# Toronto Transit Commission CEO's Report

April 2020



Performance scorecard	2
CEO's commentary	9
COVID-19 dashboard	11
Performance updates:	
Safety and security	15
Ridership	21
Customer experience	25



# TTC performance scorecard – April 2020

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
Safety and security							
Lost-time injuries	Injuries per 100 employees	Q4 2019	5.37	4.77*	$\bigotimes$	$\bigotimes$	15
Customer injury incidents	Injury incidents per 1M boardings	Q4 2019	1.24	1.22*	⊗	•	17
Offences against customers	Offences per 1M boardings	Q4 2019	0.68	1.00		0	19
Offences against staff	Offences per 100 employees	Q4 2019	4.48	4.18	×	×	20
Ridership							
Ridership	Monthly ridership	Feb 2020	44.3M	44.3M	⊗	$\bigotimes$	21
Ridership	Year-to-date ridership	2020 YTD (to Feb)	85.0M	85.1M	⊗	×	21
Ongoing trend indicators: *Represents four-quarter average o	rourable	e <b>N</b> ot applica	able				_

Key performance indica	tor Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
PRESTO ridership	Monthly ridership	Feb 2020	36.5M	36.1M			23
PRESTO ridership	Year-to-date ridership	2020 YTD (to Feb)	76.5M	75.6M			23
Wheel-Trans riders	hip Monthly ridership	Feb 2020	304.5K	334.4K			24
Wheel-Trans riders	hip Year-to-date ridership	2020 YTD (to Feb)	645.8K	636.5K			24
Customer experience	Customer experience						
Customer satisfaction	on Customer satisfaction sco	re Q4 2019	81%	80%	Ø		25
Subway services							
1 On-time perform Line 1	nance Scheduled headway performance at end termin	hals Feb 2020	90.4%	90%		•	26
On-time perform Line 2	nance Scheduled headway performance at end termir	hals Feb 2020	93.5%	90%	<b>S</b>	<b>S</b>	27
3 On-time perform Line 3	nance Scheduled headway performance at end termin	hals Feb 2020	98.4%	90%	<b>S</b>	<b>I</b>	28
Ongoing trend indicators: <ul> <li>Favourable</li> <li>Mixed</li> <li>Unfavourable</li> <li>Not applicable</li> <li>*Represents four-quarter average of actual results</li> </ul>							

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
On-time performance Line 4	Scheduled headway performance at end terminals	Feb 2020	98.6%	90%			29
1 Capacity Line 1	Trains-per-hour during peak	Feb 2020	96.5%	96%			30
1 Capacity Bloor Station	Trains-per-hour (8 a.m. to 9 a.m.)	Feb 2020	92.2%	96%	$\bigotimes$		30
Capacity St George Station	Trains-per-hour (8 a.m. to 9 a.m.)	Feb 2020	100.4%	96%	<b>S</b>	ø	30
2 Capacity Line 2	Trains-per-hour during peak	Feb 2020	98.0%	96%	ø	ø	31
3 Capacity Line 3	Trains-per-hour during peak	Feb 2020	99.1%	98%		S	32
Capacity Line 4	Trains-per-hour during peak	Feb 2020	100%	98%		S	33
Amount of service	Average weekly service hours delivered	Feb 2020	10,998 h	11,131 h	0		34
Vehicle reliability T1 trains	Mean distance between failures	Feb 2020	772,790 km	300,000 km			35
Vehicle reliability TR trains	Mean distance between failures	Feb 2020	506,883 km	600,000 km	$\bigotimes$	0	36
Ongoing trend indicators: VFav	vourable 😑 Mixed 😣 Unfavourable	Not applica	able				

\*Represents four-quarter average of actual results

Key	performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
	Service availability	Daily average service delivered	Feb 2020	100%	100%	<b>~</b>		37
	Subway cleanliness	Audit score	Q4 2019	90.1%	90%	Ø		38
	Streetcar services							
	On-time performance	On-time departures from end terminals	Feb 2020	75.3%	90%	$\bigotimes$		39
	Short turns	Monthly total short turns	Feb 2020	94	1,074	<b>S</b>		40
	Amount of service	Average weekly service hours	Feb 2020	18,356 h	19,121 h	$\bigotimes$	0	41
	Vehicle reliability LFLRV (Low-Floor Light Rail Vehicle) – Contractual	Mean distance between failures	Feb 2020	38,818 km	35,000 km			42
	Vehicle reliability LFLRV (Low-Floor Light Rail Vehicle) – Operational	Mean distance between failures	Feb 2020	16,636 km	TBD			42
	Road calls and change offs	Average daily road calls or vehicle change offs	Feb 2020	5	2.4	$\bigotimes$		44
	Service availability	Daily number of vehicles available for service	Feb 2020	100%	100%	<b>S</b>		45
(	Ongoing trend indicators: <ul> <li>Favourable</li> <li>Mixed</li> <li>Unfavourable</li> <li>Not applicable</li> <li>*Represents four-quarter average of actual results</li> </ul>							

Key	performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
	Streetcar cleanliness	Audit score	Q4 2019	80.7%	90%	×	$\bigotimes$	46
	Bus services							
	On-time performance	On-time departures from end terminals	Feb 2020	85.8%	90%	×		47
	Short turns	Monthly total short turns	Feb 2020	72	1,590			48
	Amount of service	Average weekly service hours	Feb 2020	145,780 h	151,606 h	×	$\bigotimes$	49
	Vehicle reliability	Mean distance between failures	Feb 2020	20,000 km	12,000 km			50
	Road calls and change offs	Average daily road calls or vehicle change offs	Feb 2020	22	24			52
	Service availability	Daily average service delivered	Feb 2019	101.0%	100%	<b>S</b>	<b>S</b>	53
	Bus cleanliness	Audit score	Q4 2019	88.1%	90%	×	0	54
<u></u>	Wheel-Trans services							
(	Dngoing trend indicators: V Fav	vourable	Not applica	able				

Key	performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
	On-time performance	% within 20 minutes of schedule	Feb 2020	93.7%	90%	ø	ø	55
	Vehicle reliability	Mean distance between failures	Feb 2020	17,469 km	12,000 km	Ø	0	56
	Accommodation rate	Percentage of requested trips completed	Feb 2020	99.9%	99%	<b>S</b>	Ø	57
	Average wait time	Average amount of time a customer waits before call is answered	Feb 2020	4.6 min	15 min		0	58
i	Station services							
	Station cleanliness	Audit score	Q4 2019	74.9%	75%	$\bigotimes$	0	59
	Elevator availability	Per cent available	Feb 2020	96.87%	98%	×	$\bigotimes$	60
	Escalator availability	Per cent available	Feb 2020	96.3%	97%	$\bigotimes$	0	61
	Fare gates equipped with PRESTO	Per cent available	Jan 2020	99.1%	99.5%	$\bigotimes$		62
	PRESTO fare card readers	Per cent available	Feb 2020	99.38%	99.99%	$\bigotimes$		64
Ongoing trend indicators: Savourable Sixed Onfavourable Not applicable *Represents four-quarter average of actual results								

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
PRESTO Fare Vending Machines	Per cent available	Feb 2020	98.48%	95.00%			65
PRESTO Self-Serve Reload Machines	Per cent available	Feb 2020	99.74%	95.00%	S		66
PRESTO Fares and Transfer Machines	Per cent available	Feb 2020	99.32%	95.00%	<b>S</b>	0	67



8

# **CEO's commentary**

In my March commentary, I noted that from the outset of the pandemic we have been embedded in the City's Emergency Operations Centre and reporting daily on a number of key metrics. You will find a summary of these metrics beginning on page 11 of this report. They paint a stark picture of the impact this pandemic has had on our service and operation.

On April 23, the TTC came to a very difficult decision in announcing cost-saving measures designed to maintain critically important transit service to Torontonians during the COVID-19 crisis.

After reviewing all other possible options, we informed our workforce that it was our intention to temporarily lay-off approximately 1,200 employees.

I come from an operations background and having to do this to dedicated and hard-working employees is the hardest decision of my career.

The TTC will take care of our coworkers impacted by this as best we can during this difficult time, and we look forward to everyone coming back once ridership has returned to pre-pandemic levels.

Like other businesses and organizations across the public sector, the TTC is not immune from the financial challenges caused by the COVID-19 crisis.

At the TTC, our highest priority is the safety and well-being of our customers and employees.

We continue to receive the most up-to-date reports and follow the guidance from Toronto Public Health to make sure the TTC remains resilient and prepared to serve our customers. I'd like to take this opportunity to thank the TTC workforce for their unrelenting commitment to the wellbeing of our customers, and for the care and support our workers show each other day in and day out. We're living and working in an incredibly difficult time, but I'm confident that we will all get through this, together.

So many people, even with a deep decline in our ridership, rely on the TTC to get them from A to B. We continue to adjust service levels and redeploy vehicles to routes where we know essential workers are making essential trips. More and more of our vehicles now operate with an additional onboard barrier to further enable physical distancing.

I'd like to publicly thank our skilled tradespeople in our shops who have manufactured and installed these items in all of our buses in short order. They are also manufacturing cloth masks for our frontline employees.

TTC staff have been very diligent in practicing physical distancing across our property — in divisions, garages and offices. We know that it's incredibly important that we all continue to be personally vigilant, at work and at home, and keep doing those basic things that are preventing the spread of this virus:

- Wash your hands frequently with soap and water or use an alcohol-based hand sanitizer.
- Avoid touching your eyes, nose and mouth.
- Sneeze or cough into your sleeve or arm.
- Stay home if you're not feeling well.

We continue to incorporate other measures into our operations, such as deep-cleaning of our vehicles, rear-door boarding and extensive signage in our vehicles and stations to reinforce best practices as advised by Toronto Public Health and our own safety experts.

Tuesday, April 28 was the National Day of Mourning. On this day, the TTC lowered flags to half mast as a tribute to those in our workplace who lost their life or suffered a serious injury.

This is a day that we ask our employees to take a personal moment to reflect on the importance of safety at the TTC now more than ever.

The TTC Executive and I are truly appreciative for the important work performed by our joint management-union Health and Safety Committees. These dedicated teams play a vital role by allowing workers and managers to equally participate in resolving health and safety issues, and to promote safety in the workplace on a continual basis. Our most important job at the TTC is to ensure the safety and security of our customers, employees and everyone around us.

Richard J. Leary Chief Executive Officer April 2020

# COVID-19 dashboard (April 17, 2020)

# 2020 YTD ridership and revenue



Key observations:

- From March 8 31, TTC revenue dropped approximately 75% (\$17.96M) due to a significant drop in ridership related to COVID-19. Overall March revenue was 34% below budget.
- With the current trend in YTD Ridership and Revenue, April TTC revenue will continue to be approximately 80-90% below budget due to decreased ridership and reduced April period pass renewals.

# **PRESTO** taps



PRESTO taps dropped as the City and Province stepped up efforts to flatten the curve:

- COVID-19 has reduced PRESTO taps by (83.43%) since February 29.
- Incremental drop has stabilized with weekly changes within ± 5% of Pre-COVID-19 (February 29); reaching day-over-day changes of 0.38% on Saturday, April 18.

# **Employee absences**



Note: Absences include sickness, AWOL, absences related to occupational injuries, approved and unapproved unpaid leaves, and paid leaves. Year over year comparison is done on the same categories and excludes paid leaves such as bereavement, jury duty, etc.

# **Transit service**

	Subway Service	Streetcar Service	Bus Service	Wheel-Trans
Service Output (per Planned Service)	Line 1 86% Service Line 2 88% Service	99.22% Service	94.66% Service	Service Reduced
Mitigating steps to meet operational needs	<ul> <li>Service target – 80% to adapt to change in ridership</li> </ul>	<ul> <li>Mitigated cancellation with buses on the 505, 508 blended service</li> </ul>	<ul> <li>Extra buses added to key routes for front line workers</li> </ul>	<ul> <li>Service Reduction due to decrease in weekly Ridership (down 70% versus 2020 budget estimates)</li> </ul>
Operator COVID-19 Related Absences	8	15	99	7
COVID-19 Absence Rate	1.0%	2.4%	2.1%	1.4%
OT hours (hh:mm)	15:55	0:00	120:20	8:00

# **Safety and security**

# Lost-time injuries rate (LTIR)



# Definition

Number of lost-time injuries reported per 100 employees.

## Contact

Betty Hasserjian, Chief Safety Officer (Acting)

**Note:** Q1 2020 data will be available in the June CEO's Report.

#### Results

The LTIR for Q4 of 2019 was 5.4 injuries per 100 employees.

#### Analysis

The LTIR for Q4 was 13% higher than the four-quarter average. There has been an upward trend in the LTIR since 2015.

#### Action plan

Slips, trips and falls injuries account for 15% of all lost-time injuries and represent the third highest injury type since 2014. These types of injuries are higher during the winter months with heavy snow and rain.

In November 2019, in support of National Fall Prevention Month, a slip, trip, and fall prevention campaign was rolled out to employees and customers. Messaging about slips, trips and falls safety was provided to employees through various communications channels, such as TTC-TV and posters on safety boards

Musculoskeletal/ergonomic type injuries (e.g. overexertion, reach/bend/twist, repetition) continue to account for 23% of all lost-time injuries and continue to represent the highest injury event type since 2014. The Ergonomic Musculoskeletal Disorder Prevention Program, currently being implemented, focuses on preventing such injuries and resolving ergonomic concerns. Specific training modules for high risk groups (e.g. Elevating Devices, Wheel-Trans Operators, and Track Maintenance) have been developed. A train-thetrainer session is scheduled for March 2020.

**Note:** In January 2018, under the Workplace Safety and Insurance Board Act, the Province introduced two legislative changes: 1) The new policy on Chronic Mental Stress allows for compensation due to workrelated stressors like bullying or harassment; 2) The policy on Traumatic Mental Stress is revised to broaden the spectrum of psychological claims. These changes have created an opportunity for an increase in the reporting of claims related to emotional trauma injuries.

# Customer injury incidents rate (CIIR)



# Definition

Number of customer injuries per one million boardings. **Contact** Betty Hasserijan.

Chief Safety Officer (Acting)

#### Results

The CIIR for Q4 of 2019 was 1.24 injury incidents per one million vehicle boardings.

## Analysis

The CIIR for Q4 was 2% higher than the four-quarter average rate of 1.22 injury incidents per one million vehicle boardings.

# Action plan

The minor increase in the Q4 CIIR was mainly due to the increase in the streetcar customer injury rate. The majority of streetcar customer injuries involved standing customers and were a result of operator hard brake/emergency brake applications to prevent collisions.

To minimize the injuries due to streetcar braking, a review of potential vehicle design improvements is underway. These include increasing the number of handholds and straps, and modification of the master controller to reduce accidental engaging of the emergency brake.

**Note:** Q1 2020 data will be available in the June CEO's Report.

# **Regulatory compliance**

At the May 29, 2019 Audit and Risk Management Committee meeting, a commitment was made to report to the Board on compliance to Safety, Health and Environment regulatory orders and to provide assurance that Commissioners have discharged their legal responsibilities. The table entitled *Order compliance,* summarizes the number of regulatory orders issued from January 1 to December 31, 2019 and their status.

## Contact

Betty Hasserjian, Chief Safety Officer (Acting)

# **Order compliance**

Туре	Number of	Status	
туре	Requirement Orders <sup>1</sup>	Non-compliance Orders <sup>2</sup>	Otatus
Ministry of Labour			
Orders	16	7	<b>Compliance</b> Achieved
Ministry of the			
Environment,			
Conservation and			
Parks Orders	0	0	Not Applicable
Technical			
Standards and			
Safety Authority			
Orders	0	0	Not Applicable
City of Toronto -			
Notice of Violation	0	2	<b>Compliance</b> Achieved
Toronto Fire			
Services Code			
Violations	8	59	Compliance Achieved

<sup>1</sup> Orders issued to provide documentation/information.

<sup>2</sup> Orders issued to remedy contraventions of the Occupational Health and Safety Act or regulations, Environmental Protection Act, City of Toronto Sewers By-Law and Ontario Fire Code.

**Note:** The next update will be available in the June CEO's Report.

# Offences against customers



## Definition

Number of offences against customers per one million vehicle boardings.

## Contact

Kirsten Watson Deputy Chief Executive Officer – Operations

#### Results

In Q4, the total number of offences against customers per one million vehicle boardings increased slightly to 0.68 from last quarter (0.67). The current rate is 6% higher than the same time last year (0.64).

# Analysis

The number of robberies and sexual assaults decreased in comparison to Q3. However, there was a small increase in the number of assaults and thefts. Overall, there was no change in the number of offences from last quarter.

# **Action Plan**

This year, we will hire 50 Special Constables to support our revenue protection team. The new Constables will be deployed strategically throughout the TTC system to ensure revenue protection and will also serve as a presence to assist with our customers and employees' safety and security.

# Offences against staff



## Definition

Number of offences per 100 employees.

## Contact

Kirsten Watson Deputy Chief Executive Officer – Operations

#### Results

In Q4, the total number of offences against staff increased to 4.48 offences per 100 employees. The current rate is 13% higher than last quarter (3.98) and 9% higher than the same time last year (4.11).

# Analysis

There was an increase in threats and other offences against employees such as mischief, harassment, indecent exposure, sexual assault and robbery compared to Q3. The number of assaults against employees decreased.

# **Action Plan**

This year, we will hire 50 Special Constables to support our revenue protection team. The new Constables will be deployed strategically throughout the TTC system to ensure revenue protection and will also serve as a presence to assist with our customers and employees' safety and security.

# Ridership

# Ridership



# Definition

Average number of journeys per week, including paid and free journeys (e.g. two-hour transfers and children 12 and under). A journey with transfers is counted as one journey. The total is derived from cash, tickets and token counts, Metropass and PRESTO data, diary studies and ridership analytics.

# Contact

Josie La Vita, Chief Financial Officer

#### Results

Period 2 (February 2 to February 29, 2020) revenue ridership totalled 44.3 million or 10.1 million passengers per week. This was -0.005 million below the budget of 44.3 million rides, but 0.905 million (2.3%) above the comparable period in 2019.

Year-to-date revenue ridership totalled 85.0 million, which is -0.061 million or -0.1% below budget, but 1.186 million or 1.4% above the comparable period in 2019.

## Analysis

Period 2 ridership results show:

- Adults were 0.106 million above budget
- Children were 0.050 million above budget
- Seniors/youth were -0.161 below budget

#### Year-over-year:

- Adults grew by 1.251 million
- Senior/youth grew by 0.095 million
- Children grew by 0.020 million
- GTA Weekly Pass and Day Pass dropped by -0.461 million due to products being discontinued.

Most of the period's growth was due to improved weather offset somewhat by more subway disruptions.

There were six fewer inclement weather days, five fewer extreme cold temperature alerts for Toronto and three fewer severe snow storms in February 2020 compared to February 2019.

Due to poor weather in 2019, scheduled subway disruptions were cancelled. In 2020 better weather allowed for 19 more subway closures for infrastructure improvements, 10 partial closures on Line 1 and nine partial closures on Line 2. Although a snow storm in February 2019 forced school closures, there were four days of strike action in February 2020.

Year-to-date ridership (periods 1 and 2) results show:

- Adults were 0.451 million above budget
- Seniors/youth were -0.219 million below budget
- Children results were -0.293 million below budget

Year-over-year (periods 1 and 2):

- Adult rides grew by 2.720 million
- Senior/youth grew by 0.178 million
- Child rides dropped by -0.420
   million
- Other rides (GTA Weekly Pass, Day Pass) dropped by -1.292 million.

Legacy fares collected continue to drop. In Period 2, only 9.6% or 3.866 million rides were paid using non-PRESTO products.

# **Action Plan**

The vision for the 5-Year Service Plan and 10-Year Outlook is to focus on improvements that directly enhance the TTC's corecompetency: mass transit — moving large volumes of customers safely, reliably and swiftly across Toronto. The emerging pillars of opportunity are:

- 1. Enhance the Transit Network: An expansive network that gets customers to where they want to go, when they want to go.
- 2. Enhance the Customer Experience at Key Stops: A pleasant experience that begins before our customers get on a vehicle.
- 3. Improve Service Reliability: A reliable service that our customers can count on.
- 4. Prioritize Transit on Key Surface Corridors: A fast service that values our customers' journey time.

5. Accelerate Integration with Regional Transit Agencies and Complementary Modes of Transport: An integrated network that provides our customers with a seamless connection to and from our services.

# **PRESTO ridership**



# Definition

Average number of journeys per week using PRESTO fare media, including PRESTO taps and PRESTO pass rides.

PRESTO ridership is included in TTC ridership totals.

## Contact

Josie La Vita, Chief Financial Officer

# Results

Period 2 (February 2 to February 29, 2020) PRESTO ridership totalled 36.5 million or 9.1 million passengers per week. This was approximately 0.4 million (1.0%) above the budget and 4.7 million higher than the comparable period in 2019 (31.7 million).

Year-to-date, PRESTO ridership totalled 76.5 million, 1.2% above budget and 9.432 million (14.1%) above 2019.

# Analysis

The PRESTO adoption rate for period 2 was 90.4%, representing a 0.9% increase over period 1 (89.5%).

Period pass sales year-over-year growth was 1.0% for February, an increase of 1,936 sales. The largest growth was seen in adult 12-month period pass sales with an increase of 4,147, however, adult sales dropped overall by -761. The other groups all increased:

Post secondary sales were +2,183

- Senior sales were +365
- Youth sales were +149.

Customers continue to use e-purse as their preferred choice of fare payment to benefit from the two-hour transfer.

In period 2, 54.4% of rides were using e-purse and 8.8% of the rides were free within the two-hour transfer period.

PRESTO one-ride/two-ride ticket rides continue to grow, in period 2 they were 0.8% of rides.

# **Action Plan**

PRESTO adoption is expected to increase over time as legacy media is phased out, more PRESTO fare options are made available and marketing initiatives encourage further PRESTO adoption. The PRESTO adoption rate is expected to continue to increase during 2020, reaching approximately 95% once legacy fare media are no longer sold.

# Wheel-Trans ridership



#### Definition

Average number of journeys per week using both Wheel-Trans dedicated services and contracted services.

Wheel-Trans ridership is not included in the TTC ridership totals.

#### Contact

Kirsten Watson, Deputy Chief Executive Officer – Operations

#### Results

Ridership in period 2 (Feb 2 to Feb 29, 2020) was 304,481 or 76,120 passengers per week. This figure was 0.8% higher than the budgeted 75,529 customers per week.

In terms of year-over-year growth, the period 2 year-to-date (YTD) ridership is 3.7% higher compared to the same period in 2019, and is currently 1.5% (9,000) over the YTD 2020 budget.

#### Analysis

Period 2 ridership continues to trend above budget and is 3.7% higher than the same period last year. Favourable weather and shorter contact call centre response times have made it easier for customers to travel.

Wheel-Trans has been able to accommodate the increasing trend in same day trip requests. Scheduling efficiencies continue to be the focus. We are averaging 2.91 passengers per hour in 2020, compared to 2.83 at the same time last year. On-time performance of 92% indicates consistent and dependable service for customers.

# **Action Plan**

We remain focused on providing a consistent, positive trip experience for the customer including the trip booking process, communications regarding requested trips as well as the ride experience. Cancellation rates and backfilling of cancelled trip space will be the focus as service demand is expected to increase in period 3.

Wheel-Trans will be implementing phase two for the next update in the scheduling software at the end of Q1 and the mobile app pilot will be launched in Q2. Both will be providing new tools for staff and customers to assist in service efficiencies and improved communications with customers.

# **Customer experience**

# **Customer satisfaction**



#### Definition

Overall satisfaction: How satisfied were you overall with the quality of the TTC's service on the last TTC trip you took?

#### Contact

Kathleen Llewellyn-Thomas, Chief Customer Officer

#### Results

Four in five (81%) customers reported high levels of overall satisfaction in Q4 2019, which is consistent with last quarter (81%) and the same time last year (80%).

#### Analysis

Satisfaction with the level of crowding inside streetcars continues to rise, up to 70% this quarter compared to 60% in Q3. Our now fully accessible fleet of streetcars are moving more customers, more comfortably.

Frontline staff continue to deliver a high level of customer service on a daily basis. In Q4 2018, 82% of customers were satisfied with the helpfulness of staff across all modes. Scores on this key driver of customer satisfaction have remained high and consistent over the years, but there is still room for improvement.

#### Action plan

On January 5, 2020, collector booths were closed at 20 additional stations, as part of our Stations Transformation program. The remaining 45 station booths will be closed on March 29, 2020. Outside of the booths, collectors will be more visible and in a better position to actively engage with and assist customers. We expect this transition to have a positive impact on customer satisfaction.

# **Subway services**

Line 1 (Finch and Vaughan Metropolitan Centre terminal stations): On-time performance (OTP)



## Definition

OTP measures the headway adherence of all service trains at end terminals. Data represents Mondayto-Friday service between 6 a.m. and 2 a.m. To be on time a train must be within 1.5 times of its scheduled headway.

## Contact

James Ross, Chief Operating Officer

## Results

In February this measure slipped to 90.4%, down from last month (91.7%).

Our target for this measure of 90% was met.

#### Analysis

The derailment of a work car at St. George Station on February 13 severely impacted service levels on the line that day. This accounted for a significant portion of the increase in delay minutes we recorded in February as compared to January.

A significant achievement was marked on February 24, when our Automatic Train Control (ATC) signaling system was extended from St. Patrick Station to Queen Station. This will not only aid in improving customer trip times and tightening headways, but will also help reduce the impact of signal system failures as the new system is in full operation from Queen Station to Vaughan Metro Centre Station.

## Action plan

The benefits of the extended ATC system should be apparent to customers on this line, however the COVID-19 pandemic will impact service levels moving forward. Service will be adjusted as required, however, a focus on peak direction in the peak periods will continue.

# Line 2 (Kennedy and Kipling terminal stations): On-time performance (OTP)



# Definition

OTP measures the headway adherence of all service trains at end terminals. Data represents Mondayto-Friday service between 6 a.m. and 2 a.m. To be on time a train must be within 1.5 times of its scheduled headway.

## Contact

James Ross, Chief Operating Officer

# Results

This metric met target, although performance at both terminal stations decreased by 2.7% in February to 93.5% combined.

Results for this measure improved in February to 93.5%, down 2.7% from our results in January.

Our target is 90%, and was met.

# Analysis

The number of incidents decreased by 15.2% and the delay minutes decreased by 29.5% from January's results, and so far 2020 year-to-date has had 19.4% fewer delay minutes than the same time in 2019.

# Action plan

The COVID-19 pandemic will impact service levels moving forward. Service will be adjusted as required, however, a focus on peak direction in the peak periods will continue.

# Line 3 (Kennedy and McCowan terminal stations): On-time performance (OTP)



#### Definition

OTP measures the headway adherence of all service trains at end terminals. Data represents Mondayto-Friday service between 6 a.m. and 2 a.m. To be on time a train must be within 1.5 times of its scheduled headway.

## Contact

James Ross, Chief Operating Officer

# Results

OTP in February was 98.4%, which is the highest performance ever recorded for this metric.

Our target of 90% was met.

#### Analysis

2020 year-to-date has 43.3% fewer delay minutes when compared to the same time in 2019. This is mostly attributed to fewer weather-related issues.

## Action plan

Line 3 continues to run as scheduled and consistently delivers at or above target.

# Line 4 (Don Mills and Sheppard terminal stations): On-time performance (OTP)



# Definition

OTP measures the headway adherence of all service trains at end terminals. Data represents Mondayto-Friday service between 6 a.m. and 2 a.m. To be on time a train must be within 1.5 times of its scheduled headway.

# Contact

James Ross, Chief Operating Officer

## Results

OTP in February was 98.6%, a slight decrease from last month (99.6%).

Our target of 90% was met.

# Analysis

The slight decrease in performance can be attributed to a 95-minute or 123% increase in delay minutes due mostly to equipment and customerrelated issues.

There has been a 22.2 % reduction in delay minutes compared to 2019 year-to-date.

# Action plan

Line 4 will continue to be managed in the same, effective manner providing consistent, reliable service to our customers.

# Line 1: Capacity



#### Definition

Total number of trains that travelled through 12 key sampling points during a.m. and p.m. peak as a percentage of trains scheduled. Data is based on Monday-to-Friday service.

Peak periods: 6 a.m. to 9 a.m. and 3 p.m. to 7 p.m.

#### Contact

James Ross, Chief Operating Officer

#### Results

The a.m. peak capacity delivered dropped by 3.7%, bringing down the overall average to 96.5%. Looking back to February 2019, however, there is a year-over-year improvement from the 95.1% we achieved then.

Our target for this measure is 96.0% and was met.

## Analysis

A significant impact to this metric was the work car derailment at St. George Station on February 13, which resulted in only 11.8 trains-per-hour in the a.m. peak. There were no other days during February that were below 20 trains-per-hour.

All other factors that can impact this measure, including restricted speed zones and delay incidents, remained fairly stable from January to February.

## Action plan

The impact of inclement weather has been much less significant this winter compared to last year. The COVID-19 pandemic will impact service levels moving forward. Service will be adjusted as required, however, a focus on peak direction in the peak periods will continue.



# Line 2: Capacity



## Definition

Total number of trains that travelled through 10 key sampling points during a.m. and p.m. peak as a percentage of trains scheduled. Data based on Monday-to-Friday service.

Peak periods: 6 a.m. to 9 a.m. and 3 p.m. to 7 p.m.

Note: Capacity delivered is the actual train count divided by the scheduled train count for each hour at sampled locations. Data is based on weekday service from Monday to Friday.

## Contact

James Ross, Chief Operating Officer

## Results

Line 2 capacity in February dropped slightly from 98.7% in January to 98.0%. However, this result is a significant improvement from the 95.2% we achieved in February 2019.

Our target of 96% was met.

## Analysis

In February we saw 29.5% fewer delay minutes compared to January, however, a large portion of those minutes in January were a result of the partial derailment at Keele Station on January 22.

Two additional restricted speed zones were added to this line during February, but had a negligible impact on overall trip times.

## Action plan

The COVID-19 pandemic will impact service levels moving forward. Service will be adjusted as required, however, a focus on peak direction in the peak periods will continue.

# Line 3: Capacity



#### Definition

Total number of trains that travelled through two key sampling points during a.m. and p.m. peak as a percentage of trains scheduled. Data is based on Monday to Friday service.

Peak periods: 6 a.m. to 9 a.m. and 3 p.m. to 7 p.m.

#### Contact

James Ross, Chief Operating Officer

#### Results

Capacity in February decreased slightly from the 99.3% in January to 99.1%. However, this result is a significant improvement from the 93.8% we achieved in February 2019.

Our target for this measure is 98%, and was met.

# Analysis

The p.m. peak did not meet target due to a signalling delay on February 6 that resulted in a 102-minute delay for customers on this line. There were no other poor performing days in February.

# Action plan

The COVID-19 pandemic will impact service levels moving forward. Service will be adjusted as required, however, a focus on peak direction in the peak periods will continue.

# Line 4: Capacity



## Definition

Total number of trains that travelled through two key sampling points during a.m. and p.m. peak as a percentage of trains scheduled. Data is based on Monday to Friday service.

Peak periods: 6 a.m. to 9 a.m. and 3 p.m. to 7 p.m.

#### Contact

James Ross, Chief Operating Officer

## Results

This measure remained at 100% and met our target of 98%.

# Analysis

The number of incidents remained steady. Although there was a disabled work car in the afternoon of February 14 causing 48-minute delay, it resulted in a small drop of 0.1 trains-per-hour during the p.m. peak. This was the most serious incident for the month.

# Action plan

Line 4 continues to run as scheduled and consistently delivers at 100% capacity.

# Subway: Weekly service hours



# Definition

Calculated duration of time that all revenue trains are in service.

# Contact

Kathleen Llewellyn-Thomas, Chief Customer Officer

# Results

In the February 2020 Board Period, 11,119 subway weekly hours were budgeted for service while 11,131 subway weekly hours were scheduled to operate, which represents a variance of 0.11%.

Of the 11,131 subway weekly hours scheduled to operate, 10,998 weekly hours were actually delivered, which represents a variance of -1.20%.

# Analysis

Scheduled service hours are matched with budgeted service hours.

# **Action Plan**

No action required at this time.

# Subway T1 train: Mean distance between failures (MDBF)



#### Definition

Total kilometres travelled in month compared to the number of rolling stock equipment incidents resulting in delays of five minutes or more. Includes all seven days of service.

## Contact

Rich Wong, Chief Vehicles Officer

# Results

The MDBF in February was 772,790 kilometres, which is an improvement from January (547,656 kilometres) and the same time last year (361,185 kilometres).

The rolling annual average is 536,647 kilometres. Our target of 300,000 kilometres was met.

## Analysis

In February, there were four delay incidents greater than or equal to five minutes. The coupler, passenger door, propulsion and truck systems each had one delay incident.

# **Action Plan**

The coupler-related incident was due to a faulty coupler heater, which caused the coupler pins to freeze. The heater has since been repaired and tested to be functioning properly.

The passenger door-related delay incident was a result of intermittent faults for doors not opening. The door control relay panel was replaced for fault isolation by technical staff. All doors were cycle tested with positive results. The train has resumed revenue service with no further issues detected.

The propulsion-related incident was a result of a loose tachometer on the base. The tachometer was adjusted to specification and propulsion-tested to be working.

The truck-related incident was a result of a faulty truck centre ring and a damaged truck side bearing. Both faults were repaired, and trucks on trains tested to be working properly. The train has resumed revenue service with no further truck-related issues.

# Subway TR train: Mean distance between failures (MDBF)



#### Definition

Total kilometres travelled in month compared to the number of rolling stock equipment incidents resulting in delays of five minutes or more. Includes all seven days of service.

## Contact

Rich Wong, Chief Vehicles Officer

## Results

The MDBF in February was 506,883 kilometres, which is a decrease from last month (769,357 kilometres) and the same time last year (804,978 kilometres)

The rolling annual average is 651,341 kilometres. Our target of 600,000 kilometres was not met.

## Analysis

In February, there were eight delay incidents greater or equal to five minutes. The passenger door system had four incidents, followed by the cab door system with two delay incidents. The body and brake systems each had one delay incident. The MDBF dropped significantly compared to the previous month due to there being two more delays in February.

# **Action Plan**

The passenger door-related incidents were a result of a dirty lead screw, faulty door electronic control unit (DECU), damaged keyway on the lead screw to motor coupler and a faulty door control unit (DCU). The dirty lead screw was cleaned and lubricated and the doors were cycle tested with positive results. The faulty DECU, DCU and damaged keyway were all replaced. All door sets were cycle tested with no further issues detected. All trains were returned to revenue service. As part of the door rollers replacement program scheduled to commence in Q2 2020, an overall door system functionality will also be performed.

The two cab door system-related incidents were due to a broken window latch and a dirty door lock switch. The broken window latches were both replaced with positive results. Design work on a new cab window latch is being performed by Rail Vehicle Engineering. The dirty door lock switch was cleaned and cab door tested to be working. Both trains have resumed revenue service with no further issues detected.

# Subway: Service availability



#### Definition

Daily average number of trains put into service (including RADs) compared to the number of trains scheduled for the a.m. peak period. Data represents Monday to Friday only. Holidays excluded.

#### Contact

Rich Wong, Chief Vehicles Officer

## Results

The vehicle availability in February was 100%.

#### Analysis

We continue to meet the service requirements, meeting the target of 100% vehicle availability. All vehicles were available for service when required.

# **Action Plan**

We will continue with the delivery of safe, reliable and clean vehicles to service on all lines.

# Subway: Vehicle cleanliness



## Results

The average rating of 90.1% in Q4 was above the target of 90.0%. We have recorded a score greater than 90% since Q4 2016.

## Analysis

The performance score takes into account pre-service, in-service and post-service audit results.

Areas of strength in vehicle cleanliness across all fleets and lines were the ceilings, etching/scratchitti, graffiti/stickers and mandatory decals. Factors affecting the quarterto-quarter overall cleanliness scores in Q4 2019 were door cleanliness, floors, anti-draft panels and windows.

# Action Plan

Exterior vehicle washes are generally halted during the winter season as temperatures drop and excess exterior water freezes. Exterior vehicle washes are still performed whenever possible, weather permitting. The floor wash cycle continues to be addressed once every 14 days.

Starting in Q2 2020, the vehicle cleanliness score will be broken down into pre-service cleanliness and in-service/post-service cleanliness. By breaking this out, the scores will provide a better indicator of TTC performance with respect to the cleaning of vehicles and of the condition of vehicles during and after service.

#### Definition

Average results of third party audit conducted each quarter. Average of "prior" "mid-day" and "end of service" results. Audits conducted weekdays only, excluding holidays.

#### Contact

Rich Wong, Chief Vehicles Officer

# **Streetcar services**

# Streetcar: On-time performance (OTP)



#### Definition

On-time performance measures vehicle departures from end terminals. Vehicles are considered on time if they depart within 59 seconds earlier or five minutes later than their scheduled departure time. Includes all seven days of service. Night routes are excluded.

#### Contact

James Ross, Chief Operating Officer

## Results

OTP in February was 75.3%, a decrease compared to January (76.9%), but a significant increase over the same period last year (52.2%). Our target of 90% was not met.

#### Analysis

Our results for February continue to show a positive trend, despite a minor decrease relative to the January score. The first week of the period was the poorest performing, due to multiple planned and unplanned incidents, with each of the remaining three weeks showing increased improvement.

Halfway through the period, an interim 505 Dundas schedule was introduced to bridge the gap between the previous schedule and a new LFLRV schedule for the April Board Period. When excluding the 505 Dundas route, OTP in February increases to just under 79%.

Numerous work projects and incidents negatively impacted the network score for the period.

The 504 King operated with planned diversions due to rail repairs on the weekends of February 8 (Strachan Avenue to Niagara Street) and February 22 (east of Shaw Street). Further, the western portion of the 501 Queen route was serviced by shuttle buses on the weekends of February 15 and 22 due to work planned for the Long Branch Loop.

Inclement weather had an impact on performance for most of February 18, the same day a 504 King streetcar derailed at King Street and Trinity Street.

# **Action Plan**

Planning meetings and coordination have been taking place to ensure the Spring and Summer service changes are implemented effectively. These changes will include some route adjustments and conversions between buses and streetcars. Again, lessons learned from previous years have been built upon in these planning efforts. The day-to-day route management team will continue to strive towards the goal of 90% OTP.

# Streetcar: Short turns



## Definition

Total short turns per month. Includes all seven days of service, excluding night routes.

## Contact

James Ross, Chief Operating Officer

#### Results

There were 94 short turns in February, a significant improvement from the same period last year (1,171), but a slight increase from January (75).

Our target of 1,074 short turns, based on a reduction from last year's level, was met.

## Analysis

February is the tenth consecutive month with short turns at significantly decreased levels compared to 2018 or early 2019. This equates to less than four streetcar short turns per day, on average, throughout the network for the February period.

The route with the highest number of short turns during the period was the 506 Carlton with 34. The 501 Queen was next highest with 23. A large majority of 506 Carlton short turns for the period were due to accidents, heavy traffic, or emergency services deployed on the route.

## **Action Plan**

Route management of the streetcar network will continue to focus on maintaining short turns at a low level in order to ensure a positive experience for our customers. Management oversight continues to play a large role in this initiative, with the positive results creating a new baseline and set of expectations. This will continue to be promoted and reinforced in the future.

# Streetcar: Weekly service hours



## Definition

Service hours are calculated from the time a streetcar leaves the yard to when it returns to the yard. Measured daily.

## Contact

Kathleen Llewellyn-Thomas, Chief Customer Officer

#### Results

In the February 2020 Board Period, 19,349 streetcar weekly hours were budgeted for service while 19,121 streetcar weekly hours were scheduled to operate, which represents a variance of -1.18%.

Of the 19,121 streetcar weekly hours scheduled to operate, 18,356 streetcar weekly hours were actually delivered, which represents a variance of -4.00%.

# Analysis

Scheduled streetcar hours are lower than budgeted due to changes in construction projects.

Actual service hours are lower than scheduled service hours. Some service was cancelled due to the COVID-19 pandemic at end of February board.

# **Action Plan**

No action required at this time.

# LFLRV streetcar: Mean distance between failures (MDBF)



#### Definition

Total kilometres travelled by the Low-Floor Light Rail Vehicle (LFLRV) compared to the number of incidents (defined contractually) resulting in delays of five minutes or more. Includes all seven days of service. A threshold of 35,000 km was established to reflect the manufacturer's obligations for reliability. The operational MDBF includes incidents defined contractually, as well as delay incidents that are caused by failures of equipment from other vendors and delays caused by TTC operations.

# Contact

Rich Wong, Chief Vehicles Officer

# Results

The monthly contractual MDBF for the LFLRV fleet in February was 38,818 kilometres. This is a decrease of 12,121 kilometres compared to January and an increase of 25,514 kilometres when compared to February of last year.

The 12-month average contractual MDBF was 31,477 kilometres. The contractual target of 35,000 kilometres MDBF must be met within one year of commissioning of the 204th vehicle.

The monthly operational MDBF for the LFLRV fleet in February was 16,636 kilometres. This is a decrease of 8,834 kilometres from previous period.

# Analysis

In February there were a total of 24 relevant failures under the contractual reliability method. The top contributors were the train and cab controls system with seven and the door system with six relevant failures. With respect to the operational MDBF method, there were a total of 56 delays. The top contributors to these failures, in addition to the contractual reliability failures, include the high voltage system with 11, the door system with six and the carbody structure with four.

Compared to January, failures related to the communication system have decreased, however an increase in failures of other systems has contributed to reduced operational reliability for February.

# **Action Plan**

Vehicle modification programs designed to address the root cause(s) of failures at various stages of development and implementation. These reliability improvement programs continue to be refined as the fleet increases and more inservice data becomes available.

**Train and cab control system:** We continue to work with Bombardier to design and implement a more reliable master controller on the fleet through an upcoming fleet modification. Additionally, an

engineering investigation of other electrical failures is underway.

**Door system:** Failures appear to be electrical-related and are under engineering investigation for root cause.

**Communication system:** A camera modification program has recently commenced that addresses known issues with image quality and stability. Also, passenger information system failures are under Engineering investigation.

# High voltage power system:

Multiple modifications aimed to improve various sub-systems are being implemented on the fleet. This includes adjusting the limit switch on the main switch, and replacement of some of trolley pole and pantograph components with more robust ones (e.g. bracket and chain).

**Brake system:** Quality control containment and improvements have been implemented at supplier sites. In addition, component improvements (e.g. seals, guidance shaft and locking pins) are in validation and planning stages with implementation targeted for Q4 2020.

# Carbody structure & interior: A

vehicle modification program to install improved inter-car dampers and articulation flooring designs is currently underway to address these failures.

In addition to the contractual programs, operational reliability improvements being made to improve MDBF include:

## High voltage power system:

Continuous improvement of consumable item inspections, which will include more frequent replacement to prevent failures due to wear. Staff are also investigating implementation of monitoring system to identify and reduce overhead/vehicle interface causes.

**Door system**: Implement an improved maintenance program and improve efficiencies of the built-in system contingencies to minimize disruption to service.

# Carbody structure & interior:

Prioritize vehicle modification programs and improve inspection requirements to avoid failures due to equipment becoming loose in service. In total there are 52 vehicle modification programs in progress to assist with improvement to vehicle reliability

# Streetcar: Road calls and change offs (RCCOs)



# Definition

Average daily number of vehicleequipment failures requiring a road call for service repair or a change off to a repair facility for a replacement vehicle. Includes Monday to Friday only.

## Contact

Rich Wong Chief Vehicles Officer

# Results

The target for the maximum number of RCCOs is 1.5% of peak daily service. In February, 3.1% (or 5 of 160 vehicles) of the peak daily service, including Run-As-Directed vehicles, resulted in a RCCO.

# Analysis

The daily average number of RCCOs in February increased by one compared to January.

An increase in failures of the car body, ramp equipment, vehicle control and passenger door systems contributed to the increase in the number of RCCOs.

# Action Plan

Staff and Bombardier continue to work together to address issues relating to the top problem systems. Modification programs are underway to help improve LFLRV reliability. Additionally, pre-service inspections and preventative maintenance activities will continue to address the RCCOs.

# Streetcar: Service availability



# Definition

Daily average number of streetcars put into service (including RADs) compared to the number of streetcars scheduled for the a.m. peak period. Data represents Monday-to-Friday only. Holidays excluded.

## Contact

Rich Wong, Chief Vehicles Officer

# Results

The target for streetcar availability is 100% of peak daily service, including Run-As-Directed vehicles. In February, the target requirements were met with an average of 160 vehicles available for service.

# Analysis

Availability numbers for February were met with the new LFLRV vehicles replacing the decommissioned legacy vehicles.

# **Action Plan**

Newly commissioned LFLRVs have replaced the legacy fleet and through proper maintenance will be available to meet 100% of the service requirements.

# **Streetcar: Cleanliness**



## Definition

Average results of third-party audit conducted each quarter. Average of "prior," "mid-day" and "end of service" results. Audits conducted weekdays only, excluding holidays.

## Contact

Rich Wong, Chief Vehicles Officer

## Results

The streetcar cleanliness score decreased in Q4 2019 to 80.7%. This is a decrease from the previous quarter (86.5%) and the same time last year (91.8%). Overall performance on streetcar cleanliness is below the target of 90%.

# Analysis

The performance score takes into account pre-service, in-service and post-service audit results.

High demand for service vehicles limited the availability for exterior/interior wash scheduling. Unfavourable weather conditions have also affected cleanliness results, particularly flooring.

Heavy snowfall in December caused an accumulation of snow and dirt residue on the floors, and contributed to a decrease in overall cleanliness. Efforts to improve scores in these areas are underway.

## **Action Plan**

Staff continues to investigate opportunities to further improve cleanliness, including increasing the frequency of cleaning activities.

Starting in Q2 2020, the vehicle cleanliness score will be broken down into pre-service cleanliness and in-service/post-service cleanliness. By breaking this out, the scores will provide a better indicator of TTC performance with respect to the cleaning of vehicles and of the condition of vehicles during and after service.

# **Bus services**

# Bus: On-time performance (OTP)



#### Definition

OTP measures vehicle departures from end terminals. Vehicles are considered on time if they depart within 59 seconds earlier or up to five minutes later than their scheduled departure time. Includes all seven days of service. Night routes are excluded.

#### Contact

James Ross, Chief Operating Officer

#### Results

OTP in February was 85.8%, a significant improvement compared to the same period last year (73.1%), and just below the January result (86.0%).

Our target of 90% was not met.

#### Analysis

Performance remained consistently above 80% throughout the period, including a 91% OTP score achieved on Family Day.

Seven schedule changes were introduced as part of the February 2020 Board Period with a combined average of 90%, a significant improvement from 75.3% in 2019. These weekday reliability improvements include:

- 116 Morningside (78% in 2019 to 87% in 2020)
- 129 McCowan North (83% in 2019 to 93% in 2020)
- 21 Brimley (79% in 2019 to 95% in 2020)
- 53 Steeles East (76% in 2019 to 92% in 2020)

- 54 Lawrence East (64% in 2019 to 88% in 2020)
- 945 Kipling North Express (79% in 2019 to 91% in 2020)
- 953 Steeles East Express (79% in 2019 to 83% in 2020).

## Action plan

The following reliability improvements will be implemented in the April 2020 Board Period: 7 Bathurst, 23 Dawes Rd, 37 Islington, 111 The East Mall, 161 Rogers Rd, 937 Islington Express and 986 Scarborough Express.

# **Bus: Short turns**



## Definition

Total short turns per month. Includes all seven days of service, night routes excluded.

#### Contact

James Ross, Chief Operating Officer

## Results

There were 72 short turns in February, a significant improvement from the same period last year (2,167), and consistent with last month (72).

Our target of 1,590 short turns is based on a reduction from last year's level and was met.

## Analysis

The significant reduction in short turns for February continued to be driven by increased management oversight, focusing on alternate route management techniques to minimize the impact on customers. On routes where schedules did not reflect actual operating conditions, vehicles were allowed to operate late with a reduced emphasis on schedule adherence and allowing full trips to be completed.

Short turns this period continued to be mainly driven by increased traffic congestion and inclement weather.

The top five routes accounted for approximately one-third of the short

turns in the period: 109 Ranee (11%), 161 Rogers Rd (8%), 85 Sheppard East (8%), 52 Lawrence West (6%) and 26 Dupont (5%).

## Action plan

We will continue to review and implement schedule changes to target high incident routes where increased traffic congestion has resulted in unreliable service and schedules that no longer reflect operating conditions.

# **Bus: Weekly service hours**



#### Definition

Service hours are calculated from the time a bus leaves a garage to the time it returns to the garage. Measured daily. Board Period total calculated using a weekly average.

#### Contact

Kathleen Llewellyn-Thomas, Chief Customer Officer

#### Results

In the February 2020 Board Period, 152,212 bus weekly hours were budgeted for service while 151,606 bus weekly hours were scheduled to operate, which represents a variance of -0.40%.

Of the 151,606 bus weekly hours scheduled to operate, 145,780 hours were actually delivered, which represents a variance of -3.84%.

## Analysis

Scheduled service hours are slightly lower than budgeted service hours due to a few construction projects being delayed.

Actual service hours are lower than scheduled service hours. Some service was cancelled due to the COVID-19 epidemic at end of February board.

## Action plan

No action required at this time.

# Bus: Mean distance between failures (MDBF)



#### Definition

Total kilometres accumulated over the entire fleet compared to the total number of chargeable mechanical road calls. Data included for all seven days of service.

## Contact

Rich Wong Chief Vehicles Officer

# Results

The February MDBF of 20,000 kilometres exceeded the target of 12,000 kilometres.

## Analysis

MDBF for the bus fleet continues to remain high and above target. Recent vehicle procurement additions to the fleet contribute to this high reliability.

Another contributing factor to this high reliability is the implementation of several key reliability and retrofits programs. Examples include: State of good repair inspections, road call and change off root cause analysis, special seasonal preventive maintenance programs, engine oil analysis, engineering modifications and upgrades to assets, and various other system specific programs targeting high failure rate systems. Notable highlights of current engineering projects include ramp snow quard addition, front door sensitive edge sensors, forward camera activation, and idle shutdown functionality, and auxiliary heater

filter design change due to obsolescence.

# **Action Plan**

We are continuing to monitoring the effectiveness of the Winter Preparedness Program. Results so far are trending positively with record low interruptions to service, however this winter has been unusually mild.

We have completed procuring parts for the Spring Seasonal program based on the submitted bill of materials, all parts are in stock. Spring Seasonal Standard Operating Procedure for the Nova Hybrid buses has been field validated and ready for operations. Garages have started the Spring Seasonal Preventative Maintenance (PM) program as part of the warm weather preparedness program. We are closely monitoring the on-time completion of this PM program, and simultaneously performing audits on the quality of the work performed, specific updates will be provided in the April CEO's report.

We are in the testing phase of several VISION on road health monitoring reports that will enable us to better predict and mitigate service interrupting failures related to complex systems such as the latest Cummins engines and associated exhaust after-treatment systems, electric and hybrid drive powertrain and controls.

In parallel we are reviewing a proposal from companies providing predictive and prescriptive engine and exhaust after-treatment diagnostic services using VISION vehicle health monitoring data

# Bus: Road calls and change offs (RCCOs)



## Definition

Average daily number of vehicleequipment failures requiring a road call for service repair or a change off to a repair facility for a replacement vehicle. Monday to Friday data only.

## Contact

Rich Wong, Chief Vehicles Officer

# Results

The average number of RCCOs in February was 22 per day. This is well below target and the lowest ever achieved during the winter months.

# Analysis

Peak revenue service was 1636 buses per day, including Run-As-Directed buses in February. The average number of RCCOs per day equates to 1.35% of service, below the 1.50% target.

# **Action Plan**

We continue to monitor and control road calls via daily tracking, gap analysis, reliability programs, and working closely with the Bus Transportation department and service line contractor to look at opportunities to reduce road calls.

# **Bus: Service availability**



#### Results

The average number of buses provided for a.m. peak service in February was 1,636 per day or 101.0% of planned service, above the target of 1,622 buses.

#### Analysis

The significant number of new bus procurements from 2016 to period 12 2019 (~950) has boosted the fleet performance and permitted a higher number of vehicles available for service. The available vehicles are being utilized for training purposes and permitting additional state of good repair preventative maintenance inspections.

# Action Plan

We will continue to monitor and control all aspects of maintenance that support continuous improvement initiatives.

# Definition

Daily average number of buses put into service (including RADs) compared to the number of buses scheduled for the a.m. peak period. Data represents Monday to Friday only. Holidays excluded.

#### Contact

Rich Wong, Chief Vehicles Officer

# **Bus: Cleanliness**



#### Definition

Average results of third party audit conducted each quarter. Average of "prior," "mid-day" and "end of service" results. Audits conducted weekdays only, excluding holidays.

#### Contact

Rich Wong, Chief Vehicles Officer

## Results

The bus cleanliness audit score in Q4 was 88.1%, which is below the target of 90%. The average score for 2019 was 90%.

# Analysis

The performance score takes into account pre-service, in-service and post-service audit results. The preservice score was 97%. However, this score was offset by the postservice score, which was 81.3%. Poor post-service scores are attributed to winter weather conditions. Snow, salt and debris accumulate on the floor throughout service.

# **Action Plan**

We will be investigating the root cause of the lower audit score for wheel assemblies by reviewing audit criteria, contractor performance and other discovered contributing factors. We will continue to closely monitor and control cleaning contractor performance. Starting in Q2 2020, the vehicle cleanliness score will be broken down into pre-service cleanliness and in-service/post-service cleanliness. By breaking this out, the scores will provide a better indicator of TTC performance with respect to the cleaning of vehicles and of the condition of vehicles during and after service.

# **Wheel-Trans Services**

# Wheel-Trans: On-time performance (OTP)



#### Definition

Measures on-time performance of all trips conducted by Wheel-Trans buses. Seven days a week, all time periods included. To be on time, the trip must arrive within 20 minutes of its scheduled arrival.

## Contact

Kirsten Watson, Deputy Chief Executive Officer – Operations

## Results

OTP in February decreased by 0.2% from the previous period to 93.7%, and is 1.3% higher than the same period in 2019.

# Analysis

An increase in inclement weather for the February period affected OTP, causing the decrease of 0.2% from the previous period. Focus on service adjustments by the Dispatch team led to an increase of 1.3% over the same period in 2019

# **Action Plan**

Service adjustments and efficient trip placement will be an action item for the Dispatch team. Trips will be analyzed to ensure they are compatible with the operator's run thus enhancing the customer journey.

# Wheel-Trans: Mean distance between failures (MDBF)



# Definition

Total kilometres accumulated over the entire fleet compared to the total number of chargeable mechanical road calls. Data included for all seven days of service.

## Contact

Rich Wong, Chief Vehicles Officer

# Results

The February MDBF of 17,469 kilometres exceeded the target of 12,000 kilometres. This is an increase compared to last month (16,751 kilometres).

# Analysis

The Wheel-Trans fleet consists of 128 ProMaster and 127 Friendly buses. Mechanical driveline failures and diesel exhaust fumes detected by operators continue to account for the most road calls and change-offs for the Friendly bus fleet. Some water leaks and side ramp issues have been experienced on the ProMaster bus fleet.

# **Action Plan**

To help mitigate exhaust system issues on the Friendly bus fleet, we continue to perform post repair exhaust system checks on all Friendly buses. A pilot is underway to install a new programing feature on all second-generation Friendly buses that will allow the operator to perform parked regenerations through the steering wheel functions while remaining in service. We have reprogrammed 85% of the secondgeneration fleet and are aiming for a mid-March completion.

Engineering retrofit programs are underway on our ProMaster fleet to correct side ramp failures (95% complete) and water leaks (50% complete).

# Wheel-Trans: Accommodated service



# Definition

Accommodated rate is the percentage of passengers requesting Wheel-Trans services that are actually provided trips by either a Wheel-Trans bus, accessible taxi or sedan taxi.

# Contact

Kirsten Watson, Deputy Chief Executive Officer – Operations

# Results

The accommodated rate in February was 99.9%. This is 0.9% above our target, and consistent with the same period in 2019.

# Analysis

Wheel-Trans has consistently been able to maintain a high accommodation rate for customers. This is a result of service and scheduling adjustments that provide trip solutions for requested service requests.

# **Action Plan**

Cancellation rates and backfilling of trips will be the focus as service demand is expected to continue to increase in period 3.

# Wheel-Trans Contact Centre: Average wait time



#### Definition

The average amount of time a customer waits in the queue before their call is answered.

## Contact

Kirsten Watson, Deputy Chief Executive Officer – Operations

## Results

The average wait time in February was 4.6 minutes. This is 10.4 minutes below our target.

# Analysis

Additional hiring in 2019 in Reservations has provided more coverage on the phones to assist customers. This has had a significant impact on our wait times. The increase in agents has led to a reduction in the amount of time customers wait on hold to speak to a Reservationist and has improved the overall customer experience.

# **Action Plan**

With ongoing upgrades and improvements to our self-booking website, we expect our customers will continue to take advantage of this option to book their trips. Supervisory staff monitor call volumes daily to ensure the average wait time for our customers remains below our target. More focus has been placed on call handling techniques and professionalism to improve the customer experience.

# **Station services**

# **Station cleanliness**



#### Definition

Average results of a third party audit conducted each quarter of all 75 stations. Audits are conducted weekdays only, excluding holidays.

#### Contact

James Ross, Chief Operating Officer

## Results

The station cleanliness audit score in Q4 was 74.9%, a slight decrease of 0.82% from last quarter (75.7%). The result was just below our target of 75%.

## Analysis

Of 22 components that are scored, two increased, eight remained the same and 12 saw a slight decrease.

The top three scoring stations in Q4 were: York University (92.2%), Pioneer Village (88.8%) and Downsview Park (87.3%)

The bottom three scoring stations were: Yorkdale (67.5%), Dufferin (66.9%) and Dundas West (65.5%). Yorkdale has been impacted by construction, while Dufferin and Dundas West saw slight improvements for the second straight quarter.

# **Action Plan**

Seasonal projects will start up again near the end of Q1 2020. The focus until then will be maintaining stations during winter months.

# **Elevator availability**



#### Definition

Percentage of total available subway elevator service hours during subway revenue service in a given month.

# Contact

Fort Monaco, Chief Infrastructure and Engineering Officer

## Results

Elevator availability in February was 96.87%, below the target of 98%. Performance marginally decreased compared to January (96.91%).

# Analysis

Ongoing elevator overhaul work at Bathurst, Kennedy and Scarborough Centre stations negatively impacted performance in February.

# **Action Plan**

Bathurst Station elevator overhaul work is now scheduled to be completed by June 1, 2020. Work at Kennedy and Scarborough Centre stations will be completed by end of July 2020. These delays are due to COVID-19 impacts.

We will continue performing preventative maintenance to meet reliability and availability targets.

# **Escalator availability**



## Definition

Percentage of total available escalator service hours during subway revenue service in a given month.

#### Contact

Fort Monaco, Chief Infrastructure and Engineering Officer

## Results

Escalator availability in February was 96.3%, below the target of 97%. Performance decreased in February compared to last month (97.4%).

# Analysis

Water damage to six escalators at St George, Bloor-Yonge, Kennedy, York Mills, and Dupont stations negatively impacted escalator service in February.

# **Action Plan**

Four escalators were repaired and returned to service. Repairs are still on-going for two escalators at Bloor-Yonge and Dupont stations.

We will continue performing preventative maintenance to meet reliability and availability targets.

# Fare gates equipped with PRESTO



# Definition

Percentage of time fare gates are available for use. Availability data provided by manufacturer for 24 hours a day, seven days a week.

## Contact

Kathleen Llewellyn-Thomas, Chief Customer Officer

# Results

Fare gate availability averaged 99.1% in January, which represents a 0.29% increase from last month and an increase of 1.77% of the same time last year. Availability was below the 99.5% target.

# Analysis

This increase reflects the continued ongoing efforts by both TTC and Scheidt & Bachmann (S&B) to address the hardware and software issues with the fare gates. We expect performance to continue to improve throughout 2020 with the current modification programmes in place.

The issue related to the availability data has been addressed and the data for the past three months has been corrected.

# Action Plan

We continue to work with S&B to address ongoing hardware and software issues. A number of programs have been developed and are currently being implemented. These include:

- The program to replace the industrial computers in the fare gates was completed in Q4 2019. It is expected that S&B's secondgeneration industrial computer with a new Solid State Drive, will provide a number of improvements including: Extending the hard drive capacity, improving and protecting the hard drive sectors, increasing the hard drive speed (faster read/write - start-up time will be improved), extending the data logging, and helping address USB disconnect issue we are currently having with the fare gates.
- A software update was installed in late Q3 2019. This software update has improved passage detection, leading to a more reliable interface for the customers; provided an upgrade to the motor control interface, improving motor reliability; and resolved an ongoing issue with the card readers on the gates.

 S&B development teams are currently completing an in-depth review of ongoing issues with the fare gate motors. The final report is still outstanding; steps are being taken to implement some of the fixes indicated in the initial reports. Once the final report is completed and the recommendations are reviewed an action plan will be developed based on the findings.

These plans will help to address the following issues: screen freezing, tap/no entry, card reader failures, motor and heater failures. We have additional software and hardware updates scheduled, which will add functionality and provide further fixes to know problems, improving gate availability for customers.

# **PRESTO card readers**



#### Results

PRESTO card reader availability averaged 99.38% in February, which represents an increase of 0.10% from last month. Availability remains below the target of 99.99%.

#### Analysis

Metrolinx has enhanced backend monitoring capability to remotely recover and resolve some device failures. It has also commenced the replacement of a hardware component on card readers to address some instances of card reader freezing and becoming unavailable for customer use.

# **Action Plan**

Continue with the replacement of hardware components on card readers and monitor impact on availability.

**Note:** Availability data from Metrolinx may be subject to inaccuracies, as indicated in previous updates and confirmed by the Auditor General's recent report. We are working with Metrolinx to improve the methodology for determining availability including the frequency at which the devices are polled for availability status. Further updates will be provided.

#### Definition

The total percentage of all PRESTO card readers that are in working order and available for customer use.

PRESTO card readers are devices that are installed onboard TTC surface vehicles (buses and streetcars) and allow customers to pay their fare by tapping on the device.

# Contact

Kathleen Llewellyn-Thomas, Chief Customer Officer

# PRESTO Fare Vending Machines (FVM)



# Definition

The average percentage of daily availability of PRESTO FVMs are based on duration of identified fault incidents to time of resolution. Cash collection incidents are currently not reflected in the calculation.

PRESTO FVMs allow customers to load funds onto their PRESTO cards via credit or debit payment, purchase new PRESTO cards, view balance and card history and activate any products purchased online. The FVMs are installed at station entrances.

# Contact

Kathleen Llewellyn-Thomas, Chief Customer Officer

# Results

PRESTO FVM availability averaged 98.48% in February, which represents an decrease of -0.39% from the last month. Availability remains above the target of 95.00%.

# Analysis

The decrease in availability is attributed to the low volume of paper stock at some machines and the timeliness of replenishing the machines.

# **Action Plan**

Increased monitoring of the devices and more timely replenishment of paper stock by Metrolinx contract staff. **Note:** Availability data from Metrolinx may be subject to inaccuracies, as indicated in previous updates. We are working with Metrolinx to improve the methodology for determining availability. Further updates will be provided.

# PRESTO Self-Serve Reload Machines (SSRM)



#### Results

PRESTO SSRM availability averaged 99.74% in February, which represents an increase of 0.04% from the previous month. Availability remains above the target of 95.00%.

## Analysis

The increase in availability is attributed to a decrease in printer jams.

# Definition

The average percentage of daily PRESTO SSRM availability are based on duration of identified fault incidents to time of resolution.

PRESTO SSRMs allow customers to load funds onto their PRESTO cards via credit or debit payment. The device also allows customers to view their balance and card history, and activate any products purchased online. The SSRMs are installed at subway station entrances.

# Contact

Kathleen Llewellyn-Thomas, Chief Customer Officer

# **Action Plan**

We will continue to monitor availability.

**Note:** Availability data from Metrolinx may be subject to inaccuracies, as indicated in previous updates. We are working with Metrolinx to improve the methodology for determining availability. Further updates will be provided.

# PRESTO Fares and Transfer Machines (FTM)



#### Definition

The average percentage of daily availability of PRESTO FTMs are based on duration of identified fault incidents to time of resolution. Cash collection incidents are currently not reflected in the calculation.

The FTMs are Single Ride Vending Machines (SRVMs), installed on the new TTC streetcars and at selected streetcar stops. These allow customers to purchase Proof of Payment tickets.

## Contact

Kathleen Llewellyn-Thomas, Chief Customer Officer

# Results

PRESTO FTM availability averaged 99.32% in February, which is an increase of 0.26% from last month. Availability remains above the target of 95.00%.

# Analysis

The increase in availability is attributed to enhanced monitoring, improvements to cash collection and enhancements to scheduling of streetcars for PRESTO equipment maintenance.

# **Action Plan**

Additional changes are planned to align cash collection activities with vehicle availability. **Note:** Availability data from Metrolinx may be subject to inaccuracies, as indicated in previous updates and confirmed by the Auditor General's recent report. We are working with Metrolinx to improve the methodology for determining availability. We are also in discussions with Metrolinx to restore the debit/credit payment feature for new streetcars. Further updates will be provided. For further information on TTC performance, projects and services, please visit ttc.ca

