

Chief Executive Officer's Report – June 2019 Update

Date: June 12, 2019 To: TTC Board

From: Chief Executive Officer

Summary

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

Financial Summary

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

Equity/Accessibility Matters

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

Decision History

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

Issue Background

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

Contact

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Signature

Richard J. Leary Chief Executive Officer

Attachments

Attachment 1 – Chief Executive Officer's Report – June 2019

Toronto Transit Commission CEO's Report



June 2019

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Performance scorecard

TTC performance scorecard – June 2019

y performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
fety and security							
Lost-time injuries	Injuries per 100 employees	Q1 2019	5.47	4.97*	8	8	12
Customer injury incidents	Injury incidents per 1M boardings	Q1 2019	1.0	1.06*		Ø	14
Offences against customers	Offences per 1M boardings	Q1 2019	0.70	1.00	Ø	Ø	15
Offences against staff	Offences per 100 employees	Q1 2019	4.22	4.07	8	•	16
Fitness for duty	Cumulative total of random drug and alcohol test results	Q1 2019	NA	NA			17
dership							
Ridership	Monthly ridership	Apr 2019	39.4M	39.9M	•	8	18
Ridership	Year-to-date ridership	2019 YTD (to Apr)	176.6M	180.2M	•	NA	18
Ongoing trend indicators:	ourable	*	Represents for	ur-quarter ave	erage of actua	l results	

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
PRESTO ridership	Monthly ridership	Apr 2019	31.9M	31.9M	0		20
PRESTO ridership	Year-to-date ridership	2019 YTD (to Apr)	140.8M	140.7M	•	NA	20
Wheel-Trans ridership	Monthly ridership	Apr 2019	323K	323K	0	Ø	21
Wheel-Trans ridership	Year-to-date ridership	2019 YTD (to Apr)	1,360K	1,406	•	NA	21
Customer experience							
Customer satisfaction	Customer satisfaction score	Q1 2019	78%	80%	8	Ø	22
Subway services							
1 On-time performance Line 1	Scheduled headway performance at end terminals	Apr 2019	91.9%	90%	②	•	23
On-time performance Line 2	Scheduled headway performance at end terminals	Apr 2019	92.6%	90%	②	•	24
On-time performance Line 3	Scheduled headway performance at end terminals	Apr 2019	96.0%	90%	②	•	25

Ongoing trend indicators: Favourable Mixed Unfavourable







^{*}Represents four-quarter average of actual results

Key perf	formance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
4	On-time performance Line 4	Scheduled headway performance at end terminals	Apr 2019	99.2%	90%	•		26
1	Capacity Line 1	Trains per hour during peak	Apr 2019	96.2%	96%	②	\bigcirc	27
1	Capacity Bloor Station	Trains per hour – 8am to 9am	Apr 2019	100%	96%	⊘	NA	27
1	Capacity St George Station	Trains per hour – 8am to 9am	Apr 2019	100%	96%	⊘	NA	27
2	Capacity Line 2	Trains per hour during peak	Apr 2019	95.2%	96%	8	8	28
3	Capacity Line 3	Trains per hour during peak	Apr 2019	98.2%	98%	②	•	29
4	Capacity Line 4	Trains per hour during peak	Apr 2019	100%	98%	②	Ø	30
Am	nount of service	Average weekly service hours delivered	Mar 2019	11.1K	11.1K	②	Ø	31
	hicle reliability trains	Mean distance between failures	Apr 2019	578,794 km	300,000 km	②	Ø	32
	hicle reliability trains	Mean distance between failures	Apr 2019	292,285 km	600,000 km	8	Ø	33

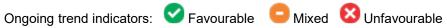






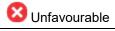
*Represents four-quarter average of actual results

Key p	erformance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
;	Service availability	Daily average service delivered	Apr 2019	100%	100%	Ø	Ø	35
,	Subway cleanliness	Audit score	Q1 2019	91.1%	90%	⊘	Ø	36
	Streetcar services							
(On-time performance	On-time departures from end terminals	Apr 2019	55.1%	90%	8	•	37
;	Short turns	Monthly total short turns	Apr 2019	632	1,074	②	②	38
,	Amount of service	Average weekly service hours	Mar 2019	18.6K	18.3K	②	②	39
	Vehicle reliability LFLRV (Low-Floor Light Rail Vehicle)	Mean distance between failures	Apr 2019	12,320 km	35,000 km	8	②	40
	Vehicle reliability CLRV (Canadian Light Rail Vehicle)	Mean distance between failures	Apr 2019	4681 km	6,000 km	8	•	41
	Road calls and change offs	Average daily road calls or vehicle change offs	Apr 2019	7	2.4	8	Ø	42
,	Service availability	Daily number of vehicles available for service	Apr 2019	100%	100%	②	②	43









^{*}Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
Streetcar cleanliness	Audit score	Q1 2019	86.0%	90%	8	②	44
Bus services							
On-time performance	On-time departures from end terminals	Apr 2019	76.30%	90%	8	8	45
Short turns	Monthly total short turns	Apr 2019	1,644	2,897	②		46
Amount of service	Average weekly service hours	Mar 2019	154K	151K	②	•	47
Vehicle reliability	Mean distance between failures	Apr 2019	20,000 km	12,000 km	⊘	②	48
Road calls and change offs	Average daily road calls or vehicle change offs	Apr 2019	23	24	②	Ø	49
Service availability	Daily average service delivered	Apr 2019	102.4%	100%	②	Ø	50
Bus cleanliness	Audit score	Q1 2019	90.7%	90%		②	51

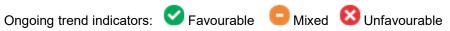


Wheel-Trans services

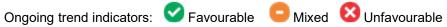






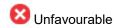


Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
On-time performance	% within 20 minutes of schedule	Apr 2019	93.2%	90%	⊘	Ø	52
Vehicle reliability	Mean distance between failures	Apr 2019	14,051 km	12,000 km	⊘	Ø	53
Accommodation rate	Percentage of requested trips completed	Apr 2019	99.9%	99%	Ø	Ø	54
Station services							
Station cleanliness	Audit score	Q1 2019	73.4%	75%	8	Ø	55
Elevator availability	Percent available	Apr 2019	98.9%	98%	⊘	Ø	56
Escalator availability	Percent available	Apr 2019	97.5%	97%	Ø	Ø	57
Fare gates equipped with PRESTO	Percent available	Mar 2019	97.29%	99.5%	8	•	58
PRESTO Fare Card Reader	Percent available	Apr 2019	98.93%	99.9%	8	②	59
PRESTO Fare Vending Machine	Percent available	Apr 2019	94.02%	99.9%	8	NA	60









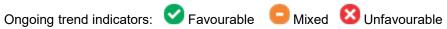
^{*}Represents four-quarter average of actual results

Key performance indicator	Description	Latest measure	Current	Target	Current status	Ongoing trend	Page
PRESTO Self-serve Reload Machine	Percent available	Apr 2019	98.54%	99.9%	8	NA	61
PRESTO Fares and Transfer Machines	Percent available	Apr 2019	97.95%	99.9%	8	NA	62









CEO's commentary

APTA, the American Public Transit Association, is coming to Toronto in June. As the third largest transit organization in North America – behind only Mexico City and New York City – the TTC has a leadership role in the industry. As such, we are very excited to be hosting APTA's 2019 International Rail Conference and its 27th International Rail Rodeo from June 20 to 26.

There will be an incredible array of skill and expertise from North America and Japan represented at both the rodeo competition and conference. It will be a tremendous privilege to welcome our industry's finest operations and maintenance people to the TTC and Toronto. The Rail Rodeo is an international skills competition for operators and maintenance workers. It will take place at Leslie Barns carhouse, our state-of-the-art streetcar facility.

The TTC will be represented at the rodeo by a very talented team and I would like to extend the best of luck

to our competitors. Our operating team is comprised of Streetcar Transportation's John Nikas and Jennine Sudeyko and Subway Transportation's Rajan Gaind. Our maintenance team is Kin Shing Lui from Streetcar Maintenance and Peter Lawryshyn and Daniel Oppong, both from Rail Cars and Shops.

During the conference, TTC staff will present on a variety of issues ranging from system accessibility to diversity and human rights to transit planning and construction. Visiting delegates will have an opportunity to visit and inspect our Transit Control Centre and multi-modal Wilson Complex as well as take self-guided tours of the Line 1 extension to Vaughan.

APTA represents the major leagues of the transit industry. And staying in the majors means a constant effort is required to provide the very best service to our customers.

One of the top priorities at the TTC is to deliver the service we advertise. Our state of good repair program is key to improving the resiliency of our aging assets, which in turn, helps to deliver the service that our riders demand and deserve.

Working to improve daily service at the TTC means constantly juggling the old and the new in terms of our equipment. Our subway system is often described as the first post-war subway built in North America. So maintaining that infrastructure in tiptop shape is critical to providing a safe and reliable service not only for the present, but also for the future. Subway assets – signals, track, cables, trains – must be continuously maintained and replaced before reaching end-of-life cycles.

Our Infrastructure and Engineering Group, under the leadership of Fort Monaco, has an extensive program underway to modernize subway infrastructure and enhance the training and work methods of our employees with the ultimate goal of providing a faster, stronger and safer system. Here are some of the initiatives underway:

- Our Signals crews have begun an in-house quality assurance audit of all equipment, starting with the Bloor-to-Eglinton corridor. The work focuses on our open-cuts and areas where our data indicates we are most susceptible to failures. Major deficiencies found are corrected quickly, and in turn, the corrective actions are used to enhance training of our apprentices, technicians and forepersons.
- Our Electrical crews have started an extensive subway station breaker maintenance program across the entire subway network, based on priority order (age of assets, amount of use and last maintenance cycle).
- The state of good repair program in our Signals area has crews replacing power cables between Kennedy and Warden stations on Line 2. The plan

- includes replacing wayside equipment and installing new cabling to further extend the life of the line. We are scheduled to start a similar scope of work at Keele later this year.
- While we review and update existing signal maintenance work methods within our engineering and maintenance groups, the Subway Infrastructure Department is actively pursuing a contract with Network Rail Consultants to work with our technicians and engineers to increase our overall skillset in the field and in the office. We expect the consultants will be on property by Q3 2019.

As discussed in the Capital Investment Plan before the Board on January 24, 2019, our aging infrastructure continues to be a challenge. Recent discoveries of deteriorated traction power cables at Greenwood Yard and in the subway stretching along the Prince Edward Viaduct will require immediate repair and long-term replacement planning. Discoveries such as these force us to re-

evaluate project plans, and reschedule current and future work and the materials required. Further updates will be provided.

Project priorities and asset maintenance cycles will be constantly reviewed through new and targeted KPIs that report on asset performance. TTC staff will be supported with the assistance of specialized consultants, and working with our Operations Training Centre, we will further enhance skills development, update engineering standards and modernize our work methods and practices.

The results of the Q1 2019 Customer Satisfaction Survey are in, and I'm happy to report that 78% of customers reported high levels of satisfaction with TTC services. This is consistent with the previous quarter (80%) and the same time last year (79%).

This year we are working to modernize the Customer Satisfaction Survey, along with our broader customer research program, to better serve the TTC and ultimately our customers. We will be running workshops across the organization and checking in with TTC's Customer Liaison Panel to identify ways we might improve the survey and discuss new customer engagement opportunities.

Summer arrives on June 21 and with it some seasonal service increases to high-traffic destinations around Toronto. Starting on June 23, the TTC will add service at various times through the week on the 509 Harbourfront route to accommodate all of the fantastic summer activities by the waterfront. We will also increase service on all days of the week on the 900 Airport Express to support higher levels of travel to and from Toronto Pearson International Airport.

If you are taking the 35 Jane bus lately, you may find yourself riding our first battery-electric bus. On Monday, June 3, Chair Robinson and Mayor Tory joined

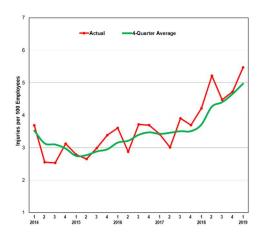
representatives from the federal government to launch bus #3700 into revenue service and began evaluating its performance. A total of 60 eBuses will hit the road in the coming months on different routes across the city.

Bus #3700 is the first batteryelectric bus that the TTC has purchased as part of our Green Procurement Plan and ultimate goal towards a zero-emissions bus fleet by 2040. The Government of Canada and the City of Toronto are investing \$140 million in these vehicles thanks to the federal Public Transit Infrastructure Fund.

Richard J. Leary Chief Executive Officer June 2019

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

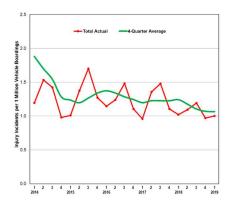
Last year we rolled out a slip, trip and fall prevention campaign for employees and customers. Messaging about slips, trips and falls safety was provided to employees through various communications channels, such as TTC-TV and posters on safety boards. Ongoing initiatives aimed at reducing such injuries include regular mopping of stairways, installations of intermediate handrails and changes to station design to ensure entrances are closed to the elements.

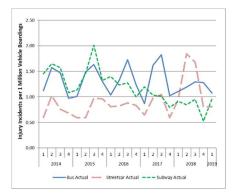
Musculoskeletal/ergonomic type injuries (e.g. overexertion, reach/bend/twist, repetition) account for 23% of all lost-time injuries and continue to represent the highest injury event type since 2014. The Ergonomic Musculoskeletal Disorder Prevention Program, currently being implemented, focuses on preventing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

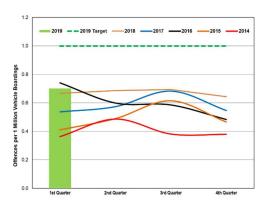
1) Frequent Rules Compliance audits to ensure proper door closing procedures are followed to

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

Results

The total number of offences against customers increased in Q1 to 0.70 per one million vehicle boardings. The current rate is 9% higher than the previous quarter (0.64) and 4% higher than the same time last year (0.67).

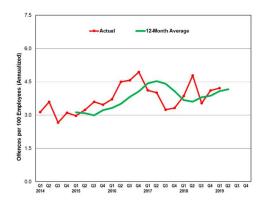
Analysis

Although the number of *Assaults* remained consistent with last quarter, there was an increase in the number *Sexual assaults* and *Thefts*.

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.

Offences against staff



Definition

Number of offences per 100 employees.

Contact

Kirsten Watson Deputy Chief Executive Officer

Results

The total number of offences against staff increased in Q1 to 4.22 per 100 employees. The current rate is 2.7% higher than last quarter (4.11) and 9% higher than the same time last year (3.86).

Analysis

Q1 had an increase in Assaults and Threats compared to the previous quarter. Other offences, including Mischief, Harassment, Indecent exposure, Sexual assault and Robbery, decreased this quarter.

Action plan

Transit Enforcement Special
Constables will 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.

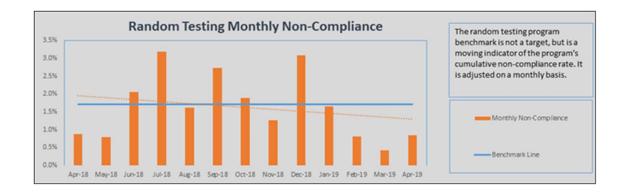
Fitness for duty

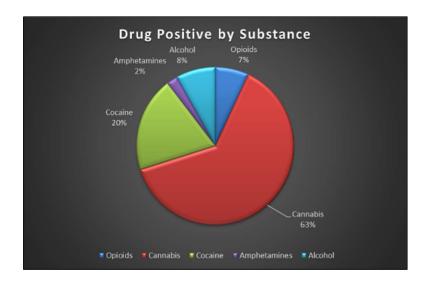
The data shows the number of random tests conducted on designated TTC employees (safety sensitive, specified management, and designated executive) each month. The data is provided by DriverCheck Inc., the TTC's third-party provider.

The chart showing "Drug Positive by Substance" is updated on a quarterly basis. The information is up to March 31,2019. The next update will be in the August 2019 CEO's Report. Some results are returned as positive for more than one substance.

Contact

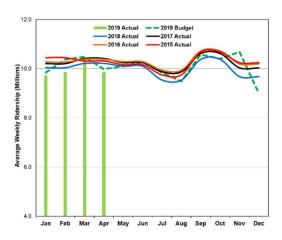
Megan MacRae, Executive Director of Human Resources





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

Dan Wright, Chief Financial Officer

Results

Period 4 (April 7 to May 4, 2019) revenue ridership was 39.4 million or 9.9 million passengers per week. This was approximately 0.5 million (1.2%) below the budget of 39.9 million rides and 0.8 million (1.9%) below the same period in 2018.

Year-to-date ridership at the end of period 4 was 176.6 million, 3.6 million (2.0%) below budget and 2.8 million (1.5%) below the comparable period in 2018.

Analysis

Ridership during the first two periods of 2019 appears to have been affected by two factors compared to early 2018: severe weather 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.

Ridership remained relatively flat compared to last year for period 3. A decrease was experienced for period 4 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 for period 4. This was 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, about 80,000 or 28% 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.

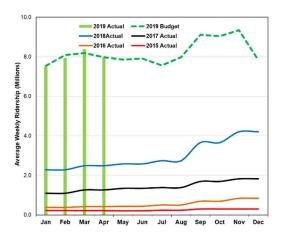
Compared to previous years, more frequent weekend subway closures have adversely impacted weekend ridership and the TTC may have also experienced an increase in fare evasion during the PRESTO implementation period.

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.

With the discontinuation of the monthly Metropass in December 2018, we have increased the monitoring of fare payment with PRESTO or otherwise via proof-of-payment and implement additional controls to prevent fare evasion.

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

Dan Wright, Chief Financial Officer

Results

Period 4 (April 7 to May 4, 2019) PRESTO ridership was 31.9 million or 8.0 million passengers per week. This was approximately 0.06 million (0.2%) below the budget, but 21.7 million (213%) higher than April 2018 ridership of 10.2 million.

Year-to-date ridership at the end of period 4 was 140.8 million, 0.1 million (less than 0.1%) above budget and up 98.3 million (231%) 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. 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 more than 220,000 unique PRESTO cards using the system in the first four months of 2019,

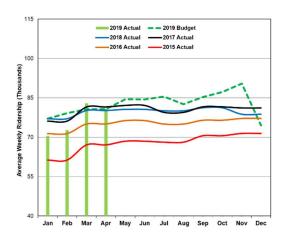
resulting in an increase in PRESTO adoption from 45.5% in December 2018 to 80.8% in April 2019.

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. Regardless, PRESTO adoption has increased substantially 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 fare options are made available, and marketing and communications activities encourage further PRESTO adoption. The PRESTO adoption rate is expected to slowly increase, reaching 95% once legacy fare media are no longer accepted

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

Dan Wright, Chief Financial Officer

Results

Ridership in period 4 (April 7 to May 4, 2019) was 323,185 or 80,796 passengers per week. This figure was 0.1% higher than the budgeted 80,737 customers per week. In terms of year-over-year growth, April ridership was 0.6% higher compared to the same period in 2018.

Analysis

Year-to-date Wheel-Trans ridership is similar to 2018 levels and has experienced positive growth for the last two periods versus the same time last year. The ability for customers to reach the contact centre by phone is currently being addressed through the hiring of additional staff. The contact centre is expected to have all staff hired by the end of June. This will allow Wheel-Trans to respond more readily to customer trip requests and will have a positive impact on future ridership levels

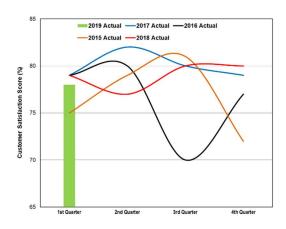
Action plan

A full ridership analysis is being completed and the forecast will be adjusted, if required, in period 5. The cancellation rate continues to be higher than anticipated, which results in a reduced number of passengers carried when compared to scheduled trip requests.

Scheduling and dispatching software upgrades continue to be implemented with additional customer-facing and service efficiencies being incorporated, including tools that will help us analyze cancelled trips.

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 Q1 2019, which is consistent with last quarter (80%) and the same time last year (79%).

Analysis

Overall satisfaction for streetcar customers fell to 73%, down significantly from the same time last year (82%). Levels of satisfaction for these customers on key drivers, such as trip duration and wait time, match this trend.

The perceived helpfulness of staff on Line 2 jumped to 91%, up significantly compared to the same time last year (81%).

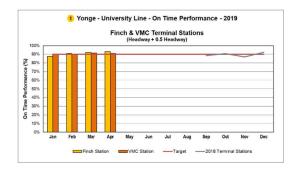
Action plan

Frontline staff continue to play an increasingly important role in shaping customer perceptions of overall satisfaction. Last year, helpfulness of

staff/operators became one of our most influential drivers of satisfaction, alongside the perennial top drivers: trip duration and wait time (overall reliability), comfort of ride, and level of crowding inside vehicle. This shift coincided with rollout of the Customer Service Agent role and the overall increased presence of staff in our system.

Subway services

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



Definition

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

Contact

James Ross, Chief Operating Officer

Results

In April, performance increased from 92.0% to 93.1% at Finch and decreased from 91.4% to 90.9% at Vaughan. The average OTP on Line 1 was 91.9%, meeting the target of 90%.

Analysis

Despite an increase of 11.7% in total delay incidents and an increase of 10.6% in total delay minutes over March results, we were able to meet the target and improve slightly on March's results.

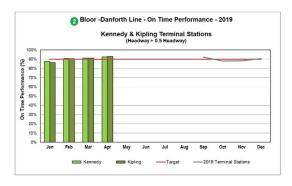
Supervisory staff continue to focus on prompt end terminal departures to provide a more reliable service on the line.

Automatic Train Control was extended from Dupont Station to St Patrick Station on May 12, and we expect to see further benefits with this and each subsequent phase.

Action plan

Additional management coverage is being added to terminals to quickly address any delayed departures, especially in the p.m. peak and early evening time periods, when slowdowns are typically observed.

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

In April, performance increased from 91.2% to 92.3% at Kennedy and from 91.1% to 92.9% at Kipling. The average OTP on Line 2 was 92.6%, meeting the target of 90%.

Analysis

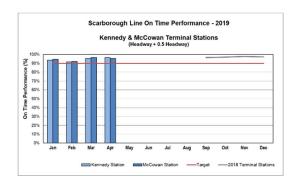
This measure remained fairly stable, but did improve slightly at both terminals, due in part to an 8.9% reduction in total delay minutes.

Looking ahead to the warmer weather, staff have completed their seasonal maintenance program to ensure the HVAC systems on our T1 fleet are ready for summer and we avoid any possible delays due to 'hot cars'.

Action plan

We continue to focus on end terminal departures, and will be evaluating the use of Run-As-Directed trains on this line to mitigate the impact of delays when they occur.

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



Definition

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

Contact

James Ross, Chief Operating Officer

Results

In April, performance on Line 3 increased to 96.5% from 95.5% at Kennedy and decreased to 95.4% from 96.7% at McCowan. The average OTP on the line was 96.0%, meeting the target of 90%.

Analysis

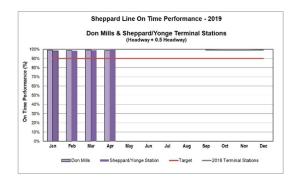
The line recorded 27.9% fewer delay incidents and 64.7% fewer delay minutes compared to March.

The biggest improvement was in the decrease in delay minutes attributed to reports of fire or smoke at track level or on a platform, a reduction of 157 minutes from March's results.

Action plan

By redeploying existing resources, peak period supervision is being added to the line to help address issues from the terminal and along the line, and clear delays quickly and safely.

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

Results in April continued to be strong on Line 4, with average OTP across the line at 99.2%. The 90% target was met.

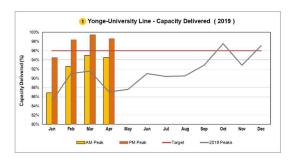
Analysis

With relatively low delay incidents, a consistent service throughout the day, and a shorter distance per round trip, this line continually performs well on all performance indicators.

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

While results for this measure were down slightly from March, average peak capacity delivered was at 96.2% in April and met the target of 96%. Year-over-year there is significant improvement from the 87.1% achieved in April 2018.

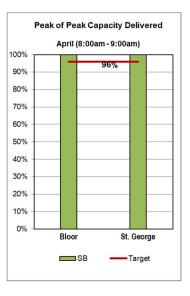
Analysis

April 16 was the lowest performing morning with 18.6 trains per hour due to an axle counter issue that caused problems with the runouts from Wilson Yard. Trains were also delayed at Union Station with several workcars still on the line as service was starting up.

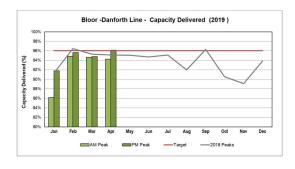
We continue to see the benefits of Automatic Train Control (ATC) across the entire line, even though only 50% of the line is now operating on our upgraded signal system. ATC was extended from Dupont Station to St Patrick Station on May 12, and we expect to see further benefits with this and each subsequent phase.

Action plan

The benefits of our ATC system are continuing to be seen all along the line, not only in the ATC territory. The Run-As-Directed trains that were added in 2018 provide relief along the line when delays do occur.



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

The p.m. peak increased to 96.1% and achieved target for the first time since September 2018. Combined peak results were 95.2% and failed to meet our target of 96%.

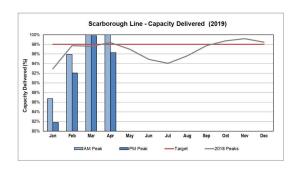
Analysis

There were 3% fewer delay incidents and 8.9% fewer delay minutes compared to March. Passenger-related delay minutes improved by 10.5%, reported smoke or fire at track level or on a platform incidents improved by 78.9%, and delays attributed to rolling stock improved by 20.4%.

Action plan

The addition of a Run-As-Directed (RAD) train in the p.m. peak period provided positive results. We are adding this RAD to future p.m. peak schedules and will be evaluating its use for the a.m. peak.

Line 3: Capacity



Definition

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

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

Contact

James Ross, Chief Operating Officer

Results

The a.m. peak performance remained at 100%, but the p.m. peak dropped to 96.3%. The combined peak result was 98.2% and met our target of 96%.

Analysis

The p.m. peak results were impacted by two particularly poor days:

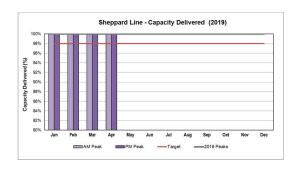
- On April 12 we recorded 8.6 trains per hour due to equipment availability, and a second train being removed from service for door issues.
- On April 24 we recorded 9.3 trains per hour due to another equipment issue.

Action plan

With the life-extension overhaul program for Line 3 rolling stock ongoing, we have diminished resiliency when we have equipment delays as one train (of the seven trains in the fleet) is unavailable due to overhaul

Looking ahead to May, by redeploying existing resources, peak period supervision is being added to the line to help address any issues that may arise and clear delays quickly and safely.

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 continues to exceed the capacity target and remains at 100%.

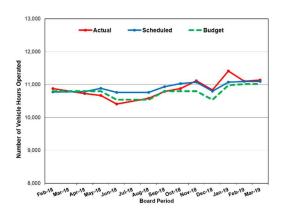
Analysis

Delay incidents and minutes remained stable when compared to March.

Action plan

Line 4 continues to run as scheduled and consistently delivers at or near 100% capacity. No further action required at this time.

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 March 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, 11,101 weekly hours were actually delivered, which represents a variance of 0.07%.

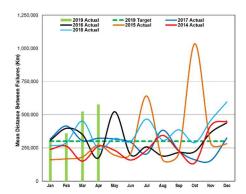
Analysis

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 Vehicle Officer

Results

The MDBF in April was 578,794 kilometres, exceeding the target of 300,000 kilometres.

Analysis

In April, there were five delay incidents greater than or equal to five minutes. The top offending system was the passenger door system with two delay incidents greater than or equal to five minutes. This was followed by the brake, propulsion invertor and speed control systems, each with one delay incident.

Action plan

The two passenger doors systemrelated failures were a result of two out of adjustment door pocket guides. The defective door pocket guides were all readjusted and tightened to specifications and doors were tested with no further issues.

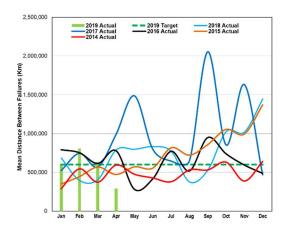
The brake-related incident was due to damaged wire in the Friction Brake Electronic Control Unit (FBECU). The damaged wire on the FBECU

has been repaired and tested positively.

The propulsion invertor-related incident was due to a defective Propulsion Electronic Control Unit (PECU). The defective PECU has since been replaced and train tested to be working.

The speed control-related incident was a result of a defective accelerometer. The accelerometer has been replaced, and the speed control unit and train has been tested to be fully operational.

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 Vehicle Officer

Results

The MDBF in April was 292,285 kilometres, which is a significant decrease in reliability from the previous month and short of the 600,000 kilometres target.

Analysis

The significant decline in vehicle reliability is uncharacteristic of both the TR fleet and the maintenance facility (Wilson Carhouse) to which the fleet is assigned.

In April there were 14 delay incidents that contributed to the decreased MDBF. The top offending system was the passenger door system with eight delay incidents. This was followed by the Automatic Train Control system with two delay incidents greater than or equal to five minutes. The brake, body, trainline and cab door systems each had one delay incident greater than or equal to five minutes.

Due to the number of door-related incidents, a thorough investigation has been initiated to determine the root causes.

Action plan

The eight passenger door-related incidents were due to three defective Door Electronic Control Units (DECU), two door sets with door nosing-related issues, a delaminated door roller, a loose door motor coupling and an offline Door Control Unit (DCU). Two of the defective DECU's were replaced, while the third DECU was reset. All affected door sets were tested with positive results after the repairs.

The root cause of the DECU failures is still unknown as this is an intermittent electronic fault. We continue to work with Bombardier to investigate this issue.

The two door nosing-related incidents were freed and subject doors were cycled multiple times with no further issues. The suspected root cause of the door nosing is material-related. New rubber door nosings sometimes stick together upon initial use. We will investigate the use of non-stick coating.

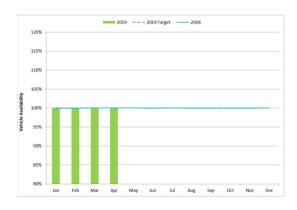
The delaminated door rollers were replaced with new rollers, and doors

cycled multiple times with positive results. The current replacement cycle for the door rollers is 12 years. Analysis of historical data indicates the life cycle and the material used for this component may be incorrect. We are evaluating the proper interval for door roller replacement and prototyping a new roller design.

In the interim, maintenance crews have been instructed to increase the frequency of inspections on this component. The loose door motor coupling was retightened with sealant applied, while the DCU was reset. Both door sets were tested multiple times with no further issues present.

The two Automatic Train Controlrelated incidents were a result of a loose connection at the circuit breaker, and a defective Power Processing Unit (PPU) and Gateway. The loose connection on the circuit breaker was tightened while the PPU and the Gateway were replaced. Both trains have since been tested and operating during revenue service with positive results.

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 Vehicle Officer

Results

The vehicle availability for April was 100%.

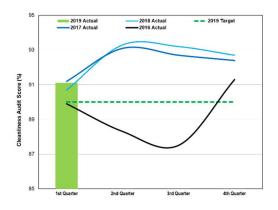
Analysis

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 to deliver safe, reliable and clean vehicles to service on all 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 Vehicle Officer

Results

The average rating of 91.1% in Q1 2019 is above the target of 90.0%. We have recorded a score of greater than 90% since Q4 2016.

Analysis

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

Major factors affecting the quarteron-quarter overall cleanliness scores in Q1 2019 were the exterior, floors and windows. These scores were lower than previous quarters due to colder inclement weather conditions where exterior washes are limited. In addition to the inclement weather, there was increased use of salt and sand on the ground. The floors are addressed every 14 days during the floor wash cycle.

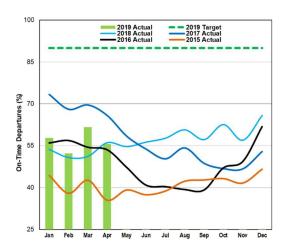
Action plan

Exterior vehicle washes were limited due to weather conditions in Q1

2019. Focused exterior programs will be picked up in the spring and summer months of 2019.

Streetcar services

Streetcar: On-time performance (OTP)



Definition

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

Contact James Ross, Chief Operating Officer

Results

OTP in April was 55.1%, a decrease compared to last month (60.1%) and a slight decrease from the same time last year (56.1%).

Analysis

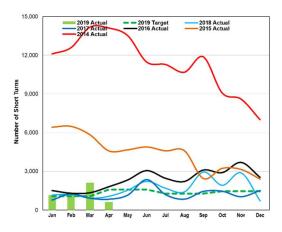
This period, the OTP was slightly lower than expected. Infrastructure repair projects on the 510 Spadina route (April 27-28), the 504 King route (May 4), and the 501 Queen route (May 4) hurt performance because planned diversions were implemented or shuttle buses operated through an end terminal on a headway basis, leading to a decrease in OTP.

The 505 Dundas route was again the worst performing route of the period, largely due to ongoing construction work in the middle portion of the route. On a positive note, the 512 St Clair route continues to benefit from a new weekday schedule, achieving 90% OTP from end terminals during the weekday for the entire period.

Action plan

A new process for developing scheduled running times, which has proven effective on the 512 St Clair route, will be implemented on other streetcar routes between now and the fall. Improvements were made to the 504 King route schedule beginning May 12, and the 501 Queen route schedule will also be updated in June.

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 632 short turns in April, a decrease compared to March (2,121) and the same time last year (1,074). This is the lowest level of short turns in a period since January 2014.

Analysis

This period's results can be attributed to several factors. First, two additional CLRV Run-As-Directed (RAD) vehicles were available for most of the period and played a significant role in reducing short turns. These vehicles were utilized mainly on the 501 Queen route, the route that contributed the largest number of short turns to the March total.

Second, a focus was placed on operator change-overs in lieu of short turning vehicles, again, mainly on the 501 Queen route. Utilizing RAD and non-RAD streetcars for operator change-overs, late runs are changed over and put back on schedule instead of being short turned. This increases the number of streetcars that continue to end terminals,

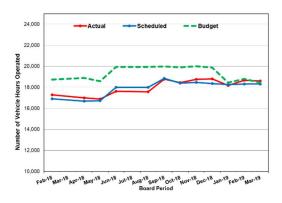
thereby offering a better service to our customers.

Lastly, this month's figure was also an outcome of increased management oversight, with a new dedicated manager assigned to oversee streetcar route management.

Action plan

We will continue efforts to use RADs and operator change-overs to keep the short turn figures low. Further, upcoming planned schedule improvements will target every streetcar route between now and the fall. Improved schedules will ensure low short turn figures can be sustained.

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 March 2019 Board Period, 18,448 streetcar weekly hours were budgeted for service, while 18,318 streetcar weekly hours were scheduled to operate. This represents a variance of -0.7%.

Of the 18,318 streetcar weekly hours scheduled to operate, 18,604 streetcar weekly hours were actually delivered, which represents a variance of 1.56%.

Analysis

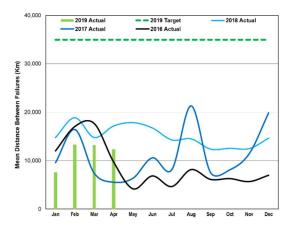
The variance between budgeted hours and scheduled hours is a result of the streetcar fleet shortage. Streetcars have been removed from 505 Dundas and 511 Bathurst and replaced with bus service.

Actual service hours are matched with scheduled service hours.

Action plan

Staff continue to monitor the Bombardier delivery schedule.

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 Vehicle Officer

Results

The MDBF for the LFLRV fleet in April was 12,320 kilometres. This is a decrease of 4,829 kilometres from the same time last year and a decrease of 903 kilometres from last month.

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

Analysis

In April, there were 43 delay incidents. While the number of delays attributed to the top offending systems (doors, brakes, train control management and communication systems) has remained steady, an increase of pantograph failures has resulted in a 7% decrease in MDBF. A pantograph is the power collection device mounted to the roof of an LFLRV.

Action plan

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

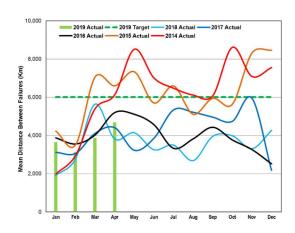
Door System: Design and component improvements (e.g. installation setup, guide channels, and end-stops) have been implemented on the fleet and a wire chain retrofit is underway.

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.

Pantograph: Technical staff are closely monitoring pantograph-related failures as engineering investigations continue with Bombardier.

These reliability improvement programs continue to be refined as more operational data becomes available with the increased use of the vehicles and an increasing LFLRV 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 Vehicle Officer

Results

The MDBF of the CLRV fleet in April was 4,681 kilometres. This is an increase of 859 kilometres from the same period last year and an increase of 813 kilometres from last month. The MDBF continues to remain below the target of 6,000 kilometres.

Analysis

The MDBF of the CLRV fleet increased in April primarily due to the decommissioning of unreliable vehicles and improved weather.

Action plan

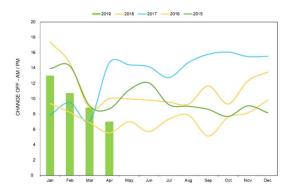
We will continue to decommission unreliable CLRV vehicles in conjunction with the delivery of new LFLRVs. By the end of Q4 2019, all CLRVs will be removed from service.

Streetcar decommissioning schedule

Year	CLRV	ALRV	Total
2014	2	1	3
2015	7	0	7
2016	16	5	21
2017	30	0	30
2018	28	31	59
2019*	113	15	128
Total	196	52	248

*Projected

Streetcar: Road calls and change offs (RCCOs)



Definition

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

Contact
Rich Wong
Chief Vehicle Officer

Results

The target for the maximum number of RCCOs is 1.5% of peak daily service. In April, 4.3 % (or seven of 162 vehicles) of the peak daily service, including Run-As-Directed vehicles, resulted in a RCCO. This was a decrease of 1.2% from the previous month.

Analysis

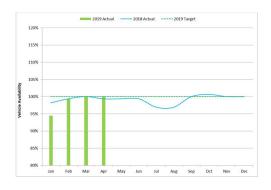
The daily average number of RCCOs improved from March to April.

The reduction of CLRVs in service contributed to the overall improvement in the number of RCCOs.

Action plan

We will continue to work with Bombardier to improve overall vehicle reliability.

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 Vehicle Officer

Results

The target for streetcar availability is 100% of peak daily service, including Run-As-Directed vehicles. In April, the target was met with an average of 162 vehicles available for service.

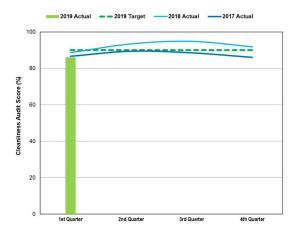
Analysis

With the increasing number of LFLRV vehicles and the decommissioning of unreliable legacy fleet vehicles, targeted availability numbers are being met.

Action plan

We will continue to commission LFLRV vehicles in order to replace the legacy fleet.

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 Vehicle Officer

Results

The audit score for streetcar cleanliness for Q1 2019 was 86.0%. This is a decrease from both Q1 2018 (88.6%), and Q4 2018 (91.8%). Overall performance on streetcar cleanliness was below the target of 90%.

Analysis

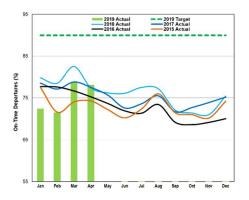
Poor weather conditions in January impacted Q1 quarterly cleanliness. Cold temperatures below -10 degrees Celsius and significant snow prevented regular exterior washes from being completed. Although floors were washed regularly, accumulation of salt and sand deposits contributed to a decrease in overall cleanliness.

Action plan

We continue to investigate and identify further improvements, including additional equipment to make cleaning more efficient.

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 April slightly declined to 76.30% as compared to last month (76.97%) and to the same time last year (77.40%).

Analysis

Metrolinx construction activities on the above surface section of the Crosstown have resulted in increased delays to routes operating on and intersecting Eglinton Ave East. 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.

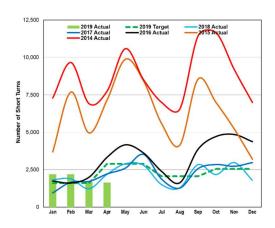
Implementation of the new VISION dispatch system continues across the system, and as part of the roll out process we have identified a number of data quality issues, which we are currently working with the vendor to resolve. These issues may result in the over reporting of missing trips as well as of vehicles departing terminals ahead of schedule.

Updates to the results will be provided as they become available.

Action plan

The following service reliability improvements were implemented in the April board period: 49 Bloor West, 82 Rosedale, 83 Jones, 92 Woodbine South, 101 Downsview Park, 106 Sentinel, 122 Graydon Hall and 900 Airport Express.

Bus: Short turns



Definition

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

Contact

James Ross, Chief Operating Officer

Results

There were 1,644 short turns in April, which is significantly below the target of 2,897. The results are an improvement compared to March (1,663) and the same period last year (2,196).

Analysis

The number of short turns in April were mainly driven by increased traffic congestion around Metrolinx construction zones on Eglinton Avenue. In addition, significant delays were experienced along Jane Street and Keele Street due to multiple lane restrictions causing delays to local and express service.

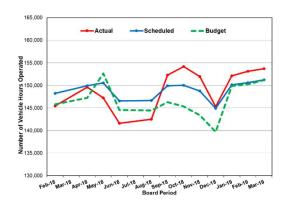
The top six routes for short turns were: 35 Jane (7.8%), 41 Keele (7.1%), 935 Jane Express (5.4%), 75 Sherbourne (5.3%), 34 Eglinton East (5.2%) and 63 Ossington (4.0%), representing one-third of all short turns.

Action plan

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

A new schedule for the 63 Ossington route will be implemented in the August 2019 board period. The 41 Keele and 75 Sherbourne routes will have new schedules implemented in the fall of 2019. Routes 35/935 Jane will have new schedules in Q1 of 2020 after the construction at Jane Station is completed.

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%.

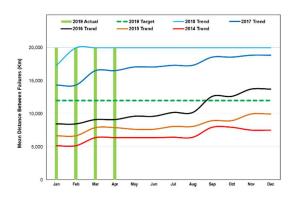
Analysis

Actual service hours are matched with scheduled service hours.

Action plan

No action required at this time.

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 Vehicle Officer

Results

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

Analysis

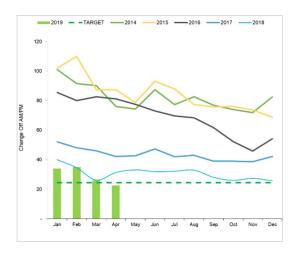
MDBF for the bus fleet continues to remain high and above the target. New vehicles entering the fleet, such as the 118 new Nova hybrids received to date in 2019 and the 387 diesel buses commissioned in 2018 contribute to this reliability. Despite this high reliability, we continue to make improvements on problematic systems.

Action plan

Several alternative 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.

Coolant System State of Good Repair (SOGR) packages were released for all Orion buses and single cooling loop Nova buses. A final draft of the Nova dual cooling loop SOGR packages was completed in May. This program has already helped reduce cooling-related road calls to an all-time low.

Bus: Road calls and change offs (RCCOs)



Definition

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

Contact

Rich Wong, Chief Vehicle Officer

Results

The average number of RCCOs in April was 23 per day.

Analysis

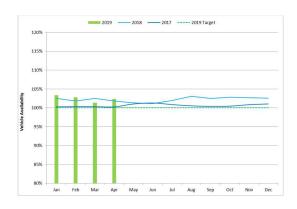
Total average daily RCCOs in April is the all-time lowest daily average achieved.

Peak revenue service was 1,655 buses per day, including Run-As-Directed buses in April. The average number of RCCOs per day equates to 1.4% of service.

Action plan

We will continue with improvement initiatives and monitor and control accordingly.

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 Vehicle Officer

Results

The average number of buses provided for a.m. peak service in April was 1,655 per day or 102.4% of planned service. This is well above the target of 1,617 buses.

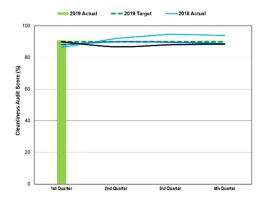
Analysis

The significant number of new bus procurements from 2016 to 2018 (841 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 Vehicle Officer

Results

The bus cleanliness audit score in Q1 2019 was 90.7%, which is slightly above the target of 90% and well above the Q1 2018 result of 86.4%.

Analysis

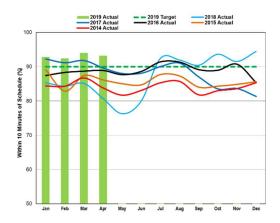
The performance score takes into account pre-service, in-service and post-service audit results. Scores are impacted by changes of in-service operating conditions. Q1 2019 results are likely to have a negative variance due to inclement weather conditions. Birchmount and Mount Dennis garages scored the lowest of the seven garages in the Contractor Cleanliness Performance section.

Action plan

Continue to monitor contractor performance. Meet with the contractor to review specific scores at Birchmount and Mount Dennis garages that negatively impacted performance.

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

Results

The OTP in April decreased by 0.8% from the previous period to 93.2%, and is 12.5% above the same period in 2018.

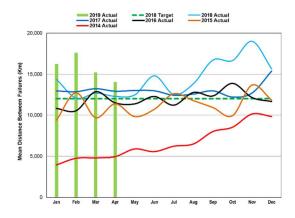
Analysis

April OTP was impacted slightly by the number inclement weather days throughout the month. However, it remained well above last year's target.

Action plan

With the delay in our Integrated Communications System (ICS) implementation, the focus remains on timely service adjustments and efficient incident management to reduce delays. ICS implementation was completed on May 5, 2019.

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 Vehicle Officer

Results

The April MDBF of 14,051 kilometres exceeded the target of 12,000 kilometres, and is above the April 2018 average of 12,292 kilometres.

Analysis

The addition of the ProMaster bus continues to be the driving force behind an above target MDBF. Wheel-Trans continues to trend in a positive direction due to the various maintenance programs that have been implemented.

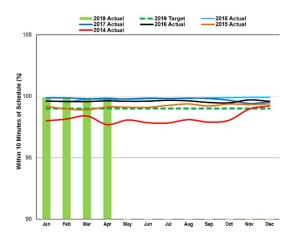
Diesel exhaust fumes detected by operators continue to account for the most road calls and change-offs for the Friendly bus fleet. Lakeshore garage maintenance staff manually engages the exhaust regeneration on property during servicing, to minimize the impact to our customers.

Action plan

To help mitigate exhaust system issues on the Friendly bus fleet, Wheel-Trans continues to perform maintenance checks on all Friendly buses, following each major repair.

Wheel-Trans has begun to take delivery on the 2019 procurement of ProMasters with four delivered in April and five more received in May. Decommissioning of first generation Friendly buses resumed in May as new vehicles were delivered.

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

Results

The accommodated rate in April was 99.9%. This is 0.9% higher than our target, and consistent with the same period in 2018.

Analysis

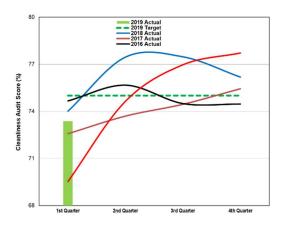
Wheel-Trans continues to provide a high standard of trip accommodation for customers. We utilize all services in order to ensure our customer trip requests are provided.

Action plan

We continue to strive for an accommodation rate of 100 per cent. Continuous improvements to our scheduling and dispatching software will assist in ensuring all trips are provided.

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 average station cleanliness score for Q1 2019 was 73.4%, which is a decrease of 2.8% from last quarter (76.2%) and 1.6% below our target of 75%.

Analysis

The Q1 audits were conducted from March 13, 2019 to March 21, 2019, which came on the heels of three of the worst storms that we experienced this past winter.

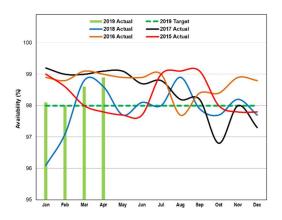
The lowest scoring stations were Main Street Station (64.1%), Woodbine Station (63.5%) and Runnymede Station (63.3%). Floors, stairs, escalators and waste units were the lowest scoring components at these locations.

In addition to weather impacts, there has been an ongoing concrete chipping project in the tunnels near Woodbine Station that prevented usual overnight cleaning activity at Main Street and Woodbine stations

Action plan

The improvement plan for Q2 will include summer students who will help augment staff and increase cleaning activity 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 98.9% in April, which represents an increase of 0.3% from last month and from the same time last year. Availability met the target of 98%.

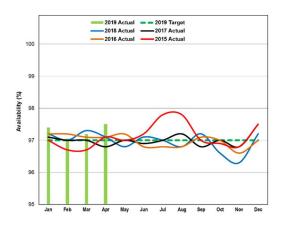
Analysis

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% for April, and performance increased to 97.5% compared 97.2% in March.

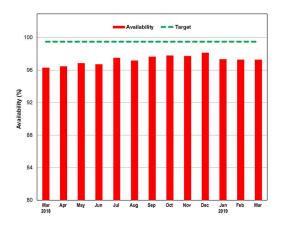
Analysis

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 97.29% in March, which represents a 0.02% increase from last month and an increase of 1.0% over the same time last year. Availability was below the 99.5% target

Analysis

The current availability reflects ongoing hardware and software issues with the fare gates. In March, we experienced a number of issues with the heaters inside the gates, continued issues related to the motors on the fare gates, and a software defect in the PRESTO mobile application, which forced the gates out of service, but has been addressed and resolved. All of these items directly impacted availability and we are working with Scheidt and Bachmann (S&B) to address these issues.

Action plan

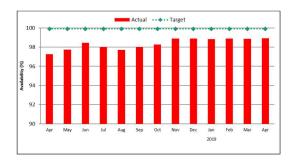
We continue to work with S&B to address ongoing hardware and software issues. A number of

programs have been developed and are currently being implemented. These include:

- A program to replace the industrial computers in the fare gates, which is currently ongoing;
- New software deployments, the next is being scheduled for Q2;
- The replacement of current fare gate motors with a modified version.

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

Results

PRESTO card reader availability averaged 98.93% during April, which represents an increase of 0.08% from March. This is below the 99.9% target.

Analysis

The availability continues to be below target due to defective card readers, which require on-site incident resolution, resulting in longer downtime.

Action plan

We are working with Metrolinx to improve availability by adjusting the Second Line Maintenance schedule from Sunday through Thursday to ensure devices are in service for the start of the work week.

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

Results

PRESTO FVM availability averaged 94.02% during April, which represents an increase of 1.47% from March 2019. This is below the 99.9% target.

Analysis

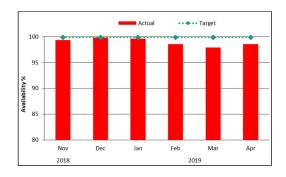
The increase in availability for FVMs is a result of improved cash collection procedures and incident response times.

Action plan

We will:

- Continue to improve incident response times.
- Extend the pilot of a new slot for rejected bank notes to Line 1 extension, Yorkdale and Lawrence West stations.

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

Results

PRESTO SSRM availability averaged 98.54% during April, which represents an increase of 0.66% from last month. This is below the 99.9% target.

Analysis

The increase in the level of availability is a result of improved response times.

Below target availability is a result of defective card readers.

Action plan

We will continue to improve incident response times and analyze the root cause of defective card readers.

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

Results

PRESTO FTM availability averaged 97.95% during April, which represents a decrease of 0.43% from last month. This is below the 99.9% target.

Analysis

The decrease in availability is a result of the following:

- A high number of battery failures on the Parkeon Single Ride Vending Machines (PSRVM), increased from 13% in March to 24% in April.
- Out of service Parkeon Single Ride Vending Machines (PSRVM) due to paper limit reached, increased from 15% in March to 25% in April.

Action plan

Metrolinx is continuing to replace the batteries of the impacted PSRVMs.

We are working with Metrolinx to assess and configure correct paper limit warnings on PSRVMs to prevent the machines from running out of paper.

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

