



Chief Executive Officer's Report – September 2020 Update

Date: September 24, 2020

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 – September 2020

Toronto Transit Commission

CEO's Report

September 2020



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Performance scorecard

TTC performance scorecard – September 2020

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
Safety and security							
Lost-time injuries	Injuries per 100 employees	Q2 2020	3.50	4.37*	✓	✗	19
Customer injury incidents	Injury incidents per 1M boardings	Q2 2020	3.11	1.71*	✗	–	20
Offences against customers	Offences per 1M boardings	Q2 2020	2.33	1.00	✗	–	22
Offences against staff	Offences per 100 employees	Q2 2020	4.33	4.18	✗	✗	24
Ridership							
Ridership	Monthly ridership	July 2020	13.1M	40.6M	✗	✗	25
Ridership	Year-to-date ridership	2020 YTD (to July)	147.7M	309.5M	✗	✗	25

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	July 2020	11.7M	20.5M	✗	✗	27
PRESTO ridership	Year-to-date ridership	2020 YTD (to July)	133.9M	277.6M	✗	✗	27
Wheel-Trans ridership	Monthly ridership	July 2020	89,382	329,166	●	●	28
Wheel-Trans ridership	Year-to-date ridership	2020 YTD (to July)	1.1M	2.4M	●	●	28
Customer experience							
Customer satisfaction	Customer satisfaction score	Q2 2020	81%	80%	✓	✓	29
 Subway services							
1 On-time performance Line 1	Scheduled headway performance at end terminals	July 2020	93.4%	90.0%	✓	✓	30
2 On-time performance Line 2	Scheduled headway performance at end terminals	July 2020	93.6%	90.0%	✓	✓	31
3 On-time performance Line 3	Scheduled headway performance at end terminals	July 2020	91.5%	90.0%	✓	✓	32


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	July 2020	99.2%	90.0%	✓	✓	33
1 Capacity Line 1	Trains-per-hour during peak	July 2020	97.0%	96.0%	✓	✓	34
1 Capacity Bloor-Yonge Station	Trains-per-hour (8 a.m. to 9 a.m.)	July 2020	100.0%	96.0%	✓	✓	34
1 Capacity St George Station	Trains-per-hour (8 a.m. to 9 a.m.)	July 2020	98.3%	96.0%	✓	✓	34
2 Capacity Line 2	Trains-per-hour during peak	July 2020	93.1%	96.0%	✗	–	35
3 Capacity Line 3	Trains-per-hour during peak	July 2020	89.7%	98.0%	✗	–	36
4 Capacity Line 4	Trains-per-hour during peak	July 2020	100%	98.0%	✓	✓	37
Amount of service	Average weekly service hours delivered	June 2020	8,945 h	9,433 h	✗	✗	38
Vehicle reliability T1 trains	Mean distance between failures	July 2020	439,786 km	300,000 km	✓	–	39
Vehicle reliability TR trains	Mean distance between failures	July 2020	747,413 km	600,000 km	✓	–	40


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	July 2020	100%	100%	✓	✓	41
Subway cleanliness	Audit score	Q2 2020	90.0%	90.0%	✓	✓	42
 Streetcar services							
On-time performance	On-time departures from end terminals	July 2020	80.6%	90.0%	✗	✓	43
Short turns	Monthly total short turns	July 2020	17	296	✓	✓	45
Amount of service	Average weekly service hours	June 2020	16,009 h	15,158 h	✓	–	46
Vehicle reliability: <i>Contractual</i>	Mean distance between failures	July 2020	36,450 km	35,000 km	✓	✓	47
Vehicle reliability: <i>Operational</i>	Mean distance between failures	July 2020	22,340 km	35,000 km	✗	–	48
Road calls and change offs	Average daily road calls or vehicle change offs	July 2020	3	2.4	✗	✓	50
Service availability	Daily number of vehicles available for service	July 2020	100%	100%	✓	✓	51



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: Pre-service	Audit score	Q2 2020	82.6%	90.0%	✗	–	52
Streetcar cleanliness: In-service & post-service	Audit score	Q2 2020	78.1%	90.0%	✗	–	53
 Bus services							
On-time performance	On-time departures from end terminals	July 2020	85.9%	90.0%	✗	✓	54
Short turns	Monthly total short turns	July 2020	3	1,350	✓	✓	56
Amount of service	Average weekly service hours	May 2020	127,245 h	131,724 h	✗	✗	57
Vehicle reliability: eBus	Mean distance between failures	July 2020	30,000 km	24,000 km	✓	✓	58
Vehicle reliability: Hybrid	Mean distance between failures	July 2020	30,000 km	24,000 km	✓	✓	59
Vehicle reliability: Clean Diesel	Mean distance between failures	July 2020	20,000 km	12,000 km	✓	✓	60
Road calls and change offs	Average daily road calls or vehicle change offs	July 2020	22	24	✓	✓	62

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	July 2019	129.3%	100%	✓	✓	63
Bus cleanliness: Pre-service	Audit score	Q2 2020	98.3%	90.0%	✓	✓	64
Bus cleanliness: In-service & post-service	Audit score	Q2 2020	86.7%	90.0%	✗	–	65
 Wheel-Trans services							
On-time performance	% within 20 minutes of schedule	July 2020	96.7%	90.0%	✓	✓	66
Vehicle reliability	Mean distance between failures	July 2020	20,000 km	12,000 km	✓	✓	67
Accommodation rate	Percentage of requested trips completed	July 2020	99.9%	99.0%	✓	✓	68
Average wait time	Average amount of time a customer waits before call is answered	July 2020	3.9 min	15 min	✓	✓	69
 Station services							
Station cleanliness	Audit score	Q2 2020	75.8%	75.0%	✓	–	70

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
Elevator availability	Per cent available	July 2020	96.0%	98.0%	✗	✓	71
Escalator availability	Per cent available	July 2020	96.7%	97.0%	✗	—	72
Fare gates	Per cent available	July 2020	99.45%	99.50%	✓	✓	73
PRESTO fare card readers	Per cent available	July 2020	99.16%	99.99%	✗	✓	75
PRESTO Fare Vending Machines	Per cent available	July 2020	99.24%	95.00%	✓	✓	76
PRESTO Self-Serve Reload Machines	Per cent available	July 2020	99.97%	95.00%	✓	✓	77
PRESTO Fares and Transfer Machines	Per cent available	July 2020	99.64%	95.00%	✓	✓	78

Ongoing trend indicators:  Favourable  Mixed  Unfavourable  Not applicable

*Represents four-quarter average of actual results

CEO's commentary

As fall quickly approaches, and Commissioners resume the business of the TTC at their next scheduled meeting on September 24, I hope that everyone had a safe summer.

It has been a challenging year for the TTC — perhaps the most difficult in our long history. Like so many organizations and businesses in our city, we've dealt with the realities of the global pandemic and have focused on protecting our customers as well as our employees while continuing to move Toronto forward. Safety is a core value at the TTC — in fact it is paramount in all that we do.

Since the start of the COVID-19 pandemic, it has been the professionalism of our front line, and those behind the scenes, that has kept the TTC a resilient and reliable option for those in our city

who need us most. As we learned more about the coronavirus, our workforce helped us to quickly modify operations, in close collaboration with health experts, to ensure that we maintained a healthy and safe system. They also blocked the transmission of the

virus, managed incidents of worker illness and protected our most vulnerable riders.

TTC employees are in the unique position to see the need that is out there in our community. I'm extremely proud to report that



volunteers from our transportation divisions, and TTC members from the Conference of Minority Transportation Officials (COMTO) Toronto and Region Chapter, raised more than \$9,600 and filled 800 backpacks with school supplies, TTC face masks and PRESTO cards for school kids in the Mount Dennis community.

As well, I'd like to say a big thank-you to crews in our Operations Training Centre who have been working with Toronto Paramedic Services to help transport hundreds of people from various shelters and encampments to hospitals, medical buildings or cooling centres in specially retrofitted buses.

COVID-19 has had a devastating impact on our business. At the height of the pandemic we were at our lowest point in ridership, carrying only about 15-to-20 per cent of pre-pandemic levels. While ridership is still below 50 per cent of normal on all modes, we're slowly

rebounding and continuing to move hundreds of thousands of customers around the city on a daily basis.

While solutions to combat the COVID-19 crisis have been both costly and labour intensive, the TTC continues to work hard to ensure our riders can get to where they need to go — whether it be jobs, schools or the numerous other essential trips they rely on us for.

We're continuing to work in close partnership with the City and Toronto Public Health officials, especially as students return to school. We'll keep running a demand-responsive service, and introduce service reliability improvements, which gives us the flexibility to adjust to changing conditions and travel demands. We've also recently introduced further protective measures for all TTC employees in response to increasing ridership, schools

reopening and the potential resurgence of COVID-19 in our city.

As part of **RapidTO**, with the introduction of the **Eglinton East Priority Bus Lanes in October**, the 86 Scarborough and 116 Morningside services will begin operating in dedicated lanes on Eglinton Avenue, Kingston Road and Morningside Avenue. Customers will have faster and more reliable journeys along these corridors. The efficiencies realized from priority bus lane operations will be used to restore the 905 Eglinton East Express and 986 Scarborough Express services, which will also take advantage of the priority corridor.

As part of the 2021 Annual Service Plan, the TTC is currently collecting feedback from customers on service proposals for the RapidTO corridors on Eglinton East and on Jane Street. Building on these consultations, on September 17 the TTC will host the first of two rounds

of stakeholder meetings to discuss broader service initiatives in the 2021 Plan. This is part of the TTC's 5-Year Service Plan and 10-Year Outlook commitment to reach out to stakeholders and the public to receive feedback to refine our services as required. Following the stakeholder meetings, there will be an additional online public survey where we will seek feedback on broader service initiatives proposed for next year.

By the end of September, **the TTC will have 60 battery-electric buses in service**. In addition to having the largest fleet of eBuses in North America, the TTC is the only agency with vehicles from all three builders of long-range electric buses — BYD Canada, New Flyer Industries and Proterra. The result is the transit industry's first head-to-head evaluation.

Over the next two years, the analysis will include:

- Assessments of customer and employee satisfaction;
- Engineering tests of both vehicles and charging system performance; and
- Evaluation of vendor performance.

Our thanks to the Government of Canada's Public Transit Infrastructure Fund (PTIF) and the City of Toronto for investing \$140 million to make this happen.

I'd like to add that through PTIF and gas tax funding, the TTC has benefited significantly in recent



Priority bus lane on Morningside Avenue

years thanks to investments from our partner at the federal level. It has enabled us to start addressing the backlog of critical state-of-good-repair work. And we hope to continue building on this partnership.

Capital investment and oversight by this Board has directly contributed to significant on-time performance improvements across all modes of service over the last five years. The TTC Board's backing of capital projects has helped to achieve safe operations of trains on closer headways through new signalling; to grow an accessible and reliable vehicle fleet; and to expand station capacity and accessibility of the network.

The base capital investments that we're making today will go a long way to maximizing the life of our system's assets, enhancing the customer experience and preserving the quality of life in our great city.



Since the TTC Board last met in July, **we've opened elevators at both Wellesley and Chester stations**, our 47th and 48th accessible subway stops, respectively. While construction on the secondary entrance and exit at Chester continues into 2021 as

scheduled, the two-week station closure in June helped to complete the elevator construction ahead of schedule.

Easier access work continues at Dupont, Wilson, Runnymede, Bay, Yorkdale, Sherbourne, Keele and Lansdowne stations. With the

contracts approved by Commissioners last July, construction at Donlands and College stations is scheduled to start in Q3 2020, which will also involve the building of new secondary exits/entrances at each location. Next year, construction is scheduled to start at eight more stations: King, Spadina, Castle Frank, Christie, Greenwood, Lawrence, Rosedale and Summerhill.

We have a great deal to say about accessibility initiatives at the TTC so I'd like to encourage everyone to **tune in to the Annual TTC Forum on Accessible Transit on October 1** for the latest news. It's the public's chance to voice their comments and opinions about our service. This year's forum is virtual and will be live-streamed, starting at 7 p.m. Everyone is invited to join in.

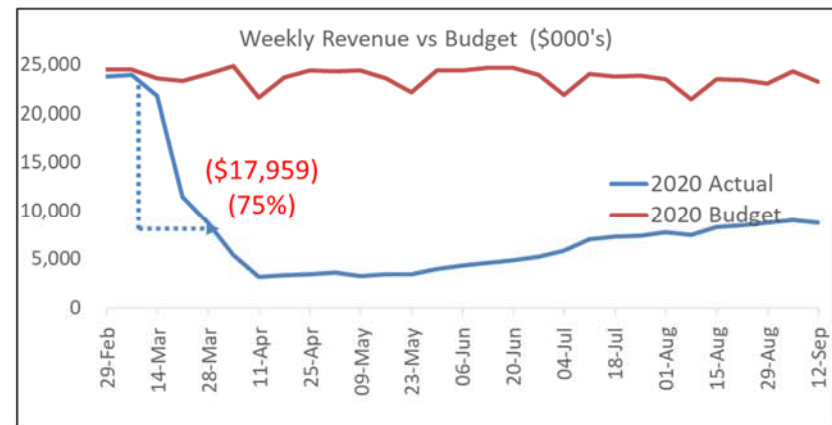
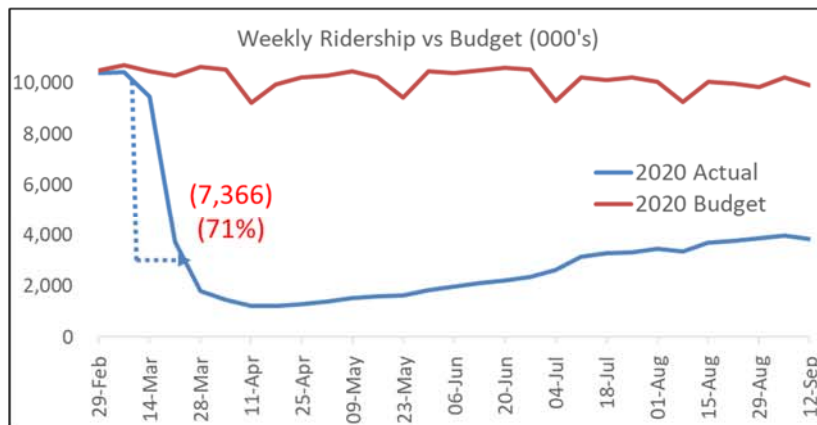
I look forward to seeing everyone at the virtual meeting next week.

A handwritten signature in black ink, appearing to read 'Richard J. Leary', with a stylized, flowing script.

Richard J. Leary
Chief Executive Officer
September 2020

COVID-19 dashboard

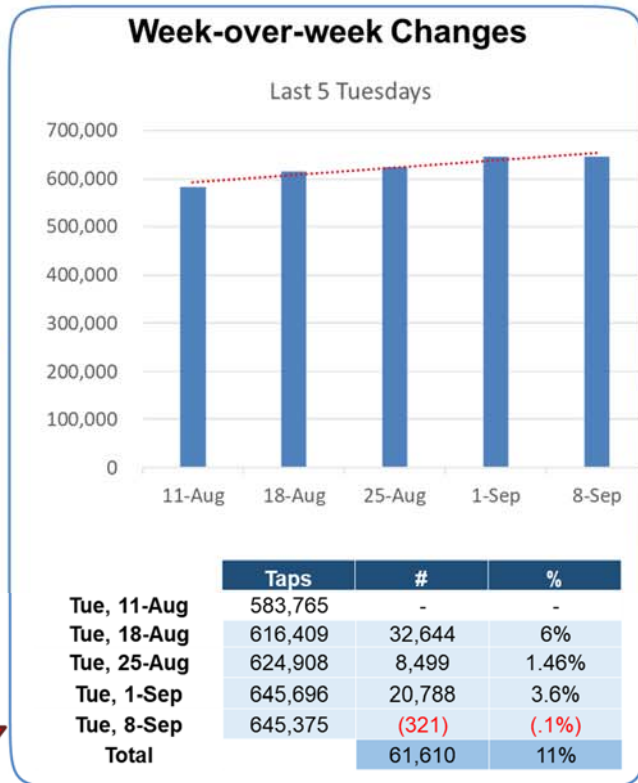
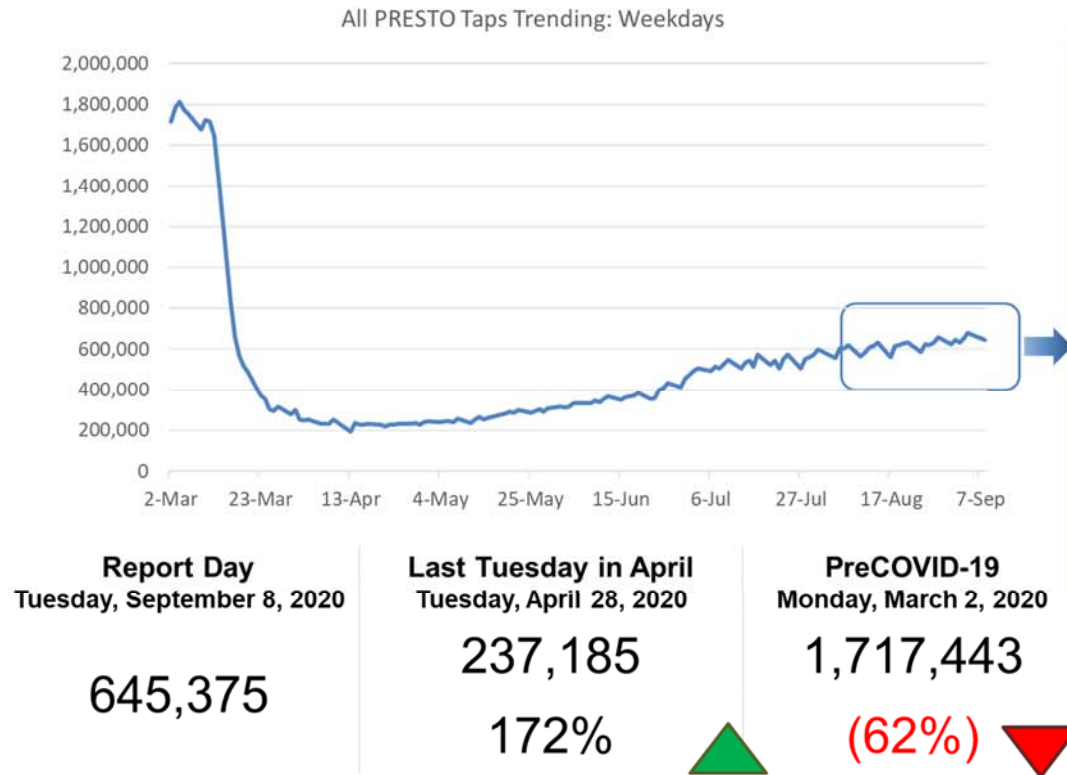
2020 YTD ridership and revenue



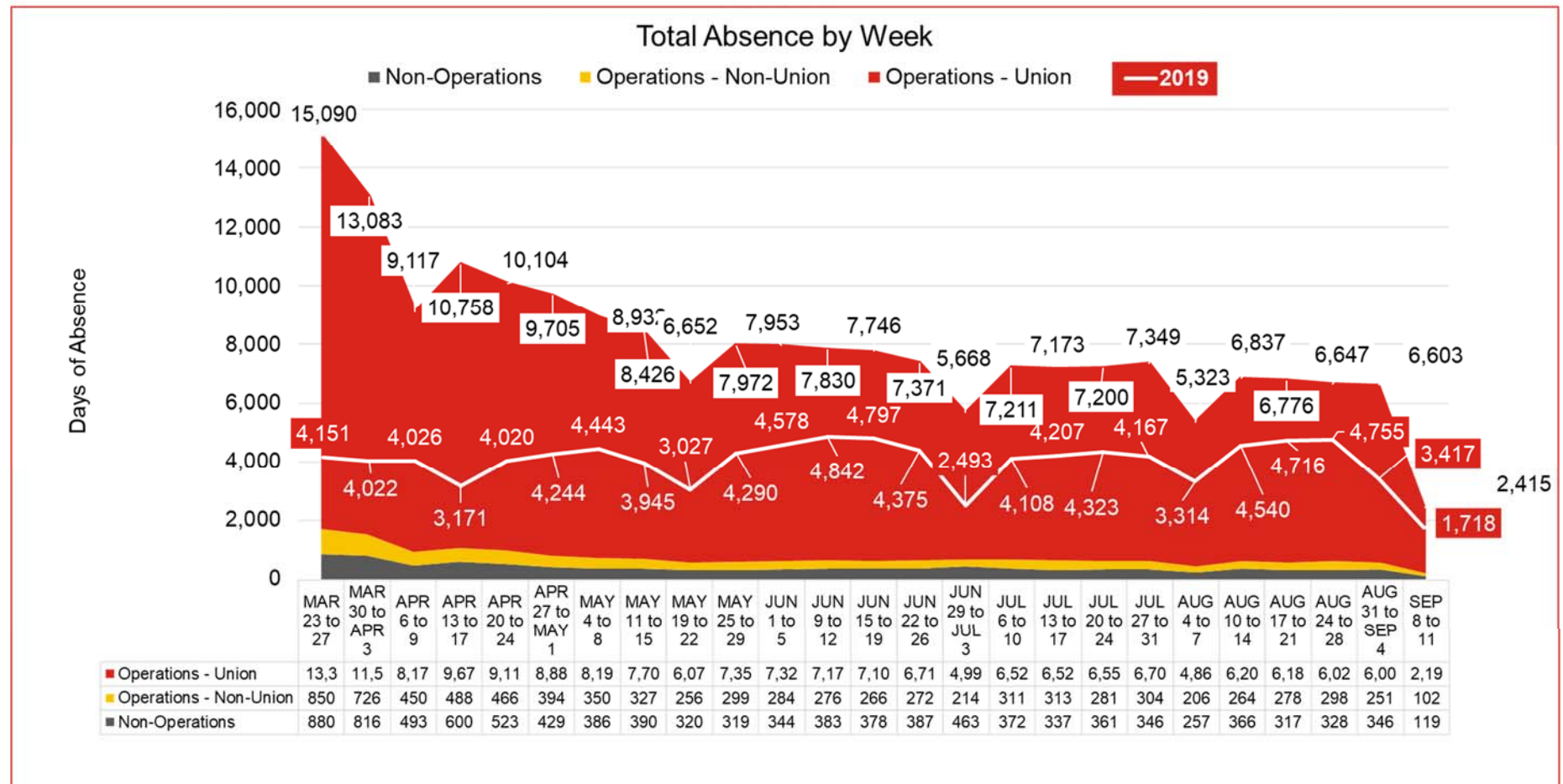
KEY OBSERVATIONS:

- August ridership and revenue increased approximately 5% over July, as the Toronto entered Stage 3 on July 31, 2020.
- Ridership is slowly recovering, currently at approximately 61.2% below budget, with a corresponding increase in revenue, currently at approximately 62.5 % below budget.

PRESTO taps (September 8, 2020)



Employee absences



Note: Absences include sickness, absent without leave, absences related to occupational injuries, approved and unapproved unpaid leaves, and paid leaves. Year-over-year comparison is done on the same categories and excludes paid leaves such as bereavement, jury duty, etc. Weeks 4, 10 and 16 are lower due to statutory holiday (only 4 days reported). 2019 data aligned by weekday (begins at March 25, 2019). 2019 weeks 5, 10 and 16 are lower due to statutory holiday.

Transit services (September 9, 2020)

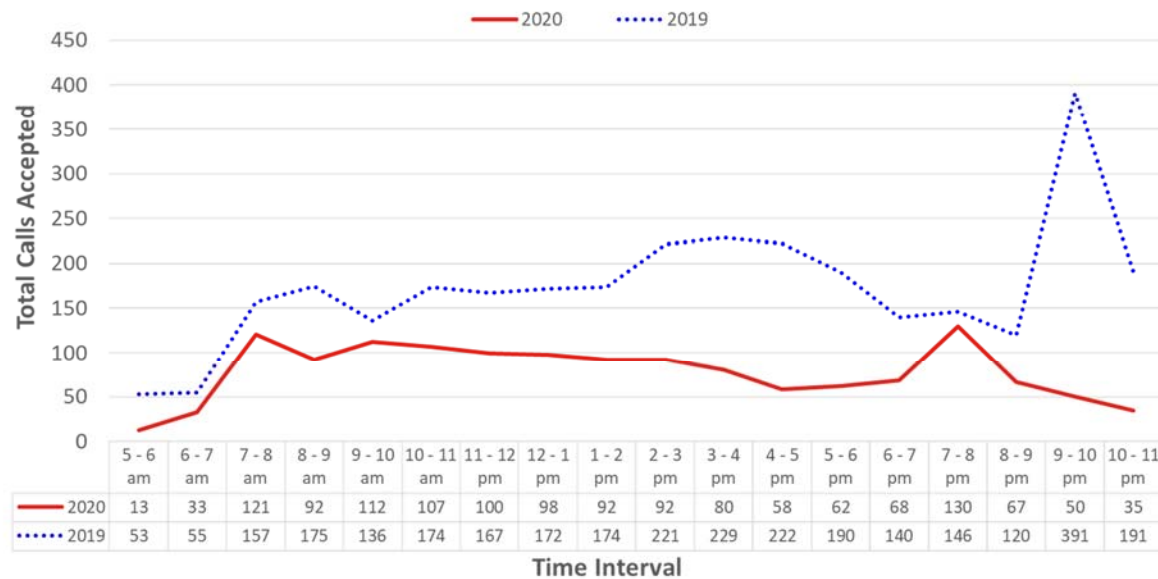
	Subway	Streetcar	Bus	Wheel-Trans
Service Output (per Planned Service)	Line 1 104% Service Line 2 107% Service	100% Service	99.15% Service	Service Reduced
Mitigating steps to meet operational needs	Meeting 100% of service at a reduced capacity. ¹	Meeting 100% of service at a reduced capacity. ¹	Meeting 100% of service at a reduced capacity. ¹ Extra buses added to key routes for front line workers	Service Reduction due to decrease in weekly Ridership (down 61% versus 2020 budget estimates)
Operator COVID-19 Related Absences	0	8	20	0
COVID-19 Absence Rate	0.0%	1.4%	0.4%	0%
OT hours (hh:mm)	0:00 ²	2:10 ²	266:21 ²	0:00

¹ Reduced Capacity is defined in the Ridership Response Service Plan: 77% or greater than that of the pre-COVID-19 service levels, this has been in effect since May 10, 2020.

² Excludes capital overtime.

Wheel-Trans: Reservations calls per hour (September 9, 2020)

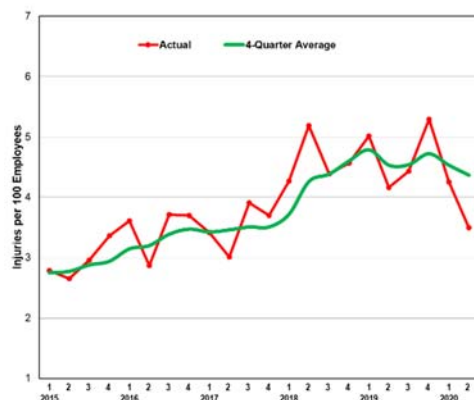
- YOY, total calls between 5-8 a.m. and 8-11 p.m. decreased by -67% (-648)
- Majority of these calls can be attributed to customers travelling less for non-essential reasons (leisure activities, day programs etc.)



Total Call Volumes (Reservations)		
Inbound Calls Accepted	1,410	345,417
Inbound Calls 2019 (for reference)	3,113	483,352
Variance (#)	(-1,703)	(-137,935)
Variance (%)	(-55%)	(-29%)

Safety and security

Lost-time injuries rate (LTIR)



Definition

Number of lost-time injuries reported per 100 employees.

Contact

Betty Hasserjian,
Chief Safety Officer (Acting)

Note: Q3 2020 data will be available in the December CEO's Report.

Results

The LTIR in Q2 2020 was 3.50 injuries per 100 employees.

Analysis

The LTIR in Q2 was 20% lower than the four-quarter average. However, there has been an upward trend in the LTIR since 2015.

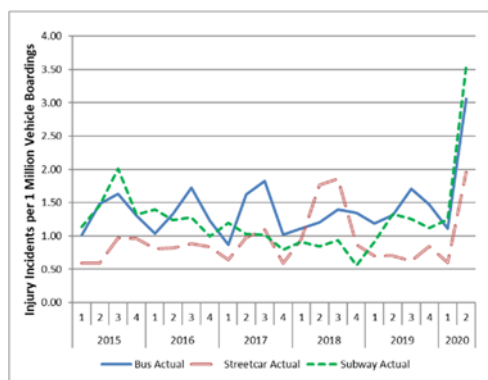
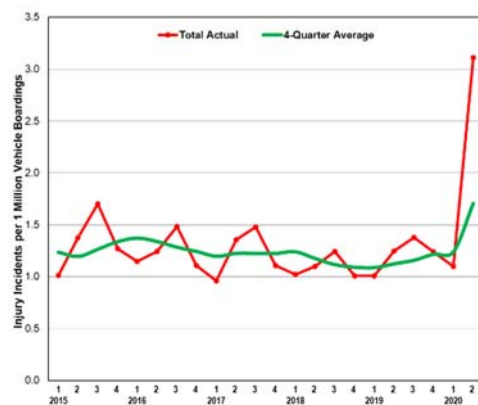
Action plan

Musculoskeletal/ergonomic type injuries (e.g. overexertion, reach/bend/twist, repetition) continue to account for 23% of all lost-time injuries and represent the highest injury event type since 2014. The Ergonomic Musculoskeletal Disorder Prevention Program, currently being implemented, focuses on preventing such injuries and resolving ergonomic concerns. Specific training modules for high

risk groups (e.g. Elevating Devices, Wheel-Trans Operators, and Track Maintenance) have been developed. The train-the-trainer sessions have been deferred to fall 2020 due to the COVID-19 pandemic.

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.

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 Q2 2020 was 3.11 injury incidents per one million vehicle boardings.

Analysis

The CIIR in Q2 was 82% higher than the Q1 average rate of 1.71 injury incidents per one million vehicle boardings. Moreover, the four-quarter average line shows no statistically significant trend in the CIIR since 2015. The CIIR is oscillating around the historic long term average of 1.3 injuries per one million vehicle boardings since 2015.

The increase in the Q2 CIIR was mainly attributed to the significant decrease in overall ridership due to the COVID-19 pandemic.

Action plan

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

Note: Q3 2020 data will be available in the December 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 July 4, 2020 and their status.

Contact

Betty Hasserjian,
Chief Safety Officer (Acting)

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

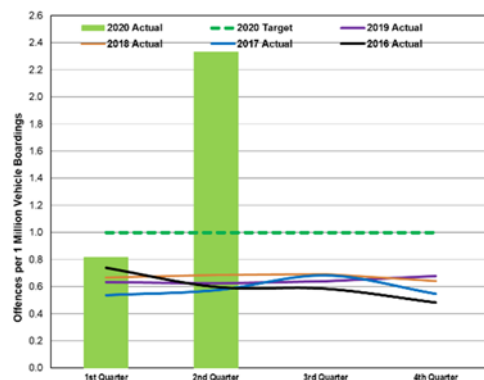
Order compliance

Type	Number of Orders Issued		Status
	Requirement Orders ¹	Non-compliance Orders ²	
Ministry of Labour Orders	2	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	5	34	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 Q2 2020, the number of crimes against customers per one million vehicle boardings increased to 2.33. This is an 186% increase from last quarter and a 273% increase from the same time last year.

Analysis

The significant increase in this rate is due to reduced ridership during the COVID-19 pandemic. Overall, there was a decrease in the number of offences compared to the previous quarter (107 compared to 179 offences, respectively). However, the reduction in ridership was not proportional to the decrease in offences against customers.

There was a significant decrease in the number of assaults, sexual assaults and robberies while the number of thefts and other offences, such as threats and harassment, remained the same.

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.

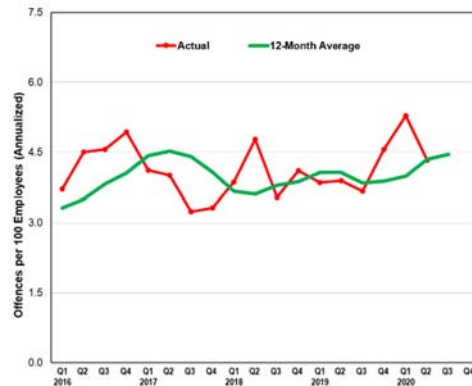
The Special Constable Service has been doing great work with the City's Streets to Homes Program. Streets to Homes assists people who may need shelter support or who are experiencing mental health or addiction issues.

Since last April, an innovative partnership has developed between the Special Constable Service's Community Engagement Unit (CEU) and outreach workers from Streets to Homes. Together, they have been providing support and education to those who require assistance. This partnership has become even more important since the global pandemic began as they are able to provide further

education to individuals about COVID-19 and how they can stay safe and self-monitor for symptoms.

As of September 1, the team had nearly 217 interactions with individuals since the start of the pandemic. They've provided shelter space, food vouchers and have arranged for taxi services for those in need of assistance.

Offences against staff



Definition

Number of offences per 100 employees.

Contact

Kathleen Llewellyn-Thomas,
Chief Strategy & Customer Officer

Results

In Q2 2020, the number of offences against staff decreased to 4.33 offences per 100 employees. This is a 18% decrease from last quarter and a 11% decrease from the same time last year.

Analysis

There was an overall decrease in offences against staff in Q2 compared to Q1 (from 209 offences to 166 offences). This decrease was seen particularly in relation to employee assaults, likely due to significantly reduced ridership numbers during the pandemic.

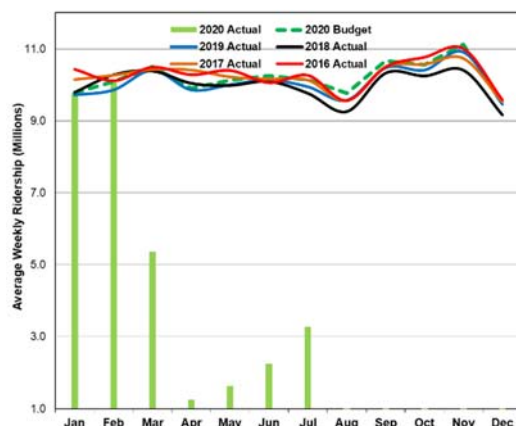
Action plan

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.

The Special Constable Service has been doing great work with the City's Streets to Homes Program. Streets to Homes assists people who may need shelter support or who are experiencing mental health or addiction issues. For more information, please see the "Offences against customers" section on page 23.

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 7 (July 5 to August 1, 2020) revenue ridership totalled 13.122 million or 3.281 million passengers per week. This represents a 46% increase from Period 6 (2.247 million passengers per week). Ridership was 27.454 million below budget (40.576 million) for the period and 26.637 million below the comparable period in 2019.

Year-to-date (periods 1-7) revenue ridership totalled 147.712 million, which was 161.834 million (52.3%) below budget and 157.894 million (51.7%) 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 Stage 2 of the Province's reopening plan on June

24 and subsequently entered Stage 3 on July 31. Weekly ridership grew from 2.20 million in week 25 (June 14–20, pre Stage 2) to 3.27 million in week 29 (July 12–18, post Stage 2). Weekly ridership continued to grow to 3.44 million in week 31 (July 26–August 1) when Toronto entered Stage 3 of reopening.

On July 2, the TTC resumed front door boarding on buses, allowing fare payments with cash, token and tickets, which contributed to the ridership growth.

While Period 7 ridership is 67% below 2019 results, it represents a 10.8% improvement over Period 6, which was 77.8% below 2019 ridership levels. As a result, we've seen an improvement from Period 6 to Period 7.

Ridership is expected to continue to rise, but marginally 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 pre-COVID-19 levels.

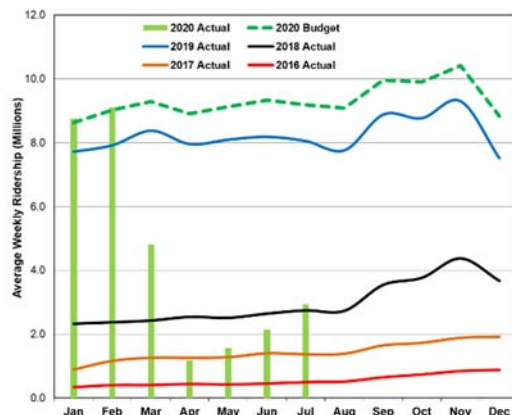
Action plan

TTC ridership has started to recover. However, ridership continues to be less than 50% of normal on all modes.

The TTC will continue to operate the demand-responsive service plan for the remainder of 2020 and into 2021. We have started to scale-up service as ridership increases. On September 8, 150 operators were recalled from layoff and are now operating vehicles where demand is greatest.

The TTC is in the process of developing the 2021 Annual Service Plan. A status update will be presented at the September Board meeting with the final plan expected to be complete in late 2020.

PRESTO ridership



Definition

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

PRESTO ridership is included in TTC ridership totals.

Contact

Josie La Vita,
Chief Financial Officer

Results

Period 7 (July 5 to August 1, 2020) PRESTO ridership totalled 11.730 million or 2.933 million passengers per week. This was 25.035 million (68.1%) below the budget and 20.503 million or 63.6% below last year's comparable 2019 ridership of 32.233 million.

Year-to-date (periods 1-7) PRESTO ridership totalled 133.931 million or 51.8% below budget and 112.471 million or 45.6% below 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 7 dropped to 89.4% (similar to the Period 1 level) from 95.2% in Period 6, primarily due to the return of fare-boxes on buses starting July 2. The rate is expected to stay at the current level as outstanding tickets and tokens continue to be used.

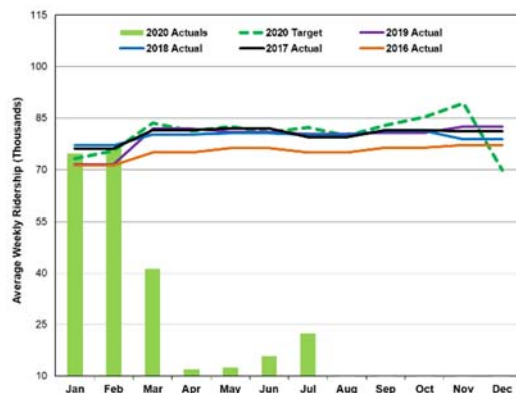
Period pass sales continue to increase: 57,334 passes were sold for August, an increase of 6,745 from July. The largest increase was in the adult group (4,213), followed by post-secondary (1,942), seniors (386) and youth (204).

As the Province's plan to reopen the economy progresses, period pass sales are expected to increase further in September as more and more customers return to normal activities, particularly students.

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 7 (July 5 to August 1, 2020) totalled 89,382 or 22,346 passengers per week. This figure was 72.8% below the budgeted 82,290 customers per week.

Period 7 year-to-date (YTD) ridership is 53.7% lower compared to the same period in 2019, and is currently 54.2% (1.323 million) under the YTD 2020 budget.

Analysis

With the introduction of Stage 3 of the Province's reopening plan, Wheel-Trans has seen an increase in ridership when compared to the previous four months of service during the COVID-19 pandemic. Ridership has increased by 12.2% compared to period 6. This remains on target with the adjusted forecast.

We continue to focus on providing solo rides, special cleans approximately every four hours and personal protective equipment for our

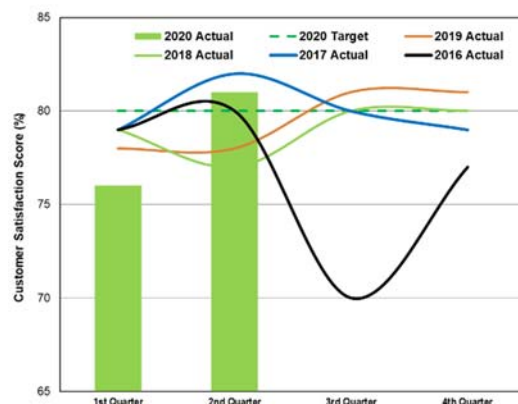
operators in order to provide a safe environment.

Action plan

Stage 3 of the Province's reopening plan was initiated in Toronto on July 31. This stage is expected to have a positive impact on ridership. Wheel-Trans will continue to monitor all aspects of service during the recovery process ensuring that the safety of our customers and staff is the top priority.

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 Q2 2020, 81% of customers reported high levels of satisfaction with TTC services. This is an increase from last quarter (76%) and the same time last year (78%).

Analysis

Customers taking the TTC in Q2 reported strong satisfaction with their experience. This increase was particularly driven by bus and streetcar riders and those who ride the TTC several times a week or more.

Though most elements of the customer experience (e.g. trip duration, comfort of ride) are steady or trending in a positive direction during the pandemic, the reported helpfulness of our staff is down significantly in Q2 across all modes. COVID-19 safety measures have made customer-staff interaction — normally a strong element of our service — more challenging.

Action plan

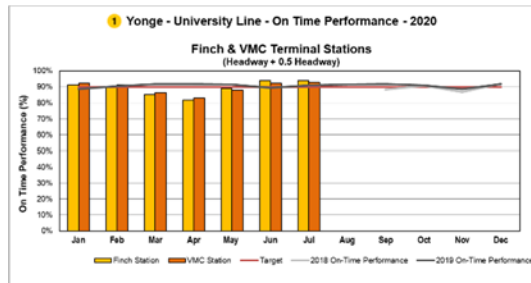
Customers are appreciative of the TTC's response to the pandemic, which necessitated many sudden changes to service. Continuing to closely monitor customer satisfaction will be crucial as ridership increases with the reopening of the province.

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

Note: Q3 2020 data will be available in the December 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

Results in July improved slightly to 93.4%, up from the 93.1% we achieved in June. Our target of 90% was met.

Analysis

Although there was an increased number of delays, the revised schedule implemented in May has proved resilient and we continue to provide reliable service levels.

The total delay minutes increased by 49.2% in July. Comparing 2020 year-to-date (YTD) to 2019 YTD, there has been a 9.5% increase in total delay minutes in 2020.

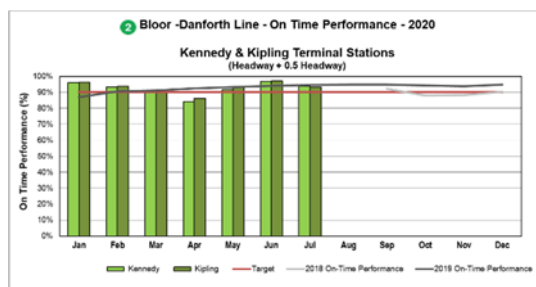
Action plan

In September, we will be returning to the use of Run-As-Directed trains, focused on our peak periods, to provide additional service based on demand.

We continue to monitor service levels in order to be able to make adjustments where and when

possible in anticipation of increased ridership levels.

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



Definition

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

Results in July declined to 93.6%, down from the 96.9% we achieved in June.

Our target of 90% was met.

Analysis

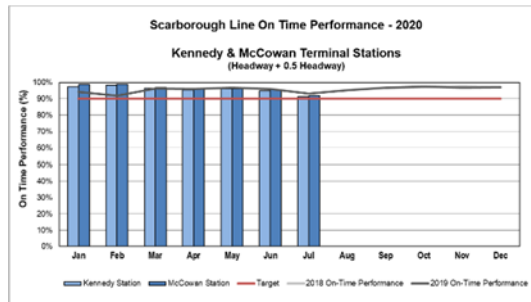
The total delay minutes recorded in July increased by 62.8%. Comparing 2020 year-to-date (YTD) to 2019 YTD, there have been 6.9% fewer delay minutes in 2020.

Action plan

In September, we will be returning to the use of Run-As-Directed trains, focused on our peak periods, to provide additional service based on demand.

We continue to monitor service levels in order to be able to make adjustments where and when possible in anticipation of increased ridership levels.

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



Definition

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

Results in July declined to 91.5%, down from the 95.2% we achieved in June.

Our target of 90% was met.

Analysis

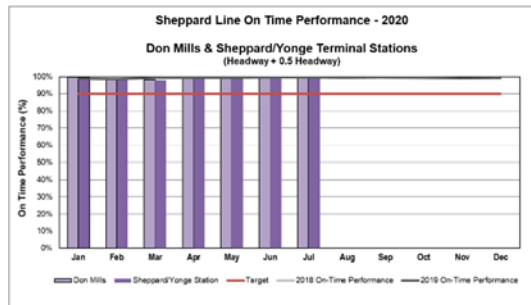
The higher temperatures in July required trains to run at reduced speeds, reducing performance on most days. In previous months this was mostly limited to the p.m. peak period. However, in July we saw the period of reduced performance increase as we reached 25 degrees Celsius earlier in the day and stayed there longer than in past months.

Action plan

We will continue to monitor throughout August as daily ambient temperatures will continue to affect Line 3 operations.

Looking ahead to September and October, it is anticipated that our results will remain consistent as there are no significant schedule changes.

Line 4 (Don Mills and Sheppard-Yonge 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 metric remained stable in July, at 99.2%, down slightly from the 99.4% we achieved in June.

Our target of 90% was met.

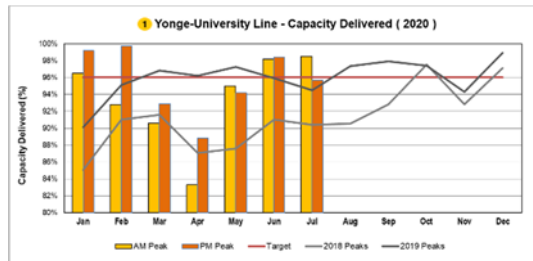
Analysis

This line ran as scheduled without the challenges we observed on other lines.

Action plan

There are no anticipated changes for this line.

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

Our July results for this measure slipped, specifically in the p.m. peak period, to 97.0%, down from the 98.3% we achieved in June. Our target of 96% was met.

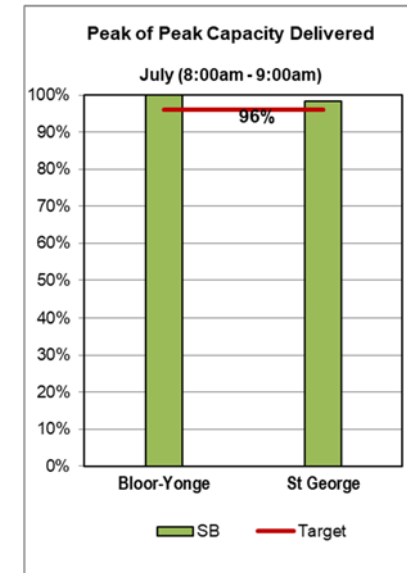
Our peak capacity, recorded southbound through Bloor-Yonge and St George, was 100% and 98.3% respectively, and we achieved our target.

Analysis

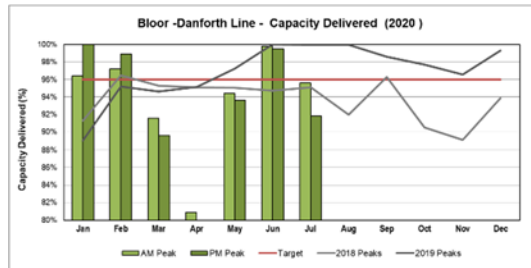
Our service levels in July remained stable and there was little change in our available workforce from the previous month. This helped us to maintain a relatively consistent level of capacity throughout the month.

Action plan

Looking ahead to September, we anticipate a return to adding back Run-As-Directed trains to match capacity with demand. We are continuously monitoring ridership and will continue to adjust our schedules to meet any increases in demand.



Line 2: Capacity



Definition

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

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

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

Contact

James Ross,
Chief Operating Officer

Results

Our results in July decreased from June's 99.6%, down to 93.1% and failed to meet our target of 96%.

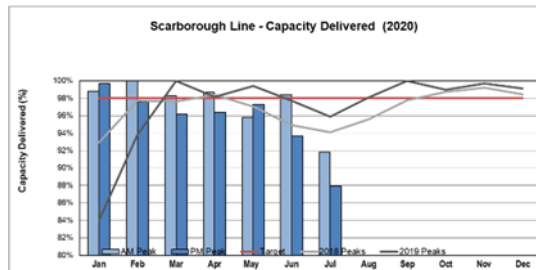
Analysis

In July we recorded an increase of 62.8% in delay minutes, contributing to this metric's relatively poor performance. A restricted speed zone at Kipling Station impacted trip times significantly, doubling the travel time between Islington and Kipling stations. However, our infrastructure staff were able to have it cleared in only four days.

Action plan

As noted for Line 1, we anticipate adding back peak-period Run-As-Directed trains to match capacity with demand. We will continue to monitor ridership and will continue to adjust our schedules to meet any increases in demand.

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

Line 3 performance declined during both peak periods in July. Our peak period average dropped to 89.7%, down from the 95.8% we recorded in June.

Our target of 98% was not met.

Analysis

Compared to June, July had more days with high temperatures requiring slower speeds and reduced braking profiles, negatively impacting our ability to deliver scheduled capacity. Temperatures rose earlier in the day in July, which resulted in the a.m. peak period being lower than it was in June.

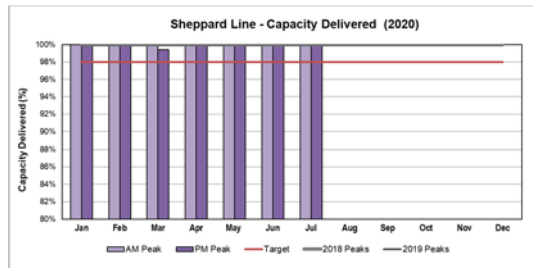
The number of delay incidents increased by 81% with a corresponding 106.3% increase in delay minutes, further impacting performance.

Action plan

This metric will continue to be lower into August as daily ambient

temperatures will continue to affect Line 3 operations. Looking ahead to September and October, it is anticipated that our results will return above target as we will not need to reduce our operating speeds due to high daily temperatures.

Line 4: Capacity



Definition

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

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

Contact

James Ross,
Chief Operating Officer

Results

This line remains at 100% performance and continues to perform well.

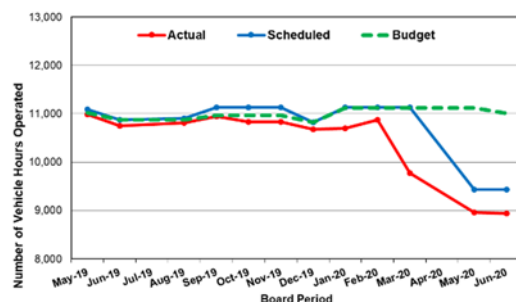
Analysis

Line 4 has not been impacted by issues that have affected our other lines.

Action plan

There are no anticipated changes to our service levels on this line.

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 June 2020 board period, 11,013 subway weekly hours were budgeted for service while 9,433 subway weekly hours were scheduled to operate, which represents a variance of -14.34%.

Of the 9,433 subway weekly hours scheduled to operate, 8,945 weekly hours were actually delivered, which represents a variance of -5.18%.

Analysis

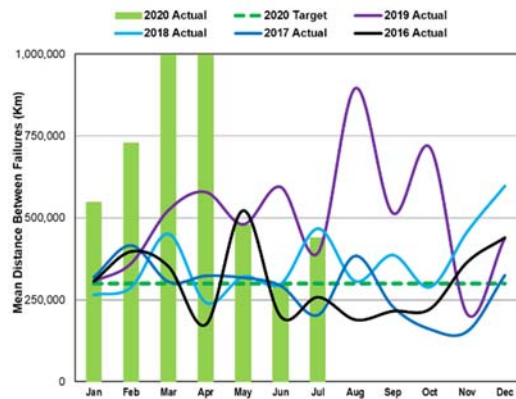
Scheduled service hours are lower than budgeted as a result of temporary service reductions in response to lower ridership demand due to COVID-19.

Actual service hours are lower than scheduled service hours. The majority of the variance can be attributed to planned subway closures that are required to conduct expedited state-of-good-repair work on subway infrastructure.

Action plan

We will continue to monitor service hours during the pandemic.

Subway T1 train: Mean distance between failures (MDBF)



Definition

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

T1 trains operate on Line 2.

Contact

Rich Wong,
Chief Vehicles Officer

Results

The MDBF in July was 439,786 kilometres, which is above the target of 300,000 kilometres. The MDBF in June was 292,003 kilometres. The MDBF in July 2019 was 393,423 kilometres and the current rolling annual average is 897,831 kilometres.

Analysis

In July, there were five delay incidents greater than or equal to five minutes. The passenger door had two delay incidents, followed by the HVAC, propulsion inverter and compressed air systems — each with one delay incident.

The passenger door-related incidents were due to a broken open magnet valve (OMV) and a corroded wire on the door control drum switch. The HVAC-related incident was a result of a faulty power supply on a new design truck control unit (TCU).

The propulsion inverter incident was a result of a resettable no-motion fault while the compressed air

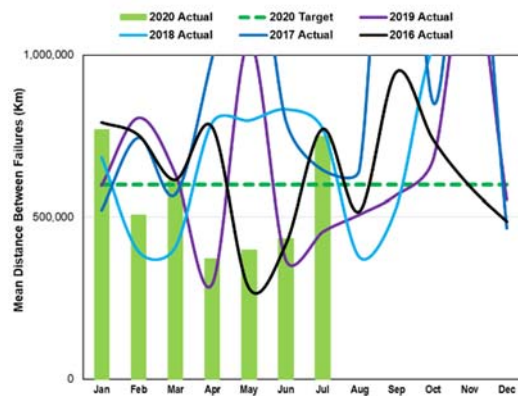
incident was a result of burnt compressor cables.

Action plan

The OMV was replaced and the corroded wires were repaired and cleaned on the door control drum switch. All doors were cycle tested and returned back into revenue service. Similarly, the faulty TCU was replaced with a new TCU and tested.

The propulsion inverter was reset and tested while the burnt compressor cables were repaired. For all five incidents, a root cause analysis is underway to review potential gaps in workmanship, component quality or component life cycle estimates. As part of this review, staff are also reviewing if any of these incidents are repeater problems.

Subway TR train: Mean distance between failures (MDBF)



Definition

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

TR trains operate on Line 1 and Line 4.

Contact

Rich Wong,
Chief Vehicles Officer

Results

The MDBF in July was 747,413 kilometres, which is above the target of 600,000 kilometres. The MDBF in June was 434,005 kilometres. The MDBF in July 2019 was 453,837 kilometres and the current rolling annual average is 607,218 kilometres.

Analysis

In July, there were five delay incidents greater than or equal to five minutes. The brake system had three incidents, followed by the body and the passenger door system — each with one delay incident.

The brake-related incidents were a result of a grounded connector on the trip switch, a broken terminal on the trip switch and a defective apply/release magnet valve (AMV/RMV). The body-related incident was a result of a faulty locking switch and a loose air hose connection on the cab seat.

The passenger door-related incident was a result of a broken door roller.

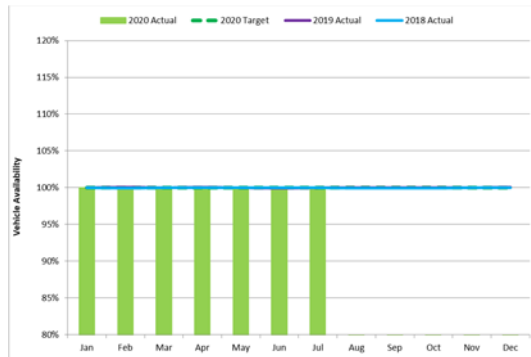
Action plan

The grounded connector was replaced with a new trip switch harness, and a new terminal connector was added to the broken terminal on the trip switch. Both trip switches were tested and returned back into service with no further incidents. The defective AMV/RMV valves were replaced and tested to be working properly.

The locking switch was cleaned and the air hose connection reconnected to the airbag. The seat was tested to be working.

The faulty door rollers were replaced and the doors were cycle tested with positive results. As mentioned in prior reports, a door roller program will commence in September 2020 to help reduce the number of door-related incidents due to premature failures of door roller components.

Subway: Service availability



Definition

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

Contact

*Rich Wong,
Chief Vehicles Officer*

Results

Vehicle availability in July was 100%.

Analysis

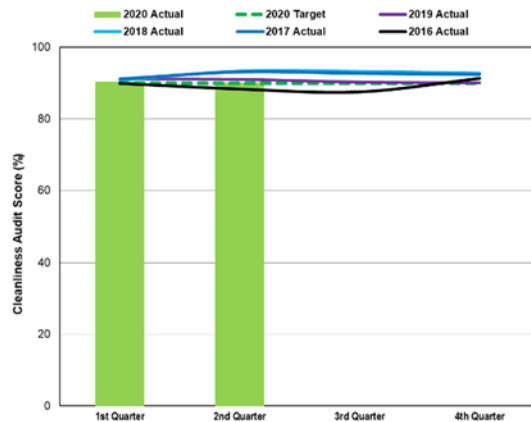
We continue to meet the service requirements, achieving the target of 100% vehicle availability. All vehicles were available for service when required.

While ridership has declined due to the COVID-19 pandemic, maintenance staff continue to prepare vehicles to meet 100% of the planned service. Future board periods will be adjusted to match ridership with demand. Decreases in service levels are providing opportunities for increased maintenance.

Action plan

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

Subway: Vehicle cleanliness



Definition

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

Contact

Rich Wong,
Chief Vehicles Officer

Results

The target of 90% continued to be met in Q2 2020. This target has been met 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 affecting the quarter-to-quarter overall cleanliness scores in Q2 2020 were overall door cleanliness, windows and exterior. Some trash and debris were documented in the mid-day and end-of-day audits at different stations across all lines.

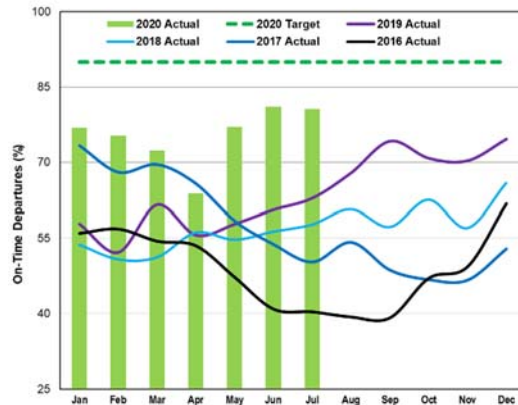
Action plan

Exterior vehicle washes are being performed on all vehicle fleets. Focused power wash program on the T1 fleet will commence in August when a new pressure washer is commissioned. The TR fleet will commence focused power washes in 2021. The floor wash cycle continues to be addressed every 14 days.

In response to the COVID-19 pandemic we have increased disinfection of all vehicles to twice per day and are conducting additional end terminal cleaning on subway vehicles.

Streetcar services

Streetcar: On-time performance (OTP)



Definition

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

Contact

James Ross,
Chief Operating Officer

Results

OTP in July was 80.6%, a small decrease compared to June (81.1%), but a significant increase over the same period last year (62.9%). Our target of 90% was not met.

Analysis

Streetcar OTP remained relatively steady through the four weeks of the period, but experienced a small decrease during the last week (week 31: 77.8%), which brought down the period score slightly. This decrease for week 31 was largely due to the early reopening of surface operations at Bathurst Station on July 27.

Bathurst Station was closed to surface vehicles for the July board period due to planned road and track work that restricted access to the station, with all service diverting to Spadina Station instead. The 511 Bathurst reverted back to using Bathurst Station once these restrictions were removed. However, the schedule for the board period remained in place with all departures scheduled from Spadina Station until August 1, as per the original plan. As

a result, the 511 Bathurst southbound OTP for week 31 was quite low and reduced the network score for the period.

Further, buses operated in place of streetcars along the 506 Carlton for the period due to planned infrastructure work along various segments of the route. The 506 Carlton buses have been operating to Dundas West Station instead of High Park Loop. The schedule chosen for this operation has proved challenging, particularly due to reduced traffic and ridership volumes stemming from the COVID-19 pandemic. These variables have negatively impacted the route's performance for the period (68.6%), and in turn brought down the network score.

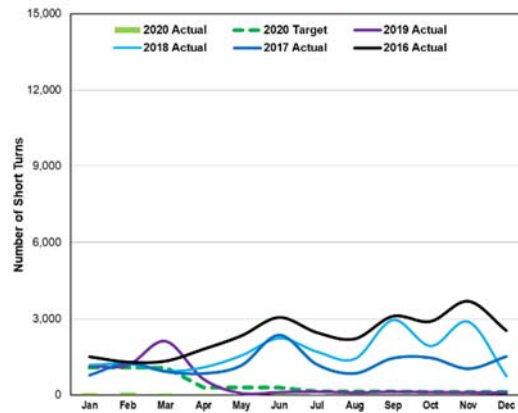
Other planned and unplanned events impacted the streetcar score for the period as follows. Planned inspection work in the Spadina tunnel took place on July 25/26, restricting the 510 Spadina from its scheduled end terminal for the weekend. During the same weekend, the 504 King was on diversion due to track work at King Street and Joe Shuster Way. On the

Sunday of this same weekend (July 26), the 501 Queen service turned back at Russell Yard to allow for a crane lift along Queen Street, east of this location. Finally, the 505 Dundas experienced numerous operational issues on several days of the period (July 11, 18, and August 1), which also negatively impacted the network score slightly.

Action plan

Efforts to reduce the number of early departures at Union Station will continue. As well, the poor performance of the 506 Carlton, as it has returned to bus operations, is under assessment. A broad review of streetcar performance will be assembled and presented with the goal of identifying the gaps that hinder the mode from achieving the target of 90%.

Streetcar: Short turns



Definition

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

Contact

James Ross,
Chief Operating Officer

Results

There were 17 streetcar short turns in July, a decrease compared to June (42) and the same period last year (128).

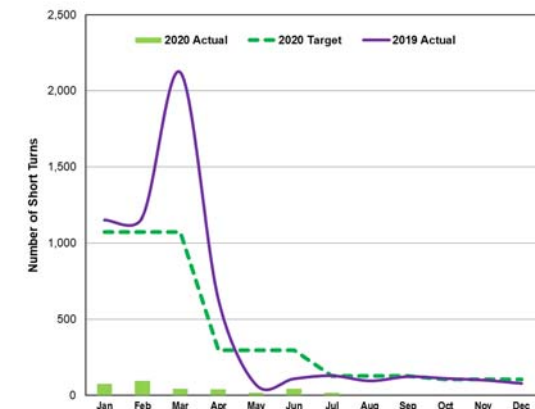
Analysis

July continues the trend of streetcar short turn figures occurring at significantly decreased levels compared to 2018 or early 2019. The July figure represents fewer than one streetcar short turn per day, on average, for the period.

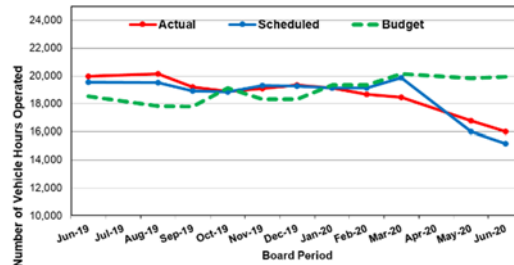
The route with the highest number of short turns for the period was the 501 Queen (11). A majority of the 501 Queen short turns for the month took place on three operating days in particular and were due to various operational incidents.

Action plan

Route management staff will continue to closely monitor streetcar short turns with our goal of minimizing these instances as much as possible.



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 June 2020 board period, 19,924 streetcar weekly hours were budgeted for service while 15,158 streetcar weekly hours were scheduled to operate, which represents a variance of -23.92%.

Of the 15,158 streetcar weekly hours scheduled to operate, 16,009 streetcar weekly hours were actually delivered, which represents a variance of 5.62%.

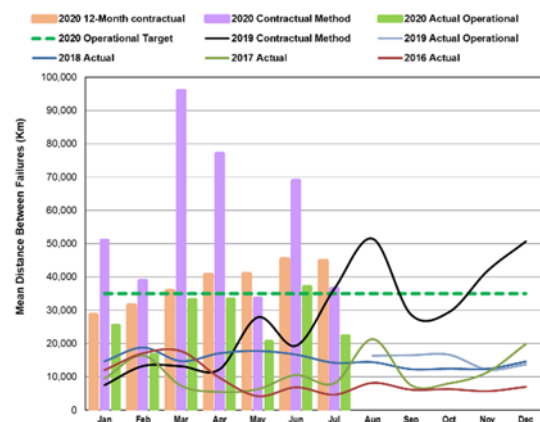
Analysis

Scheduled streetcar hours are lower than budgeted as a result of temporary service reductions in response to lower ridership demand due to the COVID-19 pandemic.

Action plan

We will continue to monitor service hours during the pandemic.

Streetcar: Mean distance between failures (MDBF)



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 July was 36,450 kilometres. This is a decrease of 32,394 kilometres compared to June and a decrease of 62 kilometres when compared to July 2019.

The 12-month average contractual MDBF was 44,869 kilometres. The contractual reliability target of 35,000 kilometres MDBF was met in July and the new streetcars continue to perform well on this measure.

The monthly operational MDBF in July was 22,340 kilometres. This is a decrease of 14,730 kilometres from the previous period.

Analysis

In July, there were a total of 19 relevant failures under the contractual reliability method. The top contributors were the train and cab controls system with eight, the train control management system with five and the door system with three.

With respect to the operational MDBF method, there were a total of

31 delays. The top contributors to these failures, in addition to the contractual reliability failures, include the ramp system with four, the high voltage system with three and the camera and disc brake systems with two each.

The number of ramp system failures increased from two in June to four in July. These were due to bent side guard assemblies, which prevented the ramp from retracting. The high voltage system had three failures recorded, two of which were due to low contact force on the pantograph and another failure due to a faulty trolley pole rope catcher. The two failures of the camera system were due to loose connection of the door camera wiring and failure of the auxiliary video camera system. The disc brake system had two failures recorded due to bent brake pads and a defective caliper.

Compared to June, both contractual and operational failures have increased by five. A decrease in service mileage along with an increase in overall system failures contributed to reduced reliability in July.

Action plan

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

Train and cab control system: We are continuing to work with Bombardier and its European supplier to review recent failure modes of the master controller and determine corrective actions that will be implemented in a future fleet modification. Unfortunately, there are ongoing delays due to the impact of the COVID-19 pandemic on the supplier. An engineering investigation of other electrical failures is underway. Several of the failures reported in July were found to be a result of workmanship from prior installation (pushed and loose pins).

Communication system: A camera modification program that addresses known issues with image quality and stability has faced ongoing delays

due to the impact of the pandemic on the supplier. Passenger information system failures are under engineering investigation.

Train control management system: Bombardier Engineering is investigating the recent failures related to the vehicle control unit, datalogger and digital diagnostics display.

Door system: Failures appear to be electrical-related and are under engineering investigation for root cause. Cab door lock failure is also under engineering investigation and the supplier is performing a root cause analysis.

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).

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.

We are working with Bombardier to provide a brake caliper redesign along with other brake system components, including the brake pads. This will improve overall system reliability, while maintenance staff will improve response to in-service single disc brake faults.

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

Ramp system: We are continuing with the maintenance program, which includes updated processes as specified by TTC staff to reduce debris-related failures and bent side guards. TTC staff will investigate a modified design to prevent bending of side guards.

High voltage power system: Implementation and monitoring of high voltage preventative maintenance practices along with increased inspection audits to reduce failures. Completion of a fleet

modification to catcher braking force to resolve failures related to catcher functionality.

Camera system: Improve pre-service inspection of camera functionality along with rear view camera, door camera and interior camera housings to ensure no obstruction or loose connections to reduce camera system-related failures.

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. In July, 2.2% (or three of 133 vehicles) of the peak daily service, including Run-As-Directed vehicles, resulted in a RCCO.

Analysis

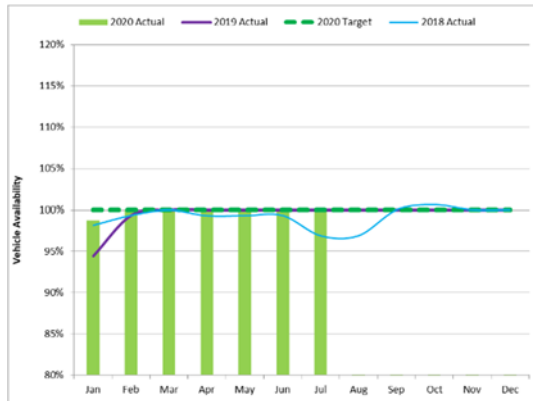
The number of daily RCCOs in July is consistent with June. Reduced ridership and passenger loading due to the COVID-19 pandemic, which allows for decreased cycling of major systems and continued preventative maintenance procedures, have contributed to these figures.

Compared to June, there was a decline in failures of the car body and high voltage systems along with the camera system. Reductions were offset by an increase in failures of the ramp system, the vehicle control system for stiff master controller issues and the windshield system, which had defects related to loose sun visors and wiper functionality.

Action plan

Pre-service inspections and further preventative maintenance activities will continue to reduce the number of RCCOs. Bombardier and TTC staff are aware of the component reliability issues and continue to investigate the problems to determine a resolution.

Streetcar: Service availability



Definition

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

Contact

Rich Wong,
Chief Vehicles Officer

Results

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

Analysis

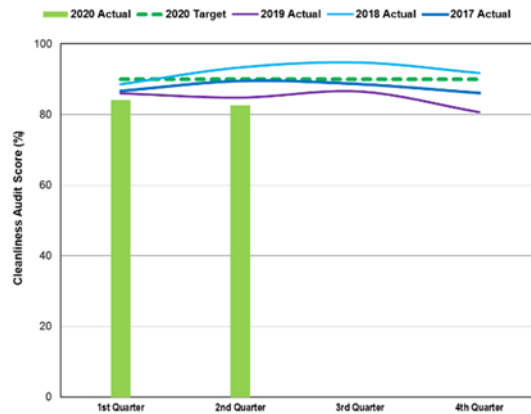
Availability numbers continue to be met in July.

While ridership has declined due to the COVID-19 pandemic, maintenance staff continue to prepare vehicles to meet 100% of the planned service. Future board periods will be adjusted to match ridership with demand. Decreases in service levels are providing opportunities for increased maintenance.

Action plan

The availability target will be achieved with continued pre-service and preventative maintenance practices.

Streetcar: Cleanliness (pre-service)



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 in Q2 2020 was 82.6%. This is a decrease from both Q1 2020 (84.0%) and Q2 2019 (84.8%). Overall performance on streetcar pre-service cleanliness is below the target of 90%.

Analysis

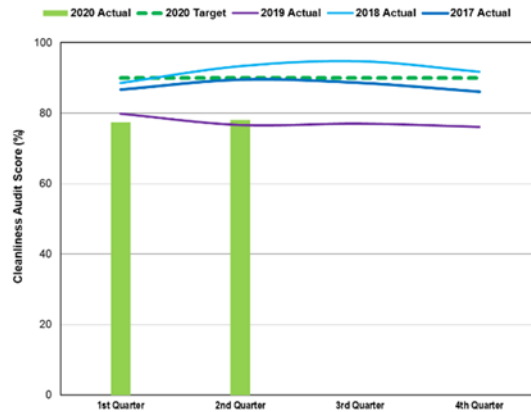
Required maintenance to the exterior carwash system prevented regular exterior washes to be completed. In addition, wet conditions in May and June increased the amount of carbon stains on the exterior of the vehicles due to the overhead pantograph and pole systems.

Action plan

The exterior carwash system is undergoing upgrades so that washing can be improved. Staff continue to investigate and identify further improvements for floor cleaning, including additional equipment to increase efficiency and frequency of cleaning activities.

In response to the COVID-19 pandemic we have increased disinfection of all vehicles to twice per day.

Streetcar: Cleanliness (in-service and post-service)



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 78.1%. This is an increase from both Q1 2020 (77.4%) and Q2 2019 (76.6%). Overall performance on streetcar in-service and post-service cleanliness is below the target of 90%.

Analysis

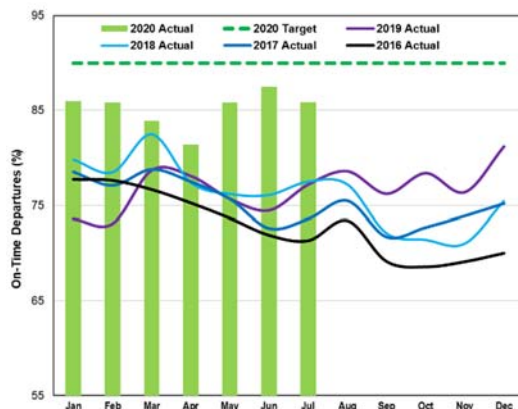
Accumulation of dirt and sand deposits on the floor due to wet conditions in May and June negatively impacted in-service and post-service cleanliness results for Q2 2020. Floors, walls and vehicle exteriors are identified areas requiring improvement.

Action plan

In response to the COVID-19 pandemic, we are actively undertaking specific disinfecting of vehicles in-service. Staff will continue to monitor and investigate opportunities for in-service cleaning.

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

Bus OTP in July was 85.9%, a small decrease compared to June (87.5%), but an increase over the same period last year (77.2%). Our target of 90% was not met.

Analysis

Bus performance in July remained fairly consistent throughout the period with each week's performance not varying by more than 1% compared to the period score. This was largely due to there being no major service or schedule changes as the reporting period fell completely within a single board period.

When compared to the previous month, the percentage of missed trips for the period increased by one percentage point (to 3.1%), the percentage of early trips increased by approximately half a percentage point (to 4%), while the percentage of late trips remained constant (at 7.1%).

This was the first full period with additional weekday "trippers"

operating on 12 bus routes to reduce crowding for customers during the busiest times. Although this additional service is making a strong contribution to increased capacity on these routes, these 12 routes brought down the performance for the period, as their combined performance for July was 81.9%.

Four of these routes in particular negatively impacted the network score: 29 Dufferin (71.4%), 41 Keele (71.5%), 34 Eglinton East (79.2%), and 86 Scarborough (79.6%).

Two major station projects continued at Keele and Eglinton West stations through July. The four local services impacted by the Keele Station work (30 High Park, 41 Keele, 80 Queensway and 89 Weston) combined for a performance score of 74.8% for the period, down from 81.2% in June, but an increase compared to 70.8% for the same period in 2019.

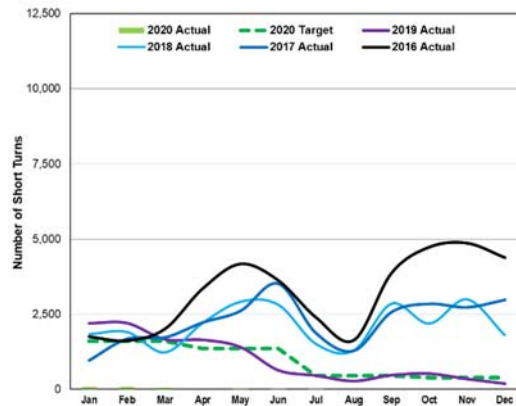
Regarding the routes related to the Eglinton West Station work, the four local services impacted (32 Eglinton West, 63 Ossington, 109 Ranee, and 163 Oakwood) combined for a performance score of 82.6% for the

period, up from the 80.6% in June and higher than the 76% in the same period of 2019.

Action plan

The service adjustments that were implemented for the June board period have allowed for a positive consistency in terms of bus OTP for the period. There are no significant changes planned for scheduling until the September board period. With recent changes to ridership demand and traffic patterns, our plan to achieve our 90% target is currently under review.

Bus: Short turns



Definition

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

Contact

James Ross,
Chief Operating Officer

Results

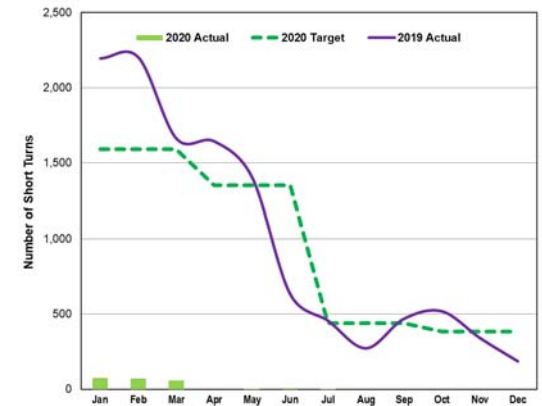
There were three bus short turns in July, a small decrease compared to June (five) and a significant improvement from the same period last year (456).

Analysis

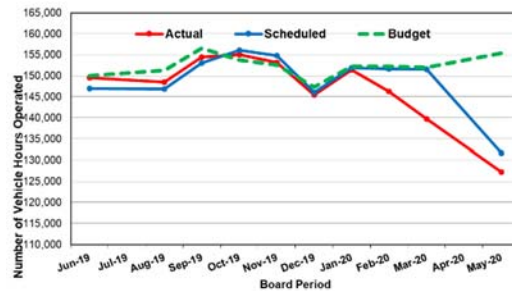
The July period continues the trend of a very small number of short turns throughout the bus network. All three short turns for the month were due to significant delays in service, with two of these occurring on July 8 due to heavy rain and localized flooding.

Action plan

The route management team continues to focus on keeping the number of bus short turns low, ensuring buses complete full trips to end terminals as much as possible and minimizing the negative impact short turns have on our customers.



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

Results

In the May 2020 board period, 155,414 bus weekly hours were budgeted for service while 131,724 bus weekly hours were scheduled to operate, which represents a -15.24% variance. Of the 131,724 bus weekly hours scheduled to operate, 127,245 hours were actually delivered, which represents a variance of -3.4%.

Analysis

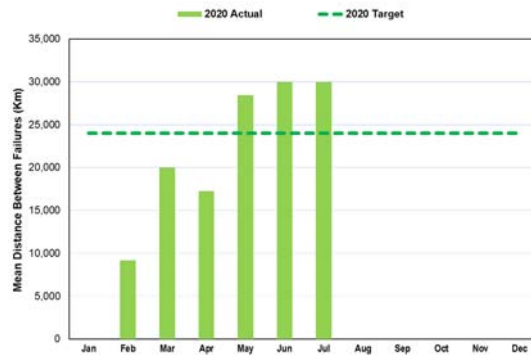
Scheduled service hours are lower than budgeted as a result of temporary service reductions in response to lower ridership demand due to the COVID-19 pandemic. Actual service hours are lower than scheduled service hours. Some service was cancelled due to the pandemic.

Action plan

We will continue to monitor the service hours during the pandemic.

Note: Current data is unavailable due a technical issue with our VISION system. We are working to resolve this issue.

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



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

Results

The eBus MDBF in July was 30,000 kilometres, which was above the target of 24,000 kilometres.

Analysis

In July, there were 22 New Flyer and 10 Proterra buses in service.

Due to the limited number of vehicles and ongoing testing programs, the total service kilometres for the eBus fleet remains relatively low. Improved trending analysis will become available with increased experience. Staff will therefore continue to closely monitor the fleet as it gains mileage and provides sufficient failure modes for trend analysis.

Based on available data, the top failure modes of eBuses are various body-related issues, such as stop call buttons, operator barriers and mirrors. Depot charging and on-road state of charge issues are also trending.

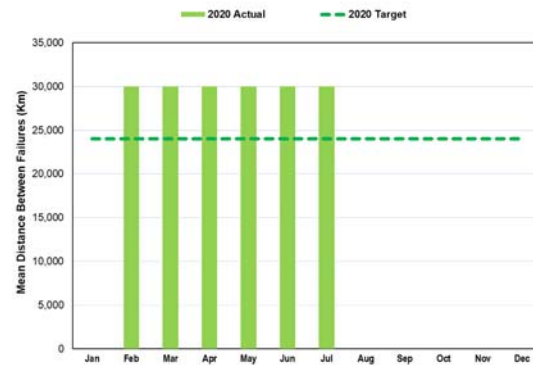
Action plan

Various design change and investigation projects are underway, which are being managed as part of the commissioning and testing programs.

We are continuing eBus commissioning efforts that include detailed standard operating procedure development for preventive maintenance programs (service check, lube, etc.) for each eBus type as well as other discovered document updates and registrations. Parts are being scaled and registered in the system to support preventative maintenance and running repairs. Garages are supporting site commissioning and investigation activities.

The first BYD eBus entered service on September 8 on the 116 Morningside route.

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



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

The hybrid bus MDBF in July was 30,000 kilometres, which was above the target of 24,000 kilometres.

Analysis

No-start and stalling failures are being identified by operators. These are not failures, but are due to the automated engine shutdown for idling or shutdown to transition to fully electric mode. These calls will be corrected with operator training and education. We will continue to closely monitor related failures via our road call root cause analysis program.

There were three cooling system-related failures that are being addressed through attrition by the cooling system state-of-good-repair program.

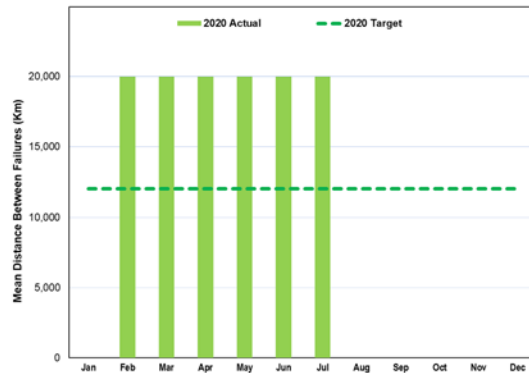
Action plan

There are numerous active warranty campaigns designed to correct observed failure modes. Highlights of these campaigns include: BAE

Hybrid Drive control system software updates to correct nuisance malfunction indicators and fault codes, updated high voltage bracket design, and harness upgrades to correct EMI faults.

The hybrid buses are performing well above target and we foresee a continuation of this trend. Quarterly technical review meetings are taking place with participation from Nova Bus, BAE Systems and TTC staff.

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



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

The diesel bus MDBF in July was 20,000 kilometres, which was above the target of 12,000 kilometres.

Analysis

Cooling system and hose/clamp failures continue to impact the diesel fleet.

Air conditioning system failures are also impacting all diesel buses. This failure mode is under investigation and being closely monitored during the summer months.

Action plan

Cooling system running failures are being addressed through state-of-good-repair cooling system technical packages customized for each order. A cooling system hose/clamp design change retrofit program is being prototyped and on schedule to be in production for the Nova 8620-8964 bus series and subsequent orders as per allowable schedule.

Root cause investigations are being performed on all air conditioning failures. Additionally, system temperature tests are being performed pre and post-service to ensure reliability.

There is continuous communication with Mobile Climate Control (HVAC original equipment manufacturer for the Nova fleet) and our engineering team to clarify gaps and update service manual content with missing critical information required for system maintenance. We are currently investigating the missing signals required for VISION remote monitoring of HVAC units so that proactive measures can be taken to avoid related interruption to service.

Cummins emission controls and after-treatment failures are being addressed through VISION AVM health monitoring and failure exception reports, engine oil analysis, root cause investigations with Cummins and aftermarket warranty group. Additionally, upcoming online training and implementation of Cummins Expert Diagnostic System will lead the

coach technician through a comprehensive fault-based diagnosis and repair. This project is on schedule to be implemented by the end of Q4 2020.

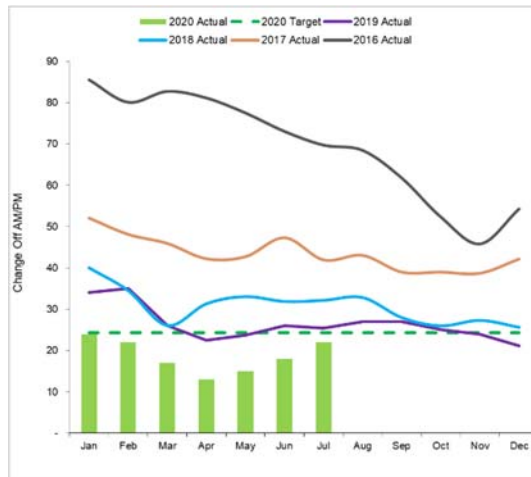
Root cause investigation into the diesel particulate filter (DPF) failures found that the majority of cleaned units received from our current supplier do not meet contractual requirements. Our Bus Maintenance & Shops Department is developing a two-stage DPF quality control program. Quality control will be performed prior to distribution to local stores, and by the coach technician prior to installation. The successful implementation of this program should significantly improve the performance of the diesel fleet in service.

Notable highlights of current engineering investigations and projects include protective barriers for operators and prototyping, front door sensitive edge sensors, idle shutdown functionality, and auxiliary heater filter design change due to obsolescence.

Overall continuous improvement in reliability of our fleet and assets is achieved through the implementation of several key reliability and retrofits programs. Examples include: state-of-good-repair inspections, road call and change off (RCCO) root cause analysis, special seasonal preventive maintenance programs, engine oil analysis, engineering modifications and upgrades to assets, and various other system specific programs targeting high failure modes.

Finally, we are planning, executing and closely monitoring COVID-19 pandemic requirements and best practices related to our employees, operations, facilities and assets. Compliance audits are taking place to ensure that all protocols are being followed.

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 July was 22 per day, well below the target of 1.5% of peak service currently set at 24 RCCOs.

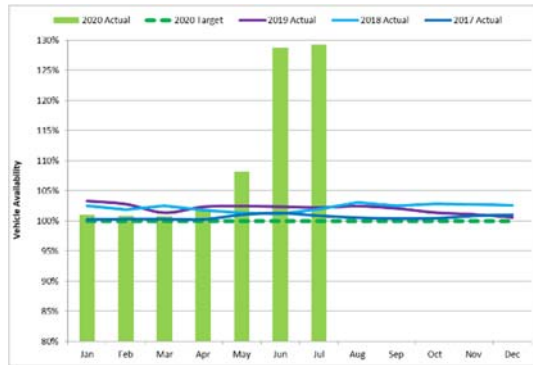
Analysis

The recent drop in daily average RCCOs (since March 2020) is partially due to reduced service levels resulting from the COVID-19 pandemic.

Action plan

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

Bus: Service availability



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 July was 1,661 per day or 129.3% of planned service, above the target of 1,291.

Analysis

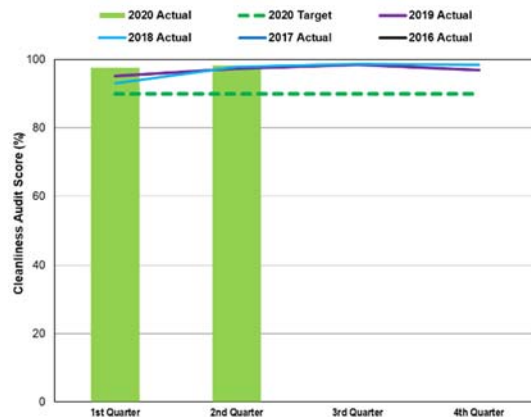
The significant variance between the service requirements in July (1,285) and available vehicles (1,661) is due to temporarily reduced service levels as a result of the COVID-19 pandemic. We expect a recovery in service level requirements and are currently taking the opportunity to complete outstanding retrofit projects on our fleet.

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

Action plan

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

Bus: Cleanliness (Pre-service)



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 score in Q2 was 98.3%, which is above the target of 90%.

Analysis

The score deduction of 1.7% is due to the wheel assembly cleanliness of buses coming out of the wash rack. The wash rack is not able to perfectly clean the rims, as required by the current contract scoring structure.

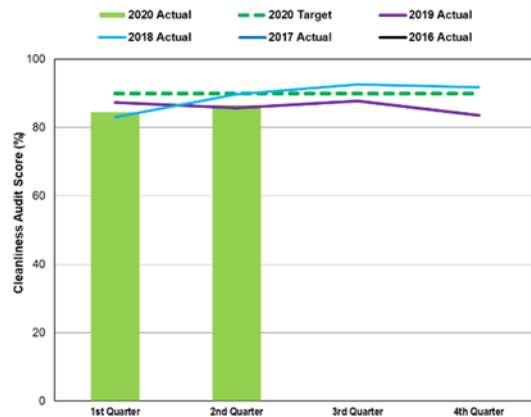
Action plan

We will be investigating the root cause of the lower audit score for wheel assemblies by reviewing audit criteria, contractor performance and other discovered contributing factors.

We will continue to closely monitor and control cleaning contractor performance.

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)



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 in-service and post-service bus cleanliness average audit score in Q2 2020 was 86.7%.

Analysis

The score deduction of approximately 14% is related to trash and debris, gum and dirty wheel assemblies. These are typical cleanliness side effects of a working bus in service.

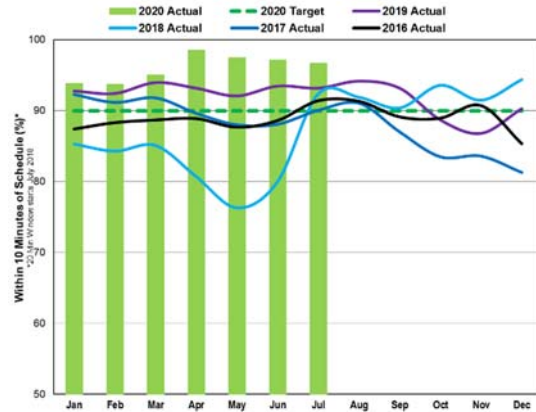
Action plan

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

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.

Wheel-Trans Services

Wheel-Trans: On-time performance (OTP)



Definition

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

Contact

James Ross,
Chief Operating Officer

Results

OTP in July decreased by 0.4% from last month to 96.7%, but is 3.5% higher than the same time last year.

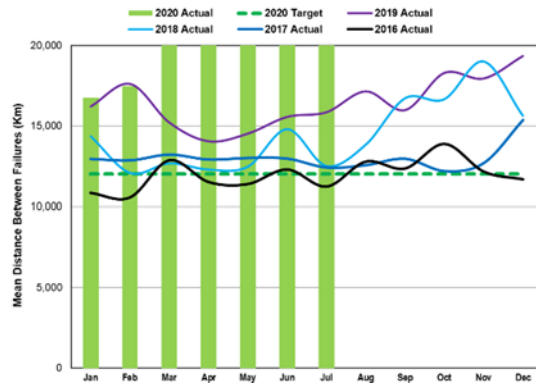
Analysis

The decrease in July is partially due to the impact of returning ridership. As the Province's reopening plan progresses, customer trips will increase and impact performance.

Action plan

All trips will be monitored ahead of time to ensure customer trips are managed for lateness and effective service adjustments.

Wheel-Trans: Mean distance between failures (MDBF)



Definition

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

Contact

Rich Wong,
Chief Vehicles Officer

Results

The MDBF in July was 20,000 kilometres, which exceeded the target of 12,000 kilometres. This is a significant reliability improvement from July 2019 (15,851 kilometres).

Analysis

The Wheel-Trans fleet currently consists of 134 ProMaster and 124 Friendly buses. Anti-lock brake system (ABS) electrical issues and no-starts accounted for the majority of road calls and change-offs for the Wheel-Trans fleet.

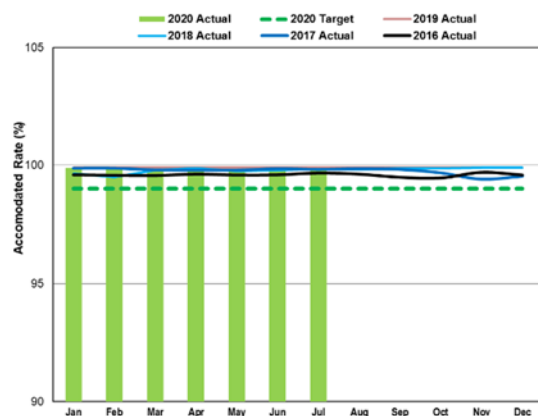
Action plan

The increase in ABS electrical faults in period 7 was due to an increased amount of wet weather. To help mitigate this, we are working to communicate with all operators the importance of signing vehicles in with ABS lights on the dashboard. This should result in a downward trend in ABS failures.

We are beginning to see a trend in no-starts while in service. Vehicles being left with key-on, engine-off during sanitization procedures or during break times seem to be the primary factor in these road calls. Communications have been put in place to reverse these trends and management will monitor results during period 8.

Lakeshore Garage has completed a reliability program that focuses on the ProMaster's most common failure areas. ProMaster buses are also 25% through a tune-up program. This program involves the replacement of components in the vehicle's ignition and cooling systems, which commonly fail, such as ignition coils, spark plugs and positive crankcase ventilation valves, to avoid costly out-of-service time.

Wheel-Trans: Accommodated service



Definition

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

Contact

James Ross,
Chief Operating Officer

Results

The accommodated rate in July was 99.9%. This measure has remained consistent at 99.9% throughout 2020 and is above our target of 99.0%.

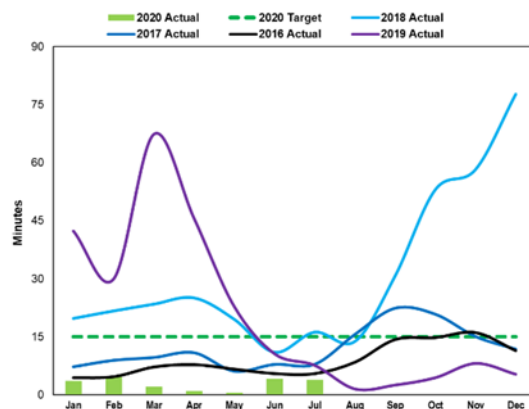
Analysis

As the Province's reopening plan progresses, we continue to ensure that all trip requests are accommodated. It is recognized that our customers are highly dependent on transportation services, especially for essential and life-sustaining trips.

Action plan

Wheel-Trans is committed to ensuring all trips are accommodated, especially for our customers who are dependent on safe, reliable transportation during the COVID-19 pandemic. We will continue to monitor the changing pattern of trip requests as we move through the recovery stages, and work to ensure that our customers are accommodated.

Wheel-Trans Contact Centre: Average wait time



Definition

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

Contact

James Ross,
Chief Operating Officer

Results

The average wait time in July was 3.9 minutes. This is 10.1 minutes below the Wheel-Trans target.

Analysis

We continue to experience lower than normal average call volumes for this time of the year. However, wait times have steadily begun to increase on certain days of the week. Monday (full day) and Saturday (afternoon) have become our busiest periods for call volumes.

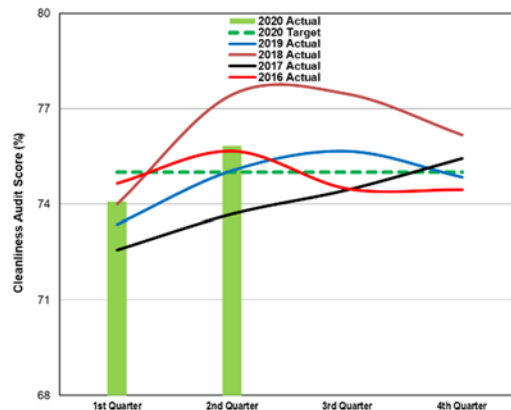
As we begin to see an increase in call volumes and wait times as we move further into the recovery, our average wait times have remained well below our target of 15 minutes.

Action plan

We will continue to monitor contact centre productivity daily, along with managing staffing levels to ensure they are aligned with demand each day.

Station services

Station cleanliness



Definition

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

Contact

James Ross,
Chief Operating Officer

Results

The Q2 audit results exceeded the target of 75% with an average station score of 75.8%. This is an increase of 1.8% from Q1 (74.1%).

Analysis

Of the 22 components that are scored, seven increased in their score, 10 remained the same, while only one (public washrooms) saw a slight decrease.

41 stations (55%) met or exceeded the target score, 23 stations (31%) scored between 70.0%-75.0%, while only 11 stations (14%) scored below 70%.

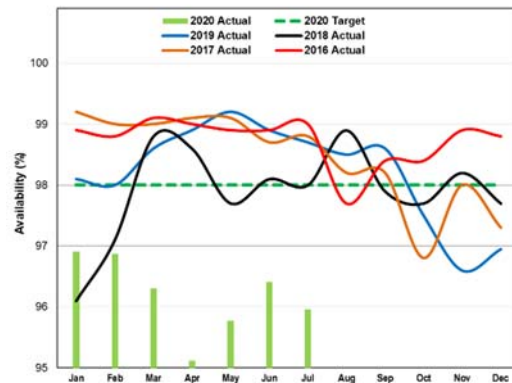
The top three scoring stations in Q2 were York University (95.4%), Pioneer Village (90.3%), and Vaughan Metropolitan Centre (88.2%).

The bottom three scoring stations in Q2 were Woodbine (67.1%), Donlands (67.0%) and Coxwell (66.7%).

Action plan

While seasonal projects have been cancelled for 2020 due to temporary employees not being able to be on-boarded, the reduced ridership and warmer weather should allow for some improvements to be gained. Additional focus is being added to stations that scored below 70% with a goal to improve the Q3 audit results by 3%.

Elevator availability



Definition

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

Contact

Fort Monaco,
Chief Infrastructure and Engineering
Officer

Results

Elevator availability in July was 96.0% and under the target of 98%. Performance marginally decreased in July compared to last month (96.4%).

Analysis

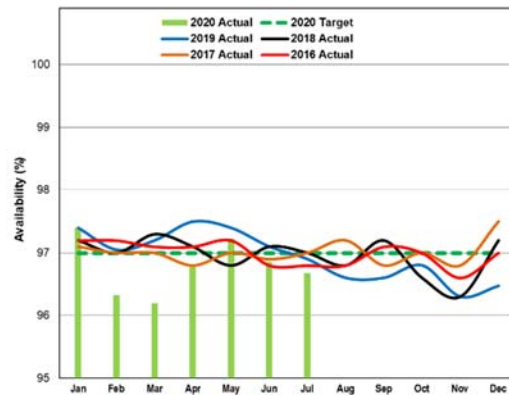
Two elevators out-of-service at Eglinton West Station due to Eglinton Crosstown Light Rail Transit construction negatively impacted performance in July.

Action plan

One elevator at Eglinton West Station is scheduled to go back into service by mid-September 2020. The other elevator will go back into service in October 2020.

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

Escalator availability



Definition

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

Contact

*Fort Monaco,
Chief Infrastructure and Engineering
Officer*

Results

Escalator availability in July was 96.7% and under the target of 97%. Performance slightly decreased in July compared to last month (96.9%).

Analysis

Construction activities at Sherbourne and Lawrence stations negatively impacted escalator service in July 2020.

Action plan

Construction work at Sherbourne Station was completed on August 5. Work at Lawrence Station is ongoing.

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

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 99.45% in July, which represents an increase of 0.11% from last month and an increase of 1.1% over the same time last year. Availability was below the 99.5% target.

Analysis

These results reflect the ongoing efforts of both the 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 2020.

Action plan

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

- The program to replace the industrial computers in the fare gates was completed 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.

- A software update was installed in late Q3 2019. This software update has improved passage detection leading to a more reliable interface for the customers, provided an upgrade to the motor control interface improving motor reliability, and resolved an ongoing issue with the card readers on the gates. An additional software update will take place in late Q3 2020 to further improve gate reliability.
- Currently, we are in the process of converting and upgrading the control and operating software for the fare gates. This upgrade will

allow us better visibility and reporting functionality.

- S&B development teams are currently completing an 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.
- 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 known problems, improving fare gate availability for 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 99.16% in July, which represents an increase of 0.05% from last month. Availability remains below the target of 99.99%.

Analysis

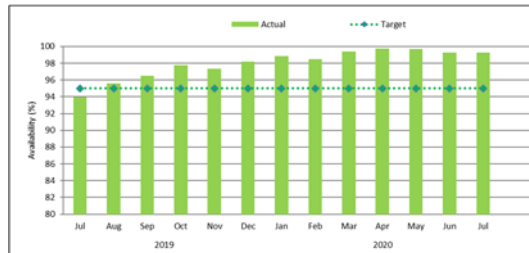
The increase in availability is attributed to the timelier resolution of card reader issues.

Action plan

We will continue to monitor availability.

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

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 99.24% in July, which represents a decrease of 0.02% from last month. Availability remains above the target of 95.00%.

Analysis

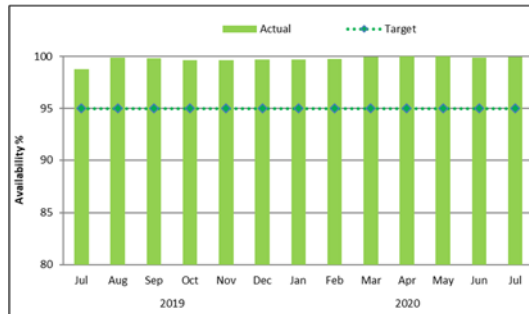
There was a small decrease in availability for July. Metrolinx technical teams have identified a performance issue with the components that accept and process bill notes within the machine. A technical team is working to identify the root cause based on information received from the field maintenance crews.

Action plan

We will continue to monitor and complete the root cause analysis for the problem with bill notes jamming in the machine.

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

PRESTO Self-Serve Reload Machines (SSRM)



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 99.97% in July, which represents an increase of 0.08% from the last month. Availability remains above the target of 95.00%.

Analysis

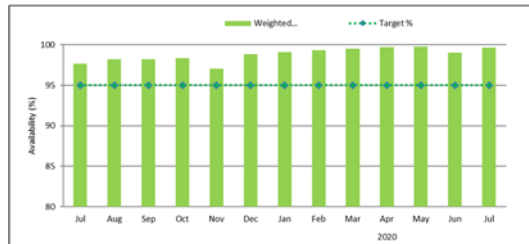
Availability continues to increase and remains above target.

Action plan

We will continue to monitor availability.

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

PRESTO Fares and Transfer Machines (FTM)



Definition

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

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

Contact

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

Results

PRESTO FTM availability averaged 99.64% in July, which is an increase of 0.60% from the last month. Availability remains above the target of 95.00%.

Analysis

Availability continues to increase and remains above target.

Action plan

We will continue to monitor availability.

Note: Availability data from Metrolinx may be subject to inaccuracies, as indicated in previous updates and confirmed by the Auditor General's recent report. We are working with Metrolinx to improve the methodology for determining availability. We are also in discussions with Metrolinx to restore the debit/credit payment feature for new streetcars. Further updates will be provided.



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