Briefing Note

Conventional Transit Service Standards

Background
The TTC strives to make public transit the simplest, fastest and most cost-efficient way to move around in Toronto. The Board-approved service standards lay out a framework for achieving these goals and are applied at every level of service planning the TTC undertakes. The TTC has two major objectives in planning transit service:

1. To maximize mobility within the City of Toronto by ensuring that public transit is provided in the right places, at the right times, to satisfy the changing travel needs within the community.
2. To ensure that all transit services operated by the TTC are as efficient and cost-effective as possible and, therefore, affordable to both TTC customers and citizens.

The service standards provide a systematic and objective means of planning, monitoring, adjusting and evaluating conventional transit services throughout the City of Toronto. The standards are:

- grounded in business logic and principles;
- transparent, quantifiable and reproducible; and
- applied consistently, fairly and equally.

Discussion
The service standards include standards and targets to plan, monitor, adjust, and evaluate transit service. They are generally divided into three broad categories discussed below:

<u>Network design standards</u>
Network design standards are system-wide standards that apply to the transit network, and include:

- Key principles of system structure and design: Establishes system-wide principles that are critical in building an effective and efficient transit network. *Example standard - surface routes will conform or be oriented to the grid system of major arterial roads*.

- Coverage and access: Addresses the accessibility of transit from a city-wide, network level by targeting a maximum walking distance that a customer will have to travel to reach a transit station or stop. *Example standard - 90% of Toronto's population and employment is within 400 metres of the All-Day, Every-Day network during regular daytime and evening hours*.

- Surface stop spacing: Establishes stop spacing guidelines for surface routes to strike a balance between the competing objectives of passenger convenience, operating efficiency, safety and community impacts. *Example standard - the stop spacing range for streetcars is 300 – 400 metres*.

<u>Quality of service standards</u>
The quality of service standards set out specific criteria for the quality of service that customers can expect and includes:

- Span of service and service levels: Determines the operating hours and frequency of transit service for customers. The span of service and service levels vary for each service classification. *Example standard - during the morning peak period on weekdays, the minimum service level for local bus routes is every 30 minutes or better*.

- Vehicle crowding: Determines the appropriate level of service based on the maximum load point, in the busiest direction, along a route during the busiest 60 minutes of each period of service. *Example standard - during off-peak periods, bus service levels are based on the vehicle crowding standards of 35 and 46 people for 12-metre and 18-metre buses, respectively.*

- Service reliability: Standards focused on on-time performance and reliability of transit service to provide customers with a predictable and consistent travel experience. *Example standard - surface transit vehicles must leave their origin timepoint between 1 minute early and 5 minutes late to be considered as having an on-time departure*.

Performance targets

The service standards establish performance targets to set desired and achievable goals for transit services. The overall effectiveness and efficiency of transit service are guided by:

- Service productivity: Performance targets that measure the effectiveness of the TTC's resources for each service classification and operating period. *Example target - during peak periods, streetcar routes should target, as a minimum, an average of 50 boardings per revenue service hour.*

- Economic performance: Measures that look to ensure all transit services operated by the TTC are as efficient and cost-effective as possible and, for that reason, affordable to both TTC customers and citizens. *Example target - net cost per passenger per route, which reflects the amount of subsidy the TTC requires per boarding passengers, over and above fare revenue collected, to operate a given route.*

In addition to the above standards and targets, the service standards specify the procedure for changing service levels, routing alignments and when new services are warranted.

TTC Service Standards document can be reviewed here.

Attachment

Presentation: Overview of TTC Service Standards

Overview of TTC Service Standards

July 4, 2025

What are Service Standards?

Two major goals:

Maximize mobility: provide service in the right places, at the right times

Efficient and cost effective: ensure that service is affordable to TTC customers and citizens

Board-approved Service Standards are a framework for achieving these goals and are applied at every level of service planning

What are Service Standards?

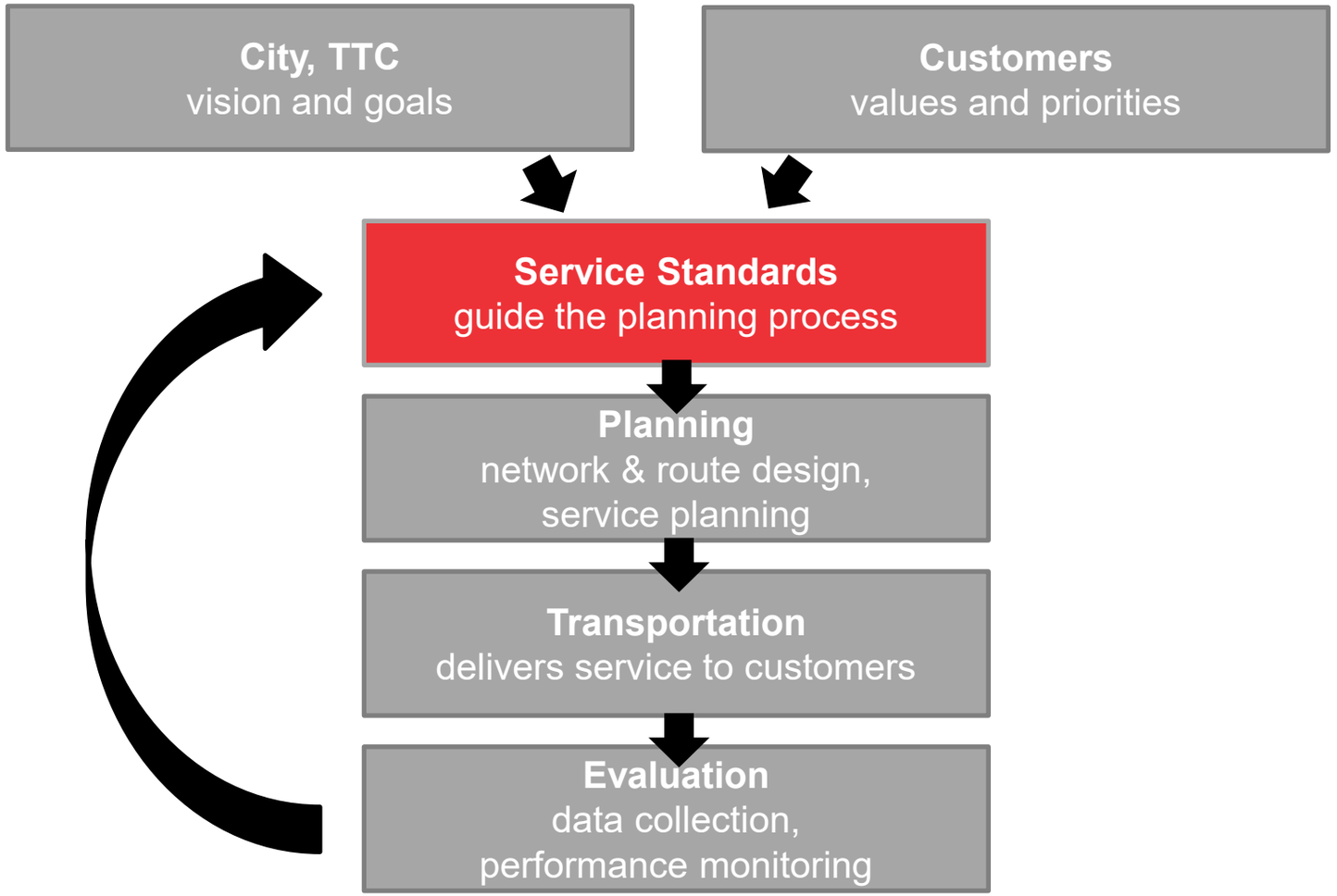
Standards, decision rules, processes

- objective, transparent, quantifiable, reproducible
- grounded in business logic, principles

Service Standards address:

- **Network design** – how routes are designed and where they go
- **Service quality** – when service is provided and how frequent and reliable it is
- **Performance targets** - service productivity and effectiveness
- **Service changes and warrants** – how service is modified and when new services are introduced
- **Service evaluation** – how service is monitored and evaluated on an on-going basis

How Service Standards are developed and applied



Network Design Standards

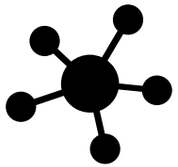
Establish key principles of system structure and design

Transit service classifications to outline the types of service TTC provides

Key Principles of System Structure and Design – accessibility, grid network, network connectivity, directness and avoiding duplication

Coverage and access to serve population and employment areas

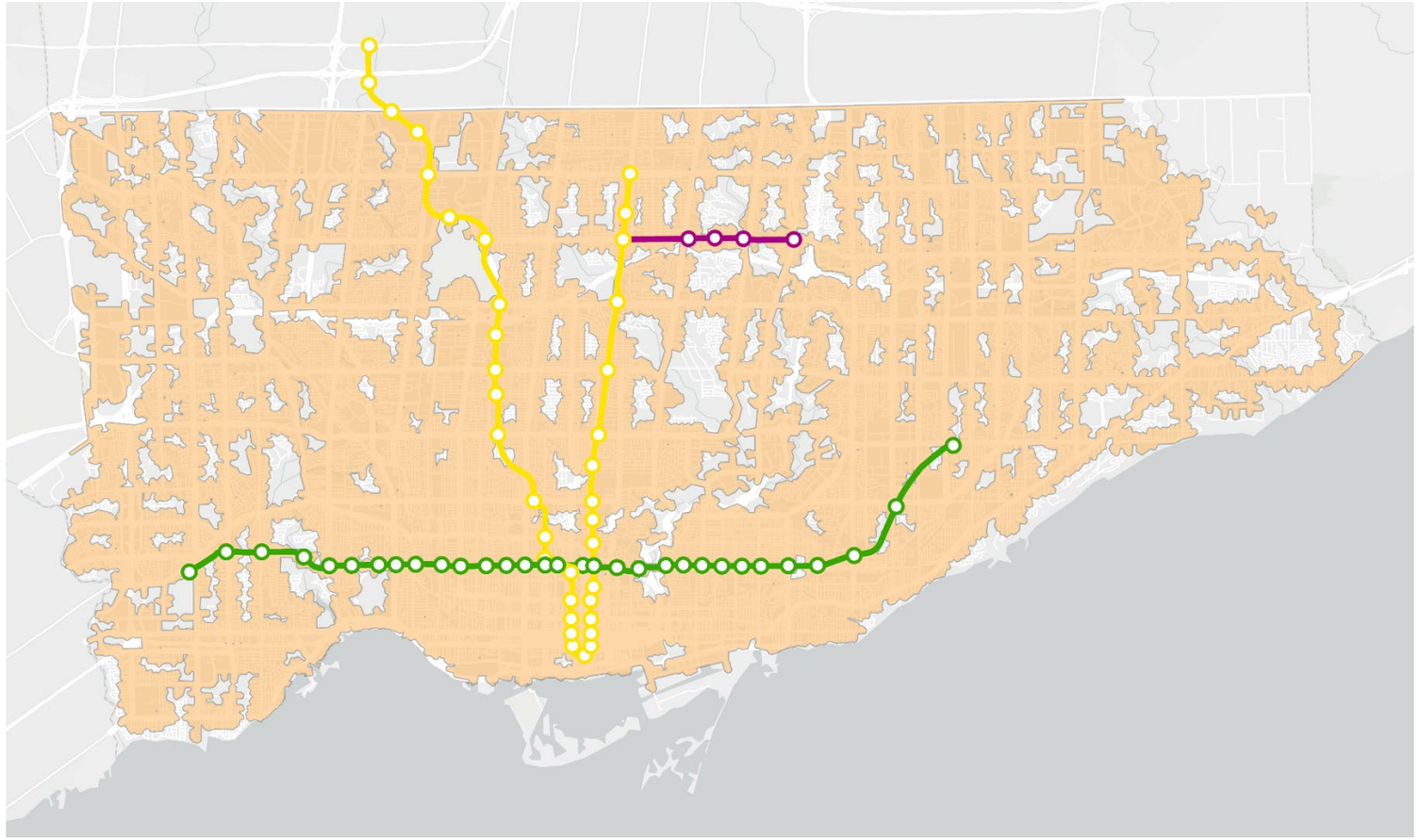
Surface Stop spacing for balancing passenger convenience, operating efficiency, and other impacts



Early / Late Connections to connect first and last rapid transit and surface trips

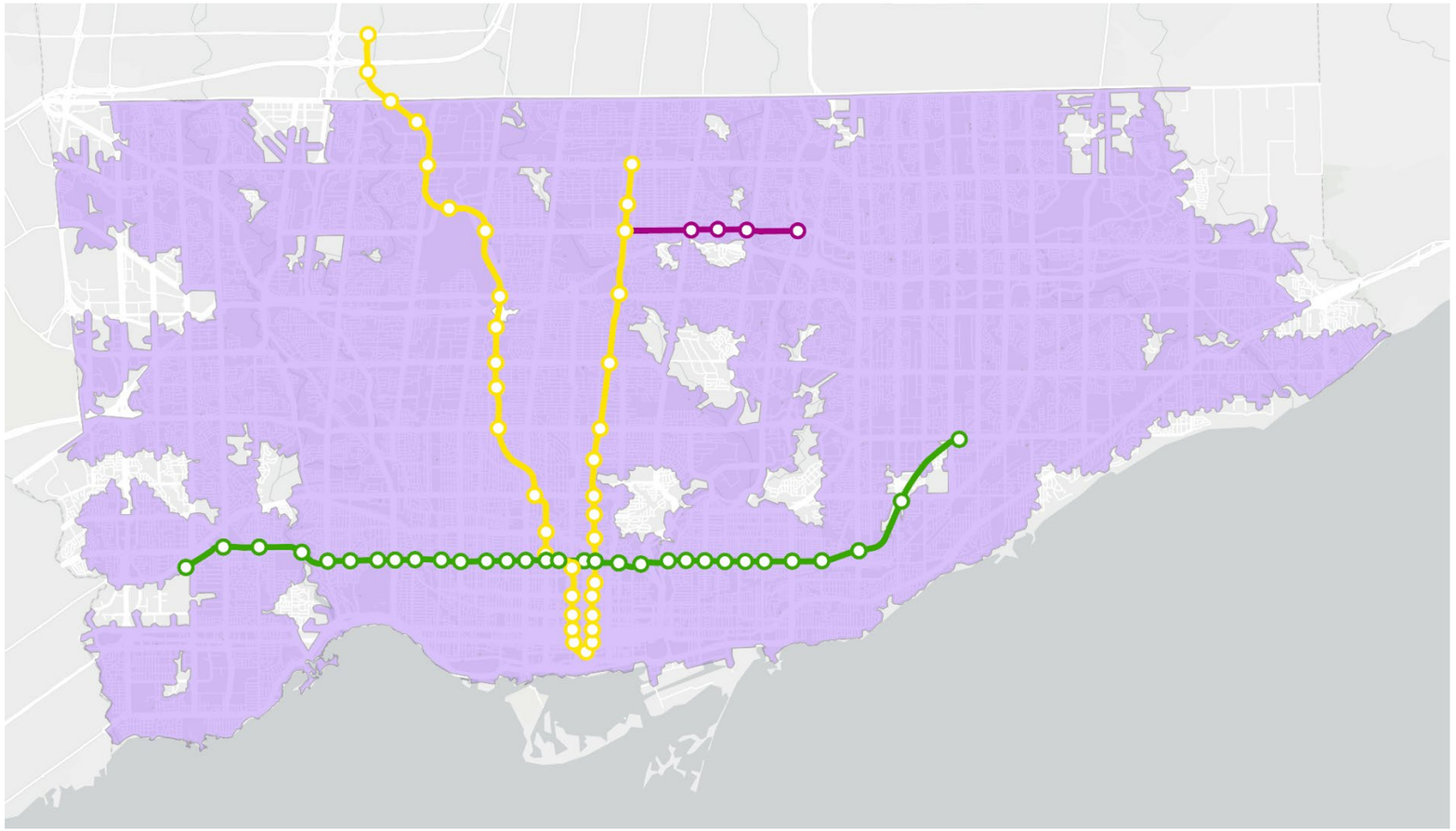
Network Design Standards – Coverage and Access

During the daytime and evening, 90% of Toronto's population and employment is within 400 metres of the All-Day, Every-Day network



Network Design Standards – Coverage and Access

The overnight network is designed so 95% of the population and employment is within a 1,250-metre walk (15 minutes) of transit service



Quality of Service Standards

Sets out criteria for the quality of service customers can expect

Span of Service outlines the minimum hours of operation by service type

Service Levels outline the minimum frequency by service type

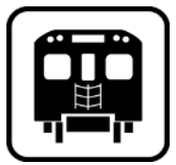
Crowding establishes peak and off-peak crowding standards by vehicle

Reliability to ensure convenience, comfort, predictability and dependability

Quality of Service Standards - Crowding Standard

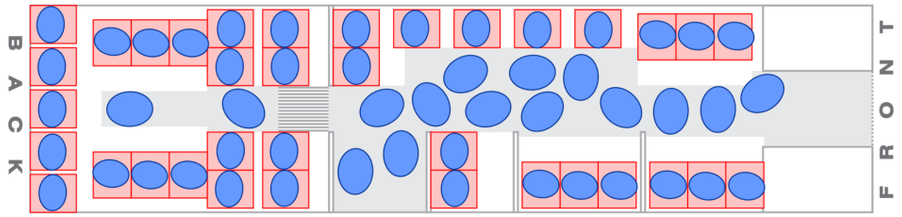
On-board crowding standards are used to:

- Identify overcrowding on routes > increase service
- Identify surplus capacity on routes > service reduction when required

Transit Service Classification / Vehicle Type		Peak Periods	Off-peak periods
Bus (local, express)			
	12-metre low-floor bus	51	35
	18-metre articulated low-floor bus	77	46
Streetcar			
	Articulated 30-metre low-floor streetcar	130	70
Rapid transit			
	Train (6 cars, TR-series)	1100	540
	Train (6 cars, T-series)	1000	500
	Train (4 cars, TR-series)	740	370

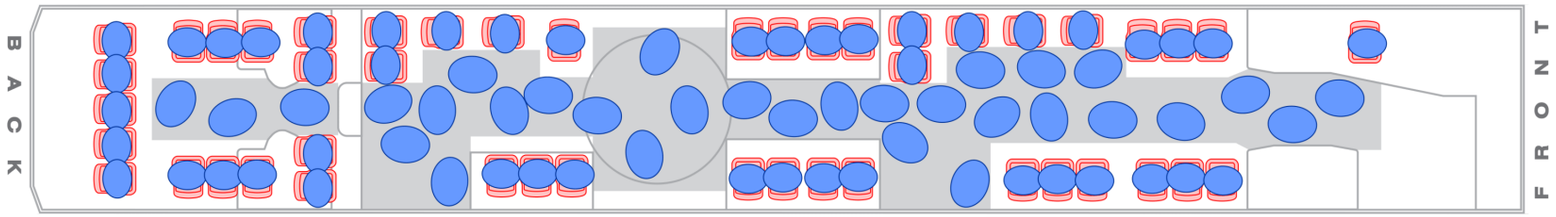
Quality of Service Standards - Crowding Standard

Regular 12 metre Bus



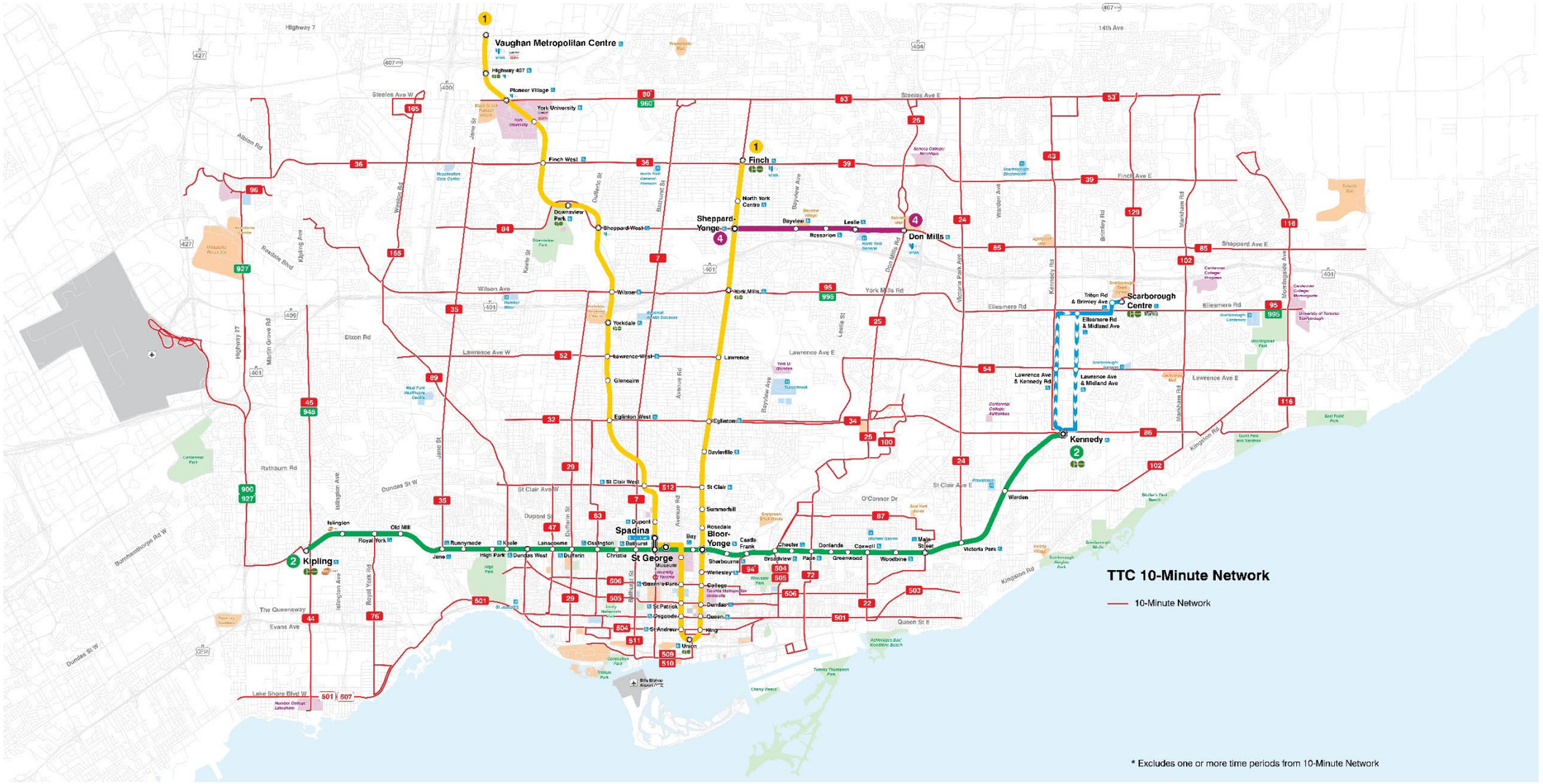
Typical Crowding During Peak Periods
51 People

Articulated 18 metre Bus



Typical Crowding During Peak Periods
77 People

Quality of Service Standards – Frequent Network



Quality of Service Standards – Example

33 Forest Hill

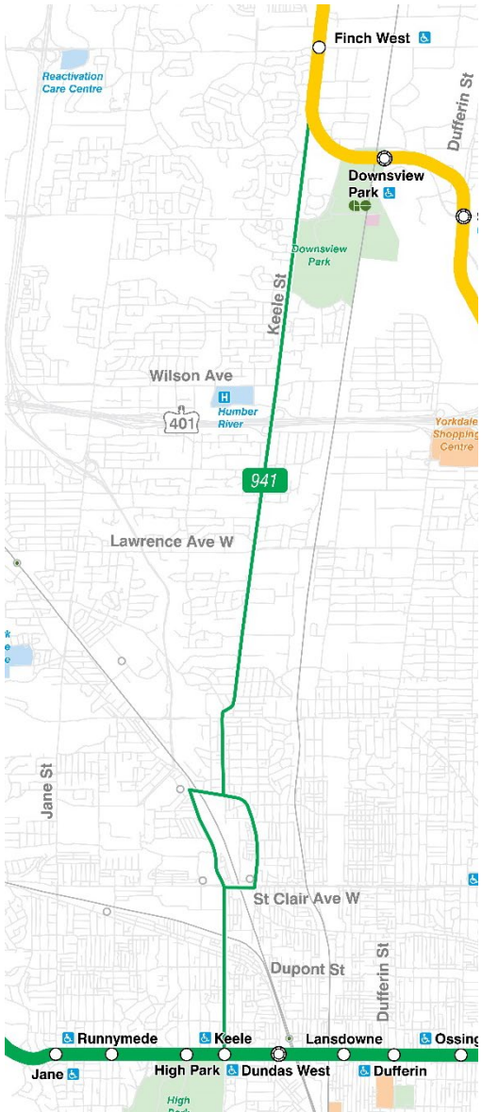
Span of Service
Bus – Local
> 6:00 am to 1:00 am, on weekdays and Saturdays
> 8:00 am to 1:00 am on Sundays

Service Level
Minimum 30-minute frequency
> 18’00’’ – 30’00’’

941 Keele Express

Span of Service
Express Bus – Tier 2
> 6:00 am to 9:00 am and 3:00 pm to 7:00 am weekdays

Service Level
Minimum 15-minute frequency
> 15’00’’



Quality of Service Standards – Reliability Standard

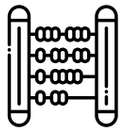
- On-time performance is affected by many variables, including **traffic congestion, traffic incidents, construction related delays, weather, etc.**
- Standards vary by **service type** and **frequency of service** and provide the tools for evaluating individual TTC routes
- Passengers using **high-frequency services** are generally more interested in **regular, even headways** than in strict adherence to published timetables, whereas passengers on **less frequent services** expect arrivals/departures to occur **as published**

Performance Targets

Set desired and achievable goals for transit services

Boarding per Service Hour measures the effectiveness of the use of resources

Net Cost per Passenger outlines the amount of subsidy per boarding passengers, over and above fare revenue collected

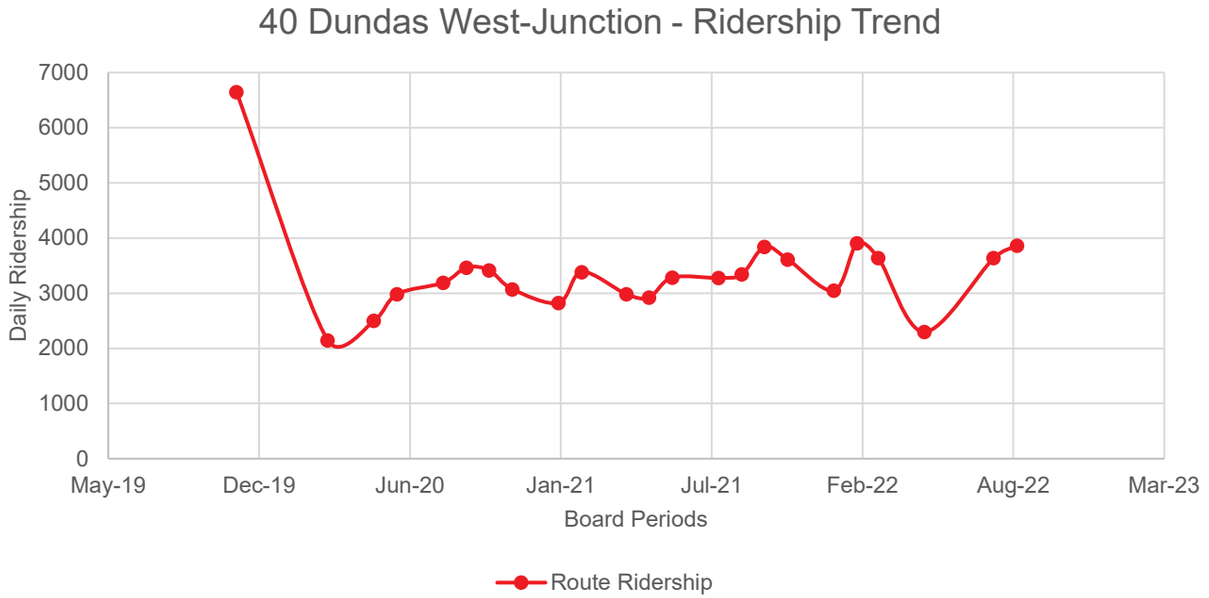


Change in Ridership per Net Dollar Spent ensures service changes achieve desirable results

Performance Targets – Example

40 Junction-Dundas West

- Extended in October 2019
- Underwent area study evaluation part of the Junction Area study
- Met TTC standard for boardings per service hour and formally added to the TTC network



	40 Dundas West-Junction boardings per service hour (equity weighting)	Standard for boardings per service hour
Weekday Peak	43	20
Weekday Off-Peak	30	10
Saturday	36	10
Sunday	28	10

Service Change & Warrant Guidelines

Procedure for changing service levels, routing alignments and when new services are warranted

Service Change Guidelines:

1. Comparison of Effects on Customers
2. Service Level Change
3. Public and Community Partner Consultation

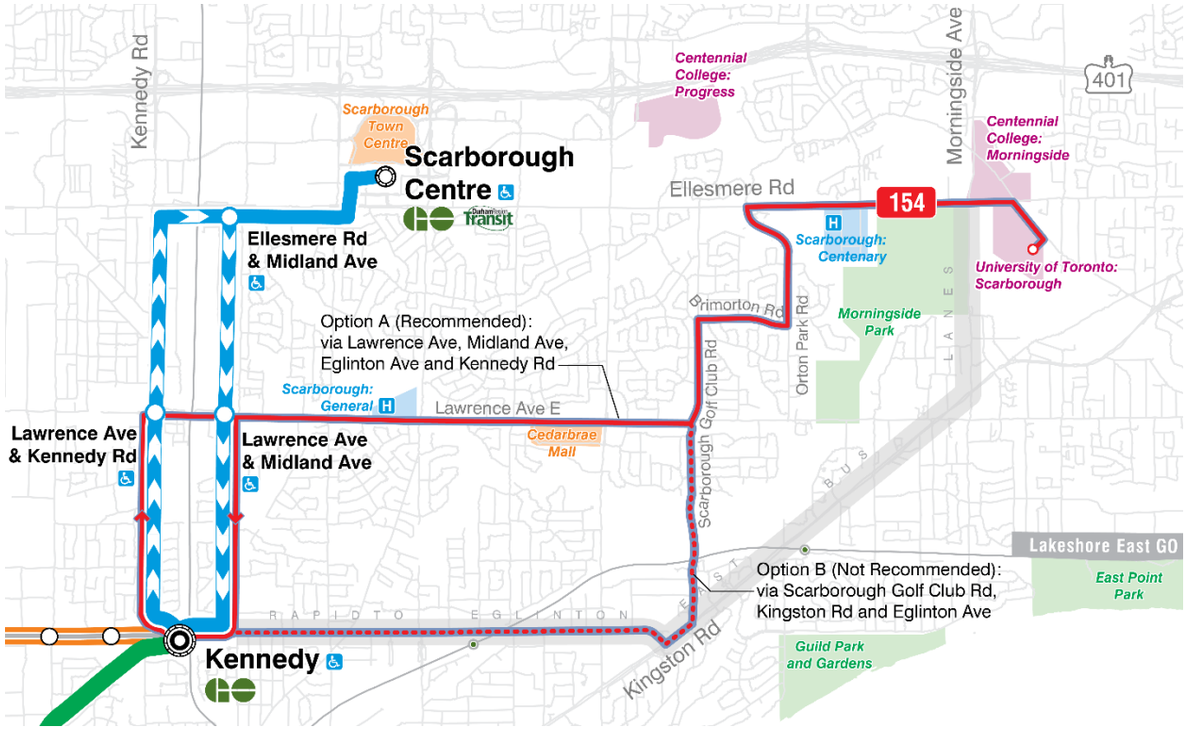
Express Bus and Community Bus Warrants:

1. Tier 2 Express Service
2. Tier 1 Express Service
3. Community Bus Service

Service Change & Warrant Guidelines – Example

154 Curran Hall

- New route recommended in 2024 ASP
- Projected 260 new customer trips to be made daily
- Reduced weighted travel times for customers by 7,430 minutes



Service Evaluation

The ways TTC service is evaluated to ensure resources are being used effectively

Annual Performance Review measures and evaluates routes on a year-to-year basis

Ridership Monitoring and Service Adjustments enables near-continuous adjustments to match changing customer needs

Post-implementation Review to measure efficacy of new services

Review of Customer Feedback to understand suggestions and complaints from customers

Route Management based on day-to-day observations of operating staff and data

Service Evaluation - Example

Fall 2024: Monday-Friday Boardings/Revenue Vehicle Hour										
Route #	Route Name	Route Classification	Construction	06-09 Morning	09-15 Midday	15-19 Afternoon	19-22 Early eve	22-01 Late eve	Total all-day	Peaks only
900	Airport Express	Bus - Tier 1 Express		60	61	59	54	33	54	59
902	Markham Rd Express	Bus - Tier 2 Express		62	74	95			78	81
903	Kennedy-Scarborough Centre Express	Bus - Tier 1 Express		69	73	125	72		84	98
904	Sheppard-Kennedy Express	Bus - Tier 1 Express		54	62	93	64	36	65	79
905	Eglinton East Express	Bus - Tier 1 Express		59	69	91	59		71	79
924	Victoria Park Express	Bus - Tier 2 Express		74		87			82	82
925	Don Mills Express	Bus - Tier 1 Express	Yes	79	84	88	66		81	84
927	Highway 27 Express	Bus - Tier 1 Express		68	77	76	70	56	72	72
929	Dufferin Express	Bus - Tier 1 Express		100	90	127	95		103	117
935	Jane Express	Bus - Tier 1 Express	Yes	86	77	94	86	0	84	90
937	Islington Express	Bus - Tier 2 Express		67		64			65	65
938	Highland Creek Express	Bus - Tier 2 Express		47		69			59	59
939	Finch Express	Bus - Tier 1 Express		61	77	105	78	46	77	81
941	Keele Express	Bus - Tier 2 Express		69		73			72	72
944	Kipling South Express	Bus - Tier 2 Express		84	68	79			75	81
945	Kipling Express	Bus - Tier 2 Express		89		98			94	94
952	Lawrence West Express	Bus - Tier 2 Express		50		59			55	55
953	Steeles East Express	Bus - Tier 2 Express		43		49			46	46
954	Lawrence East Express	Bus - Tier 2 Express		56		77			68	68
960	Steeles West Express	Bus - Tier 1 Express		70	69	86	96		77	79
968	Warden Express	Bus - Tier 2 Express		61		75			68	68
984	Sheppard West Express	Bus - Tier 2 Express		72	96	90	96		87	84
985	Sheppard East Express	Bus - Tier 2 Express		76		91			85	85
986	Scarborough Express	Bus - Tier 2 Express		49		64			55	55
989	Weston Express	Bus - Tier 2 Express		69		75			72	72
995	York Mills Express	Bus - Tier 2 Express		71	63	88			73	82
996	Wilson Express	Bus - Tier 2 Express		52	63	91			68	72

When are Service Standards reviewed?

- Service Standards are regularly reviewed as part of the Annual Service Plan process
- A wholesale review occurred in 2015, minor changes occurred in 2020, 2023 and 2024
- Jurisdictional review shows we are in line with our peers in North America
- All changes require Board approval

Conclusion

- Service Standards provide a systematic and objective means of planning, monitoring, adjusting and evaluating service
- Balancing customer expectations and budget constraints is a difficult challenge
- Existing services must be monitored, measured, and modified continuously to match service levels to demand, address community needs and respond to opportunities for new or improved services
- Existing Service Standards have a goal of continuous improvement over time
- Adjusting different Standards will have different levels of impact on customers, vehicle, fleet and maintenance requirements