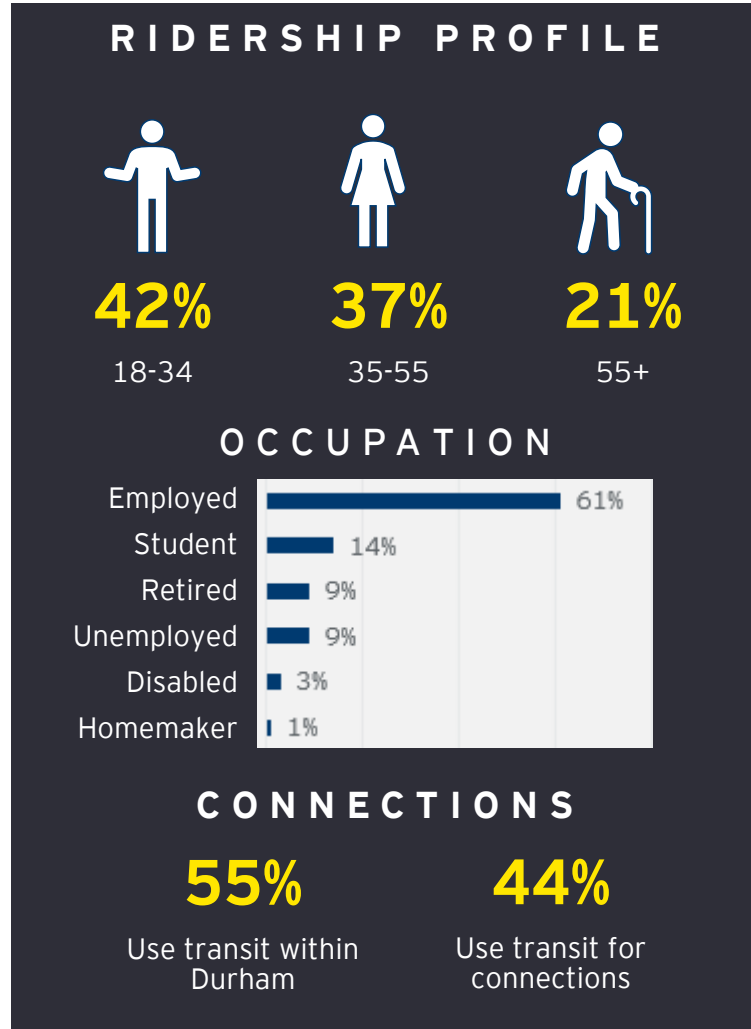
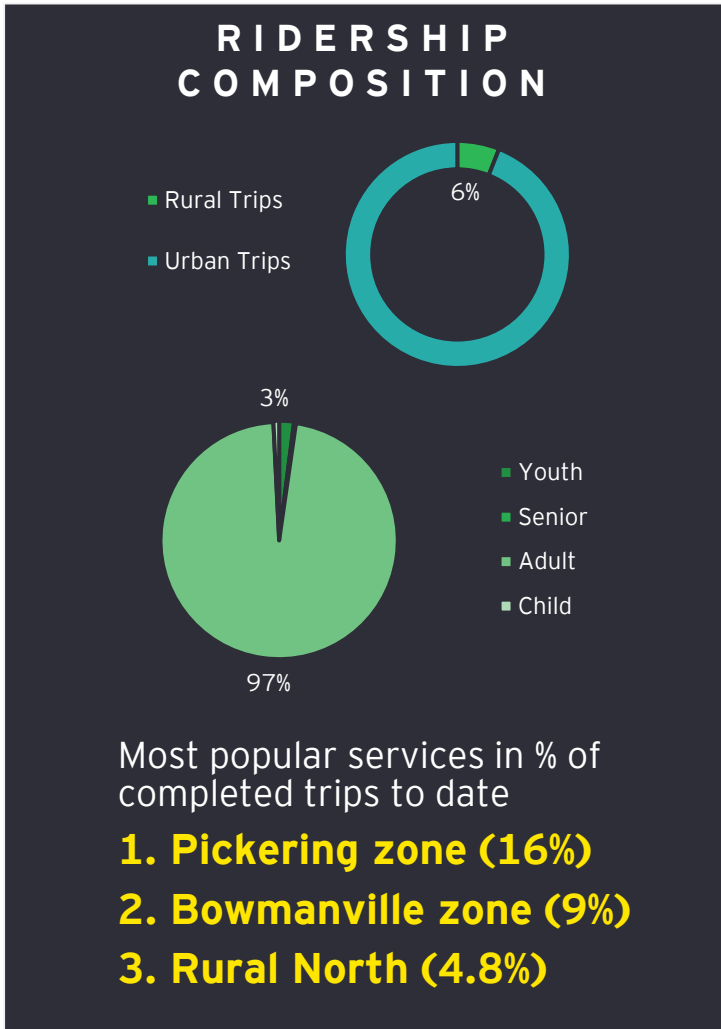
| | |
|-----------------------------|----------------------------|
| A. Downtown Ajax - Ajax | E. Gibb West - Oshawa |
| B. Downtown Whitby - Whitby | F. Central Park - Oshawa |
| C. Downtown Oshawa - Oshawa | G. Beatrice North - Oshawa |
| D. Lakeview - Oshawa | |

Rural populations*

8.4% of residents live in rural and Northern areas in Durham

With a rapidly-growing region, social and economic equity considerations are vital to the process of imagining, designing, and delivering an exceptional and inclusive customer experience and inform the set of principles used to develop a future state model and recommendations for an integrated Demand Responsive service offering.

Analysis of current customer base | On Demand ridership



Most On Demand trips are still being taken in urban spaces, specifically within the Pickering and Bowmanville zones. Based on the nine priority neighbourhoods listed in DRT's Social Equity Report, heavy communication and education will be required to support communities in need beyond On Demand's current uptake zones. DRT can also focus on resolving gaps in service, On Demand capabilities, and ability to book trips in advance.

Customer analysis | Customer personas and pain-points



SARAH

- 47 years old
- Day program / Part time shift
- Cross-boundary Rider: Ajax to Scarborough

Profile: Sarah lives in Ajax in a congregate care setting and uses a mobility device. She attends medical appointments weekly and has work shifts in Scarborough.

Expectations: Reliable, timely transit and connections to access weekly activities with support from operators to board / exit vehicles.

Frustrations: Lengthy time and delay to access integrated conventional service and delay in accessing cross-boundary Wheel-Trans.

Digital needs: Sarah is seeking a simple way to schedule trips digitally and try the On Demand service.



XAVIER

- 19 years old
- Student at Ontario Tech University
- Internal Rider: Uxbridge to Oshawa

Profile: Xavier is looking forward to studying on campus as COVID restrictions lift. He is a choice rider and can use the car from his family home in rural Uxbridge.

Expectations: Affordable and reliable service to get to class on time. Ability to come home later at night after a long day studying.

Frustrations: Transfers and time it takes to travel from Uxbridge to Oshawa makes the car seem like an easier transportation option.

Digital needs: Xavier seeks an easy digital interface with constant updates on his buses ETA.



GREG

- 80 years old
- Retired, lives in LTC home
- Internal Rider: Oshawa

Profile: Greg lives in an LTC in Oshawa and has seen his scheduled route convert to On Demand. His typical trips to the library and bingo hall have been interrupted as he heard his typical route requires 2 buses and a transfer.

Expectations: An easy route to his typical destinations, support in understanding the new system and support in accessing technology.

Frustrations: Greg doesn't own a smartphone or computer and wants easy options to access activities as facilitates open up from COVID restrictions.

Digital needs: Open to learning simple technology but limited access to devices.



MARIAM

- 34 years old
- Part-time worker
- Internal and Cross-Boundary Rider: Whitby to Toronto

Profile: Mariam recently moved to Durham from Mississauga and is a mother to a 4-year old and caretaker to her elderly parents. She works part-time in downtown Toronto.

Expectations: Transit to support her occasional trips to the office via Whitby GO and easy-to-understand transit options for her elderly parents.

Frustrations: Apprehension around the On Demand service that may lead to her missing her train. Language barriers for her elderly parents to use DRT.

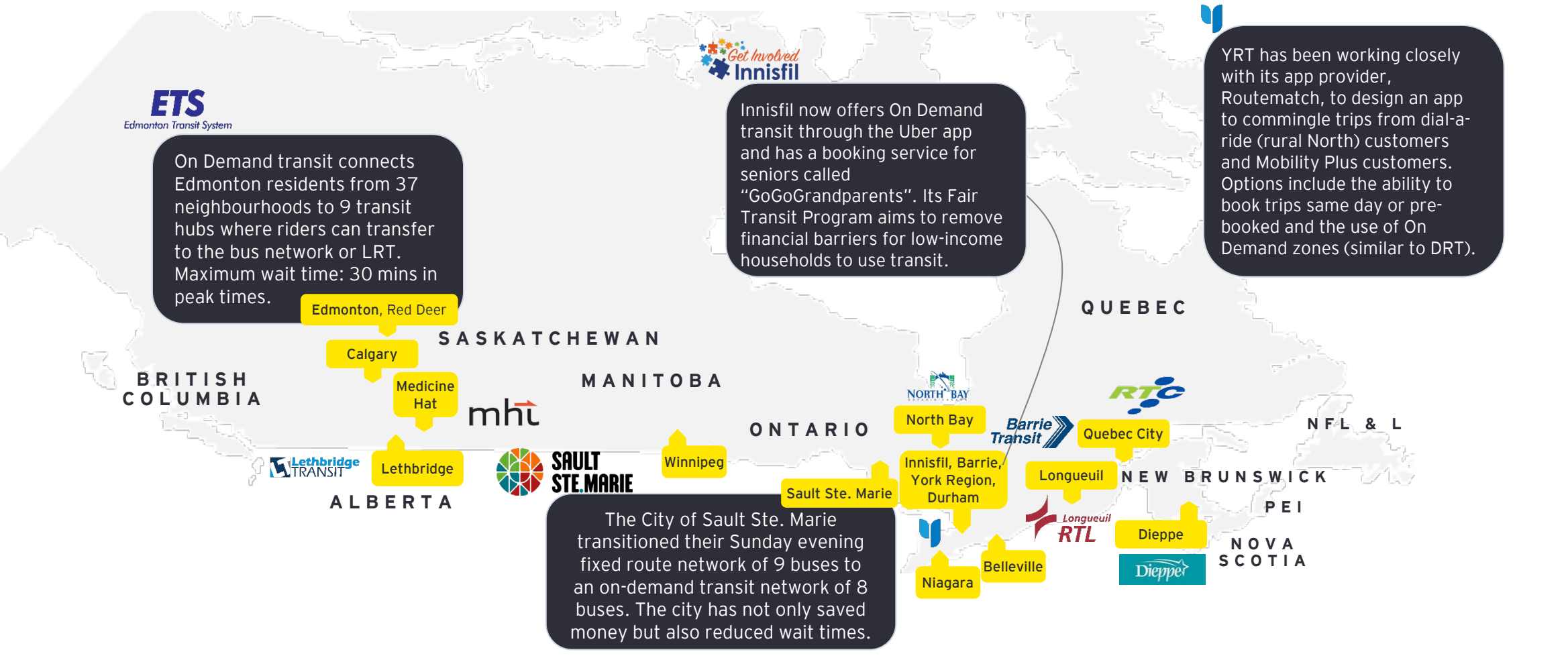
Digital needs: Mariam appreciates the digital app booking and website and frequently books trips for her parents.

with 81% of trips occurring within Durham

The above personas were developed based on current state findings and a holistic review of demographics information, On Demand ridership statistics, and equity considerations for the purposes of highlighting potential pain-points experienced by customers under the current service delivery model. These personas will be revisited and their customer journeys' tested using the proposed future state model for Demand Responsive service.

Jurisdictional scan results | Demand responsive service landscape

The pandemic accelerated uptake of Demand Responsive service models to replace scheduled service where demand is low



To provide context to current Demand Responsive transit practices and approaches being deployed across Canada, the above map has been provided, summarizing some of the key Canadian transit agency comparators for consideration by DRT, along with a spotlight on ETS, Innisfil and Sault Ste. Marie for insights which may be of interest to DRT in informing how existing service offerings may evolve.

Jurisdictional scan results | Leading practices from other agencies

Evidence suggests Demand Responsive service models are quickly evolving to provide better, more accessible service

ENABLING ACCESSIBILITY IN AUSTRALIA



What is Victoria, Australia doing?

- The state of Victoria collaborated with a 3rd-party vendor to create a Demand Responsive solution leveraging virtual bus stops, get-off alerts, and pre-booking for weeks ahead

How is the solution accessible for paratransit?

- The app is optimized with screen reading features, talkback/voiceover capabilities, identification of wheelchair-accessible routes and stations and calculates step-free routes
- The app is also designed with optimized menus and buttons to simplify the user experience

EY Insight

- DRT can consider combining Specialized services within the On Demand service offering and share fleet, operators, and booking that includes an accessible and simple interface

VIRTUAL BUS STOPS IN ZURICH, SWITZERLAND



What are virtual bus stops?

- Zurich launched its On-Demand service called "Pikmi" and introduced 150 virtual bus stops, requiring no new infrastructure and only the smartphone app
- Pikmi is used for last mile trips during later evening hours and the fare is integrated into existing ticket costs

How has this helped Zurich?

- Allowed choice riders to take transit in evenings and transported many passengers in few vehicles to common destinations

EY Insight

- DRT can expand service design and optimize trips by considering high-uptake areas and use virtual bus stops to reduce travel to each stop

ON DEMAND NOTIFICATIONS IN MADRID, SPAIN



What is Madrid's Smart Bus doing?

- Notifications and trip ETAs are available in real-time to customers who have requested On Demand service through the Smart Madrid app
- COVID-19 screening protocols are in place and digitized through an in-app wellness check for every booking
- Contactless payment via app is also available during booking
- The service runs at no cost to riders and specifically serves hospital workers, residents, and patients

EY Insight

- Using notifications and COVID screening protocols built into the future Demand Responsive app could support contact tracing and transparency for riders' journeys

Jurisdictional scan results | Leading practices from other agencies

Evidence suggests Demand Responsive service models are quickly evolving to provide better, more accessible service

PRE-BOOKING TRIPS IN CHEYENNE, WYOMING



How does on-demand pre-booking work?

- Riders are able to pre-book rides, schedule recurring rides in advance, and also book rides on-demand. The algorithm analyzes routes in real-time to schedule advanced and real-time bookings
- The service has also brought paratransit under its On Demand umbrella to allow booking and commingling for various services
- Paratransit passengers with recurring trips are considered subscribers and are also able to schedule trips 48 hours ahead of time

EY Insight

- Pre-booking options are possible through various software solutions which provide a flexible experience to meet users' needs and necessary in an integrated Specialized / On Demand model

ON DEMAND FOR SENIORS IN OSLO, NORWAY



How has Oslo used transit to build an age-friendly city?

- Ruter (Oslo's transit service) and a 3rd-party vendor launched an on-demand, shared, door-to-door transportation service for people aged 67+
- Ruter created a user-friendly digital booking interface tailored to senior users
- The creation of user profiles including favourite locations and default accessibility needs has allowed 20% of seniors to use the service with 88% being very satisfied

EY Insight

- Rethinking the user experience and digital interfaces to cater to seniors and other specific populations may create a more customized and simplified experience for riders

APP INTEGRATION IN BERLIN, GERMANY



What did one of the world's first and largest Demand Responsive offering do?

- Berlin's fleet of 50 accessible, electric vans provide service when options are limited
- Users without a bank account can purchase ride credits through customer centers using cash while riders without smartphones can use the service by booking a ride at designated kiosks in customer centers
- The solution is integrated with BVG trip planning app "Fahrinfo" through an API. Full integration allows BerlKönig to pop up as an option during reduced service and re-routes to BerlKönig app

EY Insight

- 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

Design principles

Design principles

Several principles were used to guide the design of the future state service delivery model for Demand Responsive transit

What are they?

- ▶ Design principles are governing qualities of a product or service that, when adhered to, provide customers with a consistent experience in interacting with it
- ▶ They are informed by DRT's strategy, stated priorities, and desired outcomes of providing an integrated, personalized and flexible demand responsive service to customers

How have they been used?

- ▶ A set of ten design principles were developed and prioritized according to relative importance with input from the DRT team and leadership
- ▶ 'Customer-centric', 'equitable access', and 'strategic alignment' were considered to be the most important principles of a proposed model
- ▶ The design principles were used to guide the construction of the future state service delivery model for Demand Responsive transit

Design principles

The future state model for Demand Responsive service was designed with emphasis on adhering to the top three principles

1

Customer-centric: To commit to transition from a traditional and transactional transit service offering to one that flexibly meets customer needs, allowing for equitable and accessible mobility

2

Equitable Access: To focus on providing everyone the right to travel efficiently, competitively, in compliance of AODA and regardless of differing individual abilities, socioeconomics factors, or access to mobile technology

3

Strategic Alignment: To facilitate the achievement of strategic objectives and KPIs set out in the Durham Region Strategic Plan and other key strategic initiatives (e.g. such as the myDurham Intelligent Communities Plan and the Corporate Climate Action Plan)

Efficiency: To minimize use of limited resources to provide a consistent, repeatable service with little 'waste' and few exceptions to standard practice or delivery approach

Value for Investment: To maximize the quality and extent of services provided relative to the cost to customers, residents, DRT, and other orders of government who contribute funding in support of public transit

Safety and Wellbeing: To promote the physical and mental safety and wellbeing of all stakeholders who interact with DRT services from the public and customers to employees and contractors

Employee-centric: To place staff and employees at the center of business transformation by continuously evaluating workforce needs and driving the evolution of processes, tasks, roles, responsibilities, structure, and employee supports to purposely address those needs

Flexibility: To provide a high degree of organizational agility and nimbleness required to respond to future business and customer needs, such as by using open source technologies, flexible contract terms, use of external resources, etc.

Data driven: To utilize data gathered from internal and external sources to derive insights valuable to improving service delivery and customer satisfaction

Innovative: To encourage an environment of experimentation in what and how services are provided, as a means of keeping DRT 'ahead of the curve' and a leader amongst its comparator organizations

Supporting

Future state recommendations

Overview of future state recommendations

Recommendations have been developed to align to the five areas of opportunity identified via the current state assessment

| | 1 Service Delivery & Operations | 2 Culture & Collaboration | 3 Technology & Analytics | 4 External Comms & Education | 5 Strategy & Key Partnerships |
|-------------------------------------|---|--|--|--|---|
| | “What services we provide and how we deliver them” | “How we work together to deliver customer-centric service” | “What tools enable our work and understanding of customers” | “How we meaningfully connect with external stakeholders” | “How we position and enable our services to deliver value” |
| CURRENT STATE FINDINGS | <p>For a more seamless, inclusive customer experience, DRT can extend existing booking and scheduling capabilities to current customers of Specialized service.</p> <p>To increase service quality, DRT would benefit from building contract management skills and capacity to better guide 3rd-party operators.</p> | <p>More effective, two-way channels of communication and feedback are needed to enhance coordination and consistency of how DRT service offerings are messaged and understood.</p> <p>Despite recent organizational changes, there continues to be value in breaking down siloes, cross-training, and knowledge sharing across the business.</p> | <p>There are limitations to the quality of customer, financial, and operational data that can be extracted from DRT’s existing suite of technology tools and solutions, which result in significant manual effort to derive meaningful insights. 3rd-party data is largely transactional and manually compiled, analyzed and reported on.</p> | <p>Increased public and targeted engagement is needed to inform the design of a seamlessly integrated, inclusive Demand Responsive service offering.</p> <p>While DRT plans to refresh branding at the same time, a relatively larger effort will need to be expended on educating beneficiaries of the service on the new offering.</p> | <p>Further work can be done to articulate the vision and strategic objectives for the future of Demand Responsive transit, including what specific initiatives and KPIs should be used to measure the success of the service for both DRT and key partners.</p> |
| FUTURE STATE RECOMMENDATIONS | <p>Further integrate Specialized and On Demand services scheduling, booking, dispatch, and customer support. Set clear 3rd-party contract service metrics and continue to invest in physical infrastructure.</p> | <p>Examine existing workforce communication channels and tools for effectiveness, invest in cross-training, and implement new feedback mechanisms to drive ongoing dialogue and improvements.</p> | <p>Carefully consider investments in technologies and resources that enable CRM, workforce management, and analytics while negotiating for better access to 3rd-party data.</p> | <p>Engage stakeholders to assess the proposed future state model and design for demand responsive transit. Allow time to roll out education alongside marketing campaigns and rebranding efforts.</p> | <p>Establish the “One DRT” strategy with underlying objectives and KPIs, while strengthening cross-boundary partner collaboration and embedding social equity principles into delivery.</p> |

Future state recommendations | Service delivery and operations

RECAP



PROGRESS TO DATE

DRT provides 100% service coverage, is launching 24/7 service in the Fall, owns a fully accessible fleet, and continues to see increases in both service demand and use of PRESTO card payment.



CURRENT STATE FINDINGS

For a more seamless, inclusive customer experience, DRT can extend existing booking and scheduling capabilities to current customers of Specialized service. To increase service quality, DRT would benefit from building contract management skills and capacity to better guide 3rd-party operators.

FUTURE STATE RECOMMENDATIONS

F1.1 Adjust service delivery and booking capabilities to integrate Specialized Services and On Demand booking and allow for both advance booking for all service types

F1.2 More robust contract management, streamlined operational processes, and improved integration of 3rd-party operators with DRT employed operators to drive a “One DRT” experience

F1.3 Continue maintenance and improvements of bus stops. Specific attention paid to cross-boundary transfer points to maximize comfort / coordinate with other authorities to minimize transfer times, especially for those with disabilities

IMPLEMENTATION ACTIONS

- A. Ensure the new integrated app allows for advance booking required to continue to serve subscription reservations for eligible customers and customers requiring door-to-door service (therefore operationally, there is enough time to reserve a particular vehicle)
- B. Combine dispatching resources under one team for all service types; combine field/mobile supervision (route management) tasks under one team
- C. Add additional dedicated contract management / performance management specialist(s)
- D. Institute ‘ride-along’ inspection process along routes or within zones
- E. Assess feasibility of on-route operator check-ins where timeliness, dress code conformity, bus cleanliness, and all other operator standards are ensured by supervisor
- F. Identify the highest use/problematic bus stops (through current On Demand data and feedback from specialized service operators and customers) to prioritize capital improvements for inclusion in the Durham Region Capital Plan and Accessibility Plan
- G. Conduct a high-level accessibility audit of frequent trip generating locations to identify physical and logistical barriers for operators and customers
- H. Review financial model once service model is stable

Future state recommendations | Culture and collaboration

RECAP



PROGRESS TO DATE

More effective 2-way channels of communication are needed to enhance how DRT service offerings are messaged and understood. Despite recent changes, breaking siloes, cross-training, and knowledge sharing across the business is key



CURRENT STATE FINDINGS

The roll-out of On Demand service has resulted in an appetite for more collaboration and training. Legacy ways of working and structure are driving a relatively siloed approach to service, reducing organizational agility. 3rd-party contractors who deliver a component of On Demand service are viewed as members of the service delivery team.

FUTURE STATE RECOMMENDATIONS

F2.1 Establish a clear plan for “One DRT” across the organization, emphasizing integrated booking, dispatch, and fleet management

F2.2 Drive buy-in for One DRT through a comprehensive and transparent internal change management strategy centred on actionable goals and defined responsibilities that are focused on enhancing user experience

F2.3 Cross-train all customer service and dispatch teams, including mobile supervisors, in accordance with an integrated One DRT service offering, centred around the customer experience

IMPLEMENTATION ACTIONS

- A. Engage staff in a survey (provide an incentive and recognition for participation) in formulating the “One DRT” vision and what customer service means to them and preferred comms channels; have leadership announce the results (vision, key messages, etc.) to build excitement for changes
- B. Develop One DRT Culture Blueprint (should include the core values and what One DRT behaviours in action look like with examples relevant to each function)
- C. Develop Service Delivery Guide (for internal use by DRT) and Customer Charter (internal/external)
- D. To support change management efforts, embark on robust employee and partner engagement program, involving organization-wide calls, townhalls, bulletins, charter release, etc.
- E. Refresh/Realign policies and processes that deal with customer interfaces and/or safety/wellbeing
- F. Leverage the Region’s HR team (with L&D expertise) and commit resources to change management
- G. Develop training materials (e.g. service offering information, ‘what’s changing’, new procedures/policies, customer service scripts, etc.); deliver via a combination of in-person, e-learning, digital displays in the garage, learning bites in bulletins, etc.
- H. Train/Cross-train workforce on new app, processes/policies, and integrated customer service approach

Future state recommendations | Technology and analytics

RECAP



PROGRESS TO DATE

Customer and operational data are limited by DRT's existing suite of technology tools and solutions. This results in significant manual effort to draw insights. 3rd-party data is largely transactional and also manually compiled.



CURRENT STATE FINDINGS

Current enterprise technology lacks the functionality to enable a modern customer service experience. Technologies used to enable operations do not fully integrate across neighbouring transit systems and service offerings. Data collection, analysis and reporting requires significant manual effort, limiting the ability to derive real-time insights.

FUTURE STATE RECOMMENDATIONS

F3.1 Analyze the moments that matter across the customer journey and procure CRM software that can best capture this customer information

F3.2 Implement an app that allows for the seamless integration of On Demand and Specialized trip booking that can satisfy both customer and business/operational req's

F3.3 In collaboration with neighbouring municipalities, review tech-related opportunities for more seamless cross-boundary travel

F3.4 Invest in new or upgraded operational and enterprise solutions, paying close attention to data accessibility, interoperability, and exportability of data from those systems

IMPLEMENTATION ACTIONS

- A. Analyze and segment customer data to inform a set of personas (ideally one per segment) and have a DRT employee ride-along and document their experience, highlighting positive aspects and pain-points along the customer journey; conduct this activity once pre and post integration service offering under Demand Responsive
- B. Use insights from customer journey analysis and stakeholder/public engagement to inform requirements for the integrated Demand Responsive app RFP under dev.
- C. Select the successful bidder for the RFP (weighting ability to meet customer needs higher than other measures); implement the new app (maintain access to legacy data)
- D. Build data agreement terms into service provider contracts that provides timely, accessible, and relevant data access for DRT
- E. Develop an IT implementation roadmap that considers external parties'/solutions' roadmaps (e.g. PRESTO, York Region) and helps remove tech-related barriers to travel
- F. Procure a centralized workforce management tool and advanced analytics tool (that can be configured to easily digest customer and operational data). Determine timelines to replace fleet radio system with VOIP system to enhance effectiveness of communication with operators, and re-engage Durham Region for an updated CRM system

Future state recommendations | External communications and Education

RECAP



PROGRESS TO DATE

Increased engagement is needed to inform the design of an integrated, inclusive Demand Responsive service. While DRT plans to refresh its branding, a larger effort will be needed to educate beneficiaries on the new service offering.



CURRENT STATE FINDINGS

Increased community outreach efforts will be needed to clearly define customer needs for an integrated Demand Responsive service. DRT branding could better reflect the organization's aspirations to deliver a customer-centric, Demand Responsive service. Customer awareness of DRT's services and how they are expected to change is low.

FUTURE STATE RECOMMENDATIONS

F4.1 Reimagine how public engagement and consultation is conducted in a post-pandemic world, testing new communications channels and feedback mechanisms

F4.2 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

F4.3 Targeted marketing campaigns to educate customers, including internal riders, choice riders, and members of social equity report communities

IMPLEMENTATION ACTIONS

- A. Evaluate the return on investment of past Public Information Centres (PICs) in terms of time invested versus quantity of feedback received, degree of participation, and diversity of customer representation
- B. Engage the Accessibility Advisory Committee (AAC) and Transit Advisory Committee (TAC) for ideas and input on how to engage specific customer segments across the Region (e.g. in-person, via schools, etc.)
- C. Empower staff with survey tools to collect feedback from members of social equity report communities to provide to DRT more robust customer data, test journey maps, and both inform and monitor the transition to a more integrated service offering
- D. Inquire (through the procurement process) what real-time customer information and feedback can be collected from any 3rd-party integrated booking apps beyond post-ride surveys
- E. Consider conducting focus groups, surveys, cold calls, and ride-alongs to identify preferred communications channels and assess current brand sentiment (to inform brand refresh)
- F. Commit marketing and research resources to develop external education and promotional campaigns to drive smooth transition and uptake of Demand Responsive transit, and to measure effectiveness of these efforts
- G. Launch in-person booking kiosks to test feasibility and effectiveness for full roll out of integrated offering

Future state recommendations | Strategy and key partnerships

RECAP



PROGRESS TO DATE

Further work can be done to articulate the vision and strategic objectives for the future of Demand Responsive transit, including what initiatives and KPIs should be used to measure success for both DRT and key partners.



CURRENT STATE FINDINGS

For a more seamless, inclusive customer experience, DRT can extend existing booking and scheduling capabilities to current customers of Specialized service. To increase service quality, DRT would benefit from building contract management skills and capacity to better guide 3rd-party operators.

FUTURE STATE RECOMMENDATIONS

F5.1 Establish One DRT strategy and performance management framework that can be used to monitor progress

F5.2 Increase communication and collaboration between neighbouring transit partners and key stakeholder groups with special attention to cross-boundary Specialized Service experience

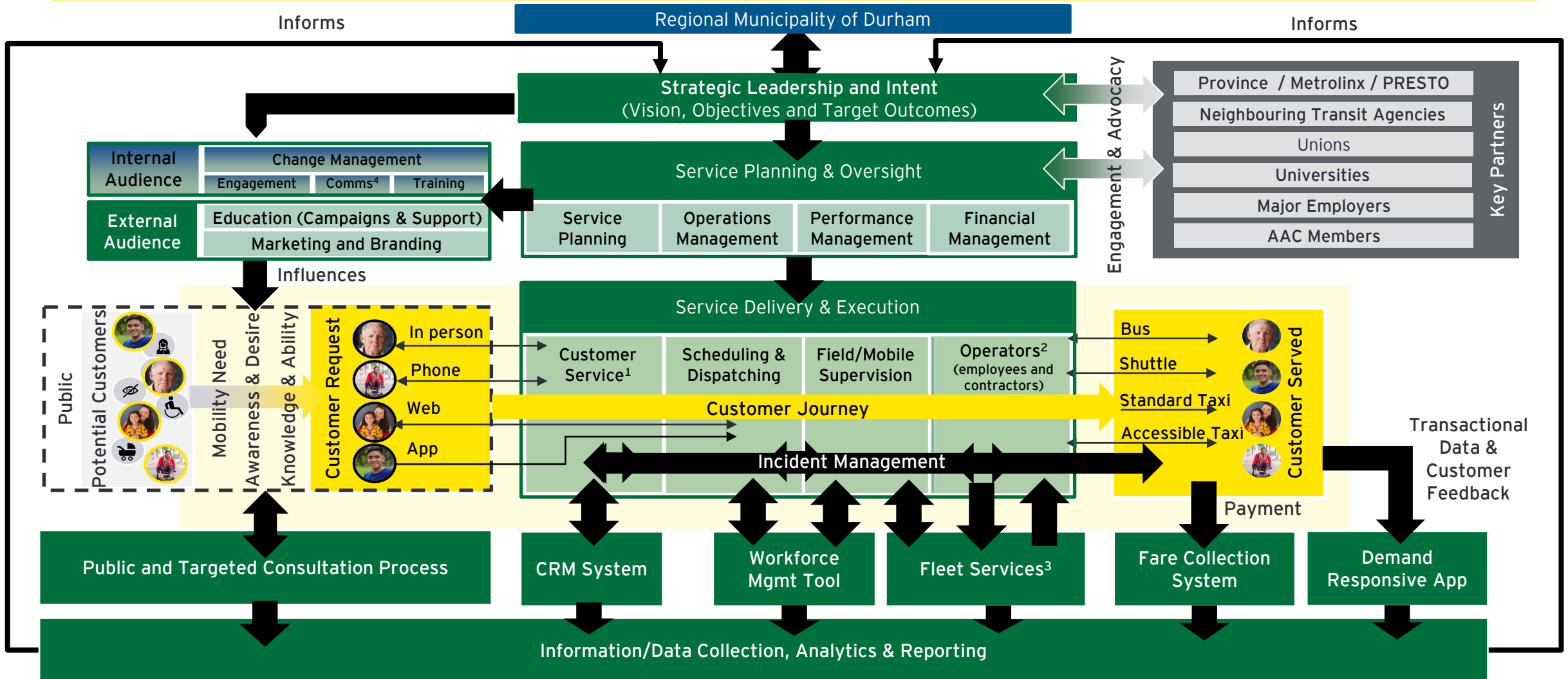
F5.3 Leverage DRT Social Equity Report to feed into strategic objectives and tactical campaign to increase access and equity for One DRT users

IMPLEMENTATION ACTIONS

- A. Hold a visioning session with DRT leadership and drive out the value proposition by stakeholder group for transitioning to the future state model of Scheduled service and integrated Demand Responsive service
- B. Link One DRT vision, objectives, and target outcomes to the Durham Region strategic plan and set KPIs that advance social equity
- C. Tie initiatives in the future state implementation roadmap to strategic objectives; socialize them with leadership from neighbouring transit agencies to drive alignment on shared goals (e.g. cross-border travel)
- D. Develop performance management framework for evaluating both organizational effectiveness (including financial metrics) and major contracts (including specific service level KPIs / service standards for vendors)
- E. Make existing and new commercial arrangements with service providers subject to a vendor audit
- F. Work with partners to ensure that goals are being met, specifically at key interaction points, such as cross-border stops
- G. Hold an executive roadshow with universities, major employers, and other major partners to engage and educate them on the new integrated service offering and benefits to them in promoting use of the service

Demand Responsive future state service delivery model

The following visual illustrates how DRT can deliver integrated services allowing for spontaneous travel for all customers



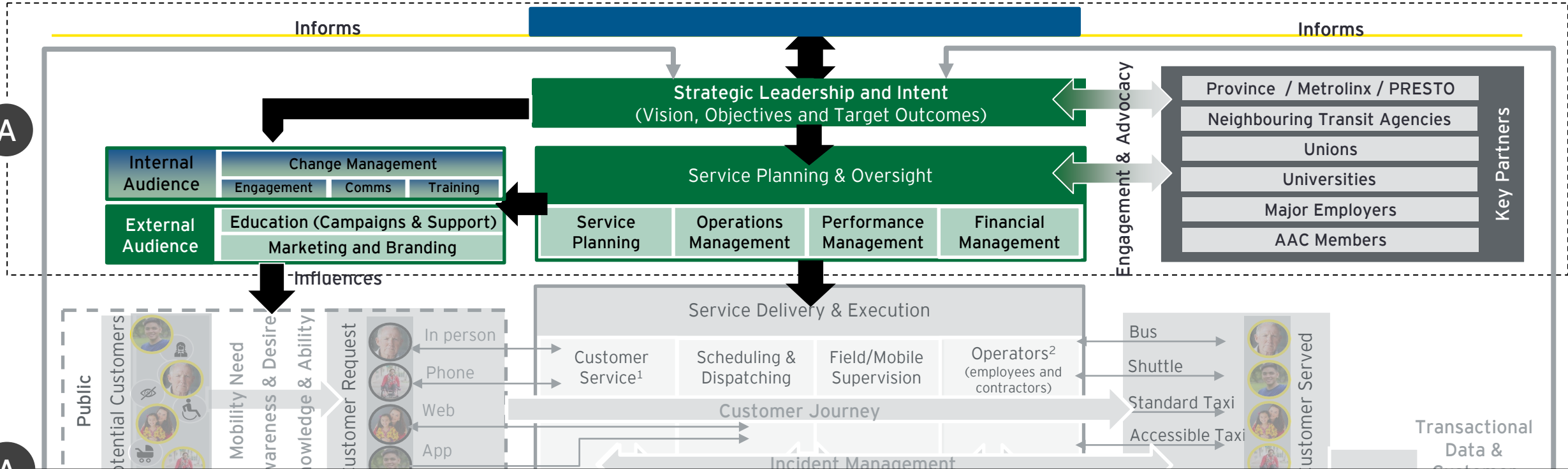
¹Includes booking, trip planning, wayfinding, education, issue resolution, and other support activities for customers of all abilities.

²Note that only DRT operated vehicles utilize fleet services whereas non-DRT owned vehicles are maintained and stored offsite.

³Fleet Services includes activities such as fleet planning, management (incl. asset lifecycle), storage, and maintenance.

⁴While this function represents strategic communications as a key component of change management, all DRT staff have a role to play in effective communications.

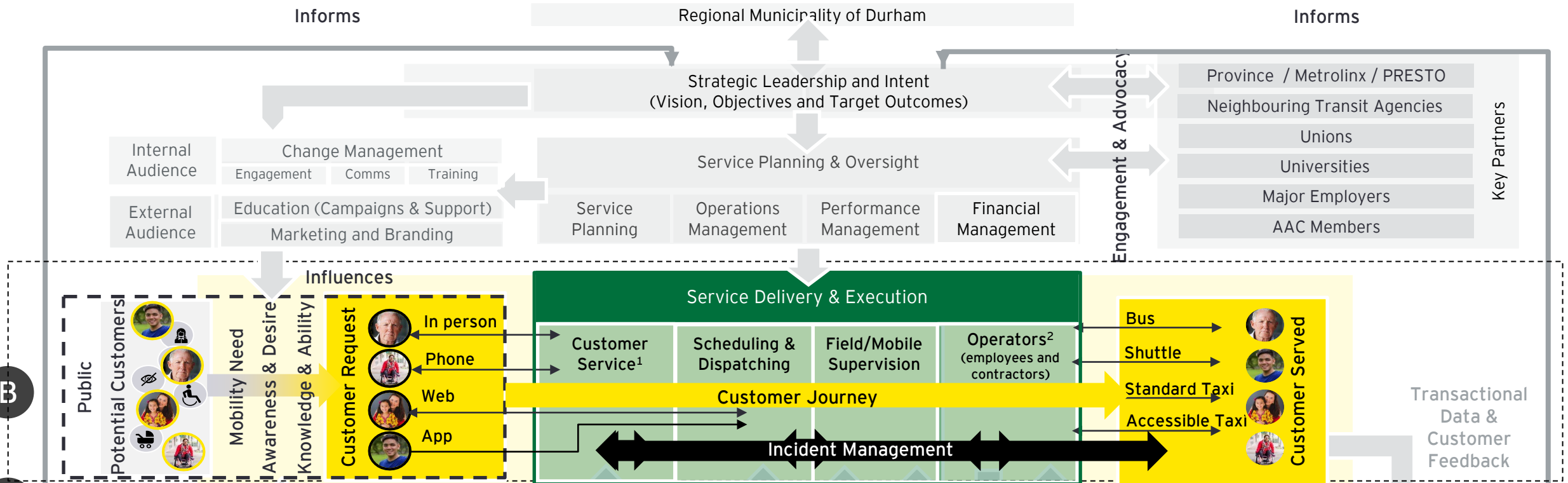
Demand Responsive future state service delivery model



Strategic Management Layer

- ▶ In alignment with Council priorities and the Durham Strategic Plan, the **Transit Executive Committee (TEC)** and the **DRT senior leadership team** affirm the **vision, objectives, and target outcomes** of evolving Demand Responsive services to provide spontaneous travel to customers of all abilities
- ▶ The **strategic intent** behind Demand Responsive service is then translated into **services plans and operational requirements**; service delivery is measured against a set of KPIs tied to target outcomes and the budget and actual costs/revenue of Demand Responsive service services are managed and reported on
- ▶ Change Management functions (engagement, communications, and training) will translate plans, policies, and procedures into learning and development objectives, courses and/or materials for each internal function, delivering them through change management tools and tactics
- ▶ Strategic communications will identify, enable, and moderate two-way channels that can deliver a combination of active and passive communications designed to reach both back-office and front-line operations staff (e.g. organization-wide calls, bulletins, daily stand-ups, etc.), which all staff will have a role in engaging with
- ▶ Marketing and branding activities will drive external awareness and desire by current and potential customers to use Demand Responsive service; educational campaigns and targeted support activities (e.g. in-person booking kiosks) will drive public knowledge and ability to use the service

Demand Responsive future state service delivery model



Customer Service Delivery Layer

- ▶ Customers - of all abilities - will be able to request Demand Responsive services via the same request intake channels: in-person, phone, web, and app
- ▶ **Customer service team members will be cross-trained and knowledgeable to handle all customer requests;** this team will be equipped with an integrated Demand Responsive booking solution that allows for advance booking (to reserve vehicles for door-to-door service or book subscription reservations for eligible customers) and an upgraded CRM to capture customer information
- ▶ Scheduling and dispatching for current On Demand and Specialized customers will be combined and team members cross-trained
- ▶ The field (mobile) supervision team will be responsible for key tasks such as route management, inspections, real-time quality checks, and incident investigations/resolutions for current On Demand and Specialized customers (*Specialized dispatch team will no longer handle route management)
- ▶ Fleet will be deployed based on customer mobility needs indicated at the time of booking and demand responsive operators will deliver services

Demand Responsive future state service delivery model

Informs

Regional Municipality of Durham

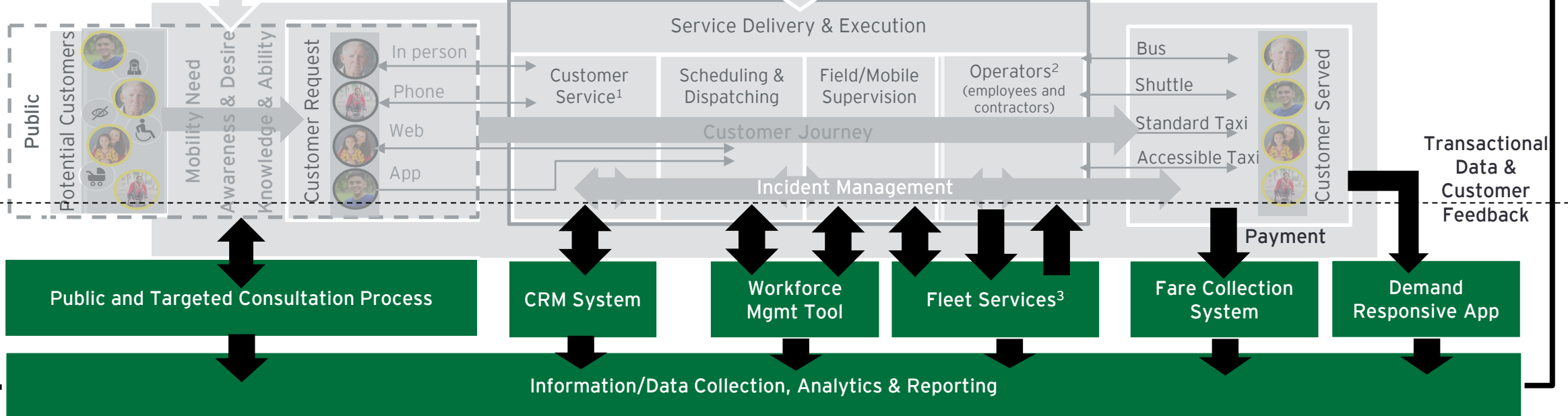
Informs

Strategic Leadership and Intent

Province / Metrolinx / PRESTO

Enablement Layer

- ▶ Public/Targeted Consultation Process will go beyond PICs to include other digital and in-person engagement informed by input from AAC and others
- ▶ New CRM system will allow for capture of Demand Responsive customer info, new workforce management tool will integrate with the new booking app as well as integrate scheduling, dispatching, etc. for current On Demand and Specialized resources, and new VOIP system will more efficiently transmit real-time operator communications and data providing better operational agility and oversight by the field/mobile supervision function
- ▶ Information/data collected through these processes, systems, and functions will feed a data lake and analytics tool and will be used to inform leadership



Future state | Customer perspective and experience

The Demand Responsive future state service delivery model is expected to impact Sarah's customer journey as follows



SARAH

- 47 years old
- Day program / Part time shift
- Cross-boundary Rider: Ajax to Scarborough

Profile

Sarah lives in Ajax in a congregate care setting and uses a mobility device. She attends medical appointments weekly and has work shifts in Scarborough.

Frustrations

- Lengthy time and delay to access integrated conventional service and delay in accessing cross-boundary Wheel-Trans.

Expectations

- Reliable, timely transit and connections to access weekly activities with support from operators to board / exit vehicles.

Time sensitivity



Digital savviness



Desired level of communication

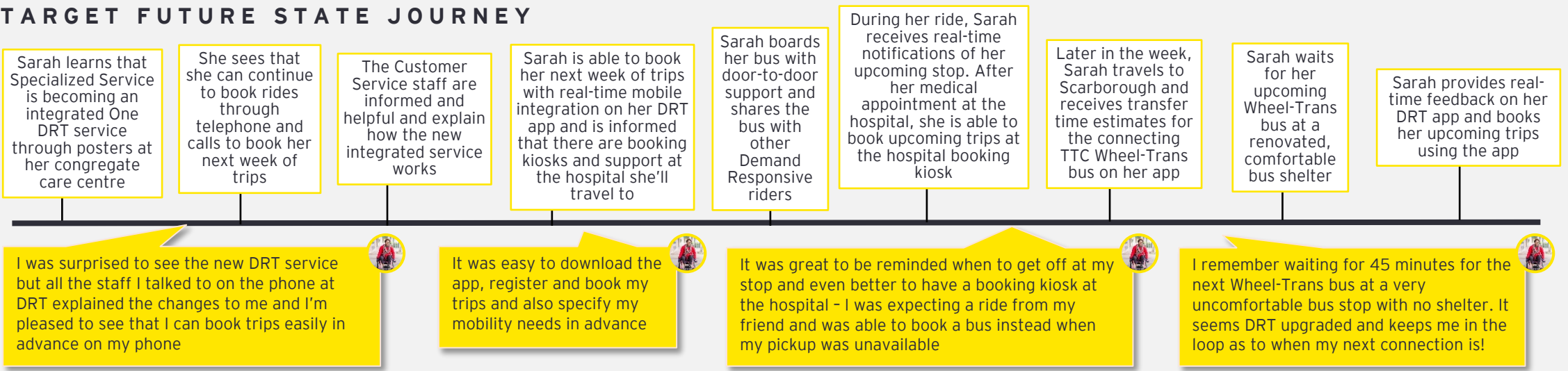


Inclination to self-serve



TARGET FUTURE STATE JOURNEY

Journey Points
Moments that matter



Future state | Customer perspective and experience

The Demand Responsive future state service delivery model is expected to impact Greg's customer journey as follows



G R E G

Profile

Greg lives in an LTC in Oshawa and has seen his scheduled route convert to On Demand. His typical trips to the library and bingo hall have been interrupted as he heard his typical route requires 2 buses and a transfer.

Frustrations

- Greg doesn't own a smartphone or computer and wants easy options to access activities as facilitates open up from COVID restrictions.

Expectations

- An easy route to his typical destinations, support in understanding the new system and support in accessing technology.

- 80 years old
- Retired, lives in LTC home
- Internal Rider: Oshawa

Time sensitivity



Digital savviness



Desired level of communication



Inclination to self-serve



TARGET FUTURE STATE JOURNEY

Journey Points
Moments that matter

DRT staff visit Greg's LTC and distribute flyers on the new service and answer questions after setting up an iPad and booking station for residents

Greg is able to use the iPad to ask about his route and get maps and information on the exact route

With the iPad tutorial in mind, Greg tries booking his trip for the bingo hall and sees that a bus will come in 10 minutes and another bus will come in 20 at his transfer

Greg boards the bus and follows his flyer map to track when to transfer and does so, waiting at the next stop

Another bus comes to pick up Greg. At the bingo hall, Greg can use the phone to call for another On Demand trip back

Greg speaks with Customer Service staff who book him an immediate bus back and he follows the same route back on his map

I'm quite interested in trying the bus again - it doesn't seem too complicated and a few of my friends will take it with me. I have some resources now to book and plan my trip

The iPad was very simple to use and there were maps and flyers available for me to follow my trip once I booked it - I was amazed that I could order the bus even at night

I was surprised by how fast the bus came after I also ordered it through telephone. The staff were nice and helpful and I followed my same trip back

The new bus system is actually pretty simple and I heard it serves all over Durham. I'll try it next week to visit my family in Beaverton as it even goes up north!

Future state | Customer perspective and experience

The Demand Responsive future state service delivery model is expected to impact Xavier's customer journey as follows



XAVIER

- 19 years old
- Student at Ontario Tech University (Oshawa)
- Internal Rider: Uxbridge to Oshawa

Profile

Xavier is looking forward to studying on campus as COVID restrictions lift. He is a choice rider and can use the car from his family home in rural Uxbridge.

Frustrations

- Transfers and time it takes to travel from Uxbridge to Oshawa makes the car seem like an easier transportation option.

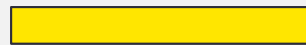
Expectations

- Affordable and reliable service to get to class on time. Ability to come home later at night after a long day studying.

Time sensitivity



Digital savviness



Desired level of communication

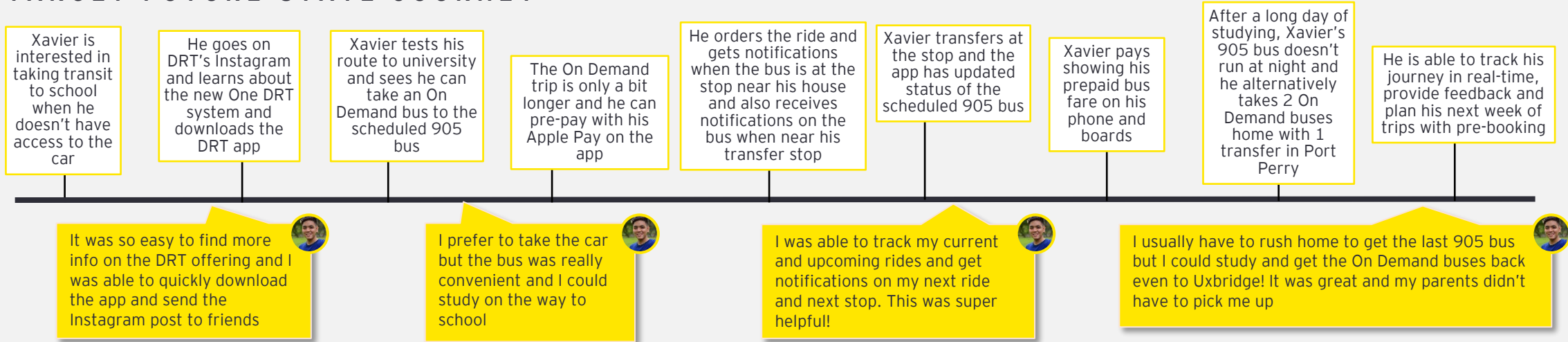


Inclination to self-serve



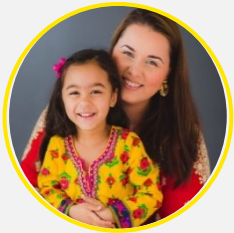
TARGET FUTURE STATE JOURNEY

Journey Points
Moments that matter



Future state | Customer perspective and experience

The Demand Responsive future state service delivery model is expected to impact Mariam's customer journey as follows



M A R I A M

- 34 years old
- Part-time worker
- Internal and Cross-Boundary Rider: Whitby to Toronto

Profile

Mariam recently moved to Durham from Mississauga and is a mother to a 4-year old and caretaker to her elderly parents. She works part-time in downtown Toronto.

Frustrations

- Apprehension around the On Demand service that may lead to her missing her train. Language barriers for her elderly parents to use DRT.

Expectations

- Transit to support her occasional trips to the office via Whitby GO and easy-to-understand transit options for her elderly parents.

Time sensitivity



Digital savviness



Desired level of communication

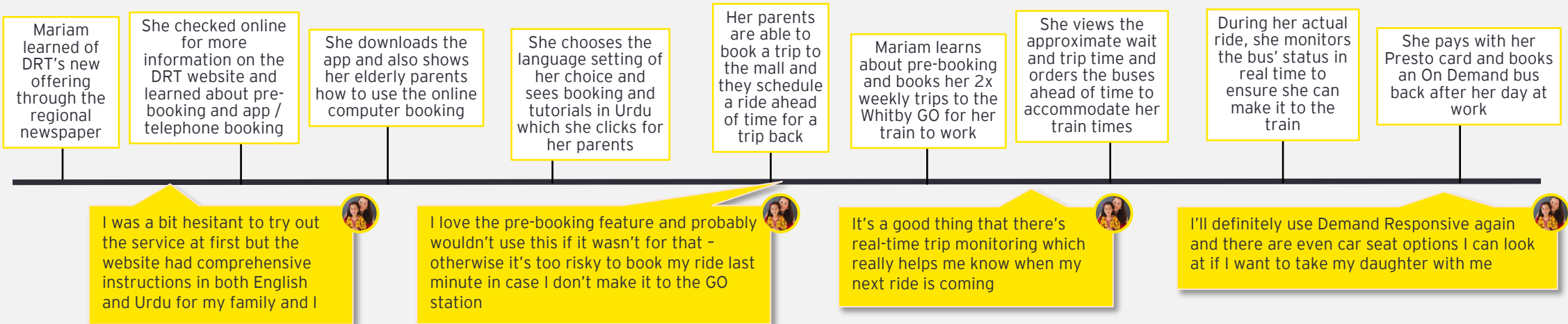


Inclination to self-serve



TARGET FUTURE STATE JOURNEY

Journey Points
Moments that matter



Accessibility and AODA considerations

Current DRT Specialized service practices are compliant with the Accessibility for Ontarians with Disabilities Act (AODA)

| Current state observation | AODA* Compliant? | Supporting evidence and future state considerations |
|--|---------------------|---|
| <p>Application of eligibility criteria</p> <ul style="list-style-type: none"> DRT uses the three categories of eligibility and associated AODA definitions of those categories to determine who qualifies to receive 'Specialized transportation services' (which is defined under regulation as a public passenger transportation service that is designed to transport persons with disabilities). Often persons with conditional eligibility are scheduled on "integrated trips" that use a Specialized service vehicle for only part of their trip and require one or more vehicle transfers. | <p>Yes</p> | <ul style="list-style-type: none"> In some cases, customers eligible for Specialized service have been reassessed using the three AODA categories for eligibility, resulting in a perceived "downgrade" in service available to the customer (e.g. from unconditional to conditional or from conditional to not eligible). As per O. Reg 191/11, s. 63 (3), even if a customer of Specialized service is assessed (or reassessed) under the AODA to be a person categorized as having temporary or conditional eligibility for Specialized service, DRT "may deny requests for Specialized transportation services... if the conventional transportation service is accessible to the person and the person has the ability to use it." Ultimately, customers assessed as having conditional or temporary eligibility for Specialized service will have greater flexibility to plan, book and travel via integrated trips under the future state model. DRT will also continue to provide "single vehicle, door-to-door service" to persons assessed as having unconditional eligibility to receive Specialized service because their disability prevents them from using conventional transportation services. |
| <p>Origin to destination services</p> <ul style="list-style-type: none"> Not all customers eligible for Specialized service receive "single vehicle, door-to-door service". Some Specialized service customers have been receiving "single vehicle, door-to-door service" whose eligibility has been reassessed, resulting in the customer needing to transition to taking an "integrated trip." | <p>Yes</p> | <ul style="list-style-type: none"> According to O Reg. 191/11, s.48, "origin to destination" services refers to the "overall package of transportation services that allows [DRT] to provide, in a flexible way, transportation services in a manner that best meets the needs of persons with disabilities" and "may include services on any accessible conventional transportation services." DRT's definition of "integrated trips" or "Family of Services" approach to delivering public transit conform to this definition and service level whereby eligible customers receive a Specialized Service vehicle and conventional fleet vehicle on a fixed route each for some portion of their trip. DRT must provide origin to destination services (under the above definition) "that take into account the abilities of its passengers and that accommodates their abilities," which is evidenced by DRT's practice of only scheduling eligible customers on integrated trips if the number of vehicle transfers are within the abilities of the customer, transfer locations are appropriate, and the destinations are more than 3 km from the origin of the trip (otherwise DRT provides a "one-vehicle, door-to-door service). |

Accessibility and AODA considerations

Current DRT Specialized service practices are compliant with the Accessibility for Ontarians with Disabilities Act (AODA)

| Current state observation | AODA* Compliant? | Supporting evidence and future state considerations |
|---|------------------|---|
| <p>Requirements for attendant (“support person”</p> <ul style="list-style-type: none"> • DRT may deny a customer Specialized transportation services to or from a destination if they do not have an “support person” present on the vehicle. • A “support person” means, in relation to a person with a disability, another person who accompanies them in order to help with communications, mobility, personal care or medical needs or with access to goods, services or facilities. | <p>Yes</p> | <ul style="list-style-type: none"> • While “it is the responsibility of a person with a disability to demonstrate to [DRT] their need for a support person to accompany them on the conventional or specialized transportation service,” the provider may also “may require a person with a disability to be accompanied by a support person when on the premises” according to Part IV.2 Customer Service Standards s. 80.47 (%). • However, DRT may require a support person, only if after consulting with the person with a disability and considering the available evidence, determining that: <ol style="list-style-type: none"> a) A support person is necessary to protect the health or safety of the person with a disability of the health or safety of others on the premises; and, b) There is no other reasonable way to protect the health or safety of the person with the disability and the health or safety of others on the premises. • Evidence suggests that while DRT vehicle operators must be trained about the following: <ol style="list-style-type: none"> 1. How to interact and communicate with persons with various types of disability. 2. How to interact with persons with disabilities who use an assistive device or require the assistance of a guide dog or other service animal or assistance of a support person. 3. How to use equipment or devices available on DRT’s premises or otherwise provided by DRT that may help with the provision of goods, services or facilities to a person with a disability. 4. What to do if a person with a particular type of disability is having difficulty accessing DRT’s goods, services or facilities. <p>However, there is no requirement for DRT vehicle operators to be trained in activities more appropriately completed by a support person.</p> • Under the future state model, support persons will continue to be required whereby the above circumstances are met and procedures completed to create a safe travel experience for all customers. |
| <p>Booking practices</p> <ul style="list-style-type: none"> • Customers who use Specialized service do not have an ability to spontaneously book trips and instead must call customer service unlike customers of On Demand service. | <p>Yes</p> | <ul style="list-style-type: none"> • DRT offers provides same day service to the extent that it is available and accepts advance booking where same day service is not available, which are practices in alignment with O Reg. 191/11. s. 17. • Furthermore, by implementing Demand Responsive transit and an integrated, accessible booking app, it is expected that reduced wait times for specialized transport can be achieved which would improve customer service for these individuals and which is in support of O Reg. 191/11 s. 42 (1). |

Accessibility and AODA considerations

The future state model will remain compliant with the Accessibility for Ontarians with Disabilities Act (AODA)

Key highlights

- ▶ DRT's current approach to eligibility is AODA-compliant and will be transferred to the future state
- ▶ The future state model provides for increased access to more spontaneous, customer-centric travel for all
- ▶ The recommended Demand Responsive future state model supports Durham Region's Accessibility Policy and the multi-year Accessibility Plan
- ▶ As growth continues, and adoption of the service rises, DRT will need to regularly re-assess the customer centricity and AODA compliance of its service model, including considering the impacts of switching between Scheduled service and Demand Responsive service
- ▶ Considering DRT's anticipated growth model is to leverage 3rd-party service providers, DRT must continue to consult Accessibility Advisory Committee members to assure that the mix of service types and levels continue to meet customer needs in compliance with the AODA

Tactical implementation considerations*

- ▶ Any changes to the Specialized service will need to be clearly communicated and in formats that are accessible to those with differing abilities (as per Clause 34 (1))
- ▶ Those who have conditional or temporary eligibility that take an integrated trip, but need the assistance of an attendant (i.e. "support person"), must be able to book an extra seat for their attendant free of charge (as per Clause 38 (1))
- ▶ DRT already has a number of mediums to manage, evaluate, and take action on customer feedback. However, to modernize the service around the customer and those with disabilities, a wider breadth of channels could be considered to reach a greater number of those with disabilities and ensure equity across the service (as per Clause 41 (1))
- ▶ Those with differing abilities should be able to book trips both spontaneously and in advance; therefore, the scheduling software should effectively optimize these trips (as per Clause 71 (1))
- ▶ Not all stops are accessible, therefore any app solution will need to be configured to consider which stops are accessible depending on the customer profile / mobility needs (Clause 78 (1, 2))
- ▶ Contracts with 3rd-party service providers need to ensure that they do not charge a higher fare for those with disabilities, nor charge a storage fee for mobility aids or assisted devices (Clause 80 (1))

Future state | Change impacts

Changes to organizational structure, roles and expected behaviours represent impacts of transitioning to a new service model

| # | Current State Description | Future State Description | Type of Change | Degree of Impact | Stakeholder Group Impacted | Related Recommendations and Actions to Support Transition |
|----|---|---|-------------------|------------------|---|--|
| 1a | Separate teams and systems (Spare and Trapeze) are used to schedule and dispatch services for customers depending on their mobility needs | A single team will be responsible for and equipped to schedule and dispatch service for customers regardless of their eligibility for specialized transport | Structure & Roles | High | <ul style="list-style-type: none"> On Demand and Specialized Scheduling and Dispatching teams | Engage staff and partners in articulating the One DRT strategy, vision, plan and how transitioning to an integrated demand responsive model will be measured for success (F2.1/2 & F5.1). |
| 1b | One team of mobile supervisors are responsible for field/mobile oversight of conventional, On Demand and Specialized services | A single team will be responsible and equipped to supervise field operations for all DRT services provided, including those delivered via contractors | Structure & Roles | High | <ul style="list-style-type: none"> Conventional, On Demand, and Specialized Field/Mobile Supervision teams | <p>Proactively inform the union of any potential changes to team structure, roles and responsibilities.</p> <p>Conduct role activity analysis and support employees over the transition via change management, including specific comms and training (F2.D-H).</p> |
| 1c | Customers are routed to different customer service reps depending on whether they require Specialized transportation services or not | All customer service reps will be able to serve customers regardless of customers' mobility needs and/or eligibility for specialized transport | Process & People | Medium | <ul style="list-style-type: none"> Customer Service team Customers | |
| 2 | DRT staff, contractors, and customers have varying levels of understanding and expectations of customer service | All stakeholders understand DRT's service offerings, what to expect for service, and what behaviours are expected of them in using/delivering it | People | Low | <ul style="list-style-type: none"> All DRT, including contractors All customers All partners | Develop Service Delivery Guide (F2.C), Customer Charter (F2.C), and refreshed policies and processes (F2.E) to give guidance |

Future state | Change impacts

A new app allowing current Specialized service customers to book spontaneous trips will be the biggest process/tech change

| # | Current State Description | Future State Description | Type of Change | Degree of Impact | Stakeholder Group Impacted | Related Recommendations and Actions to Support Transition |
|---|---|---|----------------------|------------------|---|--|
| 3 | Transit users with mobility needs have access to mobility through a system of phone booking that has not changed for many years | Users with mobility issues will experience significant changes to both how they book transit and how the service itself is delivered, requiring high levels of communication and education for users and their families | Process & People | High | <ul style="list-style-type: none"> Customers Customer Service Team Operators Communication Team | Commit marketing and research resources to develop external education and promotional campaigns to drive smooth transition and uptake of Demand Responsive transit, and to measure effectiveness of these efforts (F4.G) |
| 4 | Customers with mobility needs are guided to call the customer service team for booking assistance and are unable to book via the app or a website interface | Customers eligible for Specialized transportation services will be able to book and receive spontaneous travel via the app (web-enabled) based on their mobility needs | Process & Technology | High | <ul style="list-style-type: none"> Customers Customer Service team | Enable all customers to book via app (F1.1 & 3.2), procure CRM solution to capture customer info (F3.A), assess problematic bus stops (F1.F) and conduct accessibility audit (F1.G). |
| 5 | Data collection from the public, customers, and operations is highly manual and cumbersome to analyze due to tool and system constraints | Systems allow for more automated capture and analysis of data and information, which is used to inform decision-making and improve services | Process & Technology | Medium | <ul style="list-style-type: none"> Data & Analytics Service Planning Ops Management Finance | Build data agreement terms into service provider contracts (F5.D) and invest in new operational and enterprise solutions (F3.4) |
| 6 | Public engagement is generally limited to annual engagement on the Accessibility Plan and PICs; only ad hoc engagement with partners | Public and customer feedback will be gathered via several methods, such as PICs, ride-alongs, inspections, digital surveys, and targeted engagement | Process & Technology | Low | <ul style="list-style-type: none"> Customers All partners, including the AAC Service Planning team | Evaluate PICs (F4.A), engage AAC and TAC for targeted engagement ideas (F4.B), work with staff (F4.C), and hold exec roadshow (F5.G) |

Future state | Change impacts

A shift to driving functional teams' accountability for performance management processes and reporting is a major change

| # | Current State Description | Future State Description | Type of Change | Degree of Impact | Stakeholder Group Impacted | Related Recommendations and Actions to Support Transition |
|---|---|---|----------------|------------------|---|--|
| 7 | Performance management of 3 rd -party operators is largely responsive and there is minimal capacity to conduct real-time inspections; broader organizational and financial metrics are reported on in an ad hoc manner | 3 rd -party contractual agreements include well-defined service levels, KPIs and metrics, which are actively monitored and reported on by DRT. Organization-wide performance metrics are established, ever-present and enable timely reporting to stakeholders | Process | High | <ul style="list-style-type: none"> Operations Management team Financial Management team Field/Mobile Supervision teams | Build performance management resource capacity (F5.D), perform ride-along inspections (F1.D), and conduct vendor audits (F5.E). |
| 8 | DRT staff, contractors, customers, and the public receive information on changes in service offerings and routes largely via one-directional communications channels | DRT will take a fulsome approach to change management to support the DRT workforce in transitioning to the new model; marketing and branding efforts will be more concentrated | Process | Medium | <ul style="list-style-type: none"> All DRT teams, including contractors Comms team Durham Region HR | Hire a temp change mgmt. specialist (F2.F) to lead change, engagement, comms, and L&D efforts with support from the Region; Hire marketing/research specialist (F4.F) |
| 9 | Staff, partners, customers, and partners describe and define DRT services differently | All stakeholders have a strong, clear understanding of what DRTs two primary service offerings are: Scheduled service and Demand Responsive service. They also understand how the service works, who is intended to use it, and what they can expect from using it | Other | Low | <ul style="list-style-type: none"> All DRT teams, including contractors Comms team All partners Customers | Develop Service Delivery Guide (for internal use by DRT) and Customer Charter (internal/external) (F2.C), develop training materials (F2.G), launch in-person booking kiosks (F4.G), develop external education and promotional campaigns (F4.F) |

Future state model evaluation

Transit Evaluation Framework | Overview

Utilizing EY's holistic Transit Evaluation Framework approach to evaluate the future state service delivery model

Context and approach

- ▶ This framework was used to evaluate the benefits and drawbacks of a new future state model that recommends integrating service delivery and organizational structure for On Demand and Specialized services.
- ▶ This new approach will be assessed through customer, equity, service delivery, financial, economic, and environmental lenses
- ▶ Service delivery and operational decisions often have non-monetary considerations, which are reinforced by the priority design principles used to shape the future state model - customer-centric, equitable access, and strategic alignment - and therefore related accounts will be weighted more heavily in arriving at a final decision as to whether DRT should transition to the future state service delivery model for Demand Responsive transit
- ▶ The application of this framework produces conclusions for each evaluation account, which provides a more robust perspective to guide decision making by recognizing the many factors DRT must consider when making significant changes to their service

Overview of the six evaluation accounts

| Customer | Equity | Service Delivery | Financial | Economic | Environmental |
|---|---|--|---|--|--|
| Assesses the impact to customer service and resulting ridership, considering how the new model provides more opportunities for spontaneous travel in a manner tailored to the needs and expectations of customers | Assesses the impact on broader social policy goals and outcomes and considers to what degree service is AODA-compliant, safe, inclusive, and universally accessible for people of all backgrounds and abilities | Assesses the impact of the new service delivery model on DRT's operational performance, employees, processes, and flexibility to respond to future changes | Assesses the extent of estimated cost impacts from transitioning to the new service delivery model, potentially providing cost savings, generating new revenue, or allowing resources to be reallocated or reinvested | Assesses the impact of transitioning to a new service delivery model and anticipated economic growth and Regional prosperity of connecting more people to opportunities to work, learn, and play | Assesses the environmental impact of transitioning to a new service delivery model, considering how it is expected to impact the rate of resource use and associated emissions |

Transit Evaluation Framework | Results

Customer

Assesses the impact to customer service and resulting ridership, considering how the new model provides more opportunities for spontaneous travel in a manner tailored to the needs and expectations of customers.

Equity

Assesses the impact on broader social policy goals and outcomes and considers to what degree service is AODA-compliant, safe, inclusive, and universally accessible for people of all backgrounds and abilities.

Service Delivery

Assesses the impact of the new service delivery model on DRT's operational performance, employees, processes, and flexibility to respond to future changes.

FUTURE STATE MODEL CONSIDERATIONS

- ✓ Improved overall customer experience
- ✓ More streamlined trip planning
- ✓ Shorter wait times as a result of more responsive service
- ✓ Greater service coverage and consistency of service levels across the region
- ⚠ At first, a potential decrease in customer familiarity with the service
- ⚠ Changes to the service will require customers to take the time to educate themselves on the new service

ASSESSMENT: HIGH

- ✓ Provides transit for everyone in region regardless of geography and/or ability, including reduced wait times for many current Specialized users
- ✓ Cross-training operators and using accessible vehicles for all Demand Responsive trips will promote safety and accessibility for all passengers, including those with differing abilities, in compliance with the AODA*
- ✓ Greater resource allocation and reduced wait times for Specialized services for those with unconditional eligibility due to accessibility of On Demand for many users with temporary or conditional eligibility
- ⚠ Service changes will impact different users at varying degrees of severity, and understanding the changes might be more challenging for certain users

ASSESSMENT: HIGH

- ✓ Strengthening the regional brand identity under a "One DRT" service delivery model that will drive the organization to align around the customer
- ✓ More streamlined, nimble service model, in which operations are modernized around the customer and equitability, while staff are trained to work across all different user types
- ✓ Increased analytical capabilities that allow for greater customer insight to be driven, and ideally, operationalized
- ⚠ Potential for higher customer expectations for improved service delivery which may take longer to realize, or create

ASSESSMENT: HIGH

THE BOTTOM LINE

A Demand Responsive transit network 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 journeys, reduced wait times, and simplicity of trip planning.

Through the delivery of Demand Responsive transit services, users with different abilities will have greater access to transit and reduced wait times. Overall, all users will have more choice when it comes to where they are able to live, work and play.

A Demand Responsive transit services provider is more equipped to action on Regional objectives and improve service delivery, facilitating regional mobility on a larger, more integrated, and more equitable scale.

Transit Evaluation Framework | Results

Financial

Assesses the extent of estimated cost impacts from transitioning to the new service delivery model, potentially providing cost savings, generating new revenue, or allowing resources to be reallocated or reinvested.

Economic

Assesses the impact of transitioning to a new service delivery model and anticipated economic growth and Regional prosperity of connecting more people to opportunities to work, learn, and play.

Environmental

Assesses the environmental impact of transitioning to a new service delivery model, considering how it is expected to impact the rate of resource use and associated emissions.

FUTURE STATE MODEL CONSIDERATIONS

- ✓ Greater opportunity to reduce long term service delivery costs by combining On Demand and Specialized service
- ✓ Creates capacity to redirect effort to other priority needs while maintaining the quality of service for customers as required by the AODA
- ⚠ Cross-training employees (from customer service through to operators) will require continued investment in training and L&D
- ⚠ There may be extra integration costs involved in transitioning to this new service delivery model (internal resources, specialists)

ASSESSMENT: MEDIUM

- ✓ Potential for increased employment levels or more lucrative employment opportunities as a result of greater regional mobility
- ✓ Increased attractiveness of business investment in the region due to reach of transit services and ability for customers to reach the business, as well as employee attraction and retention
- ✓ Reduced infrastructure investment levels will be required to sustain a service level that reaches the entire region
- ⚠ Could require capital investment/divestiture over the long-term to meet regional needs as transit usage changes, including mode shifts and evolving customer needs

ASSESSMENT: MEDIUM

- ✓ Reduced Green House Gas (GHG) emissions per rider through more efficient use of service hours across the regional network
- ✓ Greater flexibility and ability to deploy vehicles across the network so vehicle capacity better matches demand
- ⚠ Having a larger service area will impact GHG emissions, although this may be offset by reduced single-occupancy vehicle usage and greater pooling for Specialized users
- ⚠ Users may begin to take trips that they previously would not have taken in any mode, increasing vehicle trips and emissions; however, the shift to electric vehicles is expected to minimize this risk longer term

ASSESSMENT: LOW

THE BOTTOM LINE

An optimized Demand Responsive transit service model will initially generate operational efficiencies and eventually provide cost savings, allowing for reinvestment in other priority areas of Durham Region Transit.

Demand Responsive transit services improve the connectivity and economic growth of the region by increasing access to employment opportunities, retaining talent, and enhancing the Region's investment profile.

A Demand Responsive transit service 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.

Transit Evaluation Framework | Financial analysis

An integrated Demand Responsive model provides better customer service without increasing the cost of service delivery

Overview

- ▶ Four scenarios have been modelled to provide a snapshot comparison of the current service delivery costs compared to different future state models
- ▶ Transition to Scenario 3 is recommended as the next step in evolving DRT's service offerings, which will provide improved service (e.g. current Specialized service customers will benefit from spontaneous trip booking currently only available to On Demand customers) and allow for operational improvements (i.e. related to contract management, controls, processes, communications, education, and technology) before any major changes are made to service mix
- ▶ As the service matures and evolves, there is potential to meet future growth in demand for integrated Demand Responsive services using additional contractors allowing some extent of Scenario 4 estimated total savings to be realized in the coming years

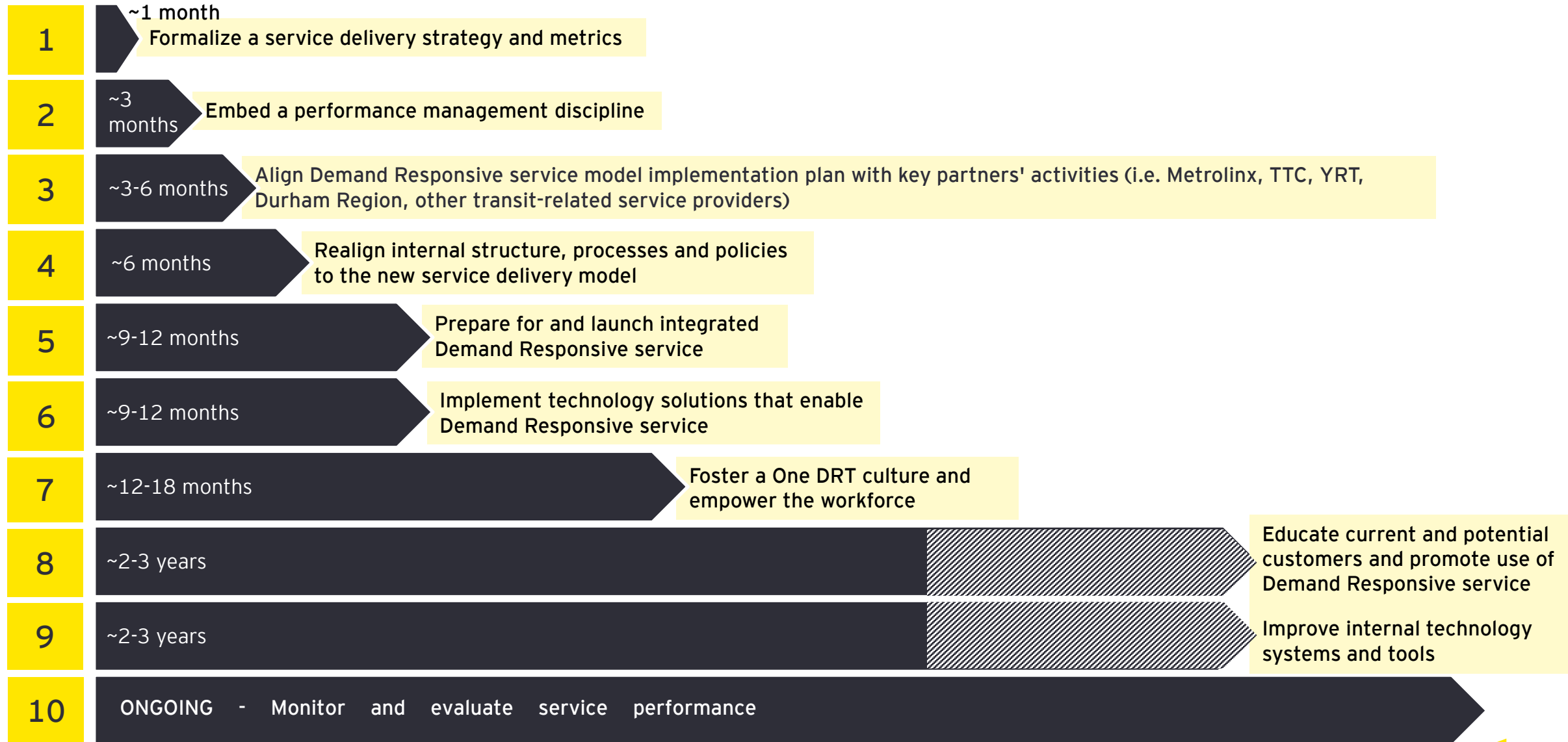
| | Scenario 1 Fully Internally Delivered <i>(ILLUSTRATIVE ONLY)</i> | Scenario 2 Current Service Delivery Model | Scenario 3 Future State Model Service Delivery Model (Initial transition) | Scenario 4 Contracted Out Model <i>(ILLUSTRATIVE ONLY)</i> |
|-----------------|--|---|---|---|
| | <i>All service brought in-house</i> | <i>Mix of internal and external service delivery</i> | <i>Integrated demand responsive service</i> | <i>All demand responsive service delivery is contracted out</i> |
| Methodology | Replaced contracted service (vehicle hours) with internal service | Calculated (annualized) vehicle hours, vehicle kms, and costs | Recognized benefits from delivering Specialized and On Demand service in an integrated way | Replaced internally delivered service (vehicle hours) with contracted service |
| Change (Hrs) | - ~40k Contracted Vehicle Hrs + ~40k Internal Vehicle Hrs | N/A | Efficiencies from more flexible fleet deployment, while providing improved customer service | - ~68k Internal Vehicle Hrs + ~68k Contracted Vehicle Hrs |
| Cost of Service | \$~10.6M | \$~8.3M | \$~8.3M | \$~3.2M |
| Total Savings | ~2.3M/Yr. (28% increase) | N/A | Operational efficiency savings | \$~5.1M/Yr. (62% savings) |
| | | | <i>Recommended (near term) transition</i> | <i>Possible (long term) evolution</i> |

Under the near-term recommended model, savings from operational efficiencies from a combined specialized and On Demand service is anticipated. As the service matures, DRT could save as much as ~ \$5.1M per year by using contractors to meet future growth in demand.

The path forward

Implementation roadmap | Overview

The following ten major roadmap activities are recommended and sequenced to reflect inherent dependencies



Implementation roadmap | Formalizing strategy and performance management

The following activities represent tactical actions that would support a smooth transition to the new service delivery model

| # | Activity and sub-activities | Milestone? | Key dependencies |
|----------|--|------------|--|
| 1 | Formalize a service delivery strategy and metrics | | |
| 1.1 | Socialize and solicit feedback on results of study with key stakeholders | - | Dependent on date of presentation to TEC. |
| 1.2 | Engage DRT leadership, staff, partners and the Region in defining customer service metrics | - | Dependent on availability of resources required to issue a survey or engage neighbouring municipal transit agencies. |
| 1.3 | Recognize stakeholders for providing feedback and input | - | - |
| 1.4 | Hold strategic planning session with leadership | - | - |
| 1.5 | One DRT vision, objectives and target outcomes developed | Yes | - |
| 1.6 | Announce renewed strategy, vision and value proposition | - | - |
| 2 | Embed a performance management discipline | | |
| 2.1 | Hire contract management / performance measurement specialist | - | - |
| 2.3 | Develop performance management framework to evaluate service delivery | - | - |
| 2.4 | Create operational, financial, and customer service Key Performance Indicators (KPIs) to measure performance | - | - |
| 2.5 | Establish performance metrics based on leadership and Council's needs and public expectations | - | - |
| 2.6 | Performance measurement framework and metrics established | Yes | - |
| 2.7 | Confirm KPIs and metrics link to higher order strategic action plan(s) | - | - |
| 2.8 | Build performance metrics into new contracts with 3 rd -party operators | - | Dependent on timing of release of ongoing RFP process. |

Implementation roadmap | Aligning internally and with partners

The following activities represent tactical actions that would support a smooth transition to the new service delivery model

| # | Activity and sub-activities | Milestone? | Key dependencies |
|----------|---|------------|---|
| 3 | Align Demand Responsive service model implementation plan with key partners' activities (i.e. Metrolinx, TTC, YRT, Durham Region, other transit-related service providers) | | |
| 3.1 | Communicate the new service delivery model and integrated operating structure with key partners | - | - |
| 3.2 | Review neighbouring service providers transit plans to determine alignment with new Demand Responsive model | - | - |
| 3.3 | Develop integrated plan based on input from partners who are part of the DRT ecosystem of services | Yes | - |
| 4 | Realign internal structure, processes and policies to the new service delivery model | | |
| 4.1 | Develop Service Delivery Guide (for internal use by DRT) and Customer Charter (internal/external) | Yes | - |
| 4.2 | Institutionalize performance management and metrics via regular communications | - | - |
| 4.3 | Engage and inform the union of proposed changes to organizational structure, rationale and mitigations | - | - |
| 4.4 | Implement organizational structure changes to improve customer service | Yes | - |
| 4.5 | Refresh/realign policies and processes that deal with customer interfaces, safety, or wellbeing | - | Dependent on level of information available on new app booking/scheduling solution based on stage of RFP process. |

Implementation roadmap | Preparing for Demand Responsive service launch

The following activities represent tactical actions that would support a smooth transition to the new service delivery model

| # | Activity and sub-activities | Milestone? | Key dependencies |
|----------|--|------------|---|
| 5 | Prepare for and launch integrated Demand Responsive service | | |
| 5.1 | Procure 3 rd -party vehicle services to deliver integrated Demand Responsive service | - | Dependent on establishment of performance framework and KPIs. This activity must be completed before March 2022, as that is when the contracts are available for renewal. |
| 5.2 | Engage the AAC and TAC for ideas and input on how to engage specific customer segments | - | - |
| 5.3 | Evaluate the ROI of past Public Information Centres (PICs), identifying opportunities to improve public engagement | - | - |
| 5.4 | Perform targeted engagement and hold PIC to inform how service delivery changes are rolled out | Yes | - |
| 5.5 | Analyze and segment customer data to inform a baseline customer experience pre-transition | - | - |
| 5.6 | Empower staff with survey tools to collect feedback from members pre-and post transition | - | - |
| 5.7 | Identify the highest use/problematic bus stops to prioritize capital improvements | - | - |
| 5.8 | Conduct a high-level accessibility audit of frequent trip generating locations to inform app business rules | - | - |
| 5.9 | Update Accessibility Plan and review with AAC and impacted community members | Yes | - |

Implementation roadmap | Implementing technology and empowering staff

The following activities represent tactical actions that would support a smooth transition to the new service delivery model

| # | Activity and sub-activities | Milestone? | Key dependencies |
|----------|---|------------|---|
| 6 | Implement technology solutions that enable Demand Responsive service | | |
| 6.1 | Gather business requirements for booking/dispatching app to enable procurement process | - | - |
| 6.2 | Prioritize requirements into "must-have", "should have", "could have", and "won't have" categories | - | Dependent on an in-depth review of requirements versus AODA and other legislated or program requirements. |
| 6.3 | Confirm "must-have" requirements can be delivered by proponent(s) and their solution(s) | - | - |
| 6.4 | Select vendor | Yes | |
| 6.5 | Negotiate contract, ensuring data, reporting, and service level/quality terms are included | - | |
| 6.6 | Implement new booking/dispatching app | Yes | This activity must be completed before March 2022, as that is when the contracts are available for renewal. |
| 6.7 | Continue to work with Metrolinx and PRESTO to confirm ability to support fare payments under the future state model | - | |
| 7 | Foster a One DRT culture and empower the workforce | | |
| 7.1 | Commit resources to develop change management plan and lead execution of activities | - | - |
| 7.2 | Develop One DRT Culture Blueprint describing desired behaviours under new model | - | - |
| 7.3 | Engage the Region's HR team for learning and development (L&D) support | - | - |

Implementation roadmap | Educating and promoting service adoption

The following activities represent tactical actions that would support a smooth transition to the new service delivery model

| # | Activity and sub-activities | Milestone? | Key dependencies |
|----------|--|------------|---|
| 7 | Foster a One DRT culture and empower the workforce (cont'd) | | |
| 7.4 | Create robust employee and partner engagement program, involving activities such as all-hands calls, townhalls, bulletins, charter release, etc. | - | - |
| 7.5 | Demonstrate measurable benefits of future state model to employees and job functions | - | - |
| 7.6 | Train and cross-train workforce on new app, processes, policies and customer service approach | - | Dependent on procurement of new app and development of processes/policies. |
| 8 | Educate current and potential customers and promote use of Demand Responsive service | | |
| 8.1 | Commit resources to marketing and research activities | - | - |
| 8.2 | Identify preferred communications channels through focus groups, surveys, etc. | - | - |
| 8.3 | Develop accessible educational "how-to" materials and collateral for current and potential customers | Yes | - |
| 8.4 | Develop and launch marketing campaigns to deliver key messages and guidance to users | - | - |
| 8.5 | Conduct user and consumer research to inform branding refresh | - | - |
| 8.6 | Undergo branding refresh | Yes | Dependent on funding available and branding requirements of 3 rd -party operators under contracts. |

Implementation roadmap | Improving internal tools and monitoring service

The following activities represent tactical actions that would support a smooth transition to the new service delivery model

| # | Activity and sub-activities | Milestone? | Key dependencies |
|-----------|---|------------|---|
| 9 | Improve internal technology systems and tools | | |
| 9.1 | Create an IT roadmap addressing enterprise and operational needs, accounting for any dependencies with external solutions | - | - |
| 9.2 | Procure a centralized workforce management tool and implement | Yes | - |
| 9.3 | Procure an advanced analytics tool and implement | Yes | - |
| 9.4 | Upgrade fleet radio system to VOIP system | Yes | - |
| 9.5 | Proceed with upgrading the CRM system required to enable an integrated approach to customer service | - | Dependent on Durham Region's stated priority and funds available to update the enterprise CRM, which DRT would utilize. |
| 10 | Monitor and evaluate service performance | | |
| 10.1 | Monitor and report on organizational, financial, and customer service KPIs | - | - |
| 10.2 | Conduct periodic vendor audits, as required and acceptable under contract terms | - | - |
| 10.3 | Conduct periodic 'ride-along' inspection processes along routes or within zones | - | - |
| 10.4 | Institute operator check-ins (pull-outs) for windows, if deemed feasible | - | - |

Conclusion | Moving to a Demand Responsive model

The results of the evaluation of the future state model supports DRT shifting to a more integrated Demand Responsive service delivery model to better serve On Demand and Specialized customers. With a priority focus on the customer, equity and service delivery accounts a strong case can be made for proceeding.

Customer

Demand Responsive transit services network 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 journeys, reduced wait times and simplicity of trip planning.

Assessment: HIGH

Financial

An optimized Demand Responsive transit service model will initially generate operational efficiencies and eventually provide cost savings, allowing for reinvestment in other priority areas of Durham Region Transit.

Assessment: MEDIUM

Equity

Through the delivery of Demand Responsive transit services, users with different abilities will have greater access to transit and reduced wait times. Overall, all users will have more choice over where they are able to live, work and play.

Assessment: HIGH

Economic

Demand Responsive transit services improve the connectivity and economic growth of the region by increasing access to employment opportunities, retaining talent, and enhancing the Region's investment profile.

Assessment: MEDIUM

Service Delivery

A Demand Responsive transit services provider is more equipped to action on Regional objectives and improve service delivery, facilitating regional mobility on a larger, more integrated, and more equitable scale.

Assessment: HIGH

Environmental

A Demand Responsive transit service 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.

Assessment: LOW

In assessing the future state model through these six accounts, the results of the evaluation provide clear evidence in support of DRT proceeding to adopt the future state model and progress recommendations to transition to an Integrated Demand Responsive Service.

Conclusion | Demand Responsive transit study

- ▶ The current state assessment identified five key areas of opportunity for improvement related to service delivery and operations, culture and collaboration, technology and analytics, external communications and education, and strategy and key partnerships
- ▶ These findings coupled with an analysis of regional demographics, current On Demand ridership metrics, and equity considerations helped to identify potential customer pain-points experienced by current customers
- ▶ Informed by these insights and a review of Demand Responsive service approaches in practice at comparator transit agencies, future state recommendations, actions and a service delivery model was developed based on a set of principles that prioritized customer-centricity, equitable access to service, and overall strategic alignment to DRT and Durham Region goals
- ▶ In applying a customer lens to the recommendations, the future state service delivery model is expected to provide for an improved customer experience based on an analysis of how various customer journeys would be impacted
- ▶ Furthermore, future state recommendations were reviewed for AODA compliance and alignment with Durham Region's Accessibility Policy and the multi-year Accessibility Plan. This review confirmed that DRT's practices related to the application of eligibility categories/guidelines, trip booking, use of all vehicles in providing origin to destination services, and mandatory use of attendants (support persons) when customers are unable to use service independently are compliant with the Act. Looking forward, the new future state model should be reviewed regularly as service grows and customer needs evolve.
- ▶ To provide an additional level of analysis, future state recommendations were closely examined from to identify a list of potential change impacts to both the organization and customers; where notable impacts were identified, a mitigation approach and actions were documented
- ▶ The proposed future state model was effectively tested and refined with input from DRT and Durham Region staff and leadership, as well as evaluated against a multi-account framework to determine its benefits, implications, and viability, which present a compelling case for DRT to proceed with implementing an integrated Demand Responsive service and consider the outputs of financial modelling
- ▶ Finally, a roadmap of sequenced implementation activities has been developed to provided guidance on how recommendations can be tactically actioned, what the key milestones in that roadmap are, and dependencies that will inform their timing

The results of this study confirm that DRT should move forward with implementing an AODA compliant integrated Demand Responsive service that is more spontaneous, equitable, reliable, and customer-focused.

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