Toronto Transit Commission

CEO's Report

August 2019

Performance scorecard

TTC performance scorecard – August 2019

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
Safety and security							
Lost-time injuries	Injuries per 100 employees	Q1 2019	5.47	4.97*	✗	✗	18
Customer injury incidents	Injury incidents per 1M boardings	Q1 2019	1.0	1.06*	✓	✓	20
Offences against customers	Offences per 1M boardings	Q2 2019	0.67	1.00	✓	✗	21
Offences against staff	Offences per 100 employees	Q2 2019	4.42	4.16	✗	–	22
Fitness for duty	% of employees that tested non-compliant	June 2019	0.9%	1.6%	✓	✓	23
Ridership							
Ridership	Monthly ridership	June 2019	51.2M	51.3M	–	✗	24
Ridership	Year-to-date ridership	2019 YTD (to June)	267.8M	271.9M	–	NA	24

Ongoing trend indicators: ✓ Favourable – Mixed ✗ Unfavourable

*Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
PRESTO ridership	Monthly ridership	June 2019	41.0M	39.6M	Mixed	Favourable	26
PRESTO ridership	Year-to-date ridership	2019 YTD (to June)	214.2M	211.7M	Mixed	NA	26
Wheel-Trans ridership	Monthly ridership	June 2019	401.3K	422.1K	Mixed	Favourable	28
Wheel-Trans ridership	Year-to-date ridership	2019 YTD (to June)	2,089K	2,165K	Mixed	NA	28
Customer experience							
Customer satisfaction	Customer satisfaction score	Q2 2019	78%	80%	Unfavourable	Favourable	29
Subway services							
1 On-time performance Line 1	Scheduled headway performance at end terminals	June 2019	89.4%	90%	Unfavourable	Mixed	30
2 On-time performance Line 2	Scheduled headway performance at end terminals	June 2019	94.1%	90%	Favourable	Favourable	31
3 On-time performance Line 3	Scheduled headway performance at end terminals	June 2019	96.0%	90%	Favourable	Favourable	32

Ongoing trend indicators: Favourable Mixed Unfavourable

*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	June 2019	99.4%	90%	✓	✓	33
1 Capacity Line 1	Trains per hour during peak	June 2019	95.9%	96%	✗	✓	34
1 Capacity Bloor Station	Trains per hour – 8am to 9am	June 2019	98.0%	96%	✓	✓	34
1 Capacity St George Station	Trains per hour – 8am to 9am	June 2019	100%	96%	✓	✓	34
2 Capacity Line 2	Trains per hour during peak	June 2019	100%	96%	✓	✓	35
3 Capacity Line 3	Trains per hour during peak	June 2019	97.7%	98%	✗	✓	36
4 Capacity Line 4	Trains per hour during peak	June 2019	100%	98%	✓	✓	37
Amount of service	Average weekly service hours delivered	May 2019	11.0K	11.1K	✗	✓	38
Vehicle reliability T1 trains	Mean distance between failures	June 2019	594,311 km	300,000 km	✓	✓	39
Vehicle reliability TR trains	Mean distance between failures	June 2019	367,856 km	600,000 km	✗	–	40

Ongoing trend indicators: ✓ Favourable – Mixed ✗ Unfavourable

*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	June 2019	100%	100%	✓	✓	41
Subway cleanliness	Audit score	Q2 2019	91.0%	90%	✓	✓	42
Streetcar services							
On-time performance	On-time departures from end terminals	June 2019	60.6%	90%	✗	✓	43
Short turns	Monthly total short turns	June 2019	108	1,592	✓	✓	43
Amount of service	Average weekly service hours	May 2019	19.4K	18.7K	✓	✓	45
Vehicle reliability LFLRV *(Low-Floor Light Rail Vehicle)*	Mean distance between failures	June 2019	19,405 km	35,000 km	✗	−	46
Vehicle reliability CLRV *(Canadian Light Rail Vehicle)*	Mean distance between failures	June 2019	5,738 km	6,000 km	✗	✓	47
Road calls and change offs	Average daily road calls or vehicle change offs	June 2019	6	2.4	✗	✓	48
Service availability	Daily number of vehicles available for service	June 2019	100%	100%	✓	✓	49

Ongoing trend indicators: ✓ Favourable − Mixed ✗ Unfavourable

*Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
Streetcar cleanliness	Audit score	Q2 2019	84.8%	90%	✗	✗	50
Bus services							
On-time performance	On-time departures from end terminals	June 2019	74.5%	90%	✗	✓	51
Short turns	Monthly total short turns	June 2019	634	2,897	✓	✓	52
Amount of service	Average weekly service hours	Mar 2019	154K	151K	✓	–	53
Vehicle reliability	Mean distance between failures	June 2019	20,000 km	12,000 km	✓	✓	54
Road calls and change offs	Average daily road calls or vehicle change offs	June 2019	26	24	✗	–	55
Service availability	Daily average service delivered	June 2019	102.4%	100%	✓	✓	56
Bus cleanliness	Audit score	Q2 2019	89.7%	90%	✗	–	57
Wheel-Trans services							

Ongoing trend indicators: ✓ Favourable – Mixed ✗ Unfavourable

*Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
On-time performance	% within 20 minutes of schedule	June 2019	92.1%	90%	✓	✓	58
Vehicle reliability	Mean distance between failures	June 2019	15,563 km	12,000 km	✓	✓	59
Accommodation rate	Percentage of requested trips completed	June 2019	99.9%	99%	✓	✓	60
Average wait time	Average amount of time a customer waits before call is answered	June 2019	22.9 min	15 min	✗	✓	61
Station services							
Station cleanliness	Audit score	Q2 2019	75.06%	75%	✓	✗	62
Elevator availability	Per cent available	June 2019	98.9%	98%	✓	✓	63
Escalator availability	Per cent available	June 2019	97.1%	97%	✓	–	64
Fare gates equipped with PRESTO	Per cent available	May 2019	98.16%	99.5%	✗	–	65
PRESTO Fare Card Reader	Per cent available	June 2019	98.78%	95.00%	✓	✓	67

Ongoing trend indicators: ✓ Favourable – Mixed ✗ Unfavourable

*Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
PRESTO Fare Vending Machine	Per cent available	June 2019	96.36%	95.00%	✓	✓	68
PRESTO Self-serve Reload Machine	Per cent available	June 2019	99.46%	95.00%	✓	✓	69
PRESTO Fares and Transfer Machines	Per cent available	June 2019	99.54%	95.00%	✓	✓	70

Ongoing trend indicators: ✓ Favourable – Mixed ✗ Unfavourable

*Represents four-quarter average of actual results

CEO's commentary

Vehicle maintenance

In my May commentary, I provided an update on the efforts of our vehicle maintenance crews to prepare our rolling stock for the hot days of summer. We're continuously implementing changes to improve air conditioning performance on our vehicles to keep our customers cool and comfortable.

To prepare for the summer season, an extensive preventive maintenance program was carried out to ensure proper functioning of air conditioning units on our train fleets. This program was completed in May. Some of the activities undertaken included: component inspections, cleaning of internal equipment, testing and checking of cooling systems.

So far this summer we've experienced three delay incidents related to air conditioning units onboard trains. These incidents involved water from air conditioning units leaking into the passenger compartment. The trains were removed from service and the units repaired.

Overall, cooling systems are performing satisfactorily. Rail Vehicles technical staff and Transit Control staff are proactively monitoring the fleets for HVAC-related issues throughout the summer. During extreme heat, the air conditioning on older trains can become overworked. If this occurs in peak times, a train will continue to operate, then undergo repairs as quickly as possible after the rush period is over.

Should temperatures exceed 35 degrees Celsius, Transit Control will initiate the hot-weather protocol. To keep system performance at optimal levels, Control will reduce train speeds in the open cut sections of track and activate ventilation fans underground.

We perform the same proactive work on the bus fleet. The Bus Maintenance & Shops department maintains well over 2,000 buses. Quality assurance checks and diagnostics on our rolling stock are conducted each spring and conclude by the beginning of June. These spring seasonal checks involve thorough inspections and the replacement of critical components that show signs of excessive wear.

When buses return from service, they are brought into the repair area for further diagnostics. Technicians perform daily air conditioning checks with heat guns to ensure air conditioning systems are working efficiently. Garage staff also have the ability to monitor new Nova buses using VISION software to identify issues that may affect the

air conditioning system while these buses are in service.

On average this summer, preventative maintenance checks have minimized the number of in-service failures involving the air conditioning system. The majority of the defects found have occurred on our Orion hybrid fleet, which is 12 years old. In May and June, we averaged one daily air conditioning-related failure, which resulted in a delay to service.

Also, in the same months we had two reported air conditioning faults on a pair of new low-floor streetcars, each resulting in a six-minute delay to service.

Provincial upload

As reported earlier this summer, Bill 107, Getting Ontario Moving Act, 2019 was passed into law by the Ontario Legislature on June 6. Bill 107 enabled the Province to prescribe a rapid transit project as the sole responsibility of Metrolinx, and gave the Province authority to transfer assets, liabilities, rights and obligations related to the project from the TTC to Metrolinx, through an Order in Council.

On July 23, 2019, the Province enacted a regulation (O. Reg. 248/19) that designated the Scarborough Subway Extension, Yonge North Subway Extension and Relief Line South and North projects as 'sole responsibility projects' of Metrolinx.

We are currently in discussions with the Ministry of Transportation to confirm next steps and implications of the regulation taking effect. The TTC, in partnership with City staff, will also continue to undertake the City Council and TTC Board directed technical assessment of the provincial transit proposal and will report the findings of the assessment to the Board and City Council in October.

A primary concern for me as CEO is seeking clarity for TTC employees and vendors impacted by the Provincial regulation and upload of the transit expansion projects. Over the last several weeks, members of the TTC Executive Leadership team have been meeting with individual TTC employees who are impacted to share available information and discuss potential implications and opportunities. Regular employee communications updates are also being provided, including town hall meetings. There has also been a meeting with TTC vendors associated with the three expansion projects to provide information.

On August 8, the President and CEO of Metrolinx and President of Major Projects at Infrastructure Ontario held a discussion with TTC employees working on the expansion projects. The purpose of the meeting was to provide an opportunity for staff to ask questions about the Province's plans and to receive information

directly from Metrolinx and Infrastructure Ontario.

The Province has indicated an interest in working with the City and TTC to establish a staff services agreement that will provide full cost-recovery for services provided by the City/TTC. Discussions continue with the Province on the potential parameters of an agreement and the role the TTC will play in these expansion projects. A full update will be provided to the TTC Board in the fall.

The CNE

On August 16, the TTC began running extra service on all routes heading to the Canadian National Exhibition (CNE). Our customers have several options to get to the CNE:

29 Dufferin, from Wilson and Dufferin stations to Dufferin Gate Loop.

- 121 Fort York Esplanade, from the Distillery District to Princes' Gates Loop.
- 509 Harbourfront, from Union Station to Exhibition Loop.
- 511 Bathurst, from Bathurst Station to Exhibition Loop.
- 929 Dufferin Express, from Wilson Station to Dufferin Gate Loop.

The extra service will run until the last day of the CNE on Labour Day, September 2.

Saturday, August 17 was the 98th Annual Warriors' Day Parade at the CNE. Every year, we are proud to offer free transit to current and former members of Canada's military on this significant day of remembrance. War and peacekeeping veterans can simply show their service medals or ribbons to receive free access to our system. One companion can also ride free of charge.

Historically, the CNE has been an excellent way for the TTC to showcase new vehicles. It was 44 years ago this month that a full-scale mock-up of our CLRV streetcar went on display at the Exhibition. The attraction gave the citizens of Toronto their first look at this modern vehicle, which was the replacement for the PCC streetcar introduced in 1938. The first CLRV entered revenue service on Long Branch in September 1979 – 40 years ago next month.

U-Pass update

In May, I advised that we would be re-assessing the U-Pass — a TTC fare program offered to students enrolled full-time in an eligible postsecondary institution. The assessment will be part of our Five-Year Fare Policy and 10-Year Fare Collection Strategy, planned to be completed in early 2020.

New provincial tuition guidelines, announced in April, allow students to opt-out of transit-related fees like the U-Pass. Without full participation, the TTC won't get the levels of ridership and revenue needed to sustain the U-Pass

program. We have advised Ryerson University on the changes to provincial guidelines and the time needed to re-assess the program's viability.

Low-floor streetcars

At the time of writing this commentary only 44 CLRVs remained in service. The fleet is gradually being retired as new low-floor streetcars continue to arrive on property. In fact, starting in September, all services on the 501/301 Queen and the 508 Lake Shore routes are scheduled to be provided by low-floor streetcars, which will designate these services as fully accessible. The last CLRV is scheduled to be retired at the end of this year.

The delivery of new Low Floor Light Rail Vehicles (LFLRV) continues to progress well. As of August 2, 2019, Bombardier has delivered and commissioned 165 LFLRV. TTC staff remains optimistic that Bombardier will fulfill their order of 204 vehicles by the end of 2019. While 2019 delivery commitments are being met, Bombardier and the TTC also continue to address reliability concerns, while balancing service requirements.

Of the 165 LFLRV commissioned, nine LFLRV have been returned to Bombardier for the Major Repair Program (MRP) and for flood-related damage.

Bombardier has developed and is implementing numerous vehicle modification programs to improve vehicle reliability. Examples of these programs include:

- Door modifications
- Brake caliper design improvements
- Camera modification

Along with these modification programs, TTC staff is also preparing to commence the four-to-five-year overhaul program on the earlier vehicles and install the new VISION system on the streetcar fleet as part of the TTC's capital programs.

With the above efforts and initiatives, Bombardier and TTC staff strive to continue improving the reliability of the new LFLRV fleet. This includes working closely with Bombardier and its primary parts suppliers to complete the various modification programs to help meet the 35,000 kilometre target by end of 2019.

In June 2019, the mean distance between failure for the LFLRV fleet was 19,405 km and was calculated based on reliability criteria outlined in the procurement contract. These criteria are based on what are known as A, B, C and D type failures, which are summarized in Table 1 on page 17.

In Q4 2019, Bombardier has also committed to aggressively tackling outstanding backlog and warranty repair work while the TTC has committed to decommissioning the remaining legacy vehicles by year

end. Table 2 on page 17 is a summary of planned LFLRV maintenance vs. service requirements for the remainder of the year.

Automatic Train Control

The installation of the Automatic Train Control (ATC) signalling system in the subway continues.

Last May, we launched ATC on the portion of Line 1 between Dupont and St Patrick stations. As a result, trains have been operating in ATC mode from St Patrick all the way up to the Vaughan Metropolitan Centre Station. The installation of ATC infrastructure up to the Rosedale Station is 90 per cent completed.

Training and development

In July, we welcomed 13 new Transit Fare Inspectors (TFIs) to the TTC. The TFI Basic Training program involves six weeks of intensive in-class training and in-field peer instruction on proof of payment inspections and TTC By-law No. 1. Basic training also focuses on communication skills, de-escalation, mental health, diversity and inclusion, disability act, statute law, and community and customer engagement.

As mentioned in my July 11 statement, following the release of the Ombudsman report on the February 2018 incident involving TFIs, beyond accepting all six recommendations in the report, the TTC is committed to developing an anti-racism strategy aimed directly at preventing racial profiling. This strategy will include anti-racism training for all levels of the organization, starting with the Executive team.

Apprenticeship programs are critical to the TTC in developing the next generation of skilled tradespeople. On July 12, 2019, the Bus Maintenance & Shops department celebrated the graduation of 29 apprentices from the 2018 – 2019 Truck & Coach Apprenticeship Program. Also included in this class was the first graduate from the Auto Body & Collision Repair Program.

Led by Al Pritchard, Head of Bus Maintenance & Shops, and implemented by Human Resources, the TTC's apprenticeship programs were developed to address a growing shortage of skilled tradespeople. The programs are run annually in partnership with Centennial College and have been ranked among the best in Ontario for several years running.
To graduate, the Truck & Coach apprentices must complete a four-year program with training standards set by the Ministry of Training, Colleges and Universities. Applicants are a mix of internal and

external candidates. Upon graduation, apprentices play a critical role in maintaining and managing the TTC's bus fleet.

In addition to partnering with Centennial College, we've also partnered with the Toronto District School Board (TDSB) on an initiative called "Front of the Line". Each year, this program recruits up to four graduating high school students who are offered apprenticeships in our Truck & Coach and Collision Repair maintenance areas.

The Bus Maintenance & Shops department recently initiated another program with the TDSB called the Specialized Trades Exploration Program (STEP) for

Transportation. STEP is geared towards bringing awareness and interest to the trades by onboarding more than 20 co-op students to explore the various skilled trades within the department.

To address a similar shortage of skilled tradespeople in rail, the TTC, in partnership with Centennial College and the TDSB, will be expanding its apprenticeship programs to the Rail Cars & Shops and the Streetcar Maintenance departments.

These programs will supplement the in-house rail maintenance training programs that are currently provided to employees. The new 14-month Rail Transit Car Mechanic program and the existing 13-month Light Rail Vehicle Technician and Subway Vehicle Technician programs will rely on colleges to provide technical training in mechanical, pneumatic, hydraulic, electrical and electronics while the in-house training builds on students' knowledge base by providing in-depth vehicle familiarization, technical mentorship and extensive hands-on experience with vehicle repairs.

In April, both the Rail Cars & Shops and the Streetcar Maintenance departments accompanied the Bus Maintenance & Shops department to a job fair aimed primarily at automotive students. At this fair, students were introduced to lesser-known opportunities in rail maintenance.

While graduates from automotive programs focus more on combustion-type engines, the differences between automotive and rail are becoming less pronounced with the increased adoption of green technology like electric cars and buses. Graduates from automotive programs have the fundamental technical background that can be expanded upon for rail maintenance.

From this job fair alone, more than 20 students applied for positions within our targeted areas. Continuing to grow and support our apprenticeship programs will help strengthen our workforce for the future and will help keep the TTC competitive as an organization.

Earlier this year, the Streetcar Maintenance Department expanded its Low-Floor Vehicle Technician and Rail Transit Car Mechanic perquisite qualifications to include licensed Automotive Service Technicians, Truck and Coach Technicians and Millwrights.

Streetcar Maintenance and Rail Cars & Shops engaged in several recruitment drives at various colleges. Successful candidates are currently in the onboarding process and are expected to enter the workforce in August.

Reliability improvements

Finally, we will be introducing reliability improvements to the following services starting on the first of September: 41 Keele, 42

Cummer, 50 Burnhamthorpe, 80 Queensway, 84 Sheppard West, 85 Sheppard East, 89 Weston, 96 Wilson, 141 Downtown/Mt Pleasant Express, 165 Weston Rd North, 939 Finch Express, 941 Keele Express, 984 Sheppard West Express, 985 Sheppard East Express, 989 Weston Express, 996 Wilson Express, 501 Queen and 503 Kingston Rd.

Service will also be increased on the 101 Downsview Park in the peak periods for the new Centennial College campus in Downsview Park.

We look forward to the September Board meeting, where we will be highlighting our plans for fall and winter preparedness.

Richard J. Leary
Chief Executive Officer
August 2019

LFLRV Status Update

Table 1

Category	Definition	Failure Effects	Requirement
A	Severe Vehicle Impairment	Rescue towing/pushing is required	800,000 km
B	Vehicle Impairment	Five minute delay in service, or removal from service after all passengers have disembarked at the nearest stop	35,000 km
C	Minor Vehicle Impairment	In service until next terminus is reached with or without minor operational restrictions	15,000 km
D	No Vehicle Impairment	In service until end of day according to scheduled service	10,000 km

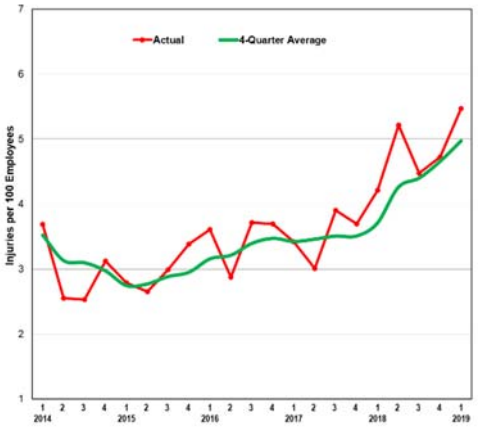
Table 2

	2019					2020
	Aug	Sep	Oct	Nov	Dec	Jan
Vehicles on Property[1] - Anticipated Month End - (9 Off Property for MRP & Flood Repairs)	160	167	175	183	190	196[2]
Less Capital Programs - BT Modifications - Overhaul - VISION Install	8	7	7	10	10	8
Less Operating Req. - BT Warranty - PM Inspections - CM Repairs - Training Vehicles - Overnight service not available for PM pullout	23	26	28	26	26	25
LFLRV Service Commitments Includes:[3] - Service Planning BP Req. - Extra LFLRV as they become available from vehicle deliveries	129	134	140	147	154	162
Operating Spare Ratio Based on LFLRV Service Commitments	18%	19%	20%	18%	17%	15%

1. End of month numbers. For planning purposes, a conservative approach is taken
2. 1 LFLRV flood-damaged car expected to be returned by end of year
3. Planned LFLRV Service Commitments may increase as additional vehicles become available with accelerated delivery in Q4

Safety and security

Lost-time injuries rate (LTIR)



Definition
Number of lost-time injuries reported per 100 employees.

Contact
John O'Grady,
Chief Safety Officer

Results

The LTIR for Q1 2019 was 5.47 injuries per 100 employees.

Analysis

The LTIR for Q1 was 10% higher than the four-quarter average of 4.97 injuries per 100 employees.

This increase is mainly attributed to the rise in slip/trip, ergonomic-related and acute emotional event (AEE) injuries in this quarter. The increase in slip/trip injuries is mainly due to adverse weather conditions in Q1.

There has been an upward trend in the LTIR since 2015.

Action plan

Last year we rolled out a slip, trip and fall prevention campaign for employees and customers.

Messaging about slips, trips and falls safety was provided to employees through various communications channels, such as TTC-TV and posters on safety boards. Ongoing initiatives aimed at reducing such injuries include regular mopping of stairways, installations of intermediate handrails and changes to station design to ensure entrances are closed to the elements.

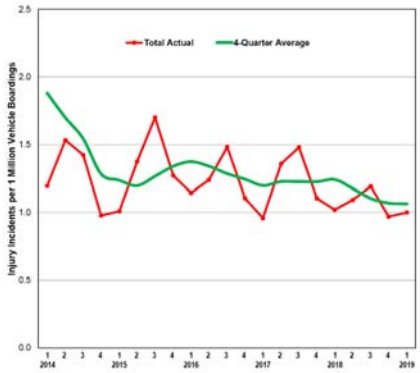
Musculoskeletal/ergonomic type injuries (e.g. overexertion, reach/bend/twist, repetition) account for 23% of all lost-time injuries and continue to represent the highest injury event type since 2014. The Ergonomic Musculoskeletal Disorder Prevention Program, currently being implemented, focuses on preventing such injuries and resolving ergonomic concerns. A new e-learning module has been developed for all supervisory staff to provide an overview of the tools available to address ergonomic

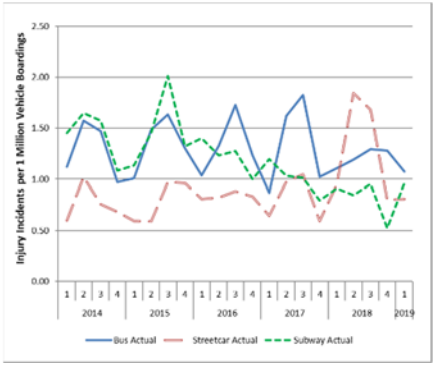
concerns, both proactively and reactively.

AEE injuries caused by sudden and unexpected traumatic events continue to represent the second highest injury type and account for 16% of all lost-time injuries since 2014. In January 2018, under the Workplace Safety and Insurance Board Act, the Province introduced two legislative changes: 1) The new policy on Chronic Mental Stress allows for compensation due to work-related stressors like bullying or harassment; 2) The policy on Traumatic Mental Stress is revised to broaden the spectrum of psychological claims. These changes have created an opportunity for an increase in the reporting of claims related to emotional trauma injuries.

Note: *Q2 2019 data will be available in the September 2019 CEO's Report.*

Customer injury incidents rate (CIIR)





Definition
Number of customer injuries per one million boardings.

Contact
John O'Grady,
Chief Safety Officer

Results

The CIIR for Q1 2019 was 1.0 injury incidents per one million vehicle boardings.

Analysis

The CIIR for Q1 was 6% lower than the four-quarter average rate of 1.06 injury incidents per one million vehicle boardings.

The four-quarter average line shows there has been a continued downward trend in the CIIR since 2014.

Action plan

In Q1 of 2019, the streetcar CIIR of 0.81 injury incidents per one million vehicle boardings was 37% lower than its four-quarter average rate of 1.28. This can be partly attributed to the following streetcar initiatives:

1) Frequent Rules Compliance audits to ensure proper door closing procedures are followed to reduce customer injuries from contact with doors;

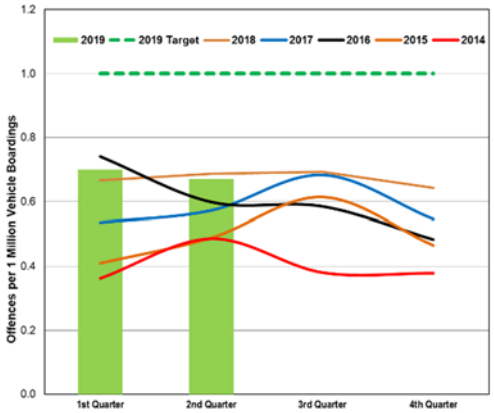
2) Increased face-to-face interactions between supervisors and operators to discuss safety-related topics;

3) Safety campaign with Toronto Police Services to provide tips to customers for a safer commute;

4) Safety reminders to operators on slowing down around corners to reduce vehicle tail-swing and the injuries that might result from customers falling off of seats.

Note: *Q2 2019 data will be available in the September 2019 CEO's Report.*

Offences against customers



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

Contact
Kirsten Watson
Deputy Chief Executive Officer – Operations

Results

The total number of offences against customers decreased in Q2 to 0.67 per one million vehicle boardings. The current rate is 4% lower than the previous quarter (0.70) and 3% lower than the same time last year (0.69).

Analysis

The number of *Thefts*, *Assaults* and *Other* crimes (threats, harassment, indecent exposure, etc.) all decreased in comparison to Q1. There were minor increases in the number of *Sexual assaults* and *Robberies*.

Action Plan

Transit Enforcement Special Constables will continue to engage with the public to provide a visible presence across the system with a greater focus on high-risk areas.

Note: Q3 2019 data will be available in the November 2019 CEO's Report.

Offences against staff

Definition
Number of offences per 100 employees.

Contact
Kirsten Watson
Deputy Chief Executive Officer – Operations

Results

The total number of offences against staff increased in Q2 to 4.42 offences per 100 employees. The current rate is 4.7% higher than last quarter (4.22) and 7.5% lower than the same time last year (4.78).

Analysis

There was a significant increase in the number of *Assaults* and *Threats* compared to the previous quarter. Other offences, including *Mischief*, *Harassment*, *Indecent exposure*, *Sexual Assault* and *Robbery*, decreased this quarter in comparison to the previous quarter.

Action Plan

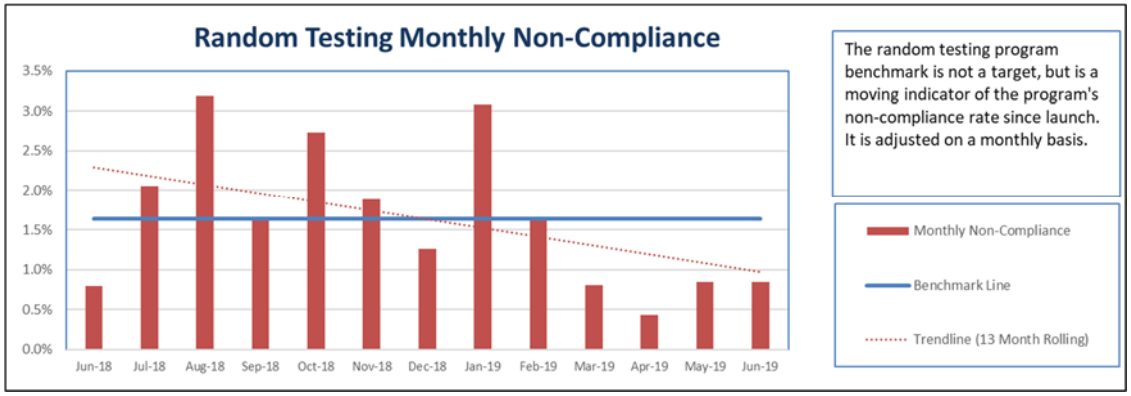
Transit Enforcement Special Constables continue to provide support to surface personnel via the BUS STOP (Bringing Uniform Support to Surface Operating Personnel) initiative, and conduct special details and initiatives to assist with ongoing and emerging issues identified by staff across the system.

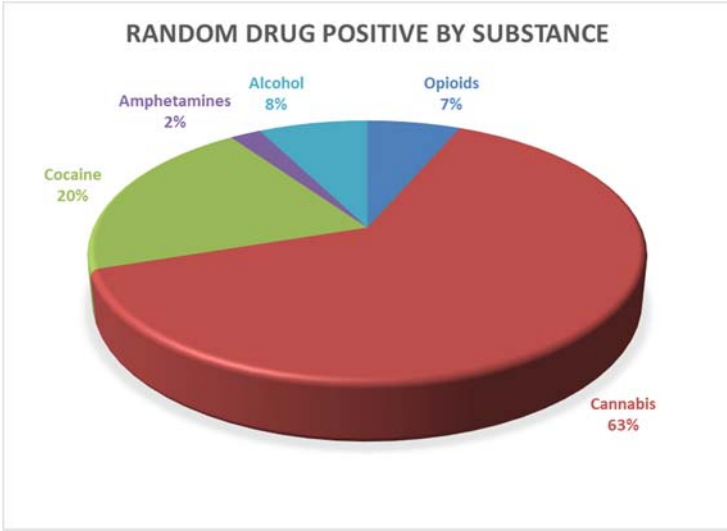
Note: *Q3 2019 data will be available in the November 2019 CEO's Report.*

Fitness for duty

The data shows the percentage of employees that tested non-compliant (drug, alcohol, refusal) under the TTC's Random Program on a monthly basis and how each of those months compares to the overall program non-compliance rate (benchmark). This data includes tests performed on unionized and non-unionized employees.

The chart showing "Drug Positive by Substance" is updated on a quarterly basis. The information is up to June 30, 2019. The next update will be in the September 2019 CEO's Report. Some results are returned as positive for more than one substance.

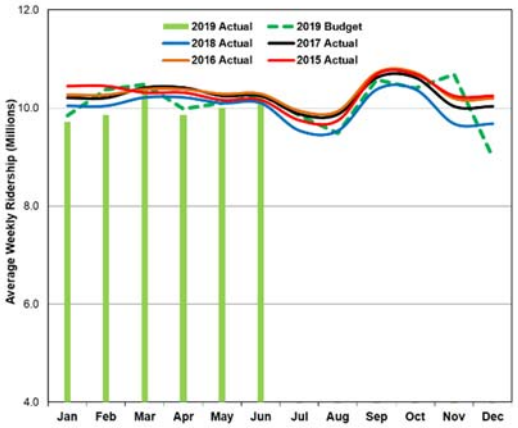




Contact
Sean Milloy,
Director – Employee Relations
Human Resources

Ridership

Ridership



Definition

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

Contact

Josie La Vita,
Chief Financial Officer

Results

Period 6 (June 2 to July 6, 2019) revenue ridership was at 51.2 million or 10.2 million passengers per week. This was approximately 0.14 million (0.3%) below the budget of 51.3 million rides, but 0.17 million (0.3%) above the same period in 2018.

Year-to-date (YTD) ridership at the end of period 6 was 267.8 million, 4.1 million (1.5%) below budget and 2.5 million (0.9%) below the comparable period in 2018.

Analysis

Upwards of one million spectators attended the Championship Parade for the Toronto Raptors on June 17. The TTC carried 2.154 million rides that day, well above our typical weekday ridership of 1.7 million rides per day and setting a new single-day ridership record. With this one-day spike in ridership, ridership for period 6 remained relatively flat to last year. However, June 2019 ridership would have been approximately 0.6% below last year if June 17, 2019 was at typical weekday ridership levels. This decrease is driven by an increase in subway closures, 21 in period 6 2019 versus three in period 6 2018.

The overall decrease in 2019 YTD ridership appears to have been affected by several factors compared to 2018, including: severe weather, decreased weekend ridership, increased subway closures and higher PRESTO adoption.

Ridership is affected by heavy snow and severe cold. Our customers experienced more of both this winter. In particular, for the first two periods of the year, there were five severe snow storms compared to none during the comparable period last year.

A decrease was experienced for period 4 (April) compared to both the prior year and budget. This decrease was predominantly driven by reduced weekend ridership that was down 6.5% compared to 2018, largely

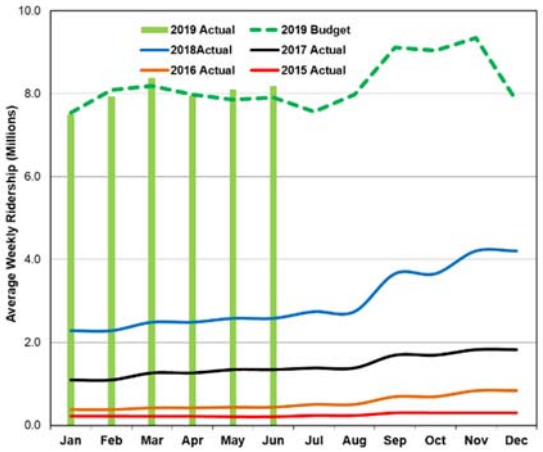
attributed to the timing of the 2019 Easter holiday weekend.

Higher PRESTO adoption appears to have affected measured ridership in two ways. First, we now have more precise ridership data compared to counting tokens and weighing paper tickets. Second, more than 25% of our former monthly pass customers have converted to PRESTO pay-as-you-go e-purse each month in 2019, likely to take advantage of the two-hour transfer and for some, the TTC/GO discounted co-fare. This would affect measured ridership to the extent that these customers may ride less often than the monthly average of 71 rides per adult monthly pass.

Action Plan

To re-establish sustained ridership growth, a new Ridership Growth Strategy, an extension of the 2018-2022 TTC Corporate Plan, is being implemented with three main objectives: (1) Retain current customers; (2) Increase transit rides per current customer; and (3) Attract new customers to the system.

PRESTO ridership



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

Note: PRESTO ridership is included in TTC ridership totals.

Contact
Josie La Vita,
Chief Financial Officer

Results

Period 6 (June 2 to July 6, 2019) PRESTO ridership was 41.0 million or 8.2 million passengers per week. This was approximately 1.4 million (3.5%) above the budget and 27.7 million (209%) higher than June 2018 ridership of 13.3 million.

Year-to-date ridership at the end of period 6 was 214.2 million, 2.4 million (1.2%) above budget and up 148.3 million (225%) above the comparable period in 2018.

Analysis

Substantial progress has been made over last year with numerous fare products now available on PRESTO. Fare card readers have been installed on all buses and streetcars and PRESTO fare gates and fare vending machines at all subway entrances.

The introduction of PRESTO tickets — now available at all stations as of period 6 2019 — helped move PRESTO ridership above the budget for period 6. Furthermore, the retirement of the legacy Metropass on December 31, 2018 encouraged a significant move of customers to PRESTO in 2019, driving an increase of over 335,000 unique PRESTO cards using the system in the first six months of 2019, resulting in an increase in PRESTO adoption from 45.5% in December 2018 to 80% in June 2019.

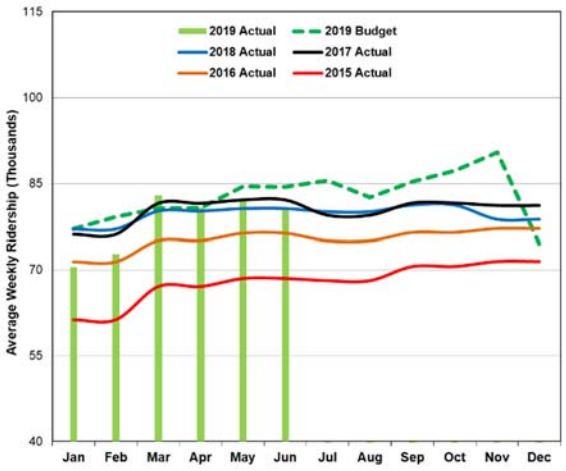
PRESTO adoption has hovered around 80% in 2019. It has increased slightly each month this year with the exception June, where it fell by 1.1%. The PRESTO adoption decrease in June is largely due to the Championship Parade for the Toronto Raptors on June 17 that saw a higher use of legacy fare media over PRESTO card usage, likely due to one-off riders visiting the City.

We are in discussions with Metrolinx about adoption rate calculation given measurement uncertainties related in particular to two-hour transfer and PRESTO monthly pass ridership. PRESTO adoption has increased over the past year, from about one-quarter of ridership in February 2018 to about three-quarters now.

Action Plan

PRESTO adoption is expected to increase over time as legacy media is phased out, more PRESTO fare options are made available and marketing initiatives encourage further PRESTO adoption. The PRESTO adoption rate is expected to continue to increase significantly during 2019, reaching approximately 95% once legacy fare media are no longer sold.

Wheel-Trans ridership



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

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

Contact
Josie La Vita,
Chief Financial Officer

Results

Ridership in period 6 (June 2 to July 6, 2019) was 401,297 (or 80,259 passengers per week). This figure was 4.9% lower than the budgeted 84,411 customers per week. In terms of year-over-year growth, the June ridership of 401,297 was 0.2% higher compared to the same period in 2018.

Analysis

Wheel-Trans ridership continues to follow a relatively flat trend, with a slight increase since period 3 in comparison to 2018. Analysis of customer behaviour patterns reveals that customers are continuing to fully divert trips to conventional services where possible, indicating early success of the Family of Services initiative.

Ridership is expected to be approximately 1.5% above 2018 actuals. The customer base has been lower in 2019 when compared to 2018, with the average rate of more than 900 per month, with 42% as conditional customers. These new conditional customers are taking fewer Wheel-Trans door-to-door trips, with data supporting that they are diverting trips to conventional services. This slight increase in ridership can be attributed to the new customers onboarding with existing customers maintaining a consistent travel pattern.

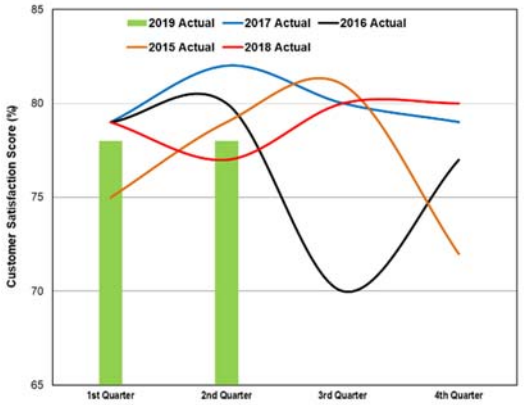
We have responded to the call volume by hiring additional contact centre staff. Although wait times have decreased, the volume of calls also decreased compared to the previous year. Customers are booking more trips online with a 17% increase over the previous year.

Action Plan

We continue to improve our scheduling and dispatching software and will be introducing a new mobile app in the fall. This will include a pilot that will allow customers to see the status of their vehicle, which is expected to produce a lower rate of cancelled trips at the door and no show trips. We are also working with customers on trip matching, which will provide more Family of Services trip options in the next software upgrade.

Customer experience

Customer satisfaction score



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

Contact
Kathleen Llewellyn-Thomas, Chief Customer Officer

Results

About four-in-five (78%) customers reported high levels of overall satisfaction in Q2 2019, which is consistent with last quarter (78%) and the same time last year (77%).

Analysis

Overall levels of satisfaction are similar across subway, bus and streetcar customers, at 78%, 75% and 78% respectively. The TTC's service is becoming more consistent, as evidenced by the decreased variability year-over-year in overall satisfaction and the key drivers of satisfaction (trip duration, helpfulness of staff, comfort of ride, wait time and crowding).

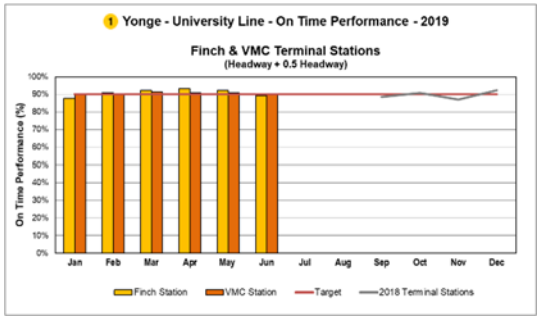
Perceived value for money remains high with nine-in-ten customers finding our service to be average or above average value for money.

Action plan

As we continue to implement reliability improvements on our surface routes, we expect to see increased levels of customer satisfaction with wait time and trip duration.

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

Line 1 OTP fell from 91.6% in May to 89.4% in June. Our target of 90% was not met.

Analysis

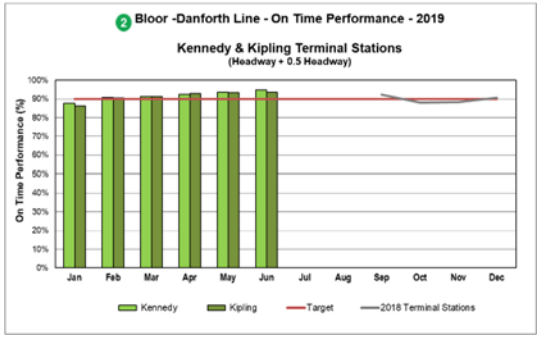
A number of significant delays adversely impacted service levels in June. An incident near Union Station delayed service for four hours on the afternoon of June 5.

Speed restrictions that are required for critical state-of-good-repair work have had a minor impact on trip times, but end terminal dwell times have remained relatively stable. This work is necessary to ensure that we can take full advantage of Automatic Train Control as it continues to be commissioned along the rest of the line.

Action plan

While the weeknight early closure program takes a pause through most of July and August, weekend subway closures and late Sunday openings continue to provide our crews with the time they need to maintain our infrastructure, predominantly on this line.

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

Improvements were realized at both terminals, with an overall average of 94.1%, up from the 93.3% we achieved in May. Our 90% target was met.

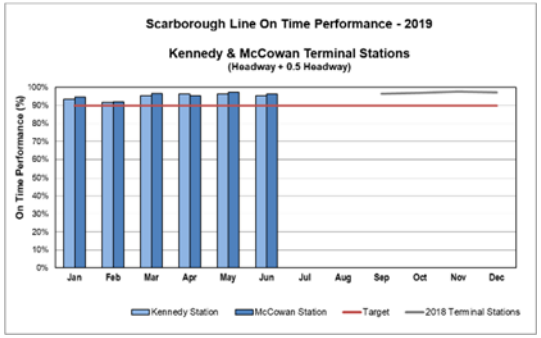
Analysis

Delay minutes on Line 2 were reduced by 28.5% in June, with all categories seeing reductions. Run-As-Directed (RAD) trains also helped to achieve these results.

Action plan

RAD trains for a.m. and p.m. peaks were permanently added to our schedule for Line 2 in late June. This will improve the resiliency of the service and help us achieve more regular service from our end terminals.

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

OTP on Line 3 declined slightly in June, with an overall average of 96.0%, down from the 96.8% we achieved in May. Our 90% target was met.

Analysis

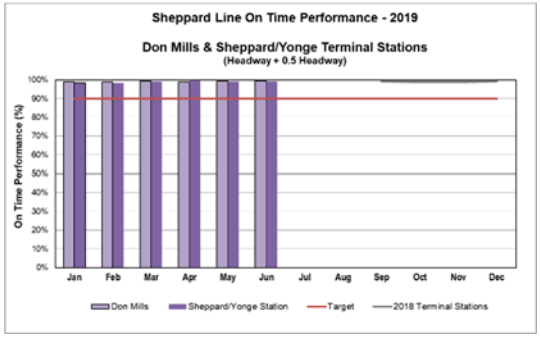
Although there was a 28.1% reduction in delay minutes, service is impacted by hot summer temperatures. To prevent issues with our equipment, when temperatures reach 25°C we reduce our maximum speed and braking profiles, resulting in slower trip times and decreased capacity.

Our Line 3 fleet is continuing to be overhauled to extend the life of the cars and improve reliability, and as a result we do not have the resiliency available to add to our service and maintain our headways during periods of reduced speed.

Action plan

Supervision has returned to the line in the a.m. and p.m. peak periods and will remain in place moving forward. This should help with ensuring prompt departures and incident resource capability should an incident occur.

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



Definition
OTP measures the headway adherence of all service trains at end terminals. Data represents Monday-to-Friday service between 6:00 a.m. and 2:00 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

Line 4 OTP improved slightly from 99.2% in May to 99.4% in June. Our 90% target was met.

Analysis

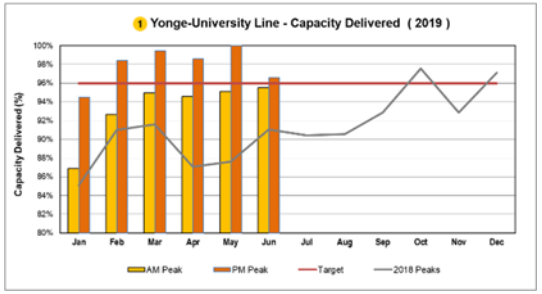
The number of delay incidents declined by four and the delay minutes declined by 27 minutes, which helped improve performance slightly.

With relatively few delay incidents, a consistent service throughout the day, and a shorter distance per round trip, this line continually performs well.

Action plan

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

Line 1: Capacity



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

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

Contact
James Ross,
Chief Operating Officer

Results

We experienced a small improvement during the a.m. peak (95.1% to 95.5%), but p.m. peak performance dropped from 100% to 96.6%. Overall performance was at 95.9%, just below our target of 96%. Peak-of-the-peak capacity did achieve target and has done so for the past five months.

Analysis

Service was seriously impacted on the afternoon of June 5 as a result of an incident near Union Station that delayed service for four hours and also required the evacuation of 56 customers from a train stalled in the tunnel.

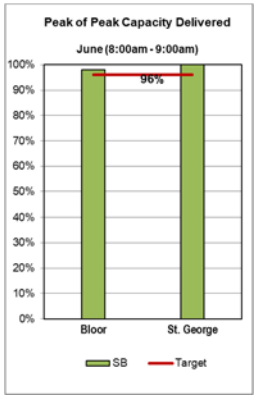
The NBA Championship parade on June 17 recorded lower capacity delivered in the afternoon due to crowding, with hundreds of thousands of additional customer trips that day.

We are continuing to focus on consistency and clearing delay incidents quickly as peak-of-the-peak capacity recorded six days at or above 28 trains-per-hour (116%) but there were also four days with 23 trains-per-hour (96%) or lower, all of which were the result of increased delays.

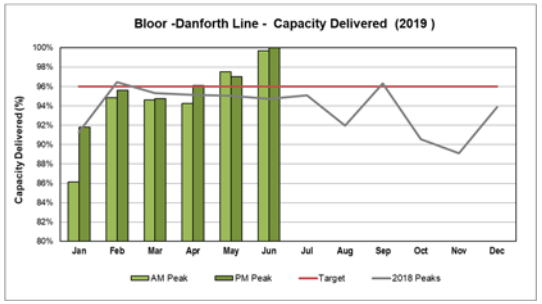
Action plan

Staff are reviewing our use and deployment locations of Toronto EMS Paramedics, who are stationed in the subway system during peak periods to provide accelerated response times to ill customers.

We are also working hard to address a number of restricted speed issues on the line as we work through state-of-good repair projects. Staff will continue to adjust service levels around these areas to minimize the impact to customers.



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

Significant improvements were realized during both the a.m. and p.m. peak on Line 2, achieving 99.7% and 100% respectively. These are the highest levels achieved in 18 months.

Our target of 96% was met.

Analysis

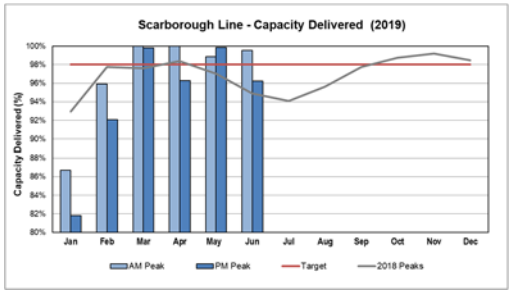
This line benefited from 28.5% fewer delay minutes in June, as well as the addition of Run-As-Directed (RAD) trains that allowed staff to mitigate delay incidents when they did occur, and provide additional capacity when there were no delays.

Action plan

As previously noted, the RAD trains for a.m. and p.m. peaks were permanently added to our schedule for Line 2 in late June. This will improve the resiliency of the service and help us achieve increased capacity.

When equipment and staffing is available, additional RAD trains will be added to complement service levels, especially during special events in the city.

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

There was some improvement during the a.m. peak on Line 3. A decline during the p.m. peak resulted in an overall decrease from 99.4% in May to 97.7% in June.

Our target of 98% was not met.

Analysis

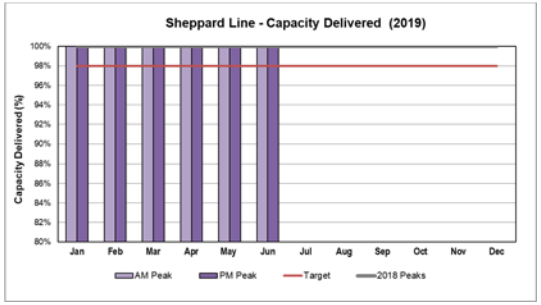
A 28.1% reduction in delay minutes helped our a.m. performance, however p.m. performance was adversely affected by warmer temperatures.

To prevent issues with our equipment, when temperatures reach 25°C we reduce our maximum speed and braking profiles, resulting in slower trip times and decreased capacity.

Action plan

With high temperatures expected for the rest of this summer, this measure is likely to stay below target for the p.m. peaks for the next several weeks.

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

Line 4 capacity remained at 100% for 18 consecutive months. Our target of 98% was met.

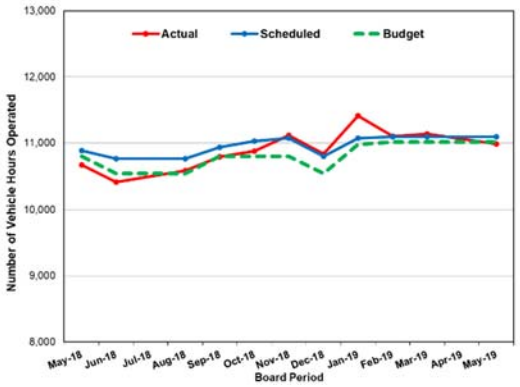
Analysis

The number of delay incidents improved by 8.5% and delay minutes improved by 22%, which helped keep this metric above target.

Action plan

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

Subway: Weekly service hours



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

Contact
Kathleen Llewellyn-Thomas, Chief Customer Officer

Results

In the May 2019 Board Period, 11,018 subway weekly hours were budgeted for service, while 11,094 subway weekly hours were scheduled to operate. This represents a variance of 0.69%.

Of the 11,094 subway weekly hours scheduled to operate, 10,987 weekly hours were actually delivered, which represents a variance of -0.96%.

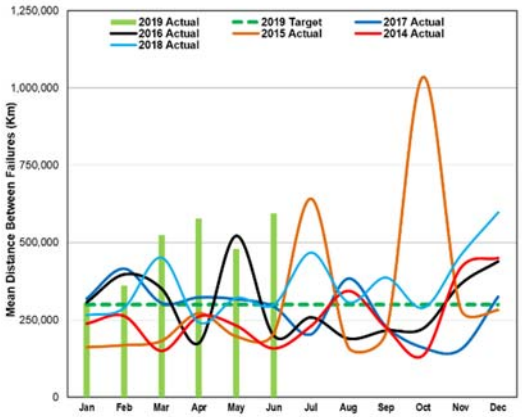
Analysis

Actual service hours are matched with scheduled service hours.

Action Plan

No action required at this time.

Subway T1 train: Mean distance between failures (MDBF)



Definition

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

Contact

Rich Wong,
Chief Vehicles Officer

Results

The MDBF in June was 594,311 kilometres, exceeding the target of 300,000 kilometres. This is the eighth consecutive month that the T1 fleet has met the target.

Analysis

In June, there were six delay incidents greater than or equal to five minutes. The worst performing system was the passenger doors system with four delay incidents greater than or equal to five minutes. This was followed by the coupler and propulsion inverter systems each with one delay incident greater than or equal to five minutes.

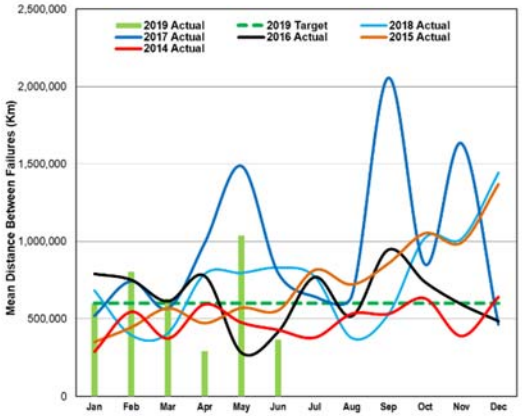
Action Plan

The four passenger doors system-related failures were a result of two out-of-adjustment door lock pins in the door lock assembly, defective open magnetic valve (OMV) and a failed door air gap test. Both door locking pins were adjusted on the door locking assembly and doors were cycle tested. The OMV was replaced, and the door speeds were tested. The failed gap between the doors have been rectified and tested to be working with no further issues.

The coupler incident was due to a loose coupler hose. The loose coupler hose was re-installed and tested.

The propulsion inverter was due to a defective printed circuit board (PCB) tachometer reader. The PCB tachometer reader was cleaned and was tested to be working.

Subway TR train: Mean distance between failures (MDBF)



Definition

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

Contact

Rich Wong,
Chief Vehicles Officer

Results

The MDBF in June was 367,856 kilometres, which is below the target of 600,000 kilometres.

Analysis

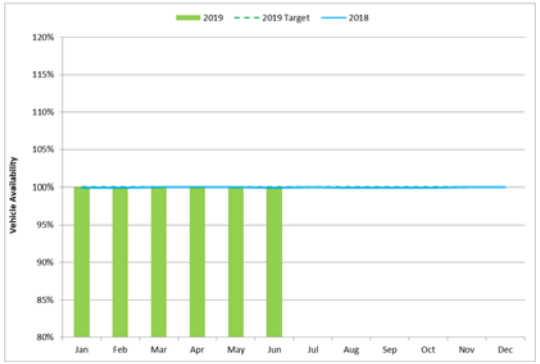
In June, there were 14 delay incidents greater than or equal to five minutes. The worst performing system was the passenger doors system with seven delay incidents greater than or equal to five minutes. This was followed by the brake system with four incidents, the trainline system with two and the automatic train control system with one delay incident.

Action Plan

The seven passenger door-related incidents were a result of two broken door rollers, a stuck door nosing, a defective door lock mechanism, faulty door electronic control unit (DECU) and door control unit (DCU), and a broken S2 switch. The two broken door roller incidents were corrected by replacing the door rollers. The doors on both trains were cycled multiple times with no further issues. The stuck doors were a result of sticky door nosings. The door nosings have since been freed and tested multiple times to be working. The defective door lock mechanism was the result of a door lock pin falling loose. A new ring replaced the cotter pin to prevent lock pins from falling loose in the future. The defective DCU was replaced and tested to be working positively. The broken S2 switch was replaced and doors cycle tested multiple times with positive results. The faulty DECU is being jointly investigated by the TTC and Bombardier Engineering. DECU has since been replaced and train doors tested to be working.

The four brake-related incidents were due to a faulty digital driver board (DDB), two defective brake pressure transducers, and a loose wiring on the trip switch. The two brake pressure transducers were replaced and train tested to be working. The faulty DDB was replaced and performed propulsion self-test as well as yard tested. The train has since been mainline tested with positive results. The loose wire on the trip switch was replaced with a ring terminal lug and secured properly.

Subway: Service availability



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

Contact
Rich Wong,
Chief Vehicles Officer

Results

The vehicle availability in June was 100%.

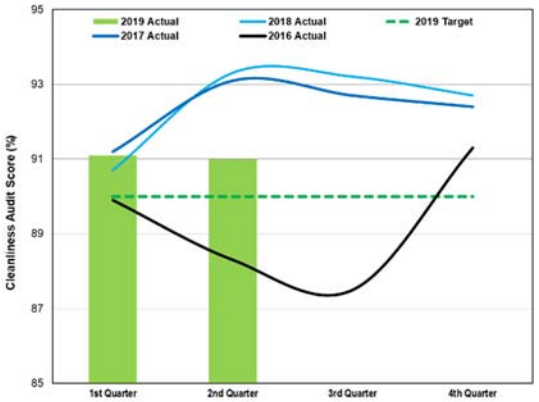
Analysis

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

Action Plan

We will continue with the delivery of safe, reliable and clean vehicles to service on all four subway 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 average rating of 91.0% in Q2 2019 for subway cleanliness was above the target of 90.0%. We have recorded a score of greater than 90% since Q4 2016.

Analysis

Areas of strength in the vehicle cleanliness across all fleets and lines were the ceilings, lighting, mandatory decals, etching/scratchitti and graffiti/stickers.

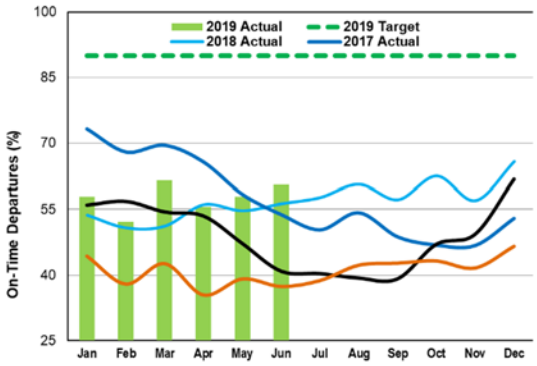
Major factors affecting the quarter-on-quarter overall cleanliness scores in Q2 2019 were the exterior, floors, door cleanliness and windows. The overall exterior and floor cleanliness scores should increase next quarter as the exterior body wash cycle resumes once every 10 days, while the floor wash cycle is addressed once every 14 days. With the winter weather season behind us, Q3 results are anticipated to be positive.

Action Plan

Exterior vehicle washes will continue to take place through Q3 with a focused exterior program started in late Q2. These focused exterior wash programs will increase the overall exterior cleanliness of the 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

Streetcar OTP in June was 60.6%, an increase compared to May (57.8%) and the same period last year (56.3%).

Analysis

Streetcar OTP showed improvement this period and represents the best June period in the past five years. Track repair work on the 504 King route (June 11-12, 29-30) and overhead incidents (June 7, July 4-5) negatively impacted performance during the period. Performance was also impacted by various special events, including four major running events and the Raptors Championship Parade on June 17.

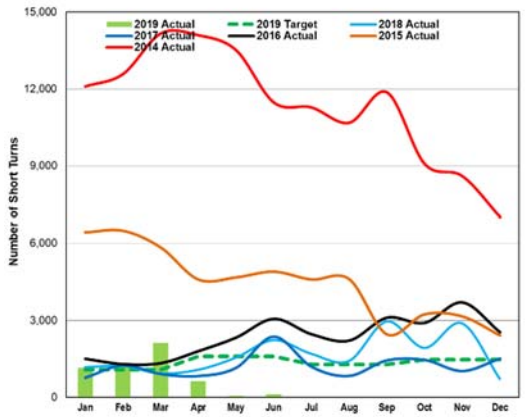
The 505 Dundas route continued to be the worst performing route of the period (26%), largely due to ongoing construction work in the middle portion of the route.

The 504 King route led all streetcar routes in terms of performance, achieving close to 80% over the entire period, followed closely by the 512 St Clair route. The improved performance can also be attributed to new schedules implemented on the 501 Queen and 511 Bathurst routes for the last two weeks of the period.

Action Plan

A new process for developing schedule times, which has proven effective on several routes, will be implemented on every other streetcar route between now and the fall. The August Board Period will see improved schedules introduced on the 505 Dundas, 506 Carlton, and 512 St Clair (weekend) routes.

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 108 streetcar short turns in June, an increase compared to May (67) and a significant decrease from the same period last year (2,227).

Analysis

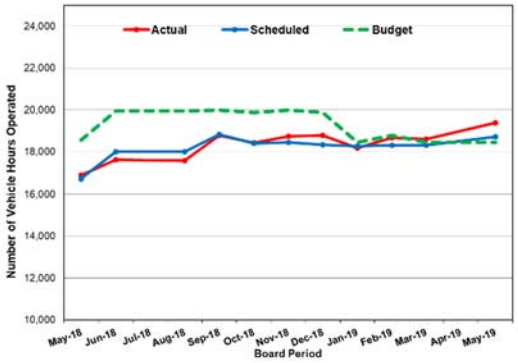
Despite challenges during Q1 2019 to keep short turns to a minimum, the June short turn figures continue a favourable declining trend on the streetcar network.

This outcome can be attributed to efficient use of Run-As-Directed (RAD) vehicles, operator change-overs, as well as increased management oversight. RAD vehicles were available for most of the period and played a significant role in reducing short turns, particularly on the 501 Queen route for the first three weeks of the period. A focus on operator change-overs instead of short turning vehicles also continued.

Action Plan

Continued management oversight and improved schedules on the remainder of our streetcar routes will ensure low short turn figures can be sustained. As well, the use of RAD vehicles and operator change-overs, as required, will help maintain a low number of short turns moving forward.

Streetcar: Weekly service hours



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

Contact
Kathleen Llewellyn-Thomas, Chief Customer Officer

Results

In the May 2019 Board Period, 18,448 streetcar weekly hours were budgeted for service, while 18,720 streetcar weekly hours were scheduled to operate. This represents a variance of 1.48%.

Of the 18,720 streetcar weekly hours scheduled to operate, 19,379 streetcar weekly hours were actually delivered, which represents a variance of 3.52%.

Analysis

Actual service hours are slightly higher than scheduled service hours.

Action Plan

No action required at this time.

LFLRV streetcar: Mean distance between failures (MDBF)

Definition

Total kilometres travelled by the Low-Floor Light Rail Vehicle (LFLRV) compared to the number of mechanical incidents 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.

Contact

Rich Wong,
Chief Vehicles Officer

Results

The MDBF for the LFLRV fleet in June was 19,405 kilometres. This is an increase of 2,664 kilometres compared to the same time last year and a decrease of 8,531 kilometres from last month.

The overall LFLRV MDBF remains below the 35,000 kilometre target.

Analysis

In June, there were 32 delay incidents. The worst performing system was the communication system with seven delays. Delay incidents related to the brake and door systems decreased.

The number of delays attributed to the other worst performing systems (train control management, pantograph) have remained steady.

Action Plan

We continue to work closely with Bombardier and have developed various vehicle modification programs to help improve the reliability of the vehicles.

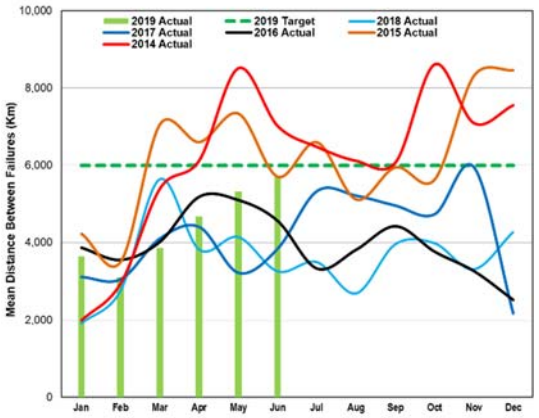
Door System: Design and component improvements (e.g. installation setup, guide channels, and end-stops) have been implemented on the fleet and a wire chain retrofit is under way.

Brake System: Quality control containment and improvements have been implemented at supplier sites. In addition, component improvements (e.g. seals, guidance shaft and locking pins) are in validation and planning stages with implementation targeted for Q4 2019.

Communication System: A camera modification program has recently commenced that addresses known issues with image quality and stability.

These reliability improvement programs continue to be refined as more operational data becomes available with the increased use of the vehicles and an increasing fleet size.

CLRV streetcar: Mean distance between failures (MDBF)



Definition

Total kilometres travelled by the Canadian Light Rail Vehicle (CLRV) compared to the number of mechanical incidents resulting in delays of five minutes or more. Includes all seven days of service.

Contact

Rich Wong,
Chief Vehicles Officer

Results

The MDBF of the CLRV fleet for June was 5,738 kilometres. This was an increase of 2,480 kilometres from the same time last year and an increase of 423 kilometres from the previous month.

The MDBF continues to remain below the target of 6,000 kilometres.

Analysis

The reliability of the CLRV fleet increased in June due to reductions in the number of compressed air, car body, warn alarm and wind shield system-related failures. Improved weather conditions, decommissioning of unreliable CLRV vehicles and increased pre-service maintenance during inspections contributed to fewer failures in June.

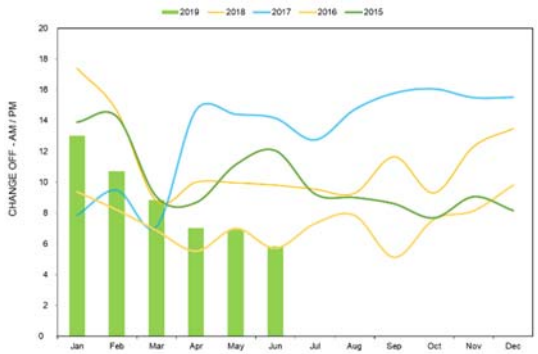
Action Plan

Staff will continue to perform preventative maintenance on the CLRV fleet to be proactive on potential failures. Decommissioning of unreliable CLRV vehicles will continue to take place as deliveries of the LFLRV become available. All CLRV vehicles will be decommissioned by the end of 2019.

Streetcar decommissioning schedule

Year	CLRV	ALRV	Total
2015	7	4	11
2016	16	4	20
2017	30	0	30
2018	28	33	61
2019*	113	10	123
Total	**194**	**51**	**245**

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 June, 3.6% (or 6 of 165 vehicles) of the peak daily service, including Run-As-Directed (RAD) vehicles, resulted in a RCCO. This was a decrease of 0.6% from the previous month.

Analysis

The daily average number of RCCOs decreased by one for the month of June, compared to last month. A reduction in failures of chopper control, car body, door equipment and compressed air systems on the CLRV fleet, along with reduced disc brakes and propulsion equipment-related failures on the LFLRV fleet contributed to the overall decrease in RCCO numbers for June.

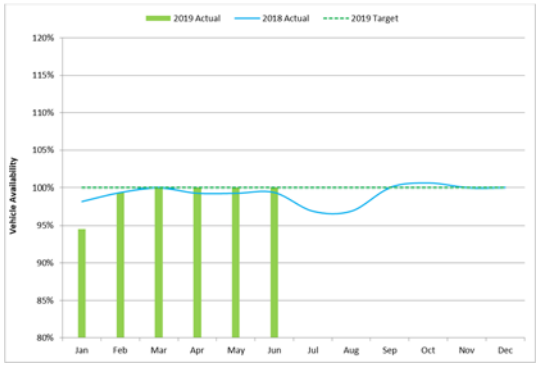
Action Plan

Staff will continue to focus on our worst performing systems on the vehicles. Improved inspections and preventative maintenance programs will help to reduce failures.

Bombardier is aware of the system issues affecting the LFLRV vehicle reliability and is implementing various modification programs to address the issues.

The decommissioning of unreliable legacy vehicles will continue.

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 (RAD) vehicles. In June, the target requirements were met with an average of 165 vehicles available for service.

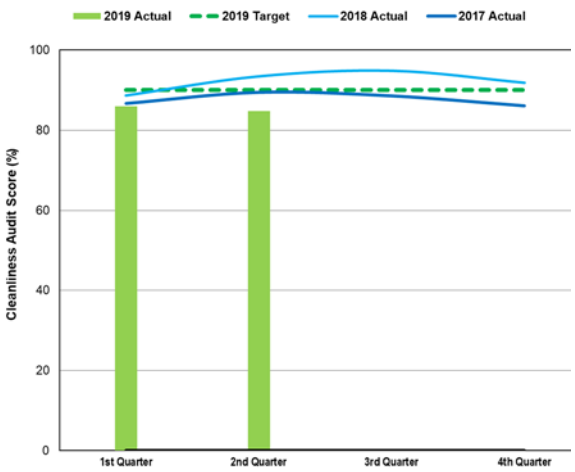
Analysis

With the number of LFLRVs increasing and the decommissioning of legacy vehicles, target availability numbers are consistently being met.

Action Plan

We will continue to commission LFLRVs in order to replace legacy vehicles.

Streetcar: Cleanliness



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

Contact
Rich Wong,
Chief Vehicles Officer

Results

The audit score for streetcar cleanliness in Q2 2019 was 84.8%. This is a decrease from both Q2 2018 (93.4%) and Q1 2019 (86.0%). Overall performance on streetcar cleanliness is below the target of 90%.

Analysis

High demand for service vehicles limits the availability for exterior/interior wash scheduling.

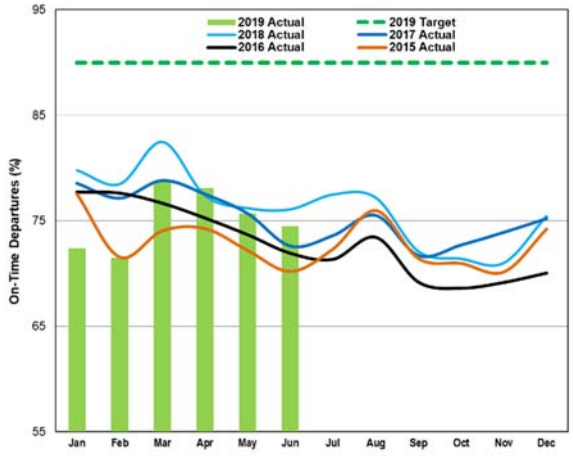
Wet conditions during May and the accumulation of salt and sand deposits impacted cleanliness results, particularly flooring which contributed to a decrease in overall cleanliness.

Action Plan

Scheduled cleaning activities will continue. Staff continue to investigate and identify further improvements, including additional equipment to make cleaning more effective.

Bus services

Bus: On-time performance (OTP)



Definition

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

Contact

James Ross,
Chief Operating Officer

Results

OTP in June slightly declined to 74.5% as compared to May 2019 (75.7%) and to the same period last year (76.1%).

Analysis

From the reliability improvements implemented in the May Board Period, route 168 Symington has shown an improvement from 74% in 2018 to 90% in 2019. Other improvements include: 66 Prince Edward (from 52% to 71%), which will be updated further in October to address scheduling issues in the afternoon peaks;127 Davenport (from 76% to 86%); and 9 Bellamy (73% to 80%), which has been negatively affected by construction around Warden Station.

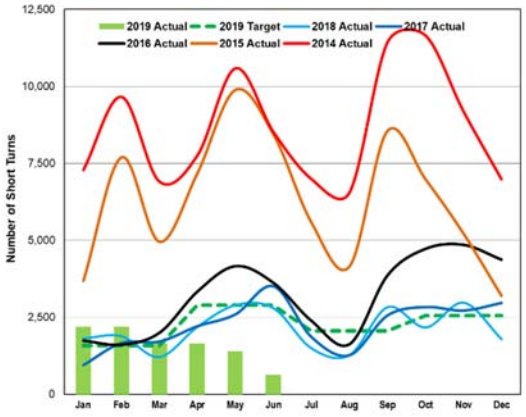
Metrolinx construction activities on the Crosstown have resulted in increased delays to routes operating on and intersecting Eglinton Avenue. These disruptions in the east end of the city are expected to continue until the end of the project, with major intersection closures expected during the summer months. Routes affected include: 68 Warden (53%), 17 Birchmount (56%), 67 Pharmacy (67%), 24 Victoria Park (63%) and 34 Eglinton East (65%).

As part of the roll out process of our new CAD/AVL system (VISION), we have identified a number of data quality issues that we are currently working with the vendor to resolve. These issues may result in the over reporting of missed/late trips mainly affecting short duration routes such as 124 Sunnybrook (44%), 92 Woodbine South (45%), 82 Rosedale (56%) and 50 Burnhamthorpe (68%). Updated results will be provided as they become available.

Action plan

The following service reliability improvements were implemented in the June Board Period: 6 Bay, 31 Greenwood and 90 Vaughan. Results of these improvements will be provided in the September report.

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 634 short turns in June, a significant improvement from the period's target of 2,897. These results are an improvement from May 2019 (1,404) and the same period last year (2,804).

Analysis

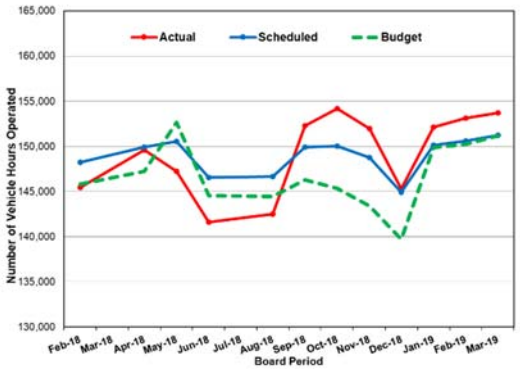
The significant reduction in short turns for the month of June was driven by increased management oversight, focusing on alternate route management techniques to minimize the impact to customers. On routes where schedules did not reflect actual operating conditions, vehicles were operated off-schedule, utilizing Run-As-Directed (RAD), and allowing full trips to be completed, reducing the impact to customers. Short turns continued to be mainly driven by increased traffic congestion around Metrolinx construction zones on Eglinton Avenue.

The top five routes for short turns were: 52 Lawrence West (11%), 35 Jane (10%), 935 Jane Express (8%), 75 Sherbourne (7%) and 929 Dufferin Express (4%) representing 40% of all short turns.

Action plan

Routes 52 Lawrence West and 75 Sherbourne will have new schedules implemented in the fall. Routes 35/935 Jane will have new schedules in the first quarter of 2020 after the construction at Jane Station is completed. Short turns on 929 Dufferin Express were mainly attributed to lane restrictions due to construction between Wilson Avenue and Lawrence Avenue West.

Bus: Weekly service hours



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

Contact
Kathleen Llewellyn-Thomas, Chief Customer Officer

Results

In the March 2019 Board Period, 151,192 bus weekly hours were budgeted for service, while 151,254 bus weekly hours were scheduled to operate. This represents a variance of 0.04 %.

Of the 151,254 bus weekly hours scheduled to operate, 153,711 weekly hours were actually delivered, representing a variance of 1.62%.

Analysis

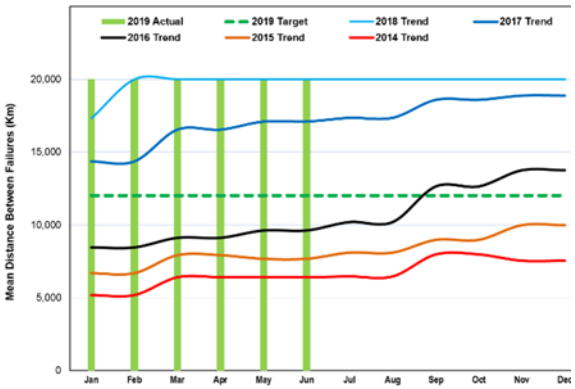
Actual service hours are matched with scheduled service hours.

Action plan

No action required at this time.

Note: *Current data is unavailable due a technical issue with our VISION system. We are working to fix this issue and will provide updated information in the September report.*

Bus: Mean distance between failures (MDBF)



Definition

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

Contact

Rich Wong
Chief Vehicles Officer

Results

The MDBF in June was 20,000 kilometres, exceeding the target of 12,000 kilometres.

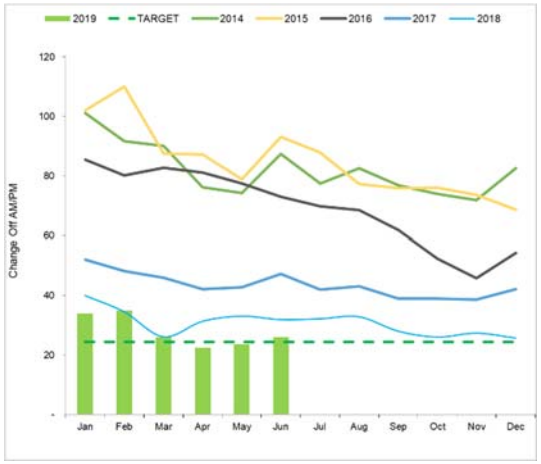
Analysis

MDBF for the bus fleet continues to remain high and above the target. New vehicles entering the fleet such as the 97 new Nova hybrids commissioned to date in 2019 and the 387 Diesel buses commissioned in 2018 contribute to this reliability. Despite this high reliability, we continue to deal with coolant leak failures.

Action Plan

Several alternate design options are being evaluated to alleviate the temperature and age dependent torque requirements on Nova bus coolant hose clamps. This failure mode is affecting all transit agencies in regions that have high seasonal temperature swings like Ontario. We have begun the enforcement of recently released Coolant System state of good repair (SOGR) packages. We will monitor compliance of repairs to the SOGR technical package.

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 bus RCCOs in June was 26 per day.

Analysis

Total average daily RCCOs this period was only two points higher than the record low for TTC buses. Bus change-offs are trending strongly in a favourable direction, well below the historic average.

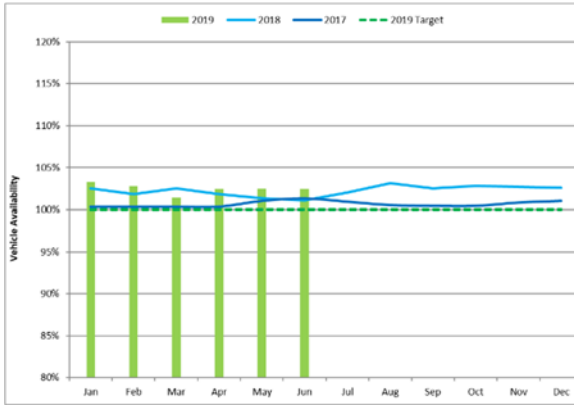
The majority of road calls were caused by the failure of the bus driver protection barrier on Nova-class buses.

Peak revenue service was 1641 buses per day, including Run-As-Directed buses in this period. The average number of RCCOs per day equates to 1.58% of service, slightly above the target of 1.5%.

Action Plan

We will proceed with continuous improvement initiatives and monitor and control accordingly. Body system State of Good Repair package, which includes new driver protection barriers will be released by October 2019.

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 provided for a.m. peak service in June, 2019 was 1,641 per day or 102.4% of planned service, well above the target of 1,603 buses.

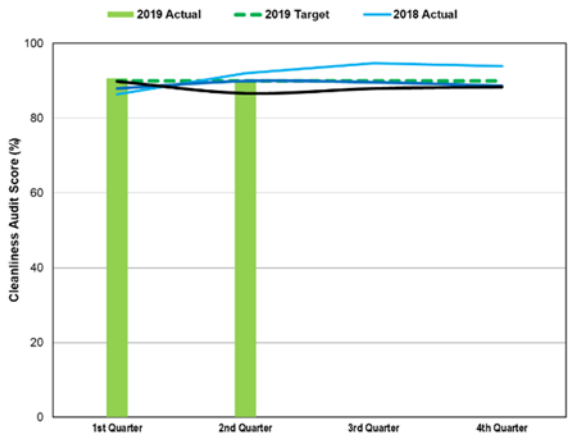
Analysis

The significant number of new bus procurements from years 2016 to 2018 (870 buses) has boosted the fleet performance and permitted a higher than projected spare ratio. The higher spare ratio supports additional buses available for service.

Action Plan

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

Bus: Cleanliness



Definition

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

Contact

Rich Wong,
Chief Vehicles Officer

Results

The bus cleanliness audit score in Q2 2019 was 89.7%, which is slightly below the target of 90%.

Analysis

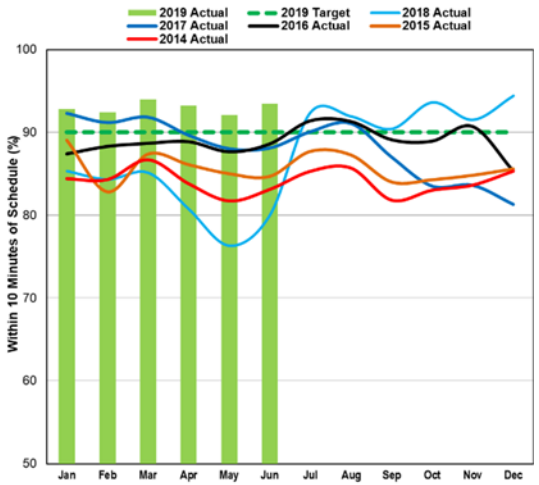
The performance score takes into account pre-service, in-service and post-service audit results. Q2 2019 had the worst end-of-service result this year, well below the yearly average. Pre-Service (contractor performance) was below target at Arrow Road, Mt. Dennis, and Queensway garages for exterior clean. Improvements to wash rack performance is required to boost exterior cleaning scores.

Action Plan

The cleaning contract administrator has been notified, and meetings have been scheduled with our vendor, TBM Service Group, to discuss the audit findings, and corrective actions.

Wheel-Trans Services

Wheel-Trans: On-time performance (OTP)



Definition

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

Contact

Kirsten Watson,
Deputy Chief Executive Officer – Operations

Results

Wheel-Trans OTP in June increased by 1.4% from the previous period to 93.5%, and is 13.5% above the same period in 2018.

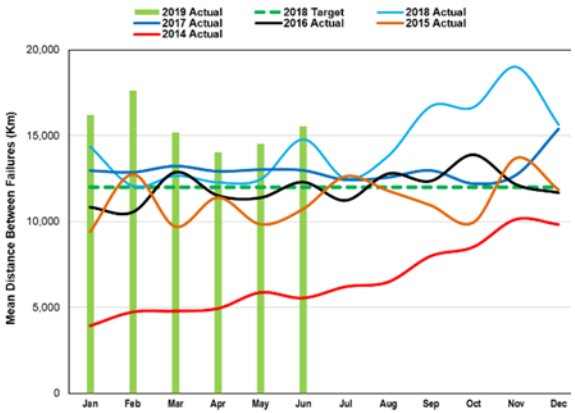
Analysis

The Integrated Communication System (ICS), which integrates all of the TTC's audio communication systems (radio, PA, telephone, paging) into one user interface, was implemented into Wheel-Trans Dispatch on May 6, 2019. The ICS tracks and compiles real-time data on incidents, as well as how the TTC responds to them. By improving the efficiency on how the TTC tracks real-time data, this technology has reduced service impact, thus improving OTP.

Action Plan

A full review of all operating procedures is underway to ensure all processes are current and up-to-date in order to establish consistent incident management and reduce delay minutes.

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 June MDBF of 15,563 kilometres exceeded the target of 12,000 kilometres, and is above the previous period average of 14,528 kilometres.

Analysis

The addition of the ProMaster bus continues to be the driving force behind an above target MDBF. We also continue to benefit from the various maintenance programs that have been implemented.

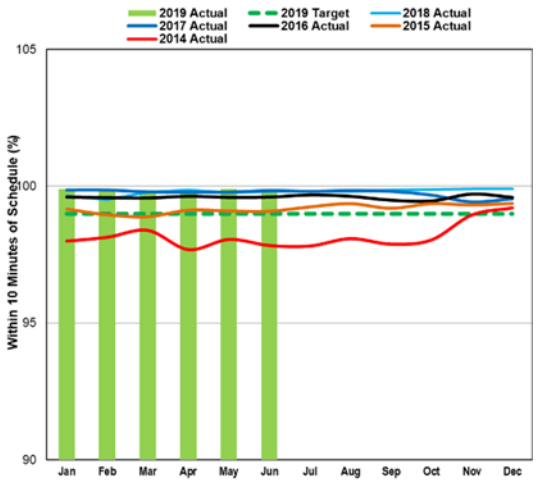
Mechanical driveline failures and diesel exhaust fumes detected by operators continue to account for the most road calls and change-offs for the Friendly bus fleet.

Action Plan

To help mitigate exhaust system issues on the Friendly bus fleet, we perform maintenance checks on all Friendly buses, following each major repair. Lakeshore garage maintenance manually engages the exhaust regeneration on property during servicing, to minimize the impact to our customers.

Wheel-Trans is currently taking delivery on the 2019 procurement of ProMasters. Seven vehicles were delivered to the garage in June, with another seven in July for a total of 18 ProMasters on property from the latest procurement. Problematic first generation Friendly buses are currently being removed from service.

Wheel-Trans: Accommodated service



Definition

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

Contact

Kirsten Watson,
Deputy Chief Executive Officer – Operations

Results

The accommodated rate in June was 99.9%. This is 0.9% above target, and consistent with the same period in last year.

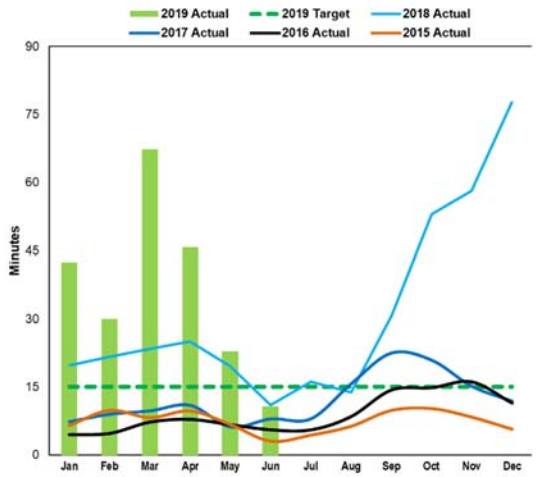
Analysis

Customer trip requests are being accommodated through more dynamic optimization processes in our scheduling and dispatching software, which allows more trips to be scheduled and ensures most trip requests are accommodated. Same day trip requests have decreased significantly when compared to the previous year, requiring fewer same day adjustments to accommodate requests. The diversion rate of our customers to other services has also contributed to this same day decrease.

Action Plan

We continue to develop efficiencies in our scheduling and dispatching software to ensure that all trips are accommodated, while providing an efficient ride-share program. As Family of Services trips continue to increase, same day requests will be monitored to ensure that these trips 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
Kirsten Watson,
Deputy Chief Executive Officer – Operations

Results

The average wait time in June was 10.7 minutes. This is 4.3 minutes below our target.

Analysis

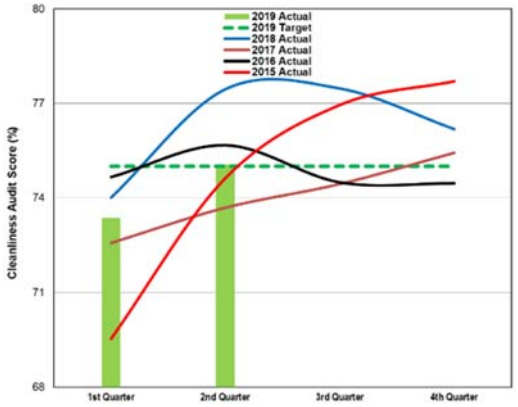
Average wait times are continuing on a downward trend and have hit their lowest point so far this year. This is due in large part to the addition of more resources and our ongoing recruitment efforts. We have also made some adjustments to when call backs can be requested, which has improved the overall functionality of our call back feature. To address some of the peak wait time issues that occur during the afternoon, additional shifts were added during that timeframe.

Action Plan

We will begin the process of recruiting temporary transitional workers to work in Reservations, which will provide additional support for the upcoming busy September period. This is when we historically see a spike in call volumes.

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 station cleanliness score was 75.06%, which is an increase of 1.69% from last quarter (73.38%), and meets our target of 75%.

Analysis

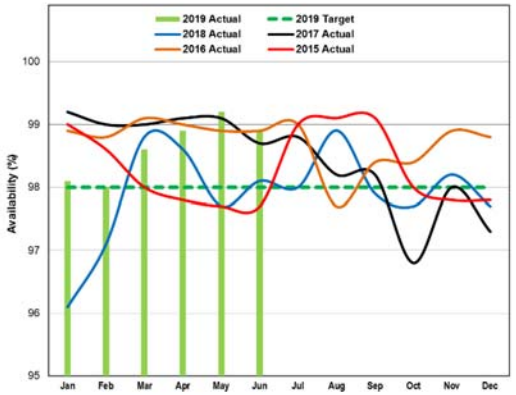
Q2 audits saw an overall increase from Q1 with 11 components receiving higher scores, while 10 other components remained consistent. Floors and escalators saw the biggest improvement, while stairs, platform edge markers, metals and waste/recycling units saw a slight up-tick.

The bottom three scoring stations in Q1 were Main 64.10%, Woodbine 63.46% and Runnymede 63.25%, all saw increases. The lowest scoring station in Q2 was Dundas West at 65.01%.

Action Plan

Summer students and seasonal projects will help improve cleanliness activities across the system.

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 was above the target of 98% for June. Performance decreased to 98.9% compared to last month (99.2%).

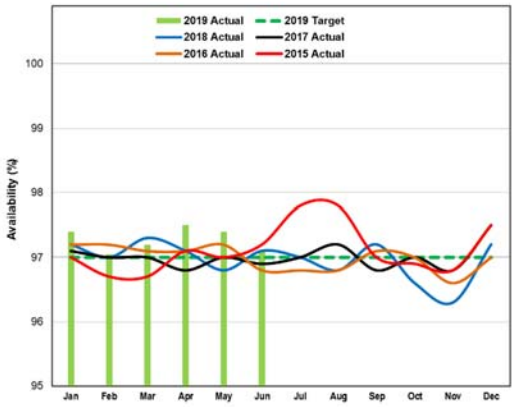
Analysis

Elevator maintenance was completed as planned and scheduled.

Action Plan

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

Escalator availability



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 was above the target of 97% in June. Performance decreased to 97.1% compared to 97.4% in May.

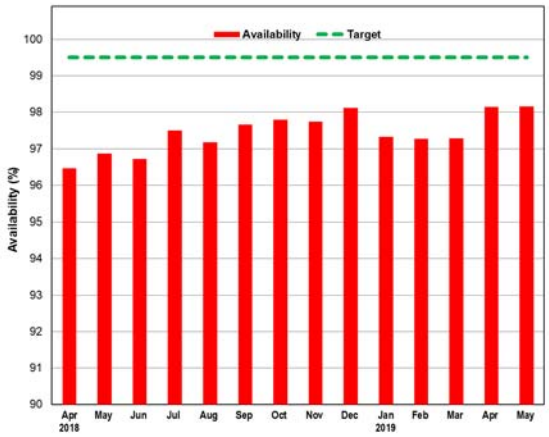
Analysis

Escalator maintenance was completed as planned and scheduled.

Action Plan

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

Fare gates equipped with PRESTO



Definition

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

Contact

James Ross,
Chief Operating Officer

Results

Fare gate availability averaged 98.16% in May, which represents a slight increase from last month and an increase of 1.3% over the same time last year. Availability was below the 99.5% target.

Analysis

Improved fare gate availability reflects the ongoing efforts by both the TTC and Scheidt & Bachmann (S&B) to address hardware and software issues. With the current modification programs in place, we expect performance to continue to improve throughout 2019.

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. S&B has a second generation industrial computer with a new Solid State Drive (SSD). This new computer with this drive will provide a number of improvements including: extending the hard drive capacity, improve and protect the hard drive sectors, increase the hard drive speed (faster read / write – start-up time will be improved), extending the data logging, and help address USB disconnect issue we are currently having with the fare gates, this program is ongoing and will require both hardware and software testing to be implemented;

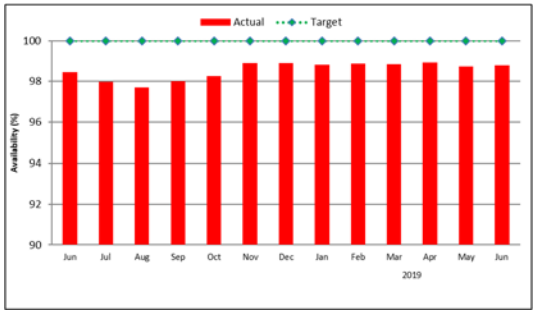
● New software deployments. The next software update will: improve passage detection leading to a more reliable interface for the customers, provide an upgrade to the motor control interface improving reliability of the motors, and resolve one of the major issues we experience with the card reader. This upgrade will be available for deployment in Q3;

● With the ongoing issues with the current fare gate motors, S&B development teams completed an in-depth field review. The team is currently reviewing the information obtained and developing

recommendations for next steps. The report is expected to be completed shortly. Once their recommendations are reviewed, an action plan will be developed.

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 updates scheduled, which will add functionality and provide further fixes to know problems, improving the gate availability to the customers.

PRESTO fare 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

Kirsten Watson,
Deputy Chief Executive Officer – Operations

Results

PRESTO card reader availability averaged 98.78% in June, which represents an increase of 0.05% from last month. This is below the target of 99.99%*.

Analysis

The improvement in card reader availability is due to a reduction in the number of devices with memory card issues.

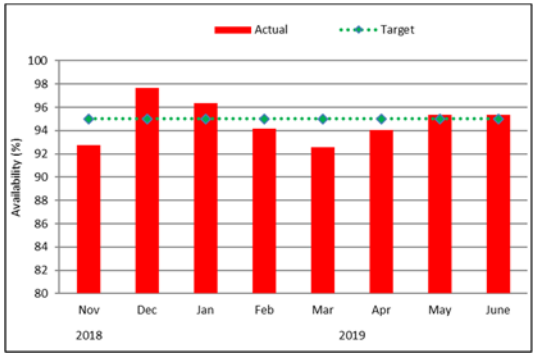
Action Plan

Availability data from Metrolinx may be subject to inaccuracies, as noted in the July 2019 report.

TTC staff continue to conduct in-field observations and validation of card reader availability. Our initial assessment indicates there is some variance in the availability data provided by Metrolinx, attributed to card readers going in and out of service or being non-responsive while appearing to be operational.

** The target level has been adjusted from 99.9% to 99.99% as specified in the TTC/Metrolinx Agreement.*

PRESTO Fare Vending Machine (FVM)



Definition

The average percentage of daily availability of PRESTO FVMs based on duration of incidents from open to resolution.

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

Kirsten Watson,
Deputy Chief Executive Officer – Operations

Results

PRESTO FVM availability averaged 96.36% in June, which represents a decrease of 0.01% from last month. This is above the target of 95.00%*.

Analysis

The minor decrease in FVM availability is partially attributed to delays in cash collection activities.

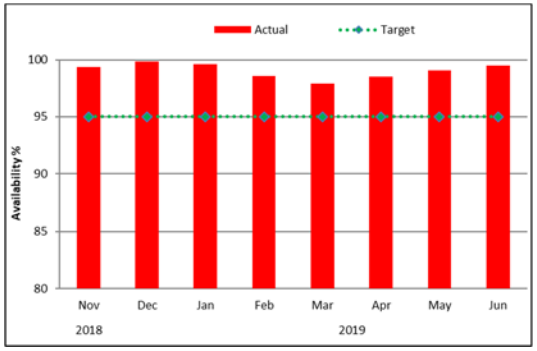
Action Plan

Availability data from Metrolinx may be subject to inaccuracies, as noted in the July 2019 report.

TTC staff continue to conduct in-field observations and validation of FVM availability. Our initial assessment indicates there is some variance in the availability data provided by Metrolinx, attributed to instances where some equipment repairs are not being reported and captured consistently.

** The target level has been adjusted from 99.9% to 95.00% as specified in the TTC/Metrolinx Agreement.*

PRESTO Self-Serve Reload Machine (SSRM)



Definition

The average percentage of daily PRESTO SSRM availability based on duration of incidents from open to 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

Kirsten Watson,
Deputy Chief Executive Officer – Operations

Results

PRESTO SSRM availability averaged 99.46% in June, which represents an increase of 0.42% from May. This is above the target of 95.00%*.

Analysis

The increase in SSRM availability is a result of improved monitoring and the dispatch/scheduling of work crews, which has resulted in reduced response time for repair.

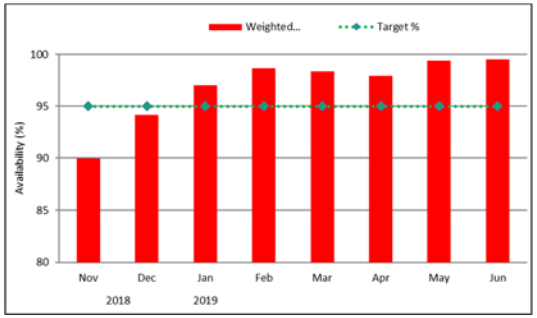
Action Plan

Availability data from Metrolinx may be subject to inaccuracies, as noted in the July 2019 report.

TTC staff continue to conduct in-field observations and validation of SSRM availability. Our initial assessment indicates there is some variance in the availability data provided by Metrolinx, attributed to instances where some equipment repairs are not being reported and captured consistently.

** The target level has been adjusted from 99.9% to 95.00% as specified in the TTC/Metrolinx Agreement.*

PRESTO Fares and Transfer Machine (FTM)



Definition

The weighted percentage of all FTMs onboard and off board that are in working order and available for customer use.

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

Kirsten Watson,
Deputy Chief Executive Officer – Operations

Results

PRESTO FTM availability averaged 99.54% in June, which represents an increase of 0.11% from last month. This is above the target of 95.00%*.

Analysis

The increase in FTM availability is due to a reduction in the number of printer paper related incidents.

Action Plan

Availability data from Metrolinx may be subject to inaccuracies, as noted in the July 2019 report.

TTC staff continue to conduct in-field observations and validation of FTM availability. The initial assessment indicates there is some variance in the availability data provided by Metrolinx, attributed to instances where some equipment repairs are not being reported and captured consistently.

** The target level has been adjusted from 99.9% to 95.00% as specified in the TTC/Metrolinx Agreement.*

For further information on TTC performance, projects and services, please visit ttc.ca