For Information

Chief Executive Officer's Report – February 2021 Update

Date: February 10, 2021
To: TTC Board
From: Chief Executive Officer

Summary

The Chief Executive Officer's Report is submitted each month to the TTC Board, for information. Copies of the report are also forwarded to each City of Toronto Councillor, the Deputy City Manager, and the City Chief Financial Officer, for information. The report is also available on the TTC's website.

Financial Summary

The monthly Chief Executive Officer's Report focuses primarily on performance and service standards. There are no financial impacts associated with the Board's receipt of this report.

Equity/Accessibility Matters

The TTC strives to deliver a reliable, safe, clean, and welcoming transit experience for all of its customers, and is committed to making its transit system barrier-free and accessible to all. This is at the forefront of TTC's new Corporate Plan 2018-2022. The TTC strongly believes all customers should enjoy the freedom, independence, and flexibility to travel anywhere on its transit system. The TTC measures, for greater accountability, its progress towards achieving its desired outcomes for a more inclusive and accessible transit system that meets the needs of all its customers. This progress includes the TTC's Easier Access Program, which is on track to making all subway stations accessible by 2025. It also includes the launch of the Family of Services pilot and improved customer service through better on-time service delivery with improved shared rides, and same day bookings to accommodate Family of Service Trips. These initiatives will help TTC achieve its vision of a seamless, barrier free transit system that makes Toronto proud.

Decision History

The Chief Executive Officer's Report, which was created in 2012 to better reflect the Chief Executive Officer's goal to completely modernize the TTC from top to bottom, was transformed to be more closely aligned with the TTC's seven strategic objectives – safety, customer, people, assets, growth, financial sustainability, and reputation. In 2018, with the launch of the new Corporate Plan, this report has undergone progressive changes to align and reflect our reporting metrics to the TTC's continued transformation.

Issue Background

For each strategic objective, updates of current and emerging issues and multi-year performance are now provided, along with a refreshed performance dashboard that reports on the customer experience. This information is intended to keep the reader completely up-to-date on the various initiatives underway at the TTC that, taken together, will help the TTC achieve its vision of a transit system that makes Toronto proud.

Contact

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Signature

Richard J. Leary
Chief Executive Officer

Attachments

Attachment 1 – Chief Executive Officer's Report – February 2021

Toronto Transit Commission
CEO's Report

February 2021

Ongoing trend indicators: ✅ Favourable ➖ Mixed ❌ Unfavourable 🔵 Not applicable
*Represents four-quarter average of actual results

Performance scorecard

TTC performance scorecard – February 2021

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
Safety and security							
Lost-time injuries	Injuries per 100 employees	Q3 2020	5.4	4.6*	❌	❌	**16**
Customer injury incidents	Injury incidents per 1M boardings	Q3 2020	2.4	2.0*	❌	❌	**18**
Offences against customers	Offences per 1M boardings	Q4 2020	2.11	1.00	❌	❌	**19**
Offences against staff	Offences per 100 employees	Q4 2020	5.11	4.18	❌	❌	**22**
Ridership							
Ridership	Monthly ridership	Dec 2020	13.7M	44.8M	❌	❌	**23**
Ridership	Year-to-date ridership	2020 YTD (to Dec)	225.0	533.5M	❌	❌	**23**

Ongoing trend indicators: ✅ Favourable ➖ Mixed ❌ Unfavourable 🔵 Not applicable

*Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
PRESTO ridership	Monthly ridership	Dec 2020	12.4M	41.7M	❌	❌	25
PRESTO ridership	Year-to-date ridership	2020 YTD (to Dec)	203.8M	486.7M	❌	❌	25
Wheel-Trans ridership	Monthly ridership	Dec 2020	106,005	329,042	🔵	🔵	27
Wheel-Trans ridership	Year-to-date ridership	2020 YTD (to Dec)	1.7M	4.2M	🔵	🔵	27

Customer experience

Customer satisfaction	Customer satisfaction score	Q3 2020	78%	80%	❌	✅	29

🚊 **Subway services**

① On-time performance Line 1	Scheduled headway performance at end terminals	Dec 2020	94.3%	90.0%	✅	✅	31
② On-time performance Line 2	Scheduled headway performance at end terminals	Dec 2020	95.0%	90.0%	✅	✅	32
③ On-time performance Line 3	Scheduled headway performance at end terminals	Dec 2020	90.1%	90.0%	✅	✅	33

Ongoing trend indicators: ✅ Favourable   ➖ Mixed   ❌ Unfavourable   🔵 Not applicable

*Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
(4) On-time performance Line 4	Scheduled headway performance at end terminals	Dec 2020	99.4%	90.0%	✅	✅	34
(1) Capacity Line 1	Trains-per-hour during peak	Dec 2020	97.9%	96.0%	✅	✅	35
(1) Capacity Bloor-Yonge Station	Trains-per-hour (8 a.m. to 9 a.m.)	Dec 2020	100.0%	96.0%	✅	✅	35
(1) Capacity St George Station	Trains-per-hour (8 a.m. to 9 a.m.)	Dec 2020	97.7%	96.0%	✅	✅	35
(2) Capacity Line 2	Trains-per-hour during peak	Dec 2020	100.0%	96.0%	✅	✅	37
(3) Capacity Line 3	Trains-per-hour during peak	Dec 2020	77.0%	98.0%	❌	❌	38
(4) Capacity Line 4	Trains-per-hour during peak	Dec 2020	100%	98.0%	✅	✅	39
Amount of service	Average weekly service hours delivered	Dec 2020	9,396 h	9,578 h	❌	➖	40
Vehicle reliability T1 trains	Mean distance between failures	Dec 2020	310,868 km	300,000 km	✅	✅	41
Vehicle reliability TR trains	Mean distance between failures	Dec 2020	700,000 km	600,000 km	✅	✅	43

Ongoing trend indicators: ✅ Favourable   ➖ Mixed   ❌ Unfavourable   🔵 Not applicable

*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	Dec 2020	100%	100%	✅	✅	**45**
Subway cleanliness	Audit score	Q4 2020	90.2%	90.0%	✅	✅	**46**
🚋 **Streetcar services**							
On-time performance	On-time departures from end terminals	Dec 2020	83.6%	90.0%	❌	✅	**48**
Amount of service	Average weekly service hours	Dec 2020	15,861 h	15,646 h	✅	➖	**50**
Vehicle reliability: *Contractual*	Mean distance between failures	Dec 2020	50,000 km	35,000 km	✅	➖	**51**
Vehicle reliability: *Operational*	Mean distance between failures	Dec 2020	43,873 km	35,000 km	✅	➖	**51**
Road calls and change offs	Average daily road calls or vehicle change offs	Dec 2020	2	2.4	✅	✅	**54**
Service availability	Daily number of vehicles available for service	Dec 2020	100%	100%	✅	✅	**56**
Streetcar cleanliness: Pre-service	Audit score	Q4 2020	88.6%	90.0%	❌	✅	**57**

Ongoing trend indicators: ✅ Favourable ➖ Mixed ❌ Unfavourable 🔵 Not applicable

*Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
Streetcar cleanliness: In-service & post-service	Audit score	Q4 2020	80.3%	90.0%	❌	✅	59
🚌 **Bus services**							
On-time performance	On-time departures from end terminals	Dec 2020	87.0%	90.0%	❌	✅	61
Amount of service	Average weekly service hours	Dec 2020	139,428 h	139,908 h	❌	➖	63
Vehicle reliability: eBus	Mean distance between failures	Dec 2020	30,000 km	24,000 km	✅	✅	65
Vehicle reliability: Hybrid	Mean distance between failures	Dec 2020	30,000 km	24,000 km	✅	✅	67
Vehicle reliability: Clean Diesel	Mean distance between failures	Dec 2020	20,000 km	12,000 km	✅	✅	69
Road calls and change offs	Average daily road calls or vehicle change offs	Dec 2020	19	24	✅	✅	71
Service availability	Daily average service delivered	Dec 2019	122%	100%	✅	✅	72
Bus cleanliness: Pre-service	Audit score	Q4 2020	99.1%	90.0%	✅	✅	73

Ongoing trend indicators: ✅ Favourable ➖ Mixed ❌ Unfavourable 🔵 Not applicable

*Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
Bus cleanliness: In-service & post-service	Audit score	Q4 2020	98.9%	90.0%	✅	✅	**74**
♿ **Wheel-Trans services**							
On-time performance	% within 20 minutes of schedule	Dec 2020	97.6%	90.0%	✅	✅	**75**
Vehicle reliability	Mean distance between failures	Dec 2020	20,000 km	12,000 km	✅	✅	**76**
Accommodation rate	Percentage of requested trips completed	Dec 2020	99.9%	99.0%	✅	✅	**78**
Average wait time	Average amount of time a customer waits before call is answered	Dec 2020	2.4 min	15 min	✅	➖	**79**
👥 **Station services**							
Station cleanliness	Audit score	Q3 2020	76.1%	75.0%	✅	✅	**81**
Elevator availability	Per cent available	Dec 2020	98.0%	98.0%	✅	➖	**83**
Escalator availability	Per cent available	Dec 2020	96.1%	97.0%	❌	✅	**84**

Ongoing trend indicators: ✅ Favourable ➖ Mixed ❌ Unfavourable 🔵 Not applicable

*Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
Fare gates	Per cent available	Dec 2020	99.59%	99.50%	✅	🟠	**86**
PRESTO fare card readers	Per cent available	Dec 2020	98.96%	99.99%	❌	❌	**88**
PRESTO Fare Vending Machines	Per cent available	Dec 2020	99.71%	95.00%	✅	✅	**89**
PRESTO Self-Serve Reload Machines	Per cent available	Dec 2020	99.99%	95.00%	✅	✅	**90**
PRESTO Fares and Transfer Machines	Per cent available	Dec 2020	99.85%	95.00%	✅	✅	**91**

Ongoing trend indicators: ✅ Favourable 🟠 Mixed ❌ Unfavourable 🔵 Not applicable

*Represents four-quarter average of actual results

CEO's commentary

It's my pleasure to welcome the newest member to the TTC Board, citizen Commissioner Fenton Jagdeo. City Council confirmed Mr. Jagdeo's appointment on February 2. He's scheduled to attend his first meeting this month, and I'm looking forward to the valuable skill and strategic insight he will bring to the table.

Mr. Jagdeo has spent a large part of his career at a global management consultancy, with a focus on business strategy and innovation. He's also a co-founder of BIPOC Network, an initiative to create opportunities for Black, Indigenous and People of Colour and LGTBQ+ students, starting with Western University and the Ivey Business School. His term on the Commission runs until March 2023.

I'd also like to congratulate Vice-Chair Joanne De Laurentiis on her re-appointment to the TTC Board at the same Council meeting. The Vice-Chair has served on the TTC Board since October 2016. Her new term runs until February 2025.

The TTC is governed by a 10-member Board consisting of six City Councillors and four members of the general public.

The Advisory Committee on Accessible Transit (ACAT) has a new Chair in Mr. Igor Samardzic. He was elected to lead ACAT in January. On behalf of the TTC Executive Team, it gives me great pleasure to welcome him to our meeting this month, along with ACAT's new Vice-Chairs, Debbie Gillespie and Chris Stigas.
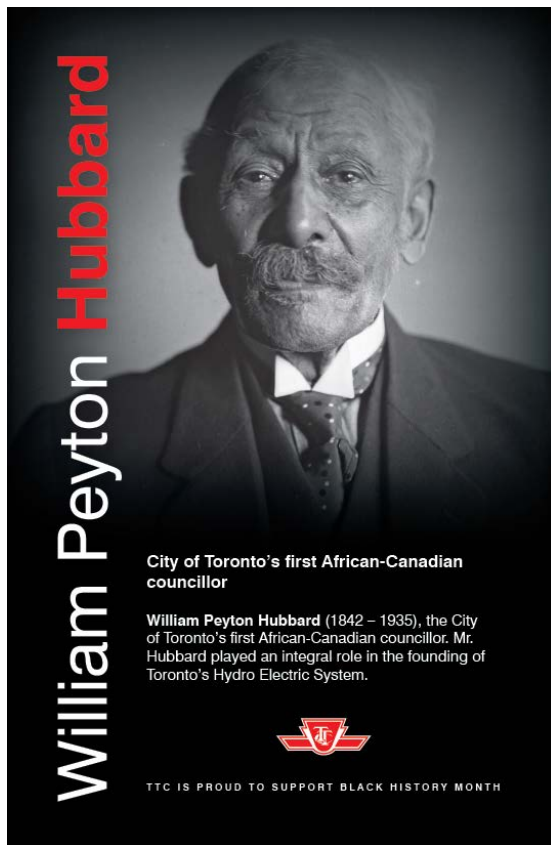
Black History Month

For several years now the TTC has celebrated Black History Month with a variety of festivities across the organization to honour the contributions of Black-Canadians, past and present.

This year, we've decided to go a step further by showcasing the accomplishments of prominent Black-Canadians who were firsts in their respective fields, and who played a critical role in shaping our great city and country.

Black History Month presents an opportunity for all of us to expand our knowledge and learn about prominent figures, such as: William Peyton Hubbard, Jean Augustine, Lincoln Alexander and Rosemary Brown. Their images and achievements are in full display on a number of wrapped buses, streetcars and trains, as well as featured on station posters, video screens and online.

This stunning campaign is also displayed in our workplaces, where it runs alongside posters of some of our employees marking the significance Black History Month in their own words.

William Peyton Hubbard

City of Toronto's first African-Canadian councillor

William Peyton Hubbard (1842 – 1935), the City of Toronto's first African-Canadian councillor. Mr. Hubbard played an integral role in the founding of Toronto's Hydro Electric System.

TTC IS PROUD TO SUPPORT BLACK HISTORY MONTH

In honouring Black Canadians, we're demonstrating our desire for the TTC to be the diverse and inclusive employer we ultimately want it to be — one that all Torontonians can be both proud of and feel welcomed by.

Board agenda and reports

At the first TTC Board meeting of the year on February 10, 2021, TTC staff will bring forward a number of important, actionable reports. The agenda will include the following items:

- Scarborough RT life extension: options for transit service along the corridor until the opening of the Scarborough Subway Extension.

- TTC fare policy and PRESTO: update on the settlement agreement with Metrolinx-PRESTO and the TTC's Fare Policy and Collection Strategy.

- Streetcar procurement strategy: terms and conditions related to

the supply of additional accessible streetcars from Bombardier Transportation Ltd.

- Asbestos abatement on Line 1: request for a contract award for state-of-good-repair work and asbestos abatement at the St Patrick Station northbound platform.

McNicoll Garage

And finally, by the time Commissioners reconvene for their meeting on April 14, the TTC will be operating a new bus facility. In fact, buses will roll out of McNicoll Division/Garage with the service period beginning on Sunday, March 28.

McNicoll, located in north Scarborough, is the TTC's ninth bus facility (includes Lakeshore-Wheel-Trans). The facility is about 29,000 square metres in size and will be home to nearly 100 maintenance employees and 600 operators.

I look forward to seeing you all virtually on February 10.
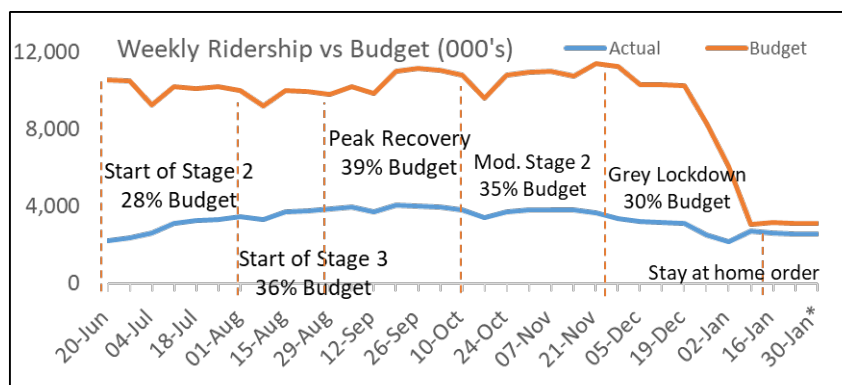
Stay safe.

Richard J. Leary
Chief Executive Officer
February 2021

A total of 15 routes will operate out of McNicoll. They are: 10 Van Horne, 17 Birchmount, 39 Finch East, 42 Cummer, 43 Kennedy, 51 Leslie, 53 Steeles East, 57 Midland, 68 Warden, 115 Silver Hills, 122 Graydon Hall, 129 McCowan North, 167 Pharmacy North, 939 Finch East Express and 953 Steeles East Express.

The garage has capacity for up to 250 accessible, 12-metre buses, and will provide the TTC much-needed maintenance and storage space to help address overcapacity issues at existing garages.
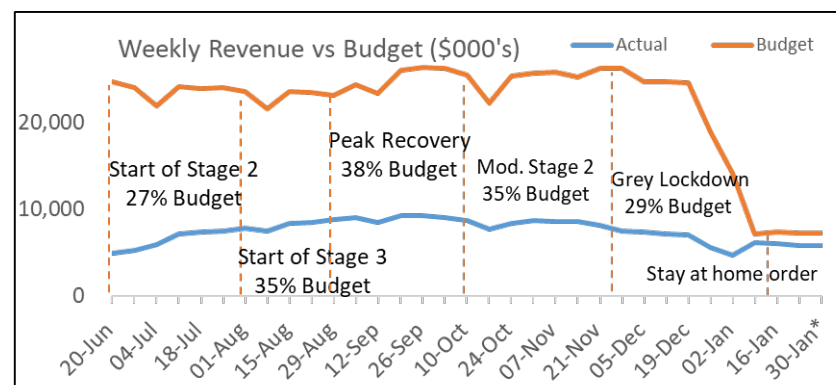
COVID-19 dashboard

2020/2021 weekly ridership and revenue

Weekly Ridership vs Budget (000's)

Actual — Budget

Start of Stage 2 28% Budget
Start of Stage 3 36% Budget
Peak Recovery 39% Budget
Mod. Stage 2 35% Budget
Grey Lockdown 30% Budget
Stay at home order

Y-axis: 12,000 / 8,000 / 4,000 / 0
X-axis: 20-Jun, 04-Jul, 18-Jul, 01-Aug, 15-Aug, 29-Aug, 12-Sep, 26-Sep, 10-Oct, 24-Oct, 07-Nov, 21-Nov, 05-Dec, 19-Dec, 02-Jan, 16-Jan, 30-Jan*

Weekly Revenue vs Budget ($000's)

Actual — Budget

Start of Stage 2 27% Budget
Start of Stage 3 35% Budget
Peak Recovery 38% Budget
Mod. Stage 2 35% Budget
Grey Lockdown 29% Budget
Stay at home order

Y-axis: 20,000 / 10,000 / 0
X-axis: 20-Jun, 04-Jul, 18-Jul, 01-Aug, 15-Aug, 29-Aug, 12-Sep, 26-Sep, 10-Oct, 24-Oct, 07-Nov, 21-Nov, 05-Dec, 19-Dec, 02-Jan, 16-Jan, 30-Jan*

2020/2021 Ridership Budget vs Actual (000's)			
Week Ending	Budget	Actual	Change	%
26-Dec	8,313	2,504	(5,809)	(69.9)
09-Jan	3,061	2,684	(377)	(12.3)
16-Jan	3,143	2,621	(522)	(16.6)
23-Jan	3,134	2,554	(580)	(18.5)
30-Jan*	3,131	2,569	(562)	(17.9)

2020/2021 Revenue Budget vs Actual ($000's)			
Week Ending	Budget	Actual	Change	%
26-Dec	$18,827	$5,594	($13,233)	(70.3)
09-Jan	$7,089	$6,102	($987)	(13.9)
16-Jan	$7,284	$5,953	($1,331)	(18.3)
23-Jan	$7,262	$5,793	($1,469)	(20.2)
30-Jan*	$7,255	$5,827	($1,428)	(19.7)

2021 Ridership Normal vs Actual (000's)			
Week Ending	Normal	Actual	Change	%
09-Jan	9,876	2,684	(7,192)	(72.8)
16-Jan	10,139	2,621	(7,518)	(74.1)
23-Jan	10,112	2,554	(7,558)	(74.7)
30-Jan*	10,101	2,569	(7,532)	(74.6)

2021 Revenue Normal vs Actual ($000's)			
Week Ending	Normal	Actual	Change	%
09-Jan	$23,499	$6,102	($17,397)	(74.0)
16-Jan	$24,125	$5,953	($18,172)	(75.3)
23-Jan	$24,061	$5,793	($18,268)	(75.9)
30-Jan*	$24,035	$5,827	($18,208)	(75.8)

Ridership is currently 17.9 % below budget, and revenue is currently 19.7% below budget.
* Jan 24 - 27 100% complete. Jan 28 - 30 extrapolated based on trend. Jan 2021 monthly pass sales is 47.4K, 4K lower than Dec sales of 51.4K.

Average weekday customer use: Week ending January 22

Customer Usage	Pre-COVID (March 2-6)	Jan 18 - 22	% of Pre-COVID
Bus Boardings	1,381,000	522,000	38%
Streetcar Boardings	350,000	82,000	23%
Subway Boardings	1,492,000	293,000	20%
Total System-wide Boardings	**3,223,000**	**897,000**	**28%**
System-wide Revenue Rides	**1,720,000**	**413,000**	**24%**

Boarding by Mode & Revenue Rides
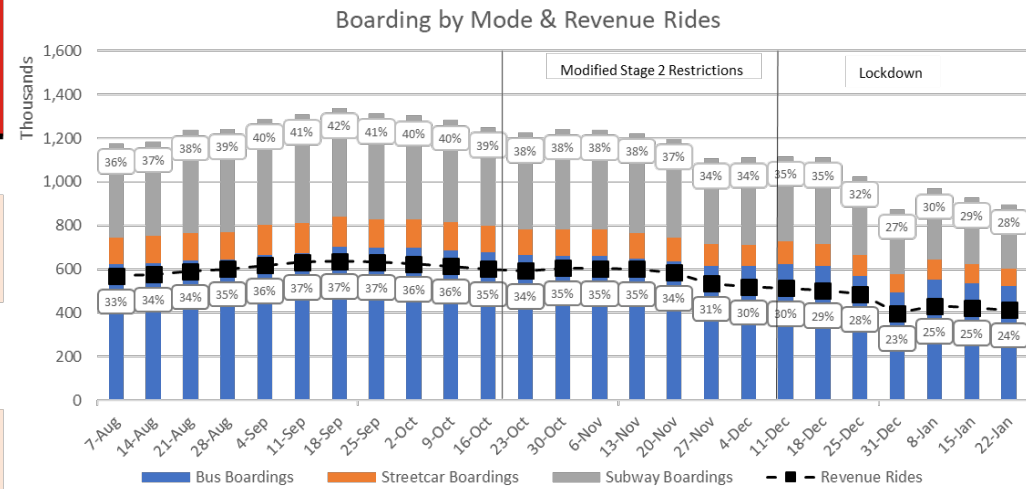
Mask compliance

- We are currently surveying customers both who are wearing a mask and those wearing a mask **correctly** (i.e. covers mouth, nose and chin)

- Compliance (this slide) = Wearing mask correctly

- Surveys are completed during day time

- About 92% of customers complied with mask rules

- There is little variation between locations, time of day and modes

Location	Date	Total Observations	Correct Usage %	Incorrect Usage %	Mode
St Clair West Stn	18-Jan-21	919	96%	4%	Subway
Victoria Park Stn	18-Jan-21	2,494	91%	9%	Bus
Bathurst Stn	20-Jan-21	2,144	92%	8%	Subway
Warden Stn	21-Jan-21	2,512	92%	8%	Subway
Bathurst Stn	22-Jan-21	1,694	91%	9%	Subway
Total		**9,763**	**92%**	**8%**	

Period	Total Observations	Correct Usage %	Incorrect Usage %
AM (6-9am)	4,019	93%	7%
Midday (9am-3pm)	4,485	91%	9%
PM (3-7pm)	1,259	92%	8%
Early Evening (7-10pm)	0	N/A	N/A

Mode	Total Observations	Correct Usage %	Incorrect Usage %
Subway	7,269	92%	8%
Bus	2,494	91%	9%

Mask adoption

- Adoption (this slide) = Wearing mask (correctly or not correctly)

- **99%** of customers are wearing a mask

- Surveys are completed during day time

- There is no variation between locations, time of day and modes

Location	Date	Total Observations	Mask %	No Mask %	Mode
St Clair West Stn	18-Jan-21	919	99%	1%	Subway
Victoria Park Stn	18-Jan-21	2,494	99%	1%	Bus
Bathurst Stn	20-Jan-21	2,144	99%	1%	Subway
Warden Stn	21-Jan-21	2,512	99%	1%	Subway
Bathurst Stn	22-Jan-21	1,694	99%	1%	Subway
Total		**9,763**	**99%**	**1%**	

Period	Total Observations	Mask %	No Mask %
AM (6-9am)	4,019	99%	1%
Midday (9am-3pm)	4,485	98%	2%
PM (3-7pm)	1,259	99%	1%
Early Evening (7-10pm)	0	N/A	N/A

Mode	Total Observations	Mask %	No Mask %
Subway	7,269	99%	1%
Bus	2,494	99%	1%

Safety and security

Lost-time injuries rate (LTIR)

Injuries per 100 Employees

Legend: ● Actual ━ 4-Quarter Average

X-axis: 1 2 3 4 (2015) 1 2 3 4 (2016) 1 2 3 4 (2017) 1 2 3 4 (2018) 1 2 3 4 (2019) 1 2 3 (2020)
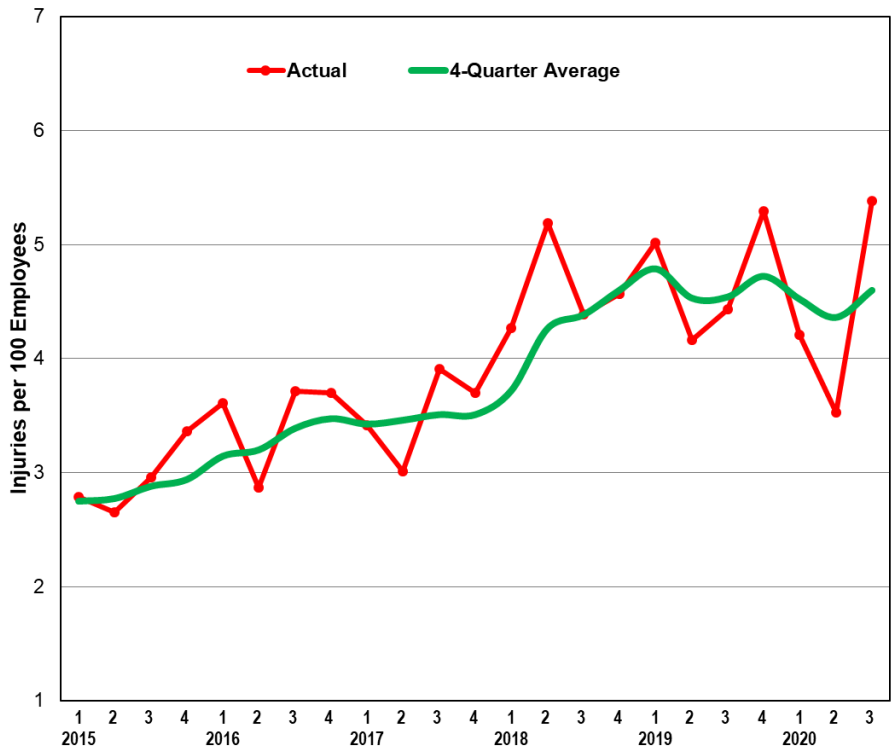
Definition
Number of lost-time injuries reported per 100 employees.

Contact
Betty Hasserjian,
Chief Safety Officer (Acting)

Results

The LTIR in Q3 2020 was 5.4 injuries per 100 employees — an increase from Q2 (3.5) and the same time last year (4.4).

Analysis

The LTIR in Q3 was 17% higher than the four-quarter average. There has been an upward trend in the LTIR since 2015.

Action plan

Musculoskeletal/ergonomic type injuries (e.g. overexertion, reach/bend/twist, repetition) continue to account for 23% of all lost-time injuries, representing 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. The train-the-trainer sessions have been deferred to winter 2021 due to the ongoing global pandemic.

Acute Emotional Event injuries account for 17% of all lost-time injuries and represent the second highest injury event type.

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 work-related 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.

Note: Q4 2020 data will be available in the March 2021 CEO's Report.

Customer injury incidents rate (CIIR)
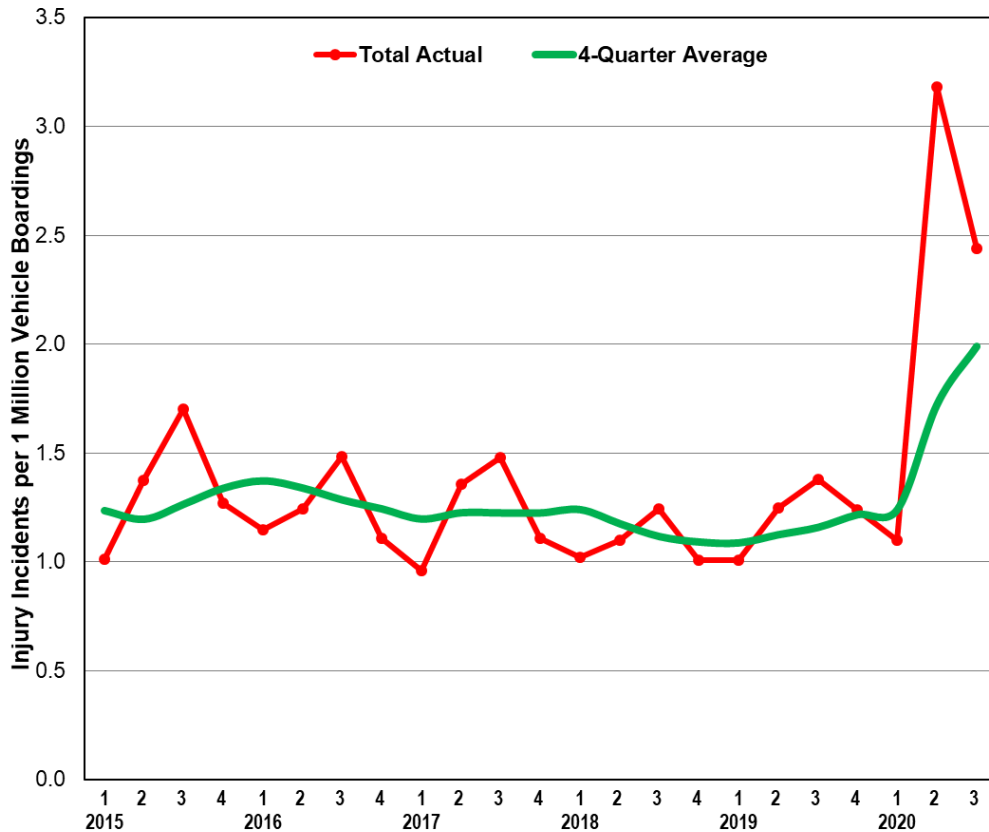
Definition
Number of customer injuries per one million boardings.

Contact
Betty Hasserjian,
Chief Safety Officer (Acting)

Results

The CIIR in Q3 2020 was 2.44 injury incidents per one million vehicle boardings — a decrease from Q2 (3.2) and an increase from the same time last year (1.4).

Analysis

The CIIR in Q3 was 23% higher than the four-quarter average. The four-quarter average line shows a statistically significant upward trend in the CIIR. The overall increase in the CIIR in 2020 was mainly due to the significant decrease in the overall TTC ridership as a result of the COVID-19 pandemic and state-of-emergency declaration.

The decrease in the CIIR in Q3 compared to Q2, was partly due to the small increase in ridership in the summer compared to spring 2020.

Action plan

We will continue to monitor the CIIR and existing customer safety initiatives.

Note: *Q4 2020 data will be available in the March 2021 CEO's Report.*
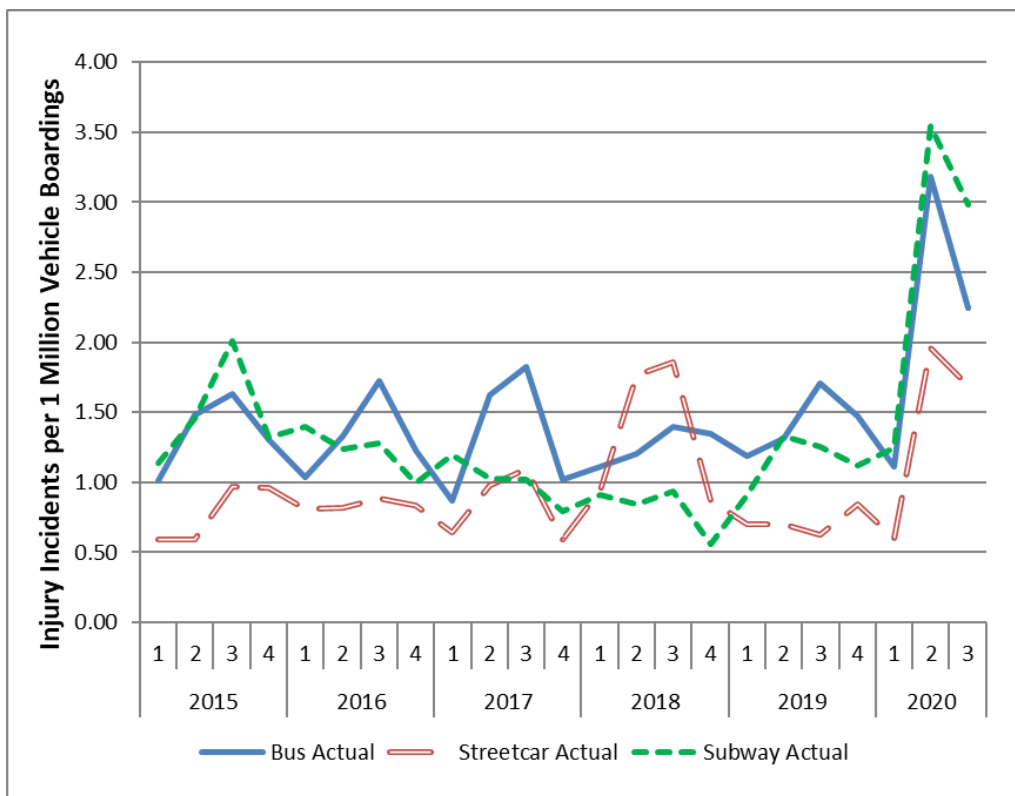
Regulatory compliance

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 October 3, 2020 and their status.

Note: *Q4 2020 data will be available in the March 2021 CEO's Report.*

Contact
Betty Hasserjian,
Chief Safety Officer (Acting)

Order compliance

Type	Number of Orders Issued		Status
	Requirement Orders[1]	Non-compliance Orders[2]	
Ministry of Labour Orders	4	7	Compliance 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	0	Not Applicable
Toronto Fire Services Code Violations	17	92	Compliance Achieved

[1] Orders issued to provide documentation/information.

[2] 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.

Offences against customers
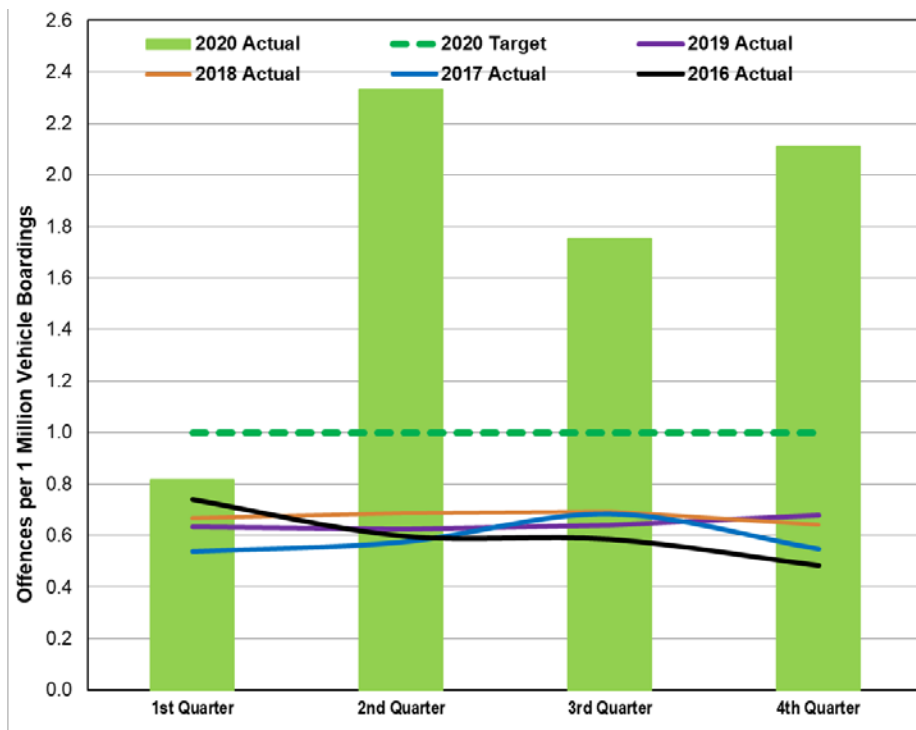
Definition
Number of offences against customers per one million vehicle boardings.

Contact
Kathleen Llewellyn-Thomas, Chief Strategy & Customer Officer

Results

In Q4, the number of offences against customers per one million vehicle boardings was 2.11. This is a 20% increase from last quarter and a 210% increase from the same time last year.

Analysis

Overall, there was an increase in the number of offences compared to the previous quarter — 167 compared to 156 offences respectively. The greatest increase was in assaults — 111 in Q4 compared to 93 in Q3.

Action plan

We continue to monitor these statistics on a regular basis and allocate Transit Special Constables across the network to provide support in the way of special details and initiatives that assist with ongoing and emerging issues identified by staff across the system. 17 new Special Constables received their status December 15. The next class of 18 Special Constables started training in October 2020 and were deployed January 10, 2021.

Offences against staff
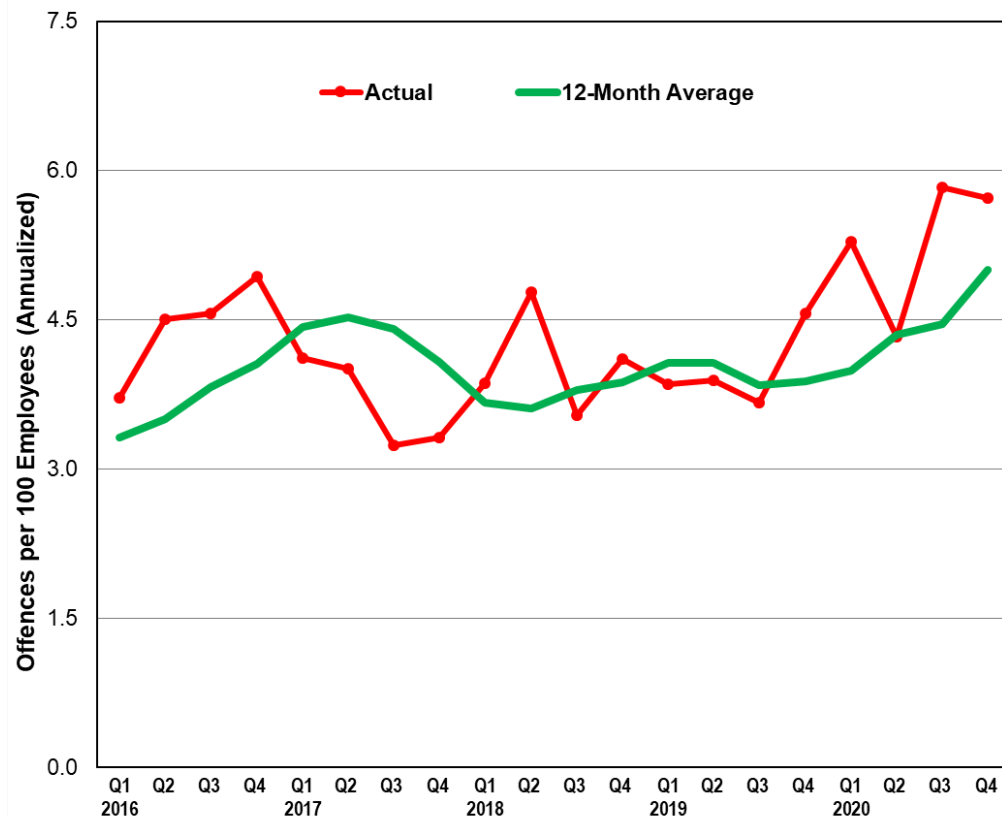
Definition
Number of offences per 100 employees.

Contact
Kathleen Llewellyn-Thomas,
Chief Strategy & Customer Officer

Results

In Q4 2020 the number of offences against staff was 5.11 offences per 100 employees. This rate is a 2% decrease from last quarter and a 25% increase compared to the same time last year.

Analysis

There has been a minimal decrease in offences towards staff in Q4 2020 compared to Q3 2020; 206 offences compared to 210 offences respectively.

Action plan

We continue to monitor these statistics on a regular basis and allocate Transit Special Constables across the network to provide support in the way of special details and initiatives that assist with ongoing and emerging issues identified across the system. 17 new Special Constables received their status December 15. The next class of 18 Special Constables started training in October 2020 and were deployed January 10, 2021.

Ridership

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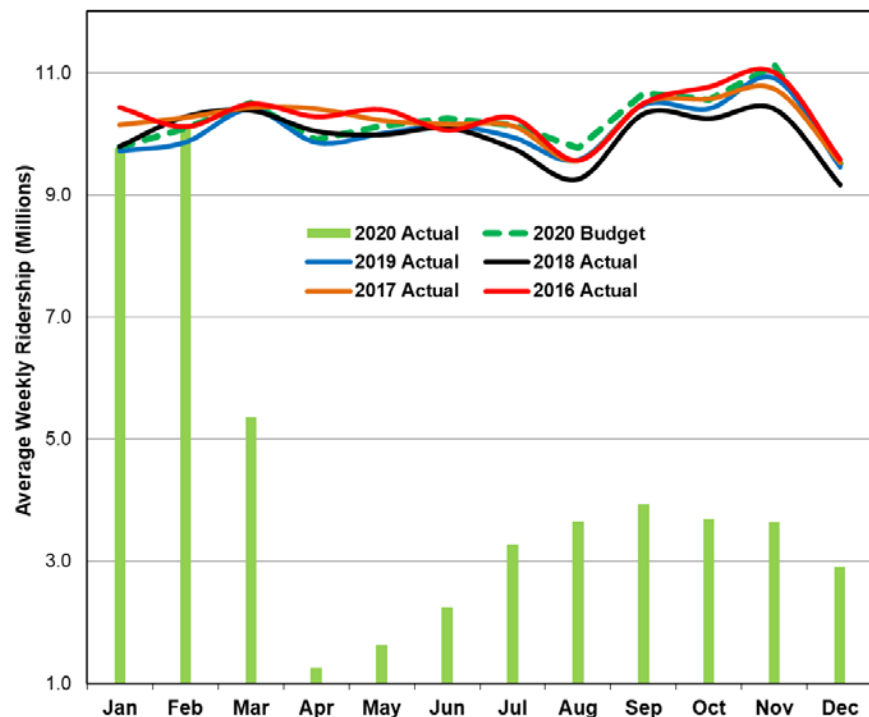
Definition
Average number of journeys per week, including paid and free journeys (e.g. two-hour transfers and children 12 and under). A journey with transfers is counted as one journey. The total is derived from cash, tickets and token counts, PRESTO data, diary studies and ridership analytics.

Contact
Josie La Vita,
Chief Financial Officer

Results

Period 12 (November 29 to December 31, 2020) revenue ridership totalled 13.671 million or 2.900 million passengers per week. This represents a 20.5% decrease from period 11 (3.646 million passengers per week). Ridership was 31.165 million or 69.5% below budget and 30.894 million or 69.3% below the comparable period in 2019.

While January and February revenue ridership was in line with budgeted levels, TTC revenue ridership dropped to 26.783 million rides, or 49% below budget in March and was at its lowest in April, at approximately 5.037 million rides, or 87% below budget. Revenue ridership began to slowly recover through the summer months, reaching approximately

19.661 million rides in September, or 63.1% below budget. However, with increasing restrictions, revenue Ridership declined in the latter months of the year, with November at 14.584 million rides or 67.2% below budget, and December at 13.671 million or 69.5% below budget.

Year-to-date (periods 1-12) revenue ridership totalled 224.999 million, which was 308.501 million or 57.8% below budget and 301.024 million or 57.2% below the comparable period in 2019.

Year-to-date ridership now includes adjustments for 5.758 million rides lost in March and 1.311 million in April due to reduced monthly pass travel.

Analysis

Toronto entered the grey zone lockdown on November 23 and the rest of Ontario subsequently entered a province-wide lockdown on December 26.

Weekly ridership averaged 3.4 million at the end of November and dropped to 3.1 million in mid-December before the holidays. Weekly ridership is expected to retract further in January as Ontario's state of emergency and stay-at-home order will be in effect until at least February 9th.

Period 12 ridership is 69.3% below 2019 results. This represents a 2.76% decline over period 11 which was 66.6% below 2019 ridership levels. The decline is partially due to increased COVID-19 restrictions during the period.

Ridership is not expected to rise as the city remains in a state of emergency. Even after the emergency measures are lifted, it is expected that ridership will take time to recover to its pre COVID-19 levels.
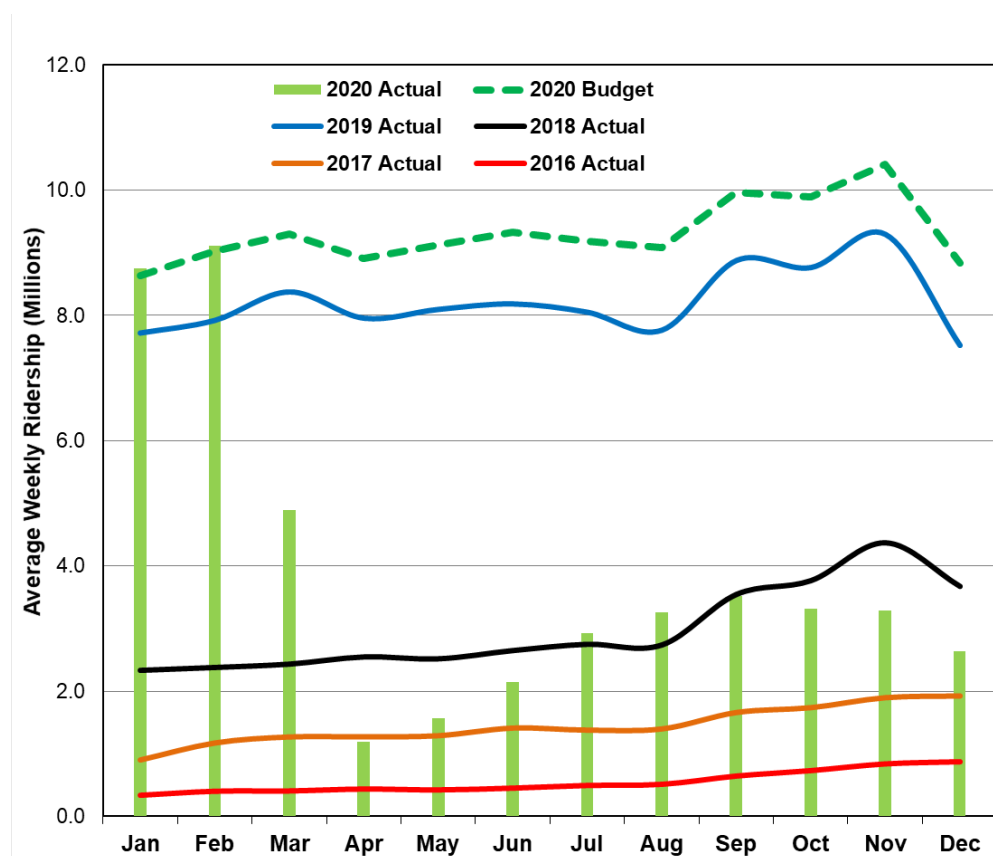
Action plan

In January, we are continuing to operate the demand-responsive service plan as outlined in the 2021 Annual Service Plan (ASP) approved by the TTC Board in December. Bus service is scheduled at 100%, streetcar at 83% and subway at 86% of pre-COVID levels. Overall, the TTC is operating 97% of pre-COVID levels.

The ASP includes the restoration of bus service comprising of most express routes and the continued provision of demand-responsive buses to deploy where additional capacity is required. Flexible buses will be used on high-demand routes and in specific high-demand cases. For example, flexible buses are being used to serve a new Amazon Fulfillment Centre in Scarborough where 1,600 essential workers are employed. The flexible buses provide additional capacity over and above regular scheduled service during a shift change when demand peaks.

We will continue to monitor ridership and adjust service to match capacity with demand.

PRESTO ridership

Average Weekly Ridership (Millions)

Legend: 2020 Actual, 2020 Budget, 2019 Actual, 2018 Actual, 2017 Actual, 2016 Actual

Months: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

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

Period 12 (November 29 to December 31, 2020) PRESTO ridership totalled 12.412 million or 2.633 million passengers per week. This represents a 19.8% decrease from period 11 (3.283 million passengers per week). PRESTO ridership was 29.263 million or 70.2% below budget and 23.078 million or 65.0% below the comparable period in 2019.

PRESTO ridership trends were similar to those observed in overall revenue ridership. January and February of 2020 were in line with budget, however March was 24.463 million PRESTO rides, or 47.4% below budget and April was the lowest for the year with 4.779 million PRESTO rides, or 86.6% below budget. PRESTO ridership picked up in the latter part of summer with August having 13.058 million PRESTO rides, or 64.1% below budget and September having 17.576 million PRESTO rides, or 64.7% below budget. As restrictions were implemented PRESTO ridership began to dip, with November dropping to 13.133 million

PRESTO rides, or 68.5% below budget, and December dropping to 12.412 million PRESTO rides or 70.2% below budget.

Year-to-date (periods 1-12) PRESTO ridership totalled 203.843 million. This is 282.851 million or 58.1% below budget and 225.863 million or 52.6% below the comparable period in 2019.

Year-to-date ridership now includes adjustments for 5.293 million rides lost in March and 1.311 million in April due to reduced monthly pass travel.

Analysis

The PRESTO adoption rate for period 12 increased slightly to 90.8% from 90.1% in Period 11. The rate is expected to stay at the current level as outstanding tickets and tokens continue to be used.

47,359 monthly passes were sold for January, a decrease of 4,035 over December. The largest decrease was in the adult and post secondary group (3,652), followed by seniors (183) and youth (200).

As the pandemic continues, period pass sales are not expected to increase as uncertainty of travel restrictions increases.

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.

Wheel-Trans ridership
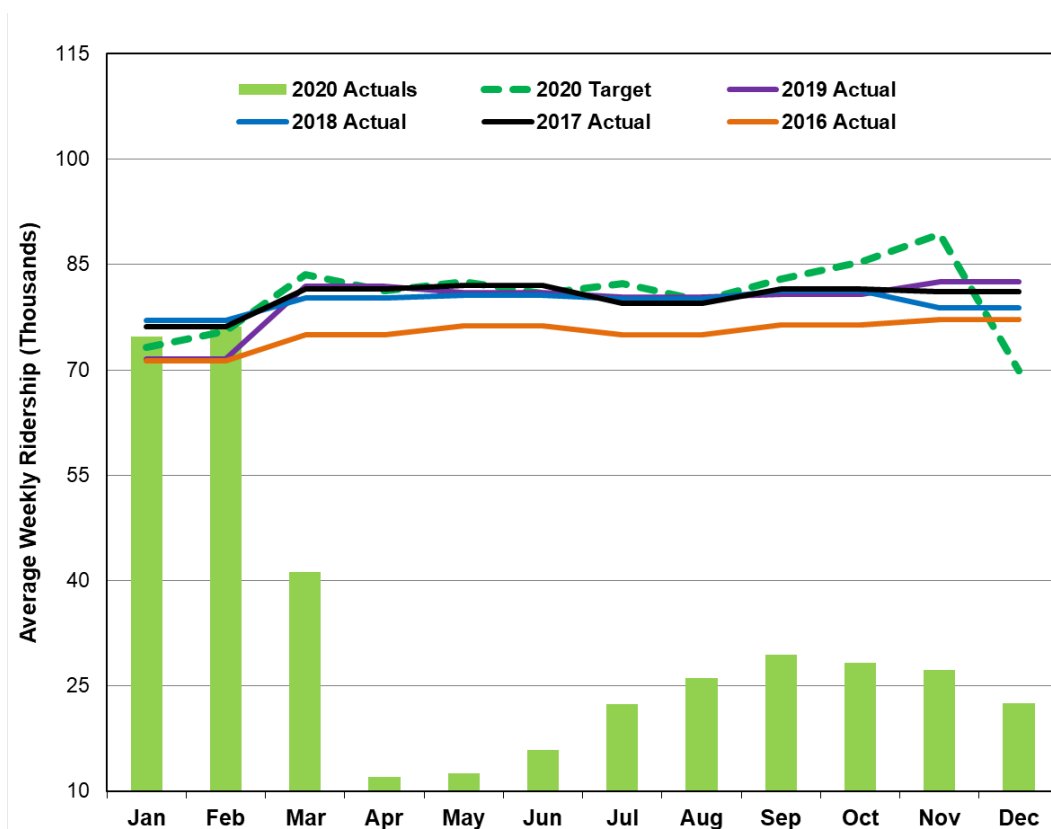
Definition
Average number of journeys per week using both Wheel-Trans dedicated services and contracted services. Wheel-Trans ridership is not included in the TTC ridership totals.

Contact
James Ross,
Chief Operating Officer

Results

Ridership in Period 12 (Nov 29 to Dec 31, 2020) was 106,005 or 22,505 passengers per week. This figure was 67.8% lower than the budgeted 69,860 customers per week. In terms of year-over-year growth, the Period 12 year-to-date ridership is 59.1% lower compared to the same period in 2019, and is currently 59.6% (2.50M) under the year-to-date 2020 budget.

Analysis

Further pandemic restrictions were identified by the City and the Province with Red Control restrictions changing as of December 26, 2020. Customer trip requests continue to decline with closures of schools, restaurants and non-essential retail locations. Safety protocols continue and customer trip requests have been reduced to essential trips.

Action plan

Safety protocols and management of trips ensuring that all trip requests are accommodated remain the focus of Wheel-Trans. Overall ridership trends are expected to remain reduced for the first half of 2021.

Customer experience

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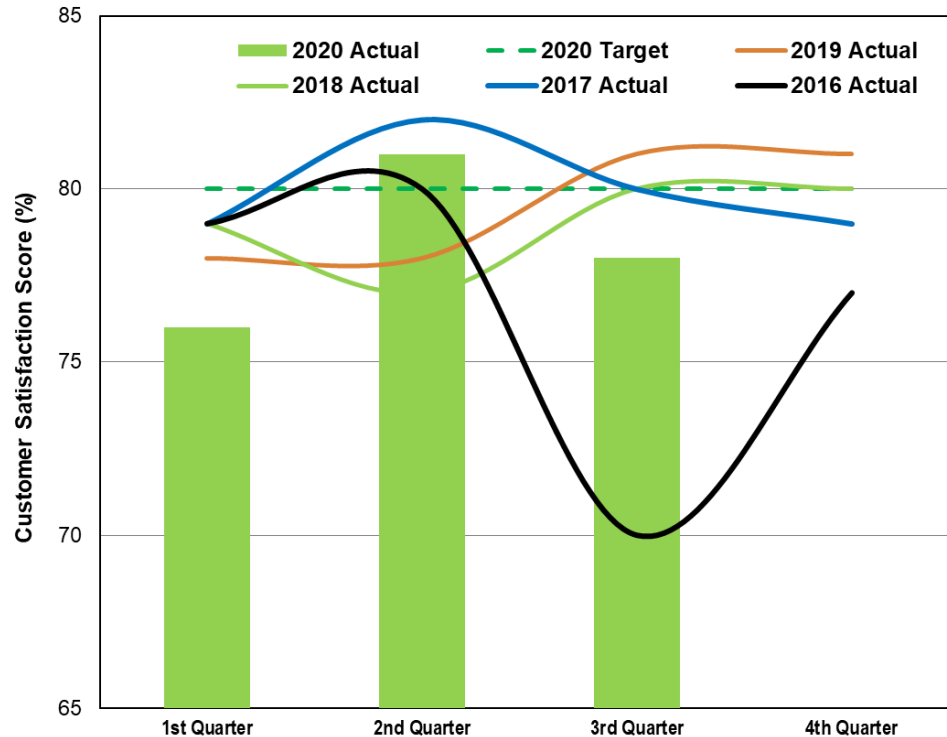
Definition
Overall satisfaction: How satisfied were you overall with the quality of the TTC's service on the last TTC trip you took?

Contact
Kathleen Llewellyn-Thomas,
Chief Strategy & Customer Officer

Results

In Q3 2020, 78% of customers reported high levels of satisfaction with TTC services. This represents a decrease from last quarter (81%) and the same time last year (81%).

Analysis

Overall satisfaction peaked in August (84%) and dropped significantly in September (74%), diverging from 2019 scores. The decrease was largely driven by bus riders, who reported lower satisfaction with trip duration, the helpfulness of staff and levels of crowding.

Perceptions of safety on the TTC also fell significantly in September compared to previous months, particularly in customer confidence in their ability to physically distance on vehicles and in stations.

Action plan

We continue to monitor higher volume routes, particularly at rush hour, and direct additional buses where they are needed most. We are also conducting regular audits of mask use as physical distancing has become more challenging. In January, 99% of customers were observed to be wearing a mask.

Since late March, we have been conducting customer surveys focused specifically on the pandemic. Results have helped inform safety measures, communication efforts and ridership forecasting.

Note: *Q4 2020 data will be available in the March 2021 CEO's Report.*

Subway services

Line 1 (Finch and Vaughan Metropolitan Centre terminal stations): On-time performance (OTP)
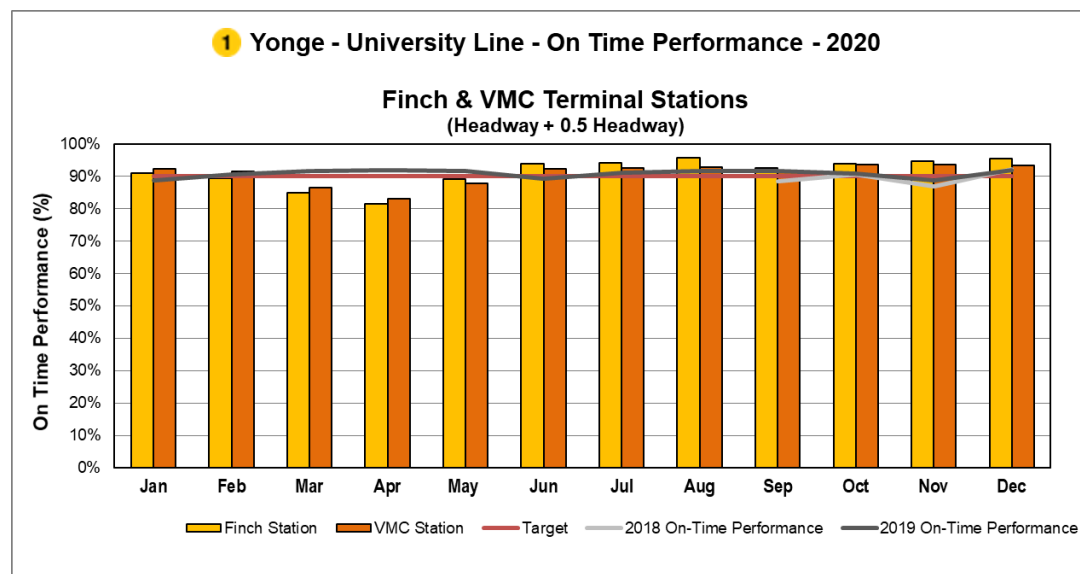
Definition
OTP measures the headway adherence of all service trains at end terminals. Data represents Monday-to-Friday service between 6 a.m. and 2 a.m. To be on time a train must be within 1.5 times of its scheduled headway.

Contact
James Ross,
Chief Operating Officer

Results

This line remained relatively stable in December at 94.3%, showing significant improvement year-over-year from the 91.8% we recorded in December 2019. Our target of 90% has been met for the last seven months.

Analysis

December was the first full month of ATC in service from Vaughan to Rosedale (Phase 3C, Queen to Rosedale, was commissioned November 21st) and we are seeing the anticipated improvements in travel time in this section of the line.

In December we were also able to close the north Yonge section of the line from December 4 to 14, from Sheppard to Finch, to accelerate asbestos abatement from the tunnel lining. This project was able to accomplish in days what would ordinarily take months to do in our usual overnight maintenance window.

Action plan

We do not anticipate any significant changes moving forward, but we are constantly monitoring ridership and service levels and making adjustments where necessary to ensure punctual service levels are delivered.

Line 2 (Kennedy and Kipling terminal stations): On-time performance (OTP)
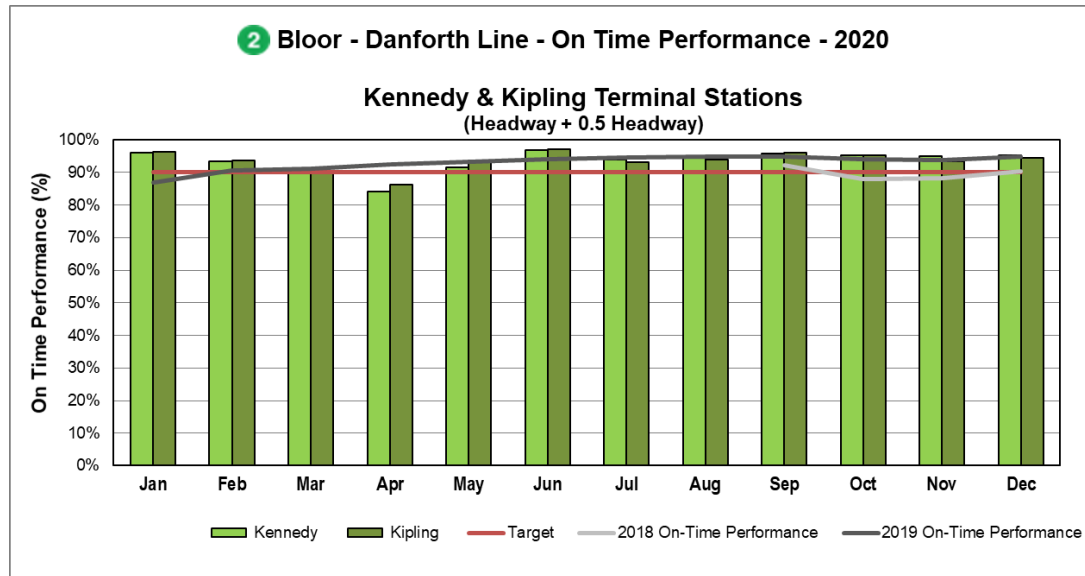
2 Bloor - Danforth Line - On Time Performance - 2020

Kennedy & Kipling Terminal Stations
(Headway + 0.5 Headway)

Legend: Kennedy, Kipling, Target, 2018 On-Time Performance, 2019 On-Time Performance

Analysis

The slight improvement can be attributed to very few restricted speed zones on the line, which resulted in a modest, but consistent, improvement in trip times.

Action plan

We do not anticipate any significant changes moving forward, but we are constantly monitoring ridership and service levels and making adjustments where necessary to ensure punctual service levels are delivered.

Definition
OTP measures the headway adherence of all service trains at end terminals. Data represents Monday-to-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 line improved in December to 95.0%, up slightly from the 94.2% we recorded in November.

Our target of 90% was met.

Line 3 (Kennedy and McCowan terminal stations): On-time performance (OTP)
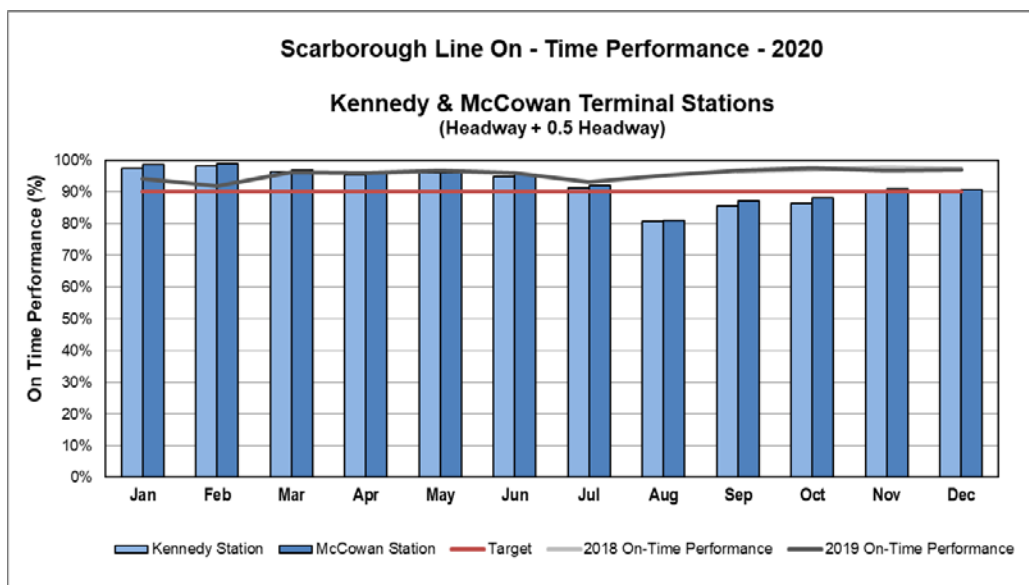
Scarborough Line On - Time Performance - 2020

Kennedy & McCowan Terminal Stations
(Headway + 0.5 Headway)

Legend: Kennedy Station | McCowan Station | Target | 2018 On-Time Performance | 2019 On-Time Performance
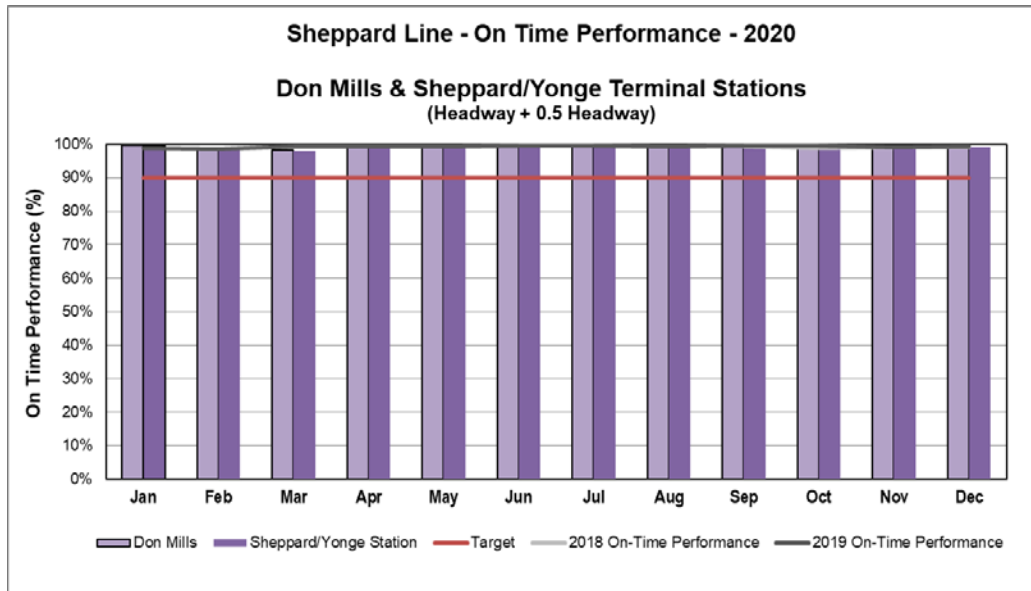
Analysis

Despite having less than the scheduled number of trains available for service, this performance measure was able to achieve target.

Action plan

As we have not yet been able to return to five trains in peak periods a review of our schedule is being initiated to align schedule expectations with what can be delivered.

Definition

OTP measures the headway adherence of all service trains at end terminals. Data represents Monday-to-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

The overall target was met and performance remained relatively stable. Our target for this performance measure is 90%, and we recorded 90.1%, down from the 90.4% recorded in November.

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

Sheppard Line - On Time Performance - 2020

Don Mills & Sheppard/Yonge Terminal Stations
(Headway + 0.5 Headway)

Legend: Don Mills | Sheppard/Yonge Station | Target | 2018 On-Time Performance | 2019 On-Time Performance

Results

OTP remained stable in December at 99.4%, slightly higher than the 99.4% recorded in November.

Our target of 90% was met.

Analysis

The Sheppard line ran as scheduled without the challenges we observed on our other lines.

Action plan

There are no anticipated changes for this line.

Definition
OTP measures the headway adherence of all service trains at end terminals. Data represents Monday-to-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

Line 1: Capacity
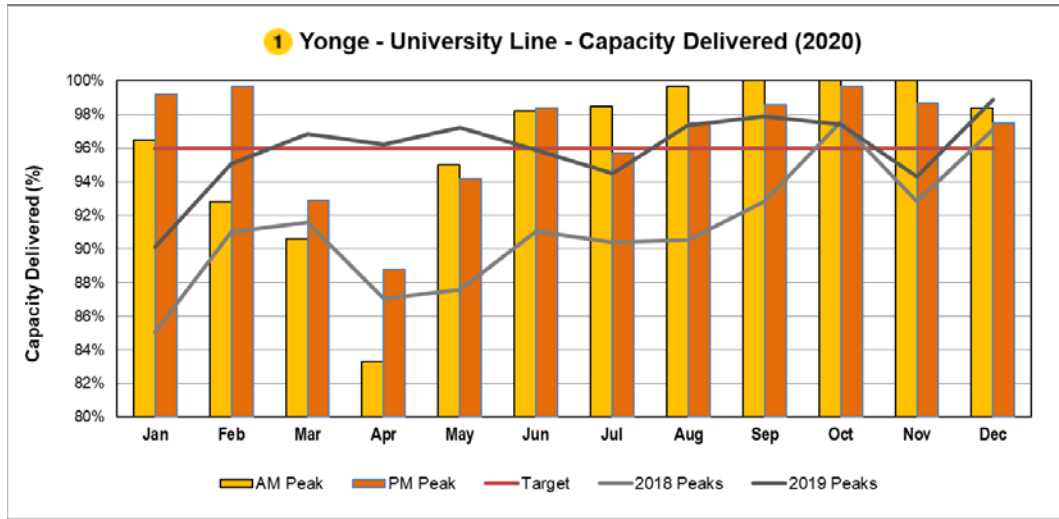
Definition

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
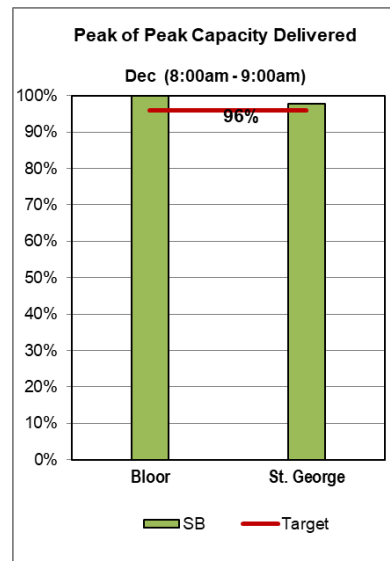
Results

Despite a drop in the p.m. peak performance to 97.5%, and a slight drop in the a.m. peak to 98.4%, December's combined average of 97.9% achieved our target of 96%.

Analysis

Throughout December, Peak of the Peak Capacity achieved 100% at Bloor and dropped to 97.7% at St. George. There were 8 days when Peak of the Peak dropped below the target of 17 TPH, all at St. George, contributing to the overall drop in performance.

Action plan

We do not anticipate any significant changes moving forward, but we are constantly monitoring ridership and service levels and making adjustments where necessary to ensure punctual service levels are delivered.

Line 2: Capacity

Bloor - Danforth Line - Capacity Delivered (2020)

Legend: AM Peak, PM Peak, Target, 2018 Peaks, 2019 Peaks

Analysis

With our continued low ridership as compared to pre-Covid-19 levels, and the use of two Run-As-Directed trains, we anticipate that delivered capacity levels will continue to perform well.

Action plan

We do not anticipate any significant changes moving forward, but we are constantly monitoring ridership and service levels and making adjustments where necessary to ensure punctual service levels are delivered.

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

With both a.m. and p.m. peaks at 100% in December, we recorded a combined average of 100% for the fourth consecutive month.

Our target for this measure is 96% and was met.

Line 3: Capacity
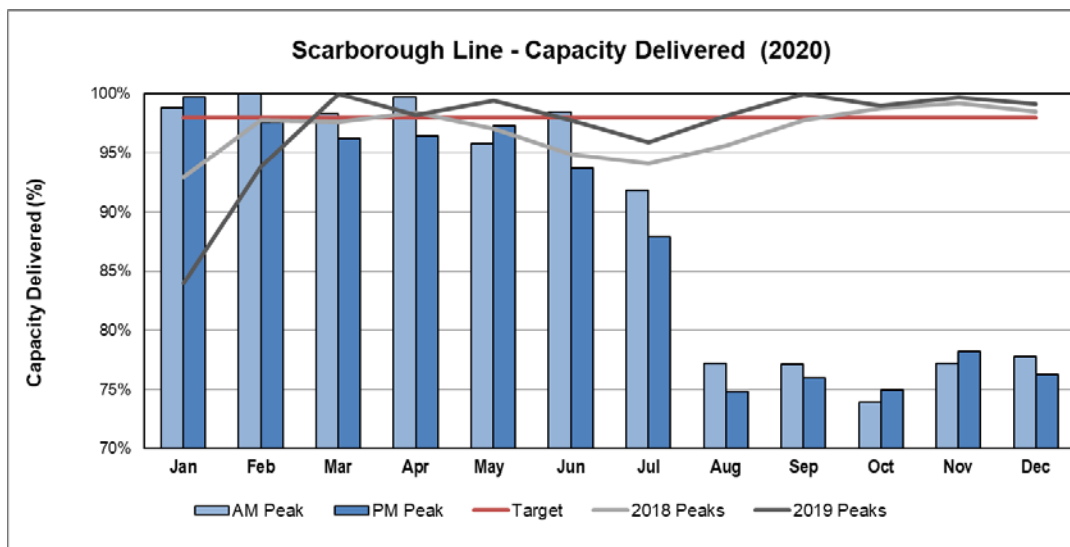
Definition
Total number of trains that travelled through two key sampling points during a.m. and p.m. peak as a percentage of trains scheduled. Data is based on Monday to Friday service.

Peak periods: 6 a.m. to 9 a.m. and 3 p.m. to 7 p.m.
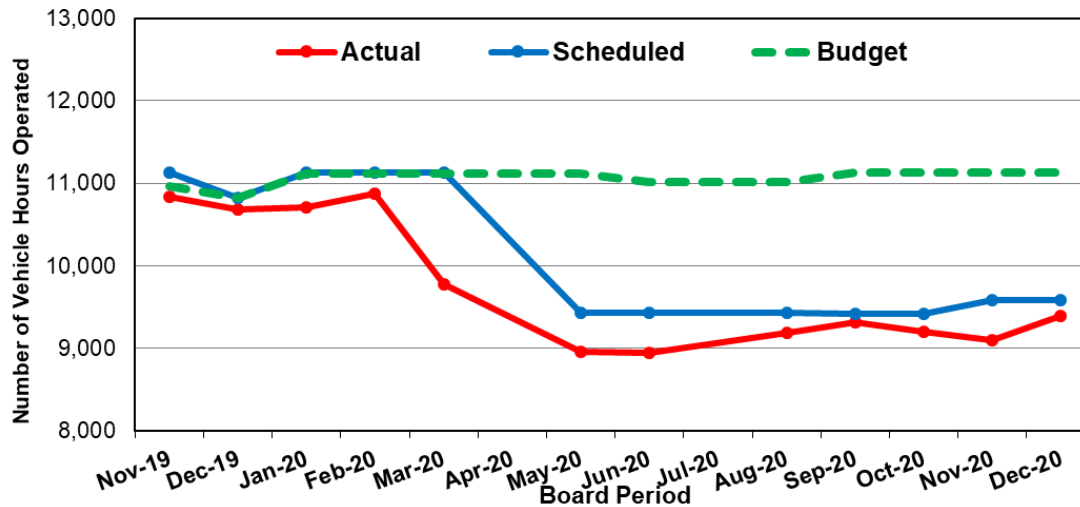
Contact
James Ross,
Chief Operating Officer

Results

The SRT continues at well below normal levels for a fifth consecutive month due to a shortage of available rolling stock for service. The target of 12 TPH during the peak periods was not met during December with all peak periods below 10 TPH.

Analysis

The availability of trains due to maintenance continues to hamper performance on this line. When the number of scheduled trains become available it is anticipated that this performance measure will return to target.

Action plan

As we have not yet been able to return to five trains in peak periods a review of our schedule is being initiated to align schedule expectations with what can be delivered.

Line 4: Capacity
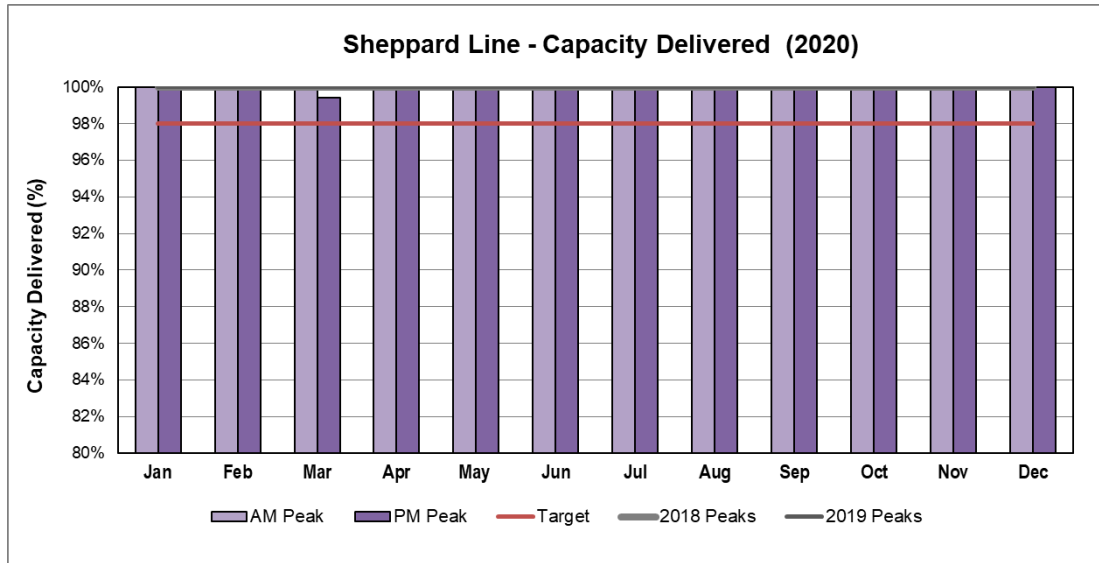
There are no anticipated changes planned for this line.

Sheppard Line - Capacity Delivered (2020)

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 line has remained at 100% since April and easily meets target.

Analysis

This line has not been affected by many of the issues affecting other lines, as reflected in the level of performance.

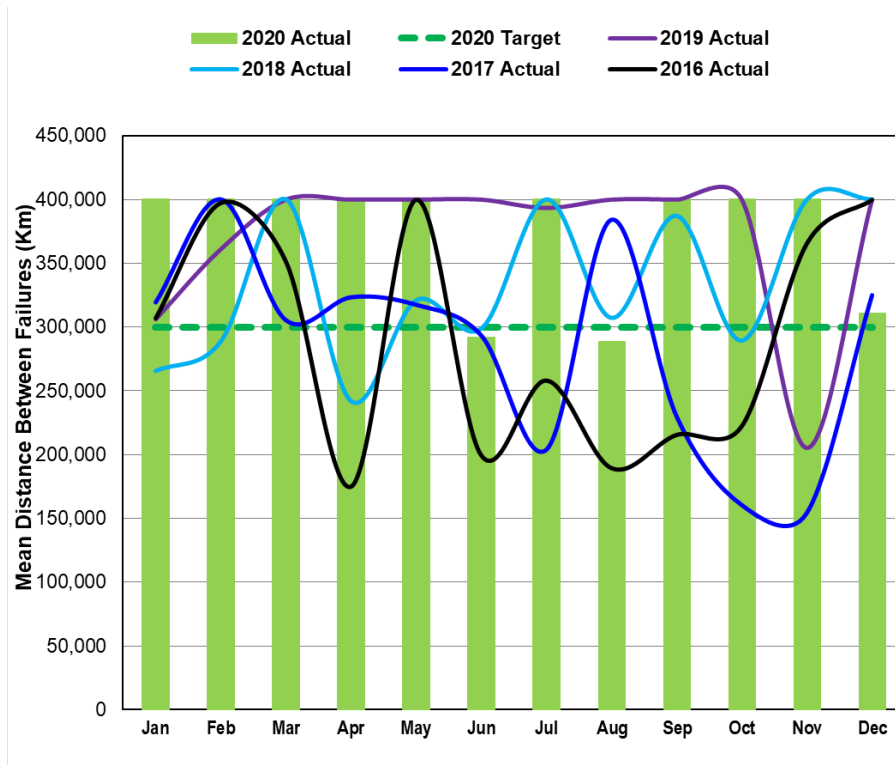## Subway: Weekly service hours

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

Contact
*Kathleen Llewellyn-Thomas,
Chief Strategy & Customer Officer*

Results

In the December 2020 Board Period, the TTC planned 86% of regular subway service compared to pre-pandemic service.

The TTC budgeted 11,133 weekly service hours while 9,578 weekly service hours were scheduled to operate, which represents a variance of -14%.

Of the 9,578 weekly service hours scheduled to operate, 9,396 weekly service hours were actually delivered, which represents a variance of -2%.

Analysis

Scheduled service hours are lower than budgeted as a result of the demand-responsive service plan, which takes into account lower ridership demand due to COVID-19.

Actual service hours are below scheduled service hours as a result of ongoing state-of-good-repair subway infrastructure work.

Action plan

We will continue to monitor service hours during the pandemic.

Subway T1 train: Mean distance between failures (MDBF)

Legend: 2020 Actual, 2020 Target, 2019 Actual, 2018 Actual, 2017 Actual, 2016 Actual

Y-axis: Mean Distance Between Failures (Km) — 0 to 450,000

X-axis: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

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. T1 trains operate on Line 2.

Contact
*Rich Wong,
Chief Vehicles Officer*

Results

The T1 fleet achieved a MDBF greater than 300,000 kilometres in December, which is above the target of 300,000 kilometres.

Analysis

In December, there was a total of nine delay incidents greater than or equal to five minutes. The passenger door system had five delay incidents, followed by the coupler system with two incidents. The brake and truck system each with one delay incident.

The five passenger door-related incidents were due to two faulty door lock assemblies (DLA), a broken air regulator, a loose door roller and a faulty traction control relay (TCR).

The two coupler-related incidents were a result of a faulty coupler pin box, and a corroded coupler pin box.
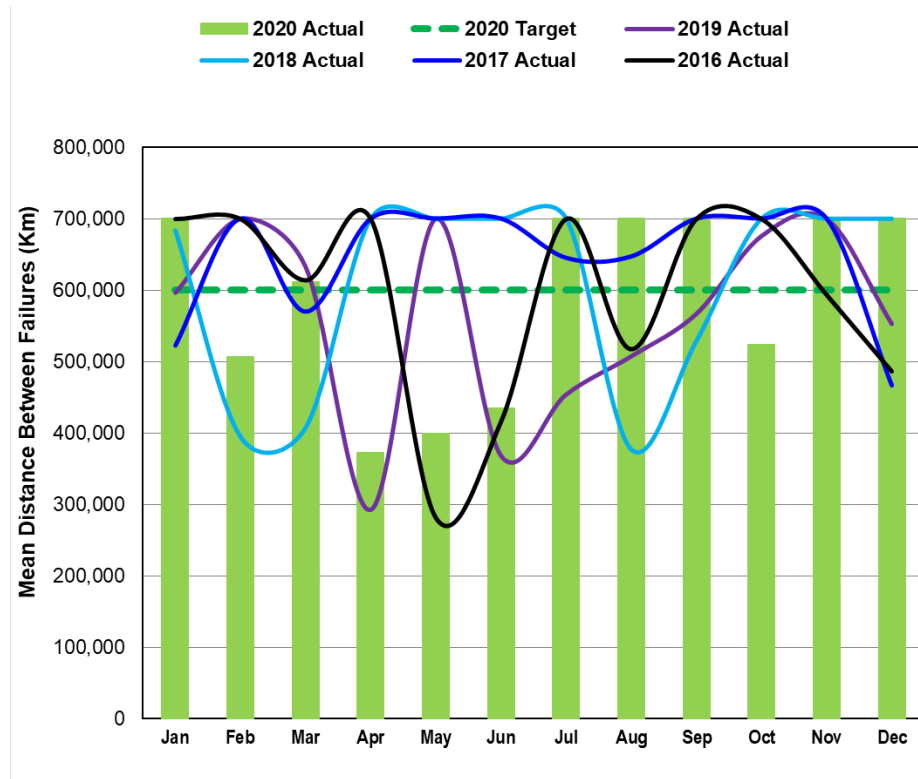
The brake-related incident was a result of a faulty pressure valve while the truck-related incident was due to a loose bearing cap on the axle.

Action plan

The 20-year state-of-good-repair (SOGR) program is ongoing, and includes brake system, truck overhauls and door component replacements. A new 25-year SOGR scope is currently in development, set to begin in 2022.

The coupler pin boxes are being replaced with an upgraded, stainless steel design, on an ongoing basis through the SOGR program.

Subway TR train: Mean distance between failures (MDBF)

Legend: 2020 Actual, 2020 Target, 2019 Actual, 2018 Actual, 2017 Actual, 2016 Actual

Y-axis: Mean Distance Between Failures (Km)

X-axis: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

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. TR trains operate on Line 1 and Line 4.

Contact
Rich Wong,
Chief Vehicles Officer

Results

The TR fleet achieved a MDBF greater than 700,000 kilometres in December, which is above the target of 600,000 kilometres.

Analysis

In December, there were seven delay incidents greater than or equal to five minutes. The passenger door system had three incidents, followed by the speed control, propulsion invertor and the cab door system each had one delay incident.

The three passenger door-related incidents were a result of two defective micro switches and a defective prototype drive nut. The root causes of the two defective micro switches are to be investigated further. The defective prototype drive nuts were due to an improper fit. All prototype drive nuts are to be removed from all vehicles. All doors were cycle tested with positive results.

The speed control related incident was a result of a halted vehicle on-board controller (VOBC). The VOBC was replaced three days prior to the

incident with a faulty CPU. The root cause of the incident is still under investigation. The train has been tested with positive results.
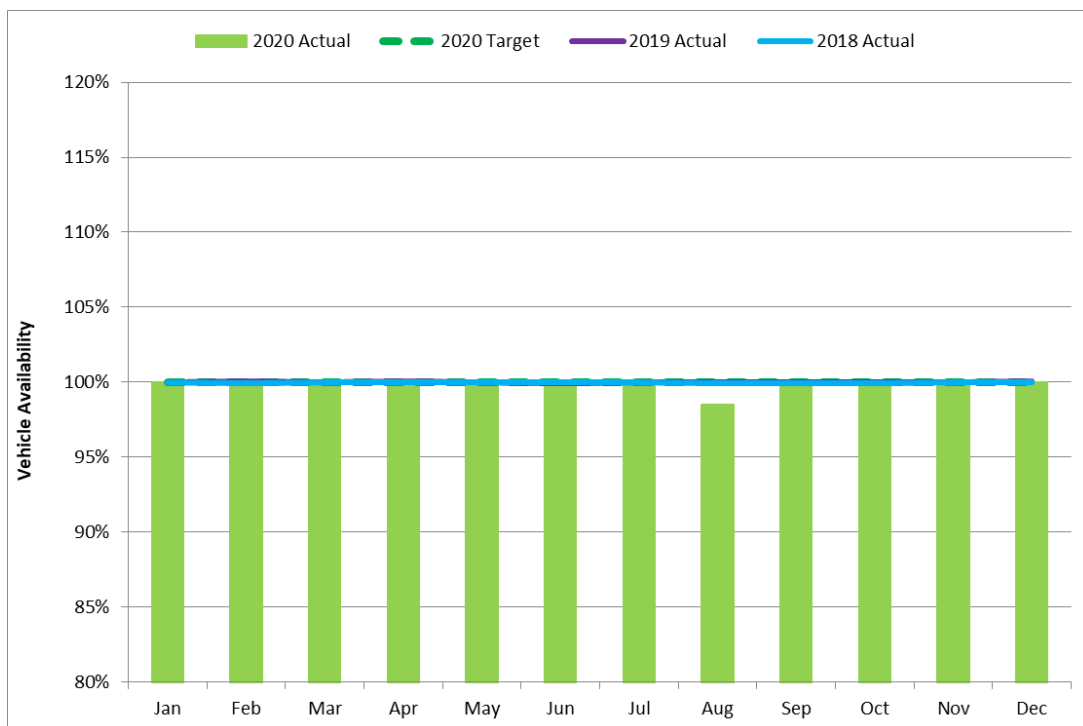
The propulsion invertor-related incident was a result of a discrepancy in the propulsion software. The incident is under investigation by the vendor. Software on the vehicles were updated and trains tested to be working positively.

The cab door-related incident was due to a defective cab window latch.

Action plan

A state-of-good-repair (SOGR) program is being developed for 2022 that will included replacement of passenger door microswitches and drive nuts, and inspection/repairs of the cab doors.

Subway: Service availability

Results

The vehicle availability in December 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.

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

Subway: Vehicle cleanliness

Legend: 2020 Actual · 2020 Target · 2019 Actual · 2018 Actual · 2017 Actual · 2016 Actual

Y-axis: Cleanliness Audit Score (%)
X-axis: 1st Quarter, 2nd Quarter, 3rd Quarter, 4th Quarter

Results

The average cleanliness rating of 90.2% in Q4 2020 is above the target of 90.0%. We have recorded a score of greater than or equal to 90.0% since Q4 2016.

Analysis

Areas of strength in vehicle cleanliness across all fleets and lines were the ceilings, etching/scratchitti, graffiti/stickers and mandatory decals. Factors impacting the quarter-to-quarter cleanliness scores were the overall door cleanliness, windows and exterior. Trash and debris were documented in the mid-day and end-of-day audits at different stations across all lines.

End terminal cleaning staff have been performing additional disinfection of all high touch points (poles and stanchions) twice a day after rush hour on all revenue vehicles during the COVID-19 pandemic.

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

Action plan

Exterior vehicle washes are being performed on all vehicle fleets, weather permitting. The TR and T1 fleets will commence focused power washes in 2021. The floor wash cycle continues to be addressed once every 14 days.

Streetcar services

Streetcar: On-time performance (OTP)

On-Time Departures (%)

Legend: 2020 Actual, 2020 Target, 2019 Actual, 2018 Actual, 2017 Actual, 2016 Actual

X-axis: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
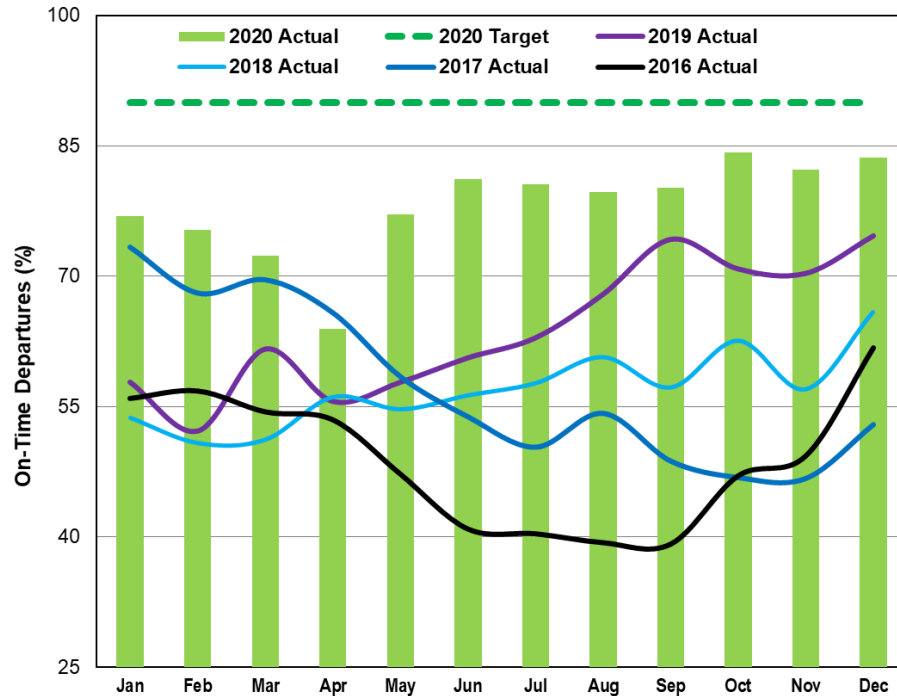
Definition
On-time performance measures vehicle departures from end terminals. Vehicles are considered on time if they depart within 59 seconds earlier or five minutes later than their scheduled departure time. Includes all seven days of service. Night routes are excluded.

Contact
James Ross,
Chief Operating Officer

Results

OTP in December was 83.6%, an increase compared to November (82.2%) and a significant increase over the same period last year (74.6%). Our target of 90% was not met.

Analysis

The streetcar OTP for December reached a high of 88.9% on November 30 (Week 49) and a low of 74.8% on December 17 (Week 51). The percentage of early trips for the period held steady over November (7.2%). The percentage of late trips increased slightly to 6% (4.7% in November), while the percentage of missed trips decreased to 3.2% (5.9% in November).

The network score in December was negatively impacted by the poor OTP score of the 505 Dundas for the period (62.9%). This score was largely attributable to the early

completion of rail repair work on the Sterling Bridge in Week 50. With this early completion, 505 Dundas streetcars were returned to Dundas West Station, although schedules and the measurement point for OTP continued to reflect an eastbound turnback at the College and Dundas streets intersection.

As such, it proved challenging to operate this route to schedule for much of the period. If excluding the 505 Dundas score for the period, the December network score would increase to 85.9%.

A significant amount of snowfall impacted streetcar performance on December 1. That same day, pantograph-related incidents impacted the 512 St Clair route during the morning peak, with shuttle buses required between St Clair West and St Clair stations during that time.

Other infrastructure repair projects also had a negative impact on the network score for the period. This included rail repair work at King Street and Joe Shuster Way during the weekend of December 5 and 6.

Emergency Toronto Hydro repair work from December 17 to 21 required the 501 Queen service to divert around Church and Jarvis streets during this period. Also on December 17, the 505 Dundas service was diverted via Ossington Avenue and College Street for the day due to track work at Dundas Street and Lansdowne Avenue.

Action plan

With numerous construction projects impacting the streetcar network in early 2021, performance monitoring continues and will focus on the new branches and routings that are an outcome of these projects. Service and routing adjustments will be made where possible and as required. Lessons learned from January will be carried forward to subsequent phases of these projects.

Streetcar: Weekly service hours
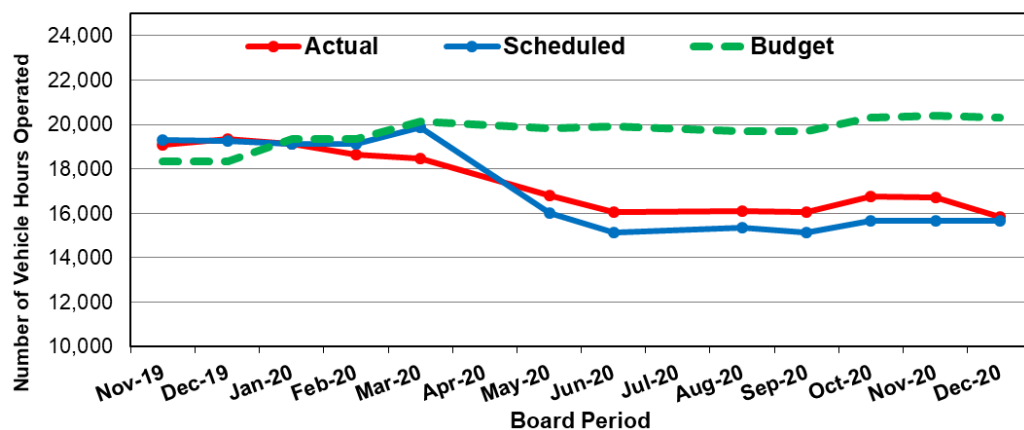
Definition
Service hours are calculated from the time a streetcar leaves the yard to when it returns to the yard.
Measured daily.

Contact
Kathleen Llewellyn-Thomas,
Chief Strategy & Customer Officer

Results

In the December 2020 Board Period, the TTC planned 86% of regular streetcar service compared to pre-pandemic service.

When accounting for both regular and construction related service, the TTC budgeted 20,389 weekly service hours while 15,646 weekly service hours were scheduled to operate. Of the 15,646 weekly service hours scheduled to operate, 15,861 weekly service hours were actually delivered which represents a variance of 1%.

Analysis

Scheduled streetcar hours are lower than budgeted as a result of the demand-responsive service plan which takes into account lower ridership demand due to COVID-19.

Action plan

We will continue to monitor service hours during the pandemic.

Streetcar: Mean distance between failures (MDBF)

Legend:
- 2020 12-Month contractual
- 2020 Contractual Method
- Actual Operational
- 2020 Operational Target
- 2019 Contractual Method
- 2019 Actual Operational
- 2018 Actual
- 2017 Actual
- 2016 Actual

Y-axis: Mean Distance Between Failures (Km)

X-axis: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
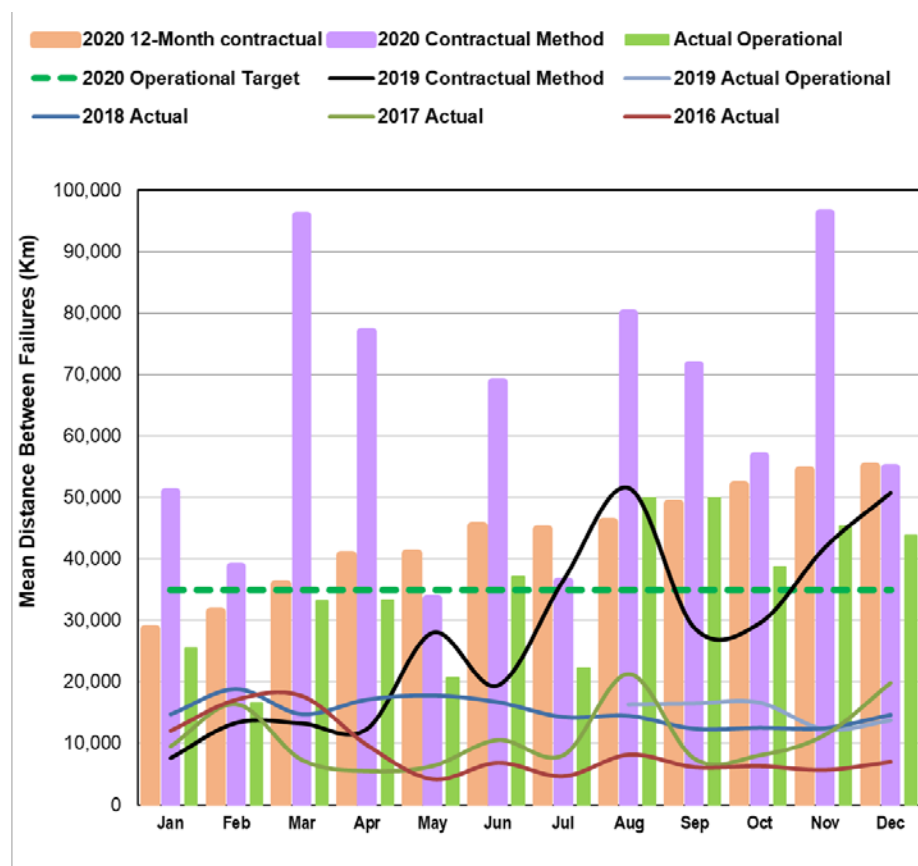
Definition
Total kilometres travelled by the Low-Floor Light Rail Vehicle (LFLRV) fleet compared to the number of incidents (defined contractually) resulting in delays of five minutes or more. Includes all seven days of service. A threshold of 35,000 km was established to reflect the manufacturer's obligations 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 in December exceeded 50,000 kilometres and the monthly operational MDBF was 43,873 kilometres.

The operational MDBF met the operational target of 35,000 kilometres, but is a decrease of 1,481 kilometres from the previous period.

Analysis

In December, there was a total of 20 relevant failures under the operational reliability. These included

16 failures that were attributed to the contractual MDBF calculation.
The top contributors impacting the contractual MDBF were the train and cab controls system, the train control management system, the door system and the communication system.

The top contributors impacting the operational MDBF included the car body and the high voltage system with two failures each.

Staff continue to investigate the root cause of these failures

Action plan

Vehicle modification programs are 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 LFLRV vehicles in service mileage increases and more in-service data becomes available.

Train and cab control system: TTC is continuing to work with Bombardier to review master controller failure modes and determine corrective actions that will be implemented in a future fleet modification in Q2 2021. Additionally, an Engineering investigation of other electrical failures is underway. This includes improving quality of work during maintenance activities.

Train control management system: We are working with Bombardier to review the vehicle control unit failure modes and determine corrective actions. Additionally, data logger failures are under Engineering investigation.

Door system: We are working with Bombardier to review the failure mode of the cab door handles and determine corrective actions.

Communication system: A camera modification program that addresses known issues with image quality and stability has faced ongoing delays due to impact of COVID-19 on the supplier. Passenger Information system failures are under Engineering investigation.

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 Q1 2021

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 trolley pole and pantograph components with more robust ones (e.g. bracket and chain).

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

Car body system: Improved pre-service inspection along with review of installation checks reduce further operator seat issues. Staff will also further investigate failures of mounted cover plates and review method of securing them.

High voltage system: Implementation and monitoring of high voltage preventative maintenance practices along with increased inspection audits to reduce

failures. A fleet inspection was completed to inspect Bowden cable routing and installation.

Streetcar: Road calls and change offs (RCCOs)
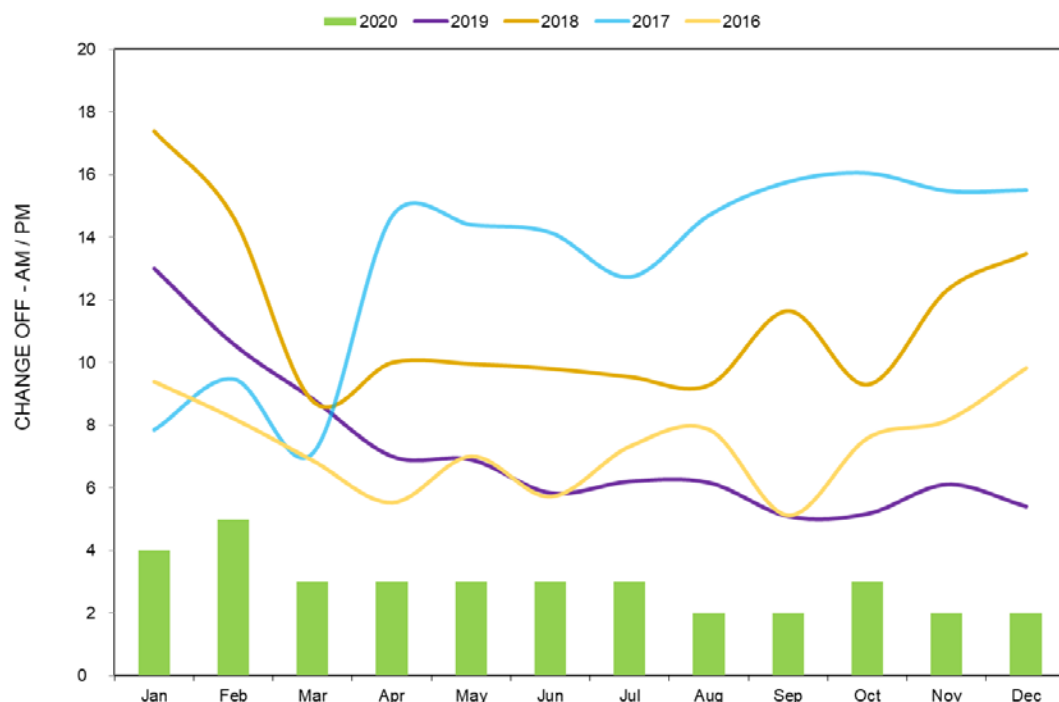
Definition
Average daily number of vehicle-equipment failures requiring a road call for service repair or a change off to a repair facility for a replacement vehicle. Includes Monday to Friday only.

Contact
Rich Wong
Chief Vehicles Officer

Results

The target for the maximum number of RCCOs is 1.5% of peak daily service, including Run-As-Directed (RAD) vehicles. In December, the target of 1.5% (or 2 of 133 vehicles) was met.

Analysis

The daily average number of RCCOs for December remained the same compared to November 2020. The continued low cycling of major systems from reduced passenger loading due to the COVID-19 pandemic, in addition to improving preventative maintenance procedures (e.g. daily review of failure and repair data to prevent vehicles with potential issues from entering service, targeted assessment of concern areas and increased inspection) have contributed to low RCCO numbers in December.

Compared to the previous month there was a reduction in failures of the car body system. Failures of the passenger door system, caused by door pushbuttons and door safety loop faults, in addition to the vehicle control system, which had defects related to master controller, have increased. However, overall failures requiring RCCOs have improved.

Action plan

Pre-service inspections and further preventative maintenance activities will continue to reduce the number of RCCOs.

We continue to focus on the top problem systems to reduce failures. Bombardier and TTC staff are aware of the component reliability issues related to the LFLRVs and continue to investigate the problems to determine a resolution.

Streetcar: Service availability

Vehicle Availability (y-axis, 80%–120%)

Legend: 2020 Actual · 2019 Actual · 2020 Target · 2018 Actual

Months: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Results

The target for streetcar availability is 100% of peak daily service, including Run-As-Directed (RAD) vehicles. In December 2020, the target requirements were met with an average of 133 vehicles available for service.

Analysis

Availability numbers continue to be met in December. Reduced service levels due to the COVID-19 pandemic provides opportunity for increased vehicle maintenance.

Action plan

The availability target will be achieved with continued pre-service and preventative maintenance practices.
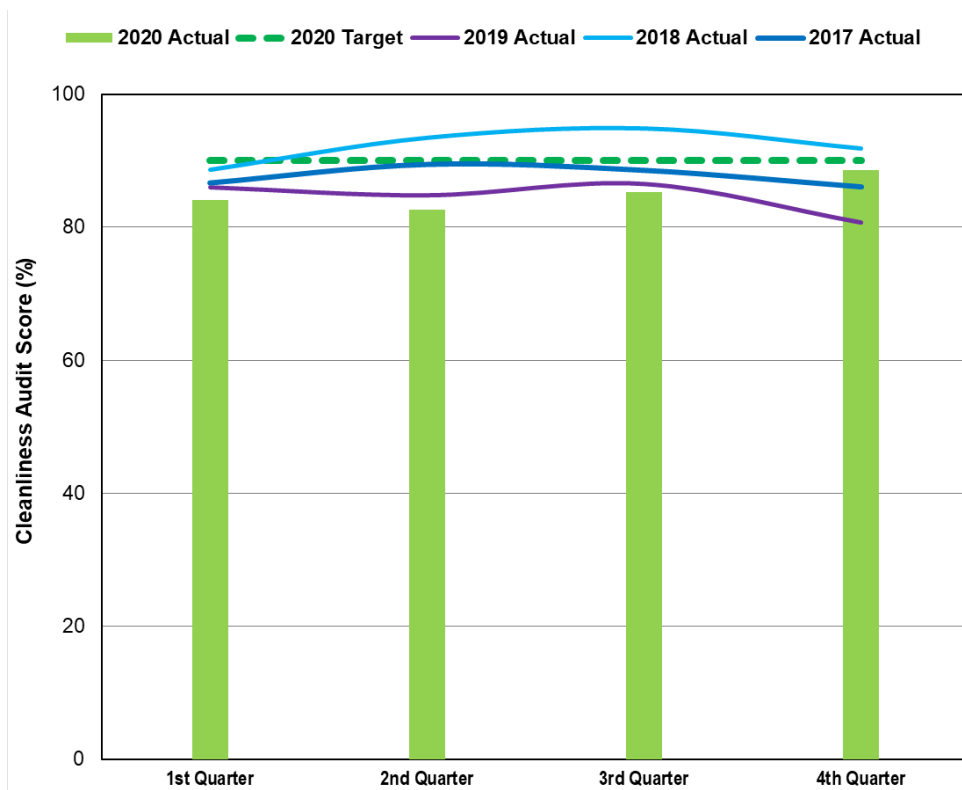
Definition
Daily average number of streetcars put into service (including RADs) compared to the number of streetcars scheduled for the a.m. peak period. Data represents Monday-to-Friday only. Holidays excluded.

Contact
Rich Wong,
Chief Vehicles Officer

Streetcar: Cleanliness (pre-service)

Legend: 2020 Actual ■ | 2020 Target ■ ■ | 2019 Actual ▬ | 2018 Actual ▬ | 2017 Actual ▬

Y-axis: Cleanliness Audit Score (%) — 0 to 100

X-axis: 1st Quarter, 2nd Quarter, 3rd Quarter, 4th Quarter

Definition

Results of third-party audit conducted each quarter. "In-service" and "post-service" cleanliness results. Audits conducted weekdays only, excluding holidays.

Contact

Rich Wong,
Chief Vehicles Officer

Results

The audit score for streetcar pre-service cleanliness was 88.6% in Q4 2020. This is an increase from Q3 2020 (85.2%) and Q4 2019 (80.7%). Overall performance on Streetcar cleanliness is below the target of 90%.

Analysis

Exterior cleanliness continues to improve as required changes to the carwash system has allowed increased scheduling. Passenger seat results remain high due to the seat replacement program. In addition, targeting of problem areas has improved results in lighting, debris and the cab area.

Floors, walls and passenger doors have been identified as areas requiring improvement.

Action plan

Exterior washing of vehicles, as weather permits, will continue to improve exterior cleanliness.

We will focus staff on the problem areas to address flooring, wall and door cleanliness activities during scheduled maintenance programs to further improve results.

During the COVID-19 pandemic disinfection of vehicles continues mid-day at station terminals and prior to service at carhouse locations.

Streetcar: Cleanliness (in-service and post-service)
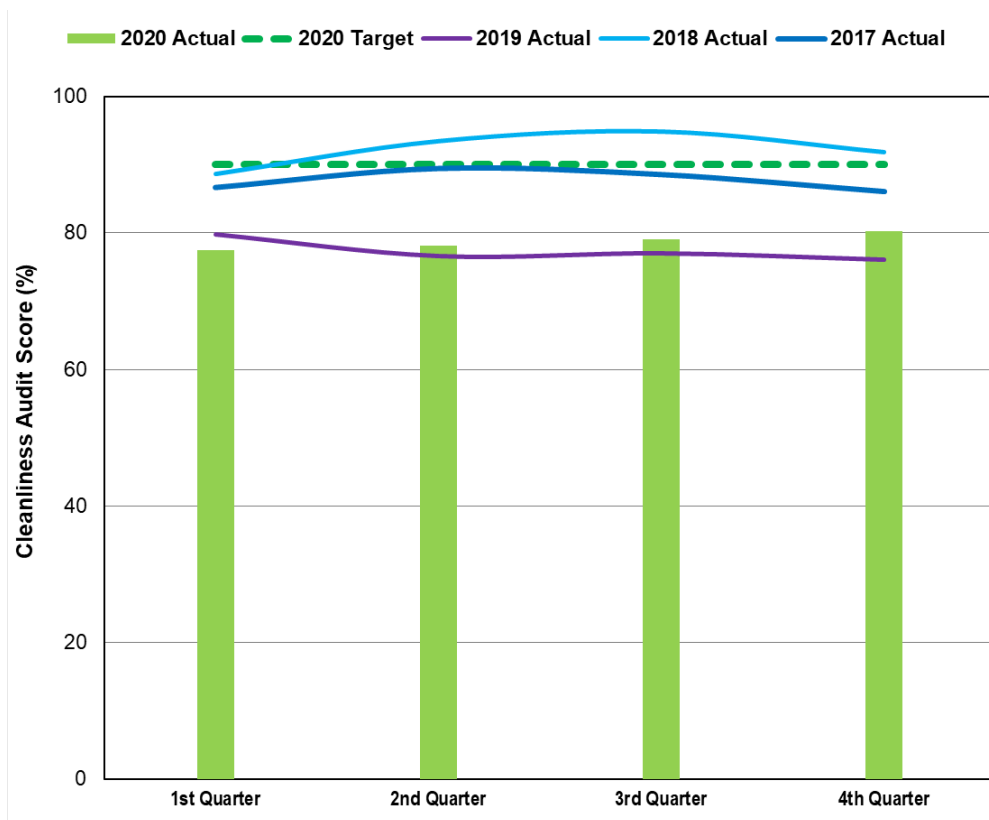
Cleanliness Audit Score (%)

Legend: 2020 Actual | 2020 Target | 2019 Actual | 2018 Actual | 2017 Actual

Definition
Results of third-party audit conducted each quarter. "In-service" and "post-service" cleanliness results. Audits conducted weekdays only, excluding holidays.

Contact
Rich Wong,
Chief Vehicles Officer

Results

The audit score for in-service and post-service cleanliness was 80.3% in Q4 2020. This is an increase from both Q3 2020 (79.0%) and Q4 2019 (76.1%).

Analysis

Improved pre-service cleaning practices along with reduced passenger ridership levels due to the COVID-19 pandemic contributed to increased cleanliness scores.

Snowfall in December caused accumulation of snow and dirt residue on the floors, which has negatively impacted in-service and post-service cleanliness results for Q4 2020.

Debris/trash and floors have been identified as areas requiring improvement during in-service and post-service.

Action plan

Maintenance staff will continue to monitor and identify further opportunities to improve overall cleanliness.

In response to the COVID 19 pandemic, disinfecting of vehicles is being performed pre-service and mid-day.

Bus services

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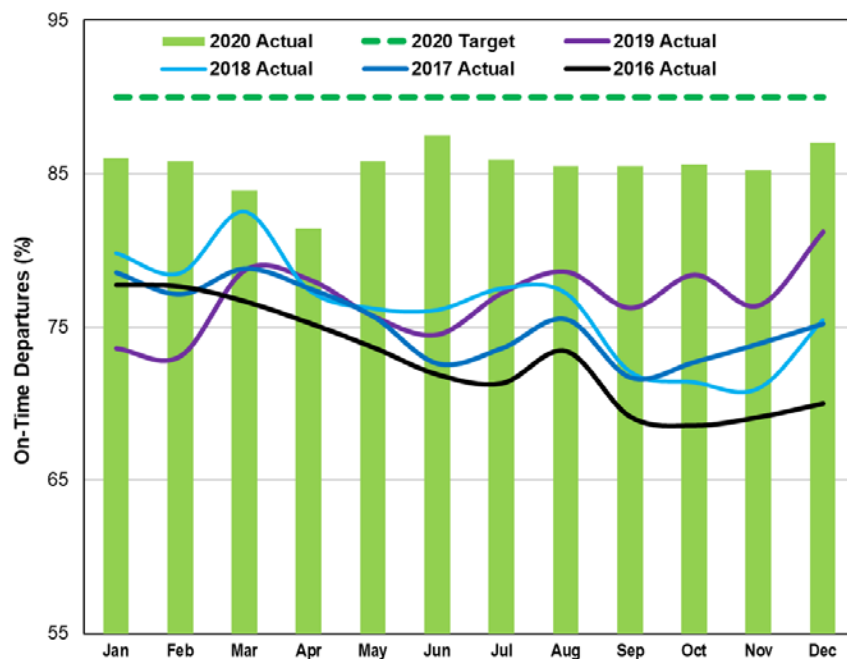
Definition
OTP measures vehicle departures from end terminals. Vehicles are considered on time if they depart within 59 seconds earlier or up to five minutes later than their scheduled departure time. Includes all seven days of service. Night routes are excluded.

Contact
James Ross,
Chief Operating Officer

Results

OTP in December was 87.0%, an increase compared to November (85.2%) and a significant increase over the same period last year (81.2%). Our target of 90% was not met.

Analysis

Bus performance for December reached a weekly high of 89.5% in Week 53 and a low of 85.9% in Week 50. The percentage of early (3.4%), late (6.7%), and missed (2.9%) trips in December all decreased slightly over the previous period (3.9%, 7.4%, and 3.5% in November, respectively).

The Eglinton East Priority Bus Lanes were implemented recently with the intent of improving travel times and minimizing travel time variability in that transit corridor. The major routes operating on this corridor (86 Scarborough, 116 Morningside, 905

Eglinton East Express and the 986 Scarborough Express) combined for 86.5% OTP for the period, an increase compared to 81.8% for the same period last year.

Further, eight 900-series Express bus routes were re-introduced with the November Board Period, beginning the last week of the November. These eight routes combined for an 83.4% performance figure for the December period, a significant improvement over the December 2019 period (73.5%). Of these eight Express routes, the worst performer was the 941 Keele route, which operated at a 66.6% level for the period (and also at a decreased performance level over its December 2019 figure of 69.3% OTP).

Lastly, it is worth noting that bus performance surpassed the 90% target on four operating days during the period. These days were November 29, December 6, 27 and 28.

Action plan

Building from a road map that prioritizes bus routes that require schedule reviews in 2021, work has begun on developing run times for key bus routes for the May 2021 Board Period. Efforts throughout the year will work towards right-sizing schedules to actual operating conditions. This work will consider potential upcoming changes in ridership and traffic volumes due to ongoing COVID-19 pandemic conditions.

Bus: Weekly service hours
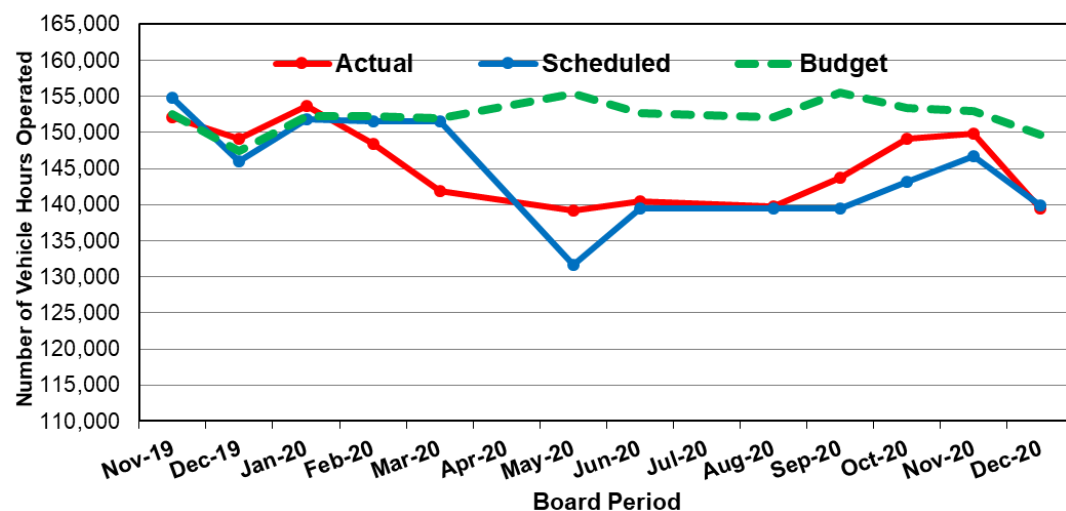
Definition

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 Strategy & Customer Officer

Action plan

Schedules will be updated to account for operators returning from layoff over the coming board periods.

Bus (eBus): Mean distance between failures (MDBF)

Results

eBuses in the TTC fleet achieved a combined MDBF of 30,000 kilometres in Period 12 2020.

Analysis

In Period 12 2020 there were 25 New Flyer, 25 Proterra, and 10 BYD buses in service travelling for a total distance of 147,667 kilometres, a 20% improvement from Period 11. eBuses still have not accumulated sufficient in service mileage for appropriate failure analysis. We will continue to closely monitor the performance of these buses as service mileage increases.

Action plan

Various investigations and design changes are underway, which are being managed as part of the testing programs. Some of the notable campaigns for each eBus series include:

Definition
Total kilometres accumulated over the eBus 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

New Flyer
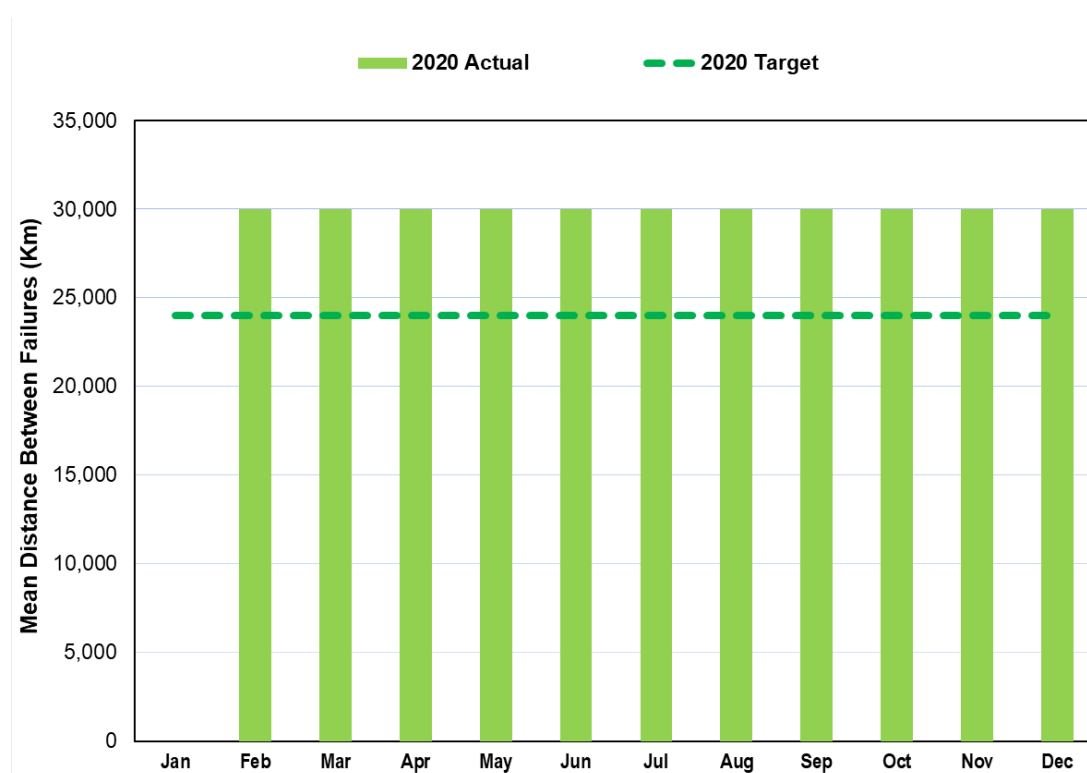Auto charge system and battery tub retrofits are both 10% complete.

Proterra
Rear door linkage campaign has been completed, rear door light curtain and driver heating convector retrofits are both 10% complete.

BYD
Entrance door floor heater and underbody splash shield retrofits are both starting in Q1 2021.

Bus (Hybrid): Mean distance between failures (MDBF)

Legend: 2020 Actual (green bars) | 2020 Target (dashed green line)

Y-axis: Mean Distance Between Failures (Km) — 0 to 35,000

X-axis: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Definition
Total kilometres accumulated over the hybrid 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

Hybrid buses in the TTC fleet achieved a MDBF of 30,000 kilometres in Period 12 2020.

Analysis

Nova LFS Hybrid buses equipped with the BAE Hybrid drive system are performing well above the expected reliability with respect to the hybrid powertrain system. However, this fleet experienced 11 hybrid propulsion-related failures in this period. Some hybrid system power losses were related to the battery temperature sensor malfunction.

Our Hybrid fleet is built on the same Nova LFS platform as the Diesel fleet and they share similar failure modes, such as cooling and engine emission-related failures as described in the Diesel bus section of this report. These failures are being corrected alongside the Nova LFS Diesel fleet via the same reliability programs.

Action plan

Several corrective retrofits are active under warranty to eliminate the recent increase in the propulsion-related failures:
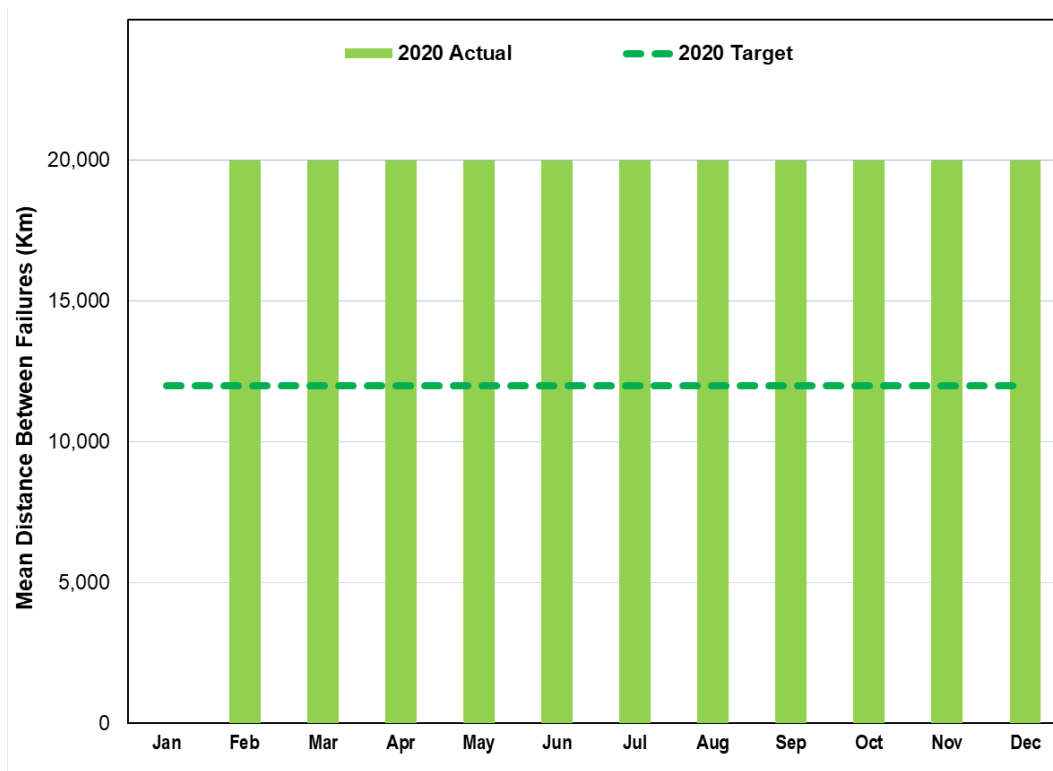
- Battery system junction box sealing retrofit is underway with 74% completion.
- High voltage power steering cable interference corrective retrofit is 94% complete.
- A/C roof drain retrofits are 55% completed.

BAE engineering has determined that the high voltage interlock faults are related to abnormally high load from the HVAC unit, Nova bus engineering is working with BAE systems to resolve this issue. The new bus warranty group is continuing to follow up with involved parties for resolution. Various other warranty campaigns are underway for failures exceeding the contract limits. However, these failures are not affecting service at this time.

Quarterly technical review meetings for Nova buses are taking place with participation from Nova Bus, BAE

Systems and TTC staff. These buses are performing well above target and we foresee a continuation of this trend.

Bus (Clean Diesel): Mean distance between failures (MDBF)

Mean Distance Between Failures (Km)

Legend: 2020 Actual | 2020 Target

Y-axis: 0, 5,000, 10,000, 15,000, 20,000
X-axis: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Definition
Total kilometres accumulated over the clean diesel 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

Diesel buses in the TTC fleet achieved a collective MDBF of 20,000 kilometres in Period 12 2020.

Analysis

The Nova LFS Diesel bus fleets continue to improve with respect to cooling system failures. However, cooling system leaks remain the top failure mode for this Nova bus model. Daily temperature swings adversely affect the clamping force at hose connections, which may create minor coolant leaks. This fleet continues to improve with respect to engine and diesel exhaust emission controls. However, unpredictable sensor failures remain a challenge for Cummins engines used in transit applications.

Action plan

Articulated Nova LFS60 bus rebuild program is nearing completion and on schedule to be completed in January 2021. The LFS40 Nova

buses purchased in 2015 are beginning their scheduled overhaul, following completion of the NFS60 buses.

Air and electrical system maintenance programs are continuing on schedule with the Nova 8620-9239 bus series with a target of 350 buses in 2021.

Cooling system failures are being addressed through state-of-good-repair (SOGR) and cooling system technical packages, which provide guidance in performing a comprehensive system repair and servicing. These packages are customized for each bus type in the fleet. Parts are now being received and kits are being created for the cooling system design change to rubber hoses (improved sealing) and heat shrink (less maintenance) clamps for the Nova 8620-8964 bus series set to begin Q1 2021.

Telematics predictive coolant level reports are in development with the VISION team. We are at final stages of testing the broadcast message capabilities of the system.

Cummins emission controls and after treatment failures are being addressed through remote telematics health monitoring, fleet wide engine oil analysis, root cause investigations with Cummins and the aftermarket warranty group. Training is underway for coach technicians on the Cummins expert diagnostic system. This system will lead the technician through a Cummins-approved and directed fault based comprehensive diagnoses and repair. To further reduce emission-related failures, we have implemented a diesel particulate filter two stage quality control program. Recent emission system reliability improvements can be largely attributed to this program. Predictive telematics emission performance reports are in development with VISION team and other private service providers.

Continuous improvement in reliability of our fleet is achieved through the implementation of several key reliability and retrofit programs. Examples include: SOGR inspections (all garages surpassed 60% fleet target), road call and change off root cause analysis, special seasonal preventive

maintenance programs (fall checks completed and audited at 10%), engine oil analysis, engineering modifications, and various other system specific programs targeting high failure modes.

Bus: Road calls and change offs (RCCOs)
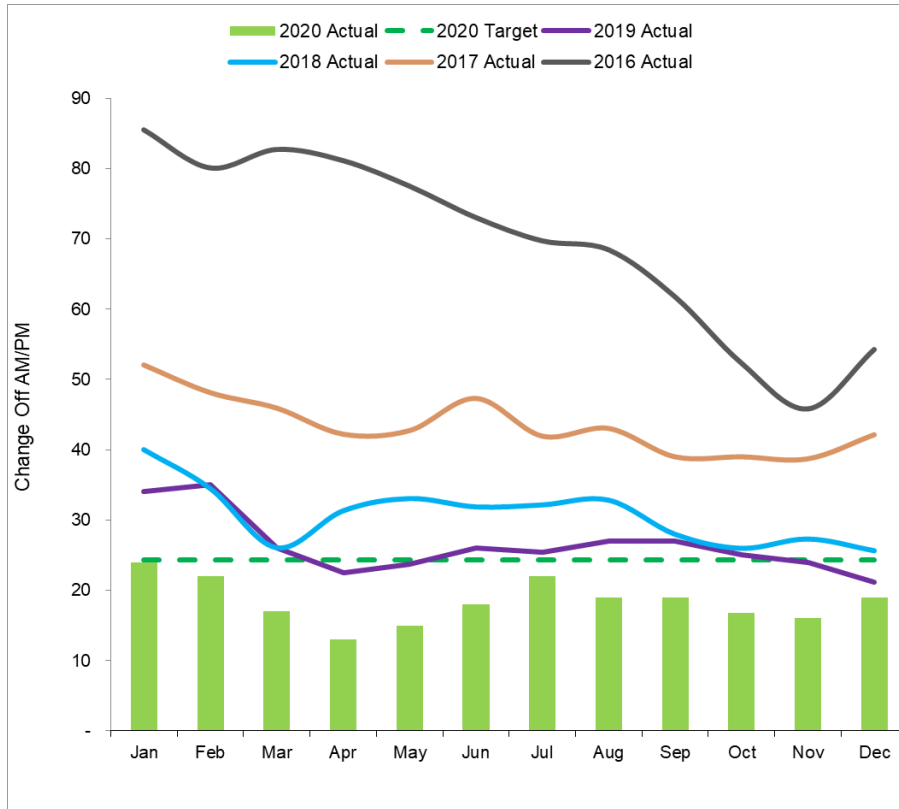
Definition
Average daily number of vehicle-equipment failures requiring a road call for service repair or a change off to a repair facility for a replacement vehicle. Monday to Friday data only.

Contact
Rich Wong,
Chief Vehicles Officer

Results

The average number of RCCOs in Period 12 2020 was 19 per day, well below the target of 1.5% of peak service currently set at 24.

Analysis

RCCOs continue to remain below the target of 1.5%. This is a result of the improved reliability of the bus fleet and from a reduction in service due to COVID-19 initiatives.

Action plan

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

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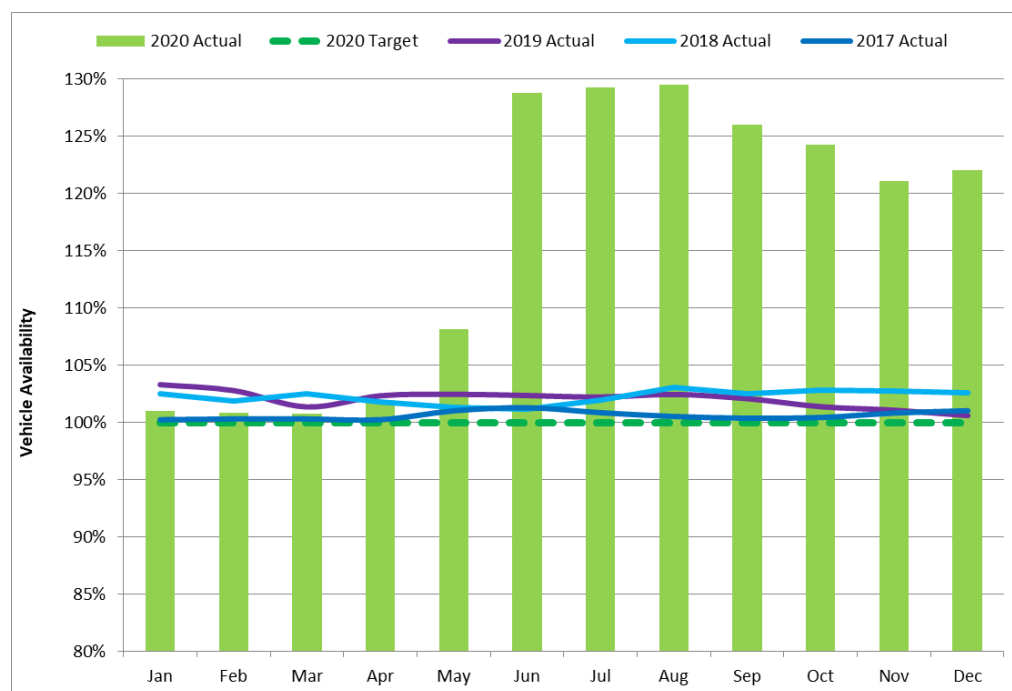
Definition
Daily average number of buses put into service (including RADs) compared to the number of buses scheduled for the a.m. peak period. Data represents Monday to Friday only. Holidays excluded.

Contact
Rich Wong,
Chief Vehicles Officer

Results

The average number of buses available for a.m. peak service in Period 12 2020 was 1,693 buses per day or 122% of planned service, above the target of 1387 buses.
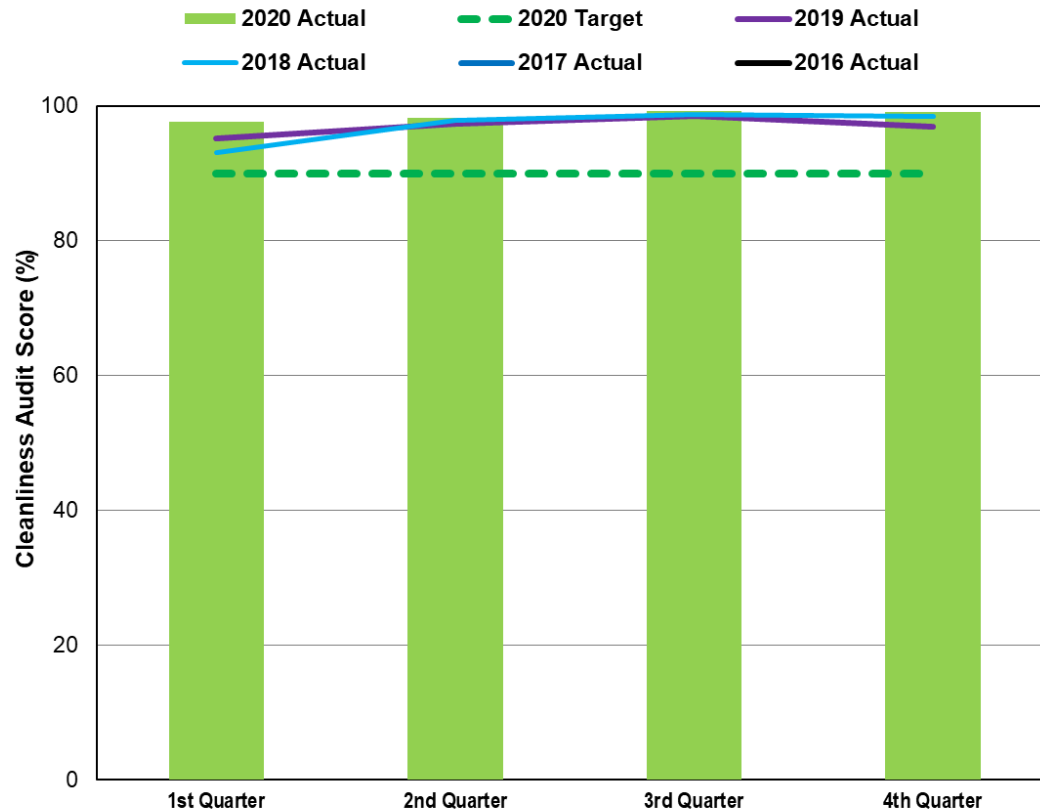
Analysis

The variance in service requirements in December 2020 (1387) and available vehicles (1693) is due to temporarily reduced service levels during the COVID-19 pandemic. We expect a recovery in service level requirements and are currently taking the opportunity to complete outstanding retrofit projects on our fleet.

Action plan

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

Bus: Cleanliness (Pre-service)

Cleanliness Audit Score (%) (y-axis)

Legend:
- 2020 Actual
- 2020 Target
- 2019 Actual
- 2018 Actual
- 2017 Actual
- 2016 Actual

x-axis: 1st Quarter, 2nd Quarter, 3rd Quarter, 4th Quarter

Definition
Results of third party audit conducted each quarter. "Pre-service" cleanliness results. Audits conducted weekdays only, excluding holidays.

Contact
Rich Wong,
Chief Vehicles Officer

Results

The pre-service bus cleanliness audit score in Q4 2020 was 99.1%, which is above the target of 90%.

Analysis

The score deduction of 0.9% is strictly due to the wheel assembly cleanliness of buses coming out of the wash rack.

Action plan

We are investigating the root cause of lower audit score for wheel assemblies by review of audit criteria, contractor performance, and other discovered contributing factors. We will continue to closely monitor and control cleaning contractor performance.

In response to the COVID-19 pandemic, we are performing specific cleaning and disinfection of all buses at multiple points during service: post-service, post a.m. rush, and during servicing.

Bus: Cleanliness (In-service & post-service)
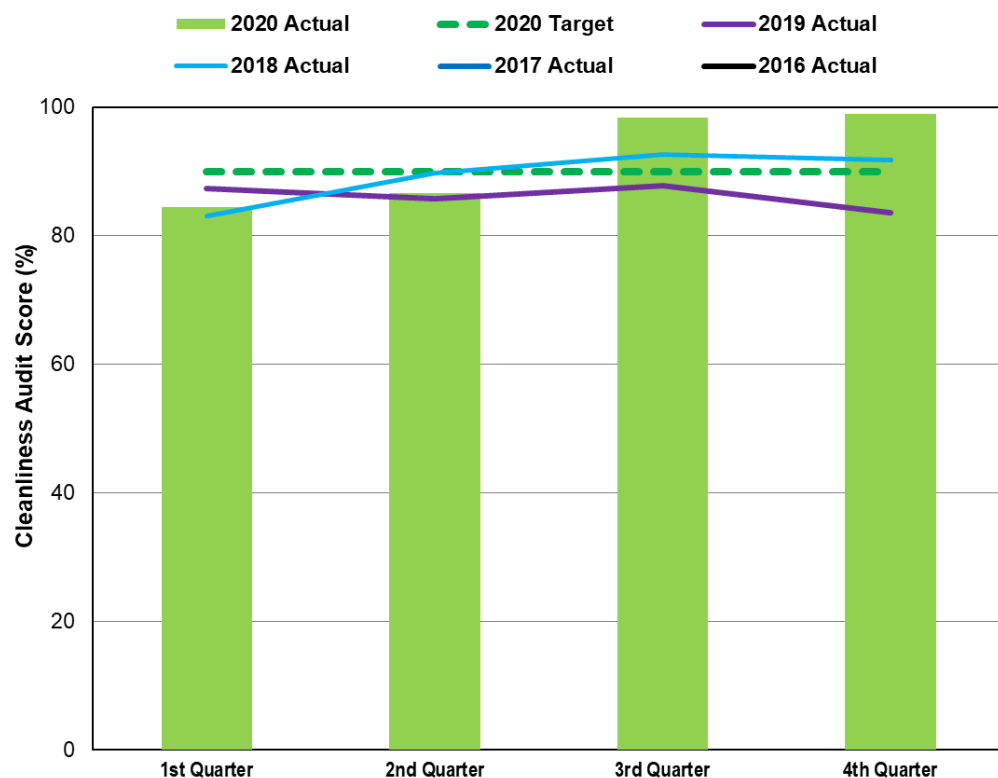
Legend: 2020 Actual · 2020 Target · 2019 Actual · 2018 Actual · 2017 Actual · 2016 Actual

Y-axis: Cleanliness Audit Score (%)
X-axis: 1st Quarter, 2nd Quarter, 3rd Quarter, 4th Quarter

Results

The in-service and post-service bus cleanliness average audit score in Q4 2020 was 98.9%. This is an increase from Q3 (98.4%) and Q4 2019 (83.6%).
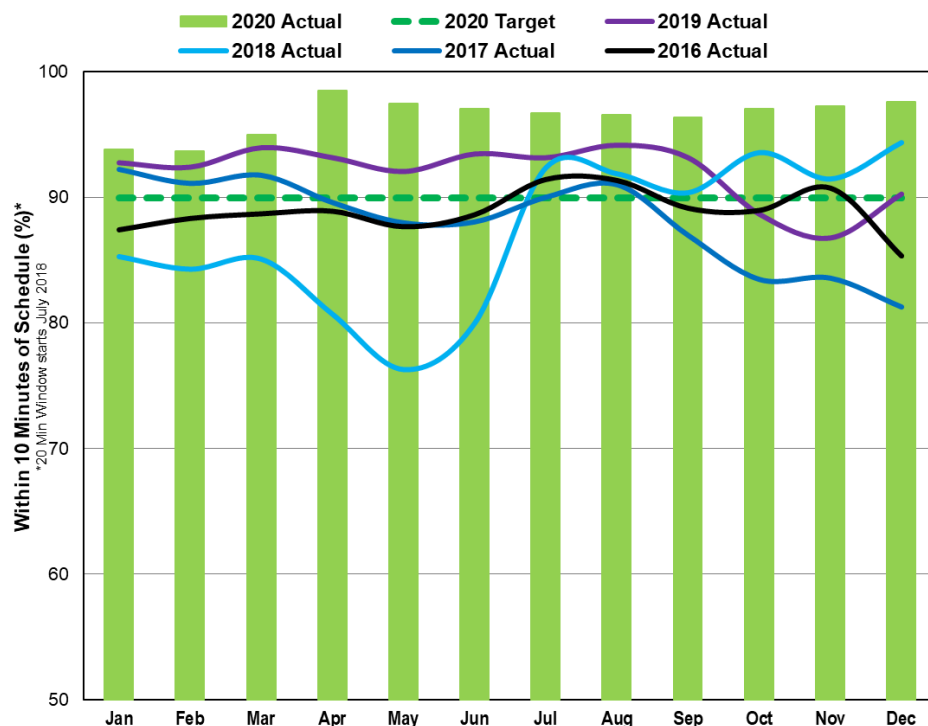
Analysis

The high cleanliness score can be attributed to lower service requirements, low ridership, and significantly fewer customers with food or drinks on buses.

Action plan

We will continue to monitor the cleanliness of the fleet post-service to determine whether increasing the frequency of cleaning is required.

Definition
Results of third party audit conducted each quarter. "In-service" and "post-service" cleanliness results. Audits conducted weekdays only, excluding holidays.

Contact
*Rich Wong,
Chief Vehicles Officer*

Wheel-Trans Services

Wheel-Trans: On-time performance (OTP)

Within 10 Minutes of Schedule (%)* *20 Min Window starts July 2018*

Legend: 2020 Actual | 2020 Target | 2019 Actual | 2018 Actual | 2017 Actual | 2016 Actual

X-axis: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

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
James Ross,
Chief Operating Officer

Results

OTP in Period 12 (November 29 - December 31) increased by 0.3% from the previous period to 97.6%, and is 7.3% higher than the same period in 2019.

Analysis

We continue to focus on service efficiencies by expediting call movement while maximizing service on all Wheel-Trans buses. OTP remains above 90%.

Action plan

Wheel-Trans will continue to maximize resources available in order to ensure trip demand and customer safety are maintained while providing an efficient service.

Wheel-Trans: Mean distance between failures (MDBF)

Mean Distance Between Failures (Km)

Legend: 2020 Actual, 2020 Target, 2019 Actual, 2018 Actual, 2017 Actual, 2016 Actual
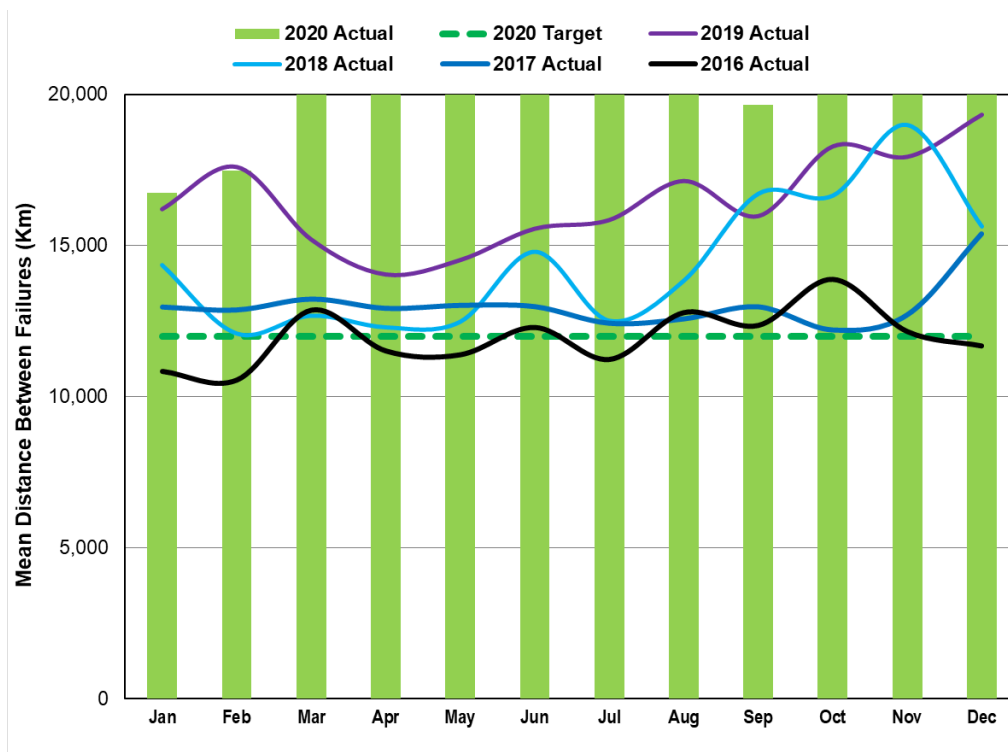
Definition
Total kilometres accumulated over the entire fleet compared to the total number of chargeable mechanical road calls. Data included for all seven days of service.

Contact
Rich Wong,
Chief Vehicles Officer

Results

Wheel Trans buses in the TTC fleet achieved a combined MDBF of 20,000 kilometres in Period 12 2020. This is a significant reliability improvement from Period 12 2019 of 19,331 kilometres MDBF.

Analysis

Exhaust system and engine electrical issues account for most of the Period 12 service faults on the Wheel-Trans 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. We are also approximately 12% of the way through a program that focuses on the Friendly and ProMaster passenger door switches and adjustments.

ProMaster buses continue to go through a tune-up program, so far 57% of the fleet has be completed. This program focuses on the vehicle's ignition, components such as ignition coils, spark plugs and PCV valves. These programs will reduce engine electrical issues and starting failures experienced on the ProMaster fleet. We will continue to monitor the effectiveness of these programs as part of our continuous improvement process.

Wheel-Trans: Accommodated service

Legend: 2020 Actual, 2020 Target, 2019 Actual, 2018 Actual, 2017 Actual, 2016 Actual

Accommodated Rate (%) — Y-axis: 90, 95, 100, 105

X-axis: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
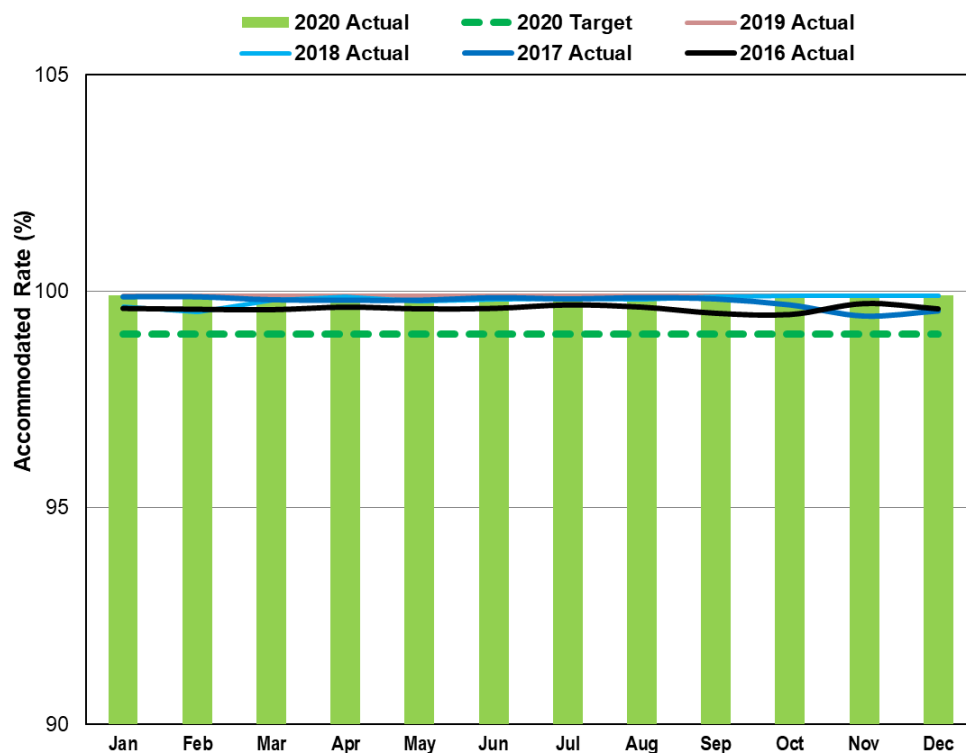
Definition
Accommodated rate is the percentage of passengers requesting Wheel-Trans services that are actually provided trips by either a Wheel-Trans bus, accessible taxi or sedan taxi.

Contact
James Ross,
Chief Operating Officer

Results

The accommodated rate in Period 12 (November 29 - December 31) was 99.9%. This is 0.9% higher than the Wheel-Trans target, and consistent with the same period in 2019.

Analysis

Wheel-Trans continues to provide a high standard of trip accommodation for customers during the pandemic. It is recognized that customers are dependent on Wheel-Trans transportation services for essential trips. The overflow contract provider, Telus, has been fully trained and they are providing, in conjunction with TTC staff, a prompt, reliable and courteous customer experience.

Action plan

Wheel-Trans will continue to focus on the accommodation of all trip requests. Safety is the main priority during the pandemic while ensuring all essential trips are provided through solo rides.

Wheel-Trans Contact Centre: Average wait time

Legend:
- 2020 Actual
- 2020 Target
- 2018 Actual
- 2017 Actual
- 2016 Actual
- 2019 Actual
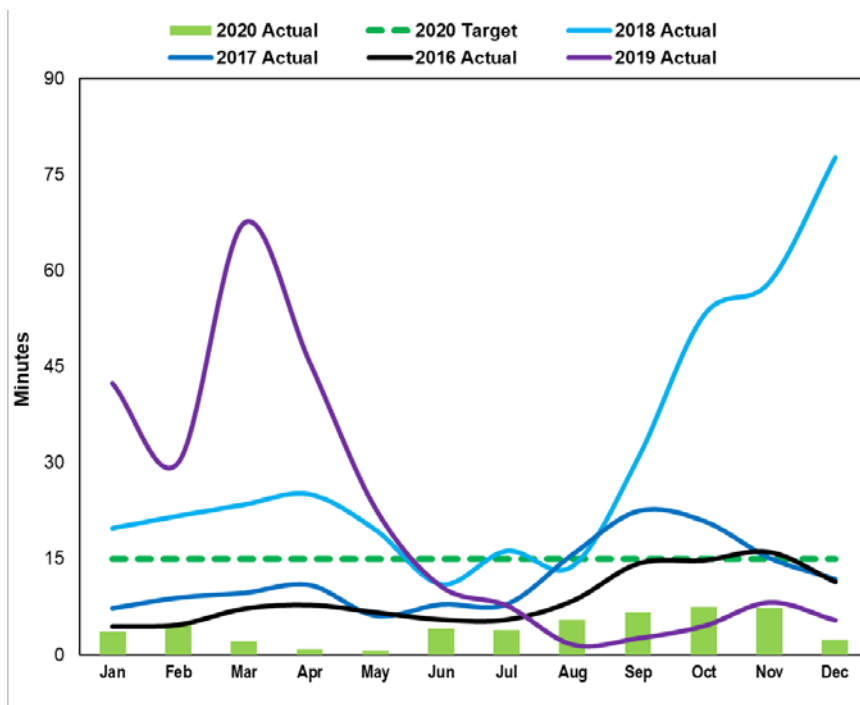
Definition
The average amount of time a customer waits in the queue before their call is answered.

Contact
James Ross,
Chief Operating Officer

Results

The average wait time in Period 12 (November 29 - December 31) was 2.4 minutes. This is lower than the 7.4-minute average in November, and below our target for this metric of 15 minutes.

Analysis

On November 22, we successfully launched our partnership with Telus to handle overflow calls in the Reservations call centre. The overflow staffing has assisted us in delivering an average wait time of 2.4 minutes. The City of Toronto implemented new lockdown measures on November 23 and further increased these measures on Dec 26, 2020, which has led to a decrease in demand for ridership, but has increased accessibility and service delivery for the contact centre.

Action plan

We continue to have regular meetings with Telus to ensure alignment and to enhance proficiencies between our contact centres. Supervisors are monitoring queues to identify coaching opportunities in order to improve the customer experience. As the pandemic continues, our team will be adjusting in step with the changes being introduced and ensuring appropriate levels of service are being provided to our customers.

Station services

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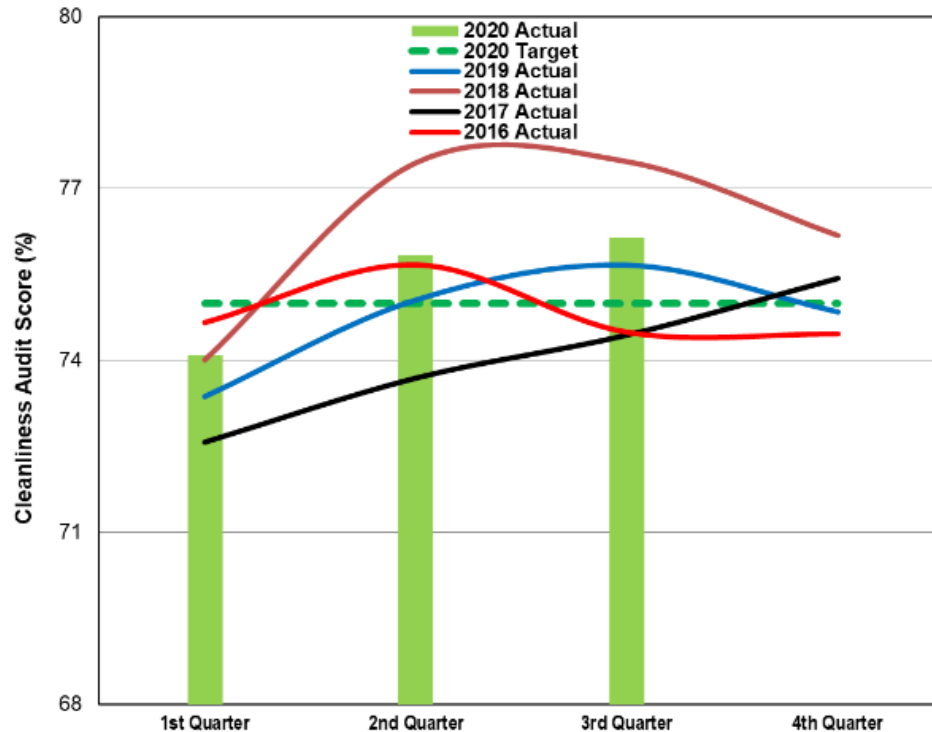
Definition
Average results of a third party audit conducted each quarter of all 75 stations. Audits are conducted weekdays only, excluding holidays.

Contact
*James Ross,
Chief Operating Officer*

The bottom three scoring stations in Q2 were: Coxwell (68.5%), Dundas West (68.3%) and Lansdowne (68.3%).

Action plan

There were 32 employees recalled from furlough to Temporary Building Serviceperson positions at the start of Q4 to allow for a modified version of seasonal projects to be carried out. Station lighting and floor care will be the focus of the modified projects.

Elevator availability

Availability (%) — y-axis
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec — x-axis

Legend: 2020 Actual, 2020 Target, 2019 Actual, 2018 Actual, 2017 Actual, 2016 Actual
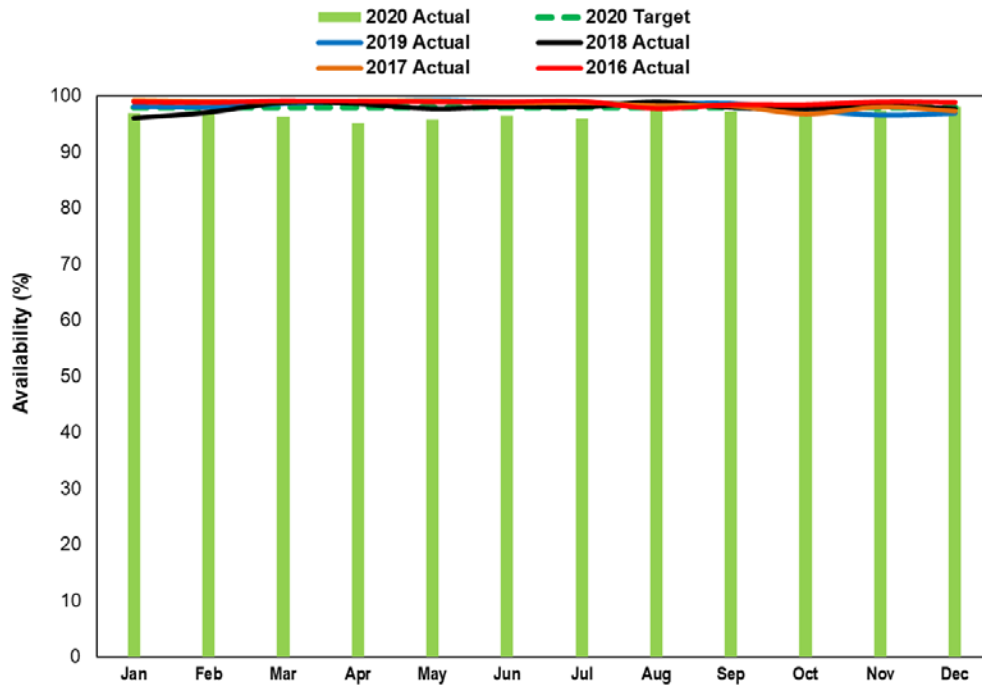
Definition
Percentage of total available subway elevator service hours during subway revenue service in a given month.

Contact
*Fort Monaco,
Chief Infrastructure and Engineering Officer*

Results

Elevator availability in December 2020 was 98.0%, meeting out target. Performance increased in December compared to the previous month (97.4%).
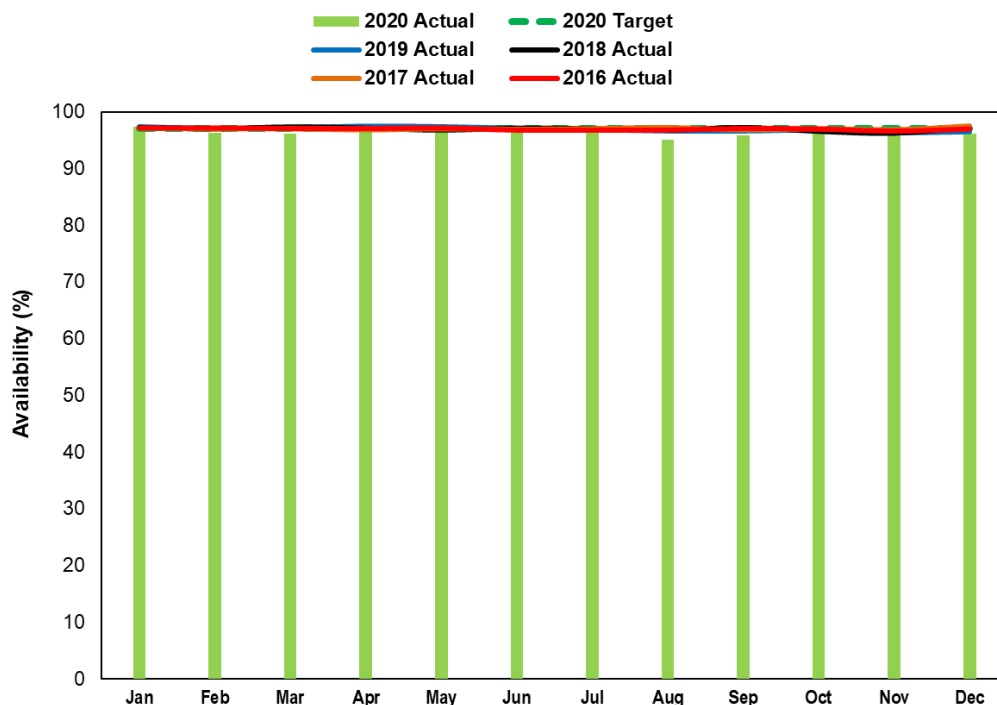
Analysis

Elevator maintenance was completed as planned and scheduled.

Action plan

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

Escalator availability

Legend:
- 2020 Actual
- 2020 Target
- 2019 Actual
- 2018 Actual
- 2017 Actual
- 2016 Actual

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 December 2020 was 96.1%, under the target of 97%. Performance marginally decreased compared to last month (96.5%).

Analysis

The following factors negatively impacted escalator service in December 2020:

- Safety and construction: An investigation of the Lawrence Station entrance on the northwest corner of Yonge Street and Lawrence Avenue resulted in the entrance being closed off. The escalator serving the entrance was shut off until January 15.

- The new vendor for supply and installation of escalator handrails lacks the capacity of past vendors, and was unable to meet contract requirements. This resulted in escalators remaining out-of-service for over 600 operating-hours in December.

- An escalator motor failed. Due to its age and design it could not be readily replaced, and needed full refurbishment resulting in prolonged downtime. Risks have been identified with similar motors in other stations.

Action plan

The Lawrence Station entrance reopened and the escalator returned service on January 15, 2021.

After discussions with TTC's Legal Department, the vendor has been removed from the contract and a new vendor was awarded the contract in January.

A corrective program for escalator motor failure, within budget constraints, will be implemented in 2021.

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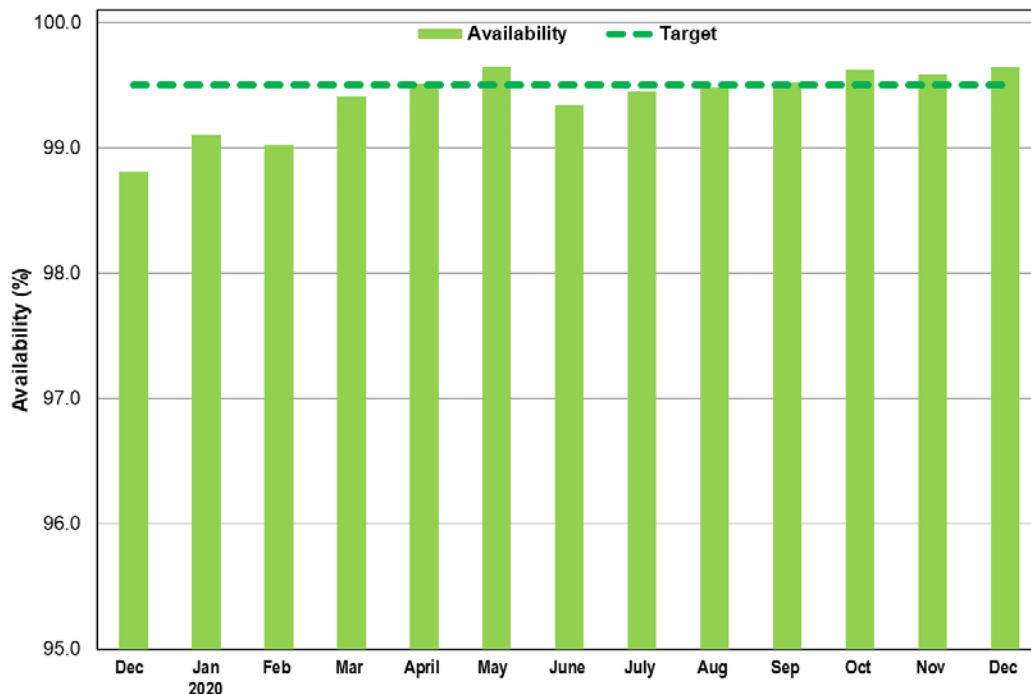
Definition
Percentage of time fare gates equipped with PRESTO are available for use. Availability data provided by manufacturer for 24 hours a day, seven days a week.

Contact
*Kathleen Llewellyn-Thomas,
Chief Strategy & Customer Officer*

Results

Fare gate availability averaged 99.64% in December 2020, which represents an increase of 0.05% from last month and an increase of 0.83% over the same time last year. Availability was above the 99.5% target.

Analysis

These results reflect the continued ongoing efforts by both TTC and Scheidt & Bachmann (S&B) to address the hardware and software issues with the fare gates. With the current modification programs in place, we expect performance to continue to improve throughout 2021.

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:

- In September 2020 we completed an upgrade of the control and operating system for the gates (FareGo 3.9). This upgrade will allow for better visibility and reporting functionality.

- An additional software upgrade was completed in September 2020. This software update will address a number of ongoing issues with the fare gates and will further improve gate reliability. The teams are currently monitoring the new software and documenting any issues in preparation for future software releases.

- The program to replace the industrial computers in the fare gates was completed Q4 2019. The S&B second-generation 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.

- S&B development teams are currently completing a further in-depth review of ongoing issues

with the fare gate motors. The final report has been completed. The team has completed a number of the recommendations from the report and expects continued improvement in the fare gates. We have received an upgraded motor type and the teams are currently conduction field testing of this new motor.

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 in the planning stage, which will add functionality and provide further fixes to know problems, improving the gate availability to the customers.

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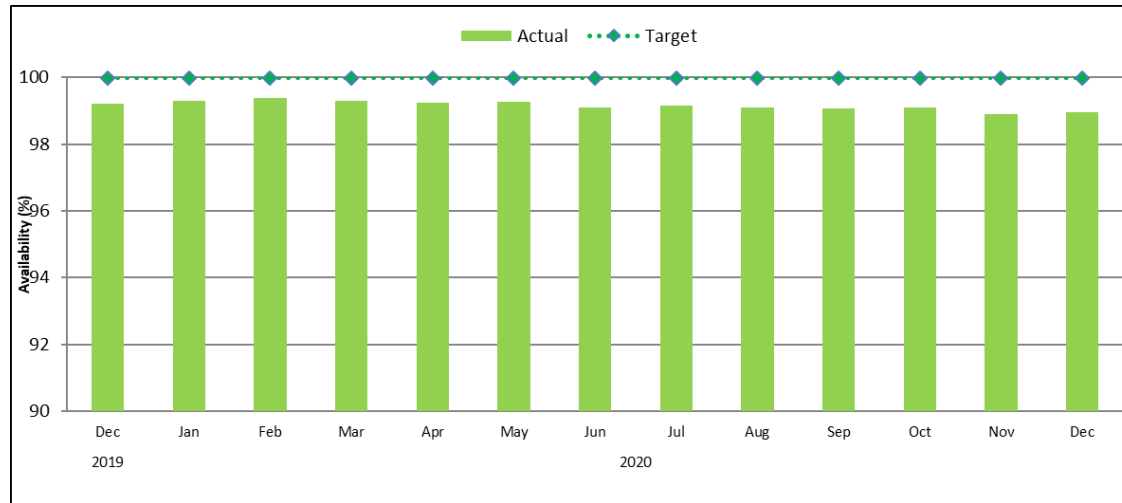
Definition
The total percentage of all PRESTO card readers that are in working order and available for customer use.

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 Strategy & Customer Officer*

Results

PRESTO card reader availability averaged 98.96% in December, which represents an increase of 0.07% from the previous month. Availability remains below the target of 99.99%.

Analysis

The increase in availability is attributed to more timely resolution of card reader issues.

Action plan

We will identify potential gaps in existing processes and communicate with Metrolinx to implement improvements.

Note: Results shown here are representative of overall card reader availability received from Metrolinx. The method used by Metrolinx for determining availability does not consider all environmental or operational factors. We are working with Metrolinx to improve their approach to calculate device availability including the frequency at which the devices are polled.

PRESTO Fare Vending Machines (FVM)
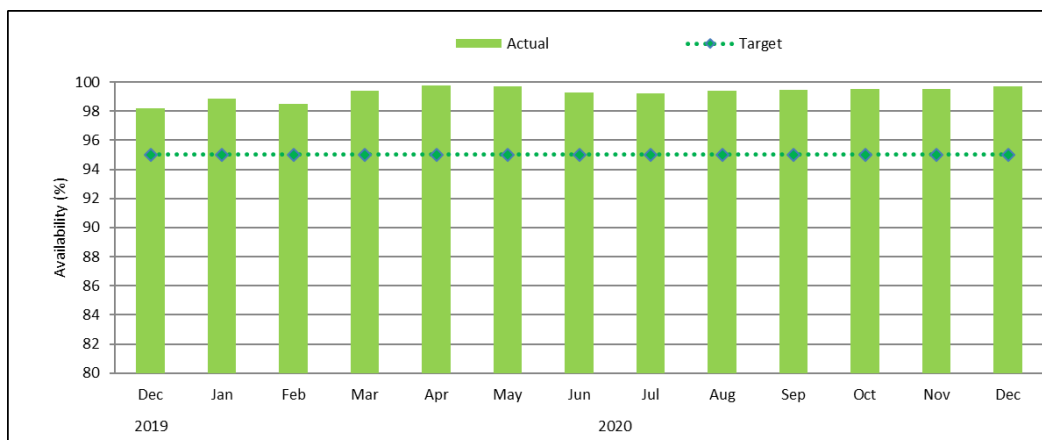
Definition

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 Strategy & Customer Officer

Results

PRESTO FVM availability averaged 99.71% in December, which represents an increase of 0.18% from the previous month. Availability remains above the target of 95.00%.

Analysis

The increase in availability is attributed to restoration of the device

at Vaughan Mills Centre Station and greater coordination between teams regarding remediation needs.

Action plan

Continue to monitor performances to ensure availability remains above target (95.00%).

Note: *Results shown here are representative of overall PRESTO Fare Vending Machine availability received from Metrolinx.*

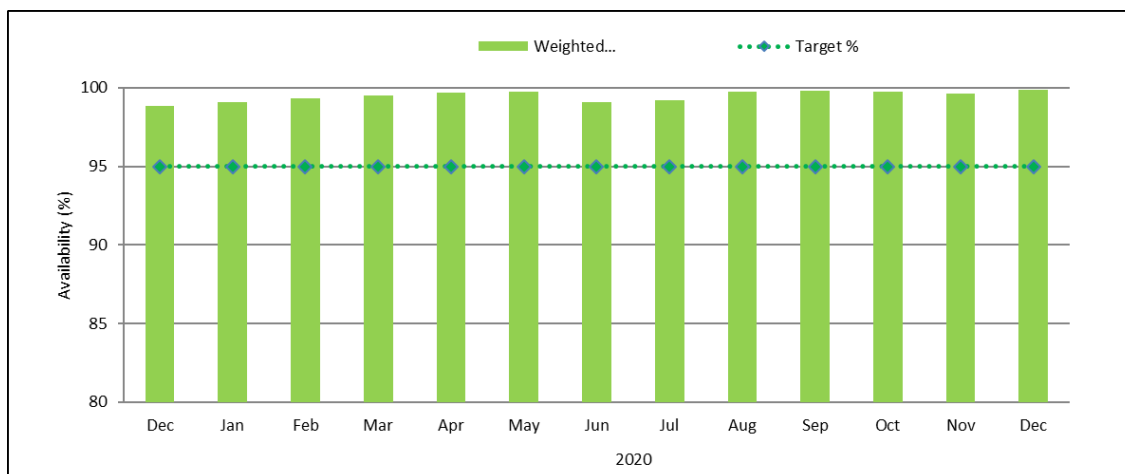# PRESTO Self-Serve Reload Machines (SSRM)

Analysis

The increase in availability is attributed to increased monitoring of systems.

Action plan

Continue to monitor performances to ensure availability remains above target (95.00%).

Note: Results shown here are representative of overall PRESTO Fare Vending Machine availability received from Metrolinx.
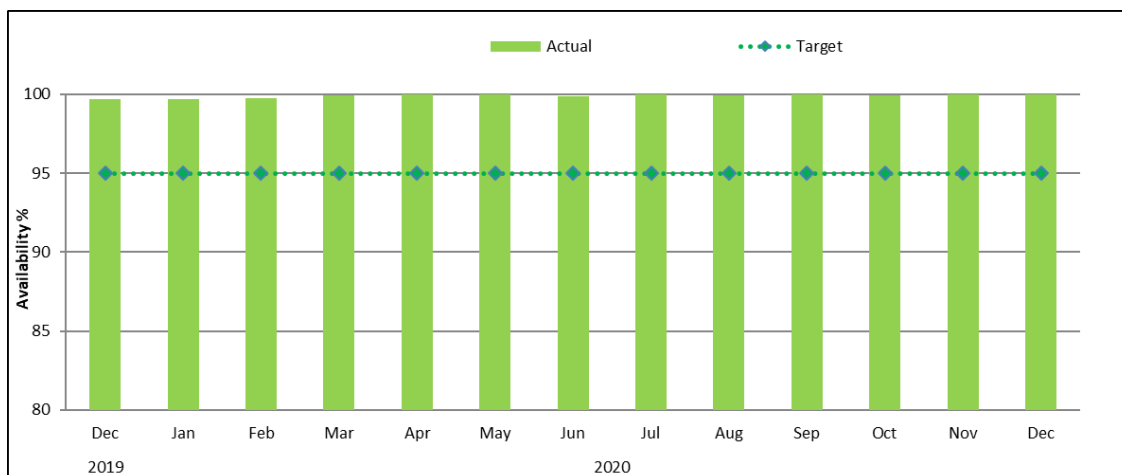
Definition
The average percentage of daily PRESTO SSRM availability are based on duration of identified fault incidents to time of resolution. PRESTO SSRMs allow customers to load funds onto their PRESTO cards via credit or debit payment. The device also allows customers to view their balance and card history, and activate any products purchased online. The SSRMs are installed at subway station entrances.

Contact
Kathleen Llewellyn-Thomas,
Chief Strategy & Customer Officer

Results

PRESTO SSRM availability averaged 99.99% in December, which represents an increase of 0.01% from the previous month. Availability remains above the target of 95.00%.

PRESTO Fares and Transfer Machines (FTM)

Analysis

The increase in availability is attributed to more efficient identification of incidents and coordination of vehicle availability for device maintenance activities.

Action plan

We will continue to monitor performance to ensure availability remains above target (95.00%).

Note: Results shown here are representative of overall PRESTO Fare Vending Machine availability received from Metrolinx.

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 Strategy & Customer Officer

Results

PRESTO FTM availability averaged 99.85% in December, which is an increase of 0.25% from the previous month. Availability remains above the target of 95.00%.

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