



## **Chief Executive Officer's Report – February 2019 Update**

Date: February 27, 2019

To: TTC Board

From: Chief Executive Officer

### **Summary**

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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**

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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**

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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**

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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**

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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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Lito Romano, Senior Community Liaison Officer, CEO's Office  
416-397-8699  
lito.romano@ttc.ca

## **Signature**

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Richard J. Leary  
Chief Executive Officer

## **Attachments**

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

# Toronto Transit Commission

# CEO's Report

## February 2019



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# Performance Scorecard

## TTC Performance Scorecard – February 2019

Key Performance Indicator	Description	Latest Measure	Current	Target	Current Status	Ongoing Trend	Page
<b>Safety and Security</b>							
Lost-time injuries	Injuries per 100 Employees	Q3 2018	4.8	4.51*	✘	✘	13
Customer injury incidents	Injury Incidents per 1 Million Boardings	Q3 2018	1.04	1.02*	✘	✔	14
Offences against customers	Offences per 1 Million Boardings	Q4 2018	.64	1.00	✔	✔	15
Offences against staff	Offences per 100 Employees	Q4 2018	4.11	3.8	✘	–	16
Fitness for Duty	Cumulative total of random drug and alcohol test results	Q4 2018	NA	NA			17
<b>Ridership</b>							
Ridership	Monthly Ridership	Dec 2018	38M	40M	✘	–	18
Ridership	Year-to-Date Ridership	2018 YTD (to Dec)	521M	539M	✘	NA	18

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	Dec 2018	17M	36M			20
PRESTO Ridership	Year-to-Date Ridership	2018 YTD (to Dec)	155M	238M		NA	20
Wheel-Trans Ridership	Monthly Ridership	Dec 2018	303K	405K			21
Wheel-Trans Ridership	Year-to-Date Ridership	2018 YTD (to Dec)	4,157	4,808K		NA	21

## Customer Experience

<b>Customer Satisfaction</b>	Customer Satisfaction Score	Q3 2018	80%	80%			23
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### Subway Services

<b>1</b>	On-Time Performance Line 1	Scheduled headway performance at end terminals	Dec 2018	92.2%	90%			24
<b>2</b>	On-Time Performance Line 2	Scheduled headway performance at end terminals	Dec 2018	90.5%	90%			25
<b>3</b>	On-Time Performance Line 3	Scheduled headway performance at end terminals	Dec 2018	97.2	90%			26


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	Dec 2018	99.2%	90%	✓	✓	27
1 Capacity Line 1	Trains per hour during peak	Dec 2018	97.1%	96%	✓	⊖	28
1 Capacity - Bloor Station	Trains per hour – 8am to 9am	Dec 2018	100%	96%	✓	⊖	28
1 Capacity - St. George Station	Trains per hour – 8am to 9am	Dec 2018	100%	96%	✓	⊖	28
2 Capacity Line 2	Trains per hour during peak	Dec 2018	94%	96%	✗	⊖	30
3 Capacity Line 3	Trains per hour during peak	Dec 2018	98.5%	98%	✓	⊖	30
4 Capacity Line 4	Trains per hour during peak	Dec 2018	100%	98%	✓	✓	31
Amount of service	Average weekly service hours delivered	Dec 2018	10.8K	11K	✗	✓	32
Vehicle reliability-T1 trains	Mean distance between failures	Dec 2018	597,269 km	300,000 km	✓	✓	33
Vehicle Reliability-TR trains	Mean distance between failures	Dec 2018	1,445,828 km	600,000 km	✓	✓	34

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	Dec 2018	100%	100%	✓	✓	35
Subway cleanliness	Audit score	Q4 2018	93%	90%	✓	○	36
 <b>Streetcar Services</b>							
On-time performance	On-time departure from end terminals	Dec 2018	65.9%	90%	✗	✓	37
Short turns	Monthly total short turns	Dec 2018	719	1,272	✓	✓	38
Amount of service	Average weekly service hours	Dec 2018	18.8K	18.4K	✓	✓	39
Vehicle reliability-LFLRV <i>(Low-Floor Light Rail Vehicle)</i>	Mean distance between failures	Dec 2018	14,646 km	35,000 km	✗	✓	40
Vehicle reliability-CLRV <i>(Canadian Light Rail Vehicle)</i>	Mean distance between failures	Dec 2018	4,270 km	6,000 km	✗	✓	41
Vehicle reliability-ALRV <i>(Articulated Light Rail Vehicle)</i>	Mean distance between failures	Dec 2018	3,464 km	6,000 km	✗	✗	42
Road calls and change offs	Average daily road calls or vehicle change offs	Dec 2018	13	2	✗	○	43

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 number of vehicles available for service	Dec 2018	100%	100%	✓	✓	44
Streetcar cleanliness	Audit score	Q4 2018	91.8%	90%	✓	–	45
 <b>Bus Services</b>							
On-time performance	On-time departures from end terminals	Dec 2018	75.5%	90%	✗	✓	46
Short turns	Monthly total short turns	Dec 2018	1,796	2,091	✓	✓	47
Amount of service	Average weekly service hours	Dec 2018	145.3k	144.9K	✓	–	48
Vehicle reliability	Mean distance between failures	Dec 2018	20,000 km	12,000 km	✓	✓	49
Road calls and change offs	Average daily road calls or vehicle change offs	Dec 2018	26	24	✗	✓	50
Service availability	Daily average service delivered	Dec 2018	102.6%	100%	✓	✓	51
Bus cleanliness	Audit score	Q4 2018	94%	90%	✓	–	52







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
 <b>Wheel-Trans Services</b>							
On-time performance	Per cent within 20 minutes of schedule	Dec 2018	94.4%	90%			53
Vehicle reliability	Mean distance between failures	Dec 2018	15,633 km	12,000 km			54
Accommodation rate	Percentage of requested trips completed	Dec 2018	99.9	99%			55
 <b>Station Services</b>							
Station cleanliness	Audit score	Q4 2018	76.2%	75%			56
Elevator availability	Per cent available	Dec 2018	97.7%	98%			57
Escalator availability	Per cent available	Dec 2018	97.2%	97%			58
PRESTO Fare Gates	Per cent available	Nov 2018	97.7%	99%			59
PRESTO Fare Card Reader	Per cent available	Dec 2018	98.9%	99.9%			60

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 (FVM)	Per cent available	Dec 2018	97.6%	99.9%			61
PRESTO Self-Serve Reload Machine (SSRM)	Per cent available	Dec 2018	99.8%	99.9%			62
PRESTO Fares and Transfer Machines	Per cent available	Dec 2018	94.2%	99.9%			63

Ongoing trend indicators:  Favourable  Mixed  Unfavourable

\*Represents four quarter average of actual results

# CEO's Commentary

I would like to take this opportunity to formally congratulate Mazin Aribi, who was recently acclaimed as the Chair of the Advisory Committee on Accessible Transit (ACAT). Mr. Aribi has previously served ACAT in various capacities and is a valued member of the committee.

Congratulations also to new Vice-Chairs Marian McDonell and Angela Rebeiro. Accessibility is embedded throughout the TTC's Corporate Plan and ACAT is a guiding voice for the TTC in improving the customer experience for seniors and persons with disabilities as we strive towards becoming a barrier-free system by 2025.

I would also like to formally welcome Gary Downie as TTC's acting Chief Expansion Officer, a new position in the organization. Gary is a mechanical engineer and project management professional with more than 30 years of

experience in the development and management of major projects across the transportation, oil and gas, defence and marine industries. Reporting to me with support from our Engineering, Construction and Expansion Group, Gary is responsible for the three ongoing subway expansion projects – Line 2 East Extension to Scarborough, Relief Line South and Yonge Subway Extension to Richmond Hill. Before joining the TTC in 2017, he worked with Transport for London, where he was responsible for the delivery of a major station capacity upgrade program.

At the time of writing this commentary, the TTC was preparing to recognize its latest crop of Rewards and Recognition award winners, employees who represent the best-of-the-best in the categories of Safety, Customer Service, Leadership, Teamwork, and Innovation and Creativity.

While the 2019 winners are still under wraps, and are scheduled to be announced the day before the February Board meeting, I can tell you that past recipients have included employees who have performed selfless actions to assist injured people, provided exemplary customer service or made significant improvements to the workplace. I have no doubt this year's recipients will be equally impressive.

Rewards and Recognition is the organization's opportunity to say thank you to our workers for their tireless dedication and commitment to moving 1.7 million daily riders safely and reliably, whether they serve on the front lines or behind the scenes.

The task of moving people safely from point A to point B was put to the ultimate test in late January when the city, much of southern

Ontario and the U.S. northeast was walloped with more than 20 centimetres of snow and high winds, followed by several days of extreme cold temperatures. The TTC wasn't the only transit system hit hard by the severe weather.

While several services throughout the city were negatively affected, here in Toronto, flights were cancelled, UP Express to the airport went out of service, roads became difficult to navigate, some schools were closed and exams postponed.

Even with the full activation of our extreme weather contingency measures, the snowstorm overwhelmed much of our schedules, exposed our aging equipment and forced the shutdown of Line 3 Scarborough for a few days despite our best efforts. Our recovery efforts were labour-intensive and conducted in severe conditions. TTC management worked with Union Executives to ensure an application to the

Ministry of Labour for extending consecutive safe hours of work was made collaboratively. The joint decision was greatly appreciated.

Our transportation forces maintained service with shuttle buses while our maintenance crews worked tirelessly to clear iced-over power rails and frozen signals and switches across open sections of the subway system and train yards.

While conditions left many customers disgruntled about service, others on this occasion took the opportunity to commend our workers, proving that people are our greatest asset. Here are some of the comments that the TTC received on Jan. 29, which I think illustrate the value of our workforce and the impact the TTC has on the well-being of our city:

*"Thanks very much to the woman driving bus 1830 on the 511 Bathurst route. She stopped in between stops and invited me to*

*board when she saw me trying to drag a stroller up the snowy path."*

*"Hats off to your bus drivers today. Mad respect to all of them driving in this. They're calm. Taking their time. Slowly but surely we shall all get home safely."*

*"Job well done to all the Wheel-Trans Drivers, including the taxi drivers contracted by Wheel-Trans. They're awesome for helping push the wheelchairs on the non-shoveled sidewalks."*

*"Shout out to all the TTC drivers tonight for getting us all home safe and sound. You guys make sure you get yourselves home safe from work, too."*

After every major event, we undertake an objective review of our plans and make every effort to retool and refine our response capabilities to be more predictable to maximize mobility, and above all

else, provide safe service right across the city.

That's why safety is the cornerstone of our Corporate Plan and our Capital Investment Plan. The TTC can't afford to put anything before the safety of our customers, our employees and those who share the road with us.

In late January, after online and in-person public consultation, the TTC activated external-facing cameras on many buses, streetcars and Wheel-Trans vehicles. This is an added program to enhance customer and public safety. These cameras will assist the TTC in investigating incidents involving TTC vehicles and support investigations and claims. By mid-February, approximately 300 buses and 125 Wheel-Trans buses had the cameras turned on. Camera activation on new streetcars is scheduled to begin later in the month. The entire surface fleet will

be equipped over the next couple of years.

Last March, the TTC Board adopted staff's recommendations to approve the addition of a new TTC U-Pass fare type and pass product in accordance with the U-Pass Fare Policy Framework. The approved Framework requires adoption by at least one of Toronto's large post-secondary institutions for the minimum four-year period. The advantage to the TTC of the U-Pass is that it promotes transit use in an important customer group, increases ridership and also guarantees the fare revenue to the TTC at the beginning of the semester. Once the TTC U-Pass is approved in a plebiscite held by the student body, participation is mandatory for four years for all eligible students with the cost of the U-Pass included in the post-secondary fees payable each semester.

Last November, Ryerson voted in favour of the U-Pass, and TTC staff initiated the process to enter into a formal U-Pass agreement with Ryerson University.

On January 17, the Province announced plans to provide post-secondary students more choice over non-tuition student fees. This may impact a post-secondary institution's ability to make a TTC U-Pass fee mandatory for students enrolled full-time. TTC staff is consulting with the Province and our transit partners to clarify what the changes to non-tuition fees means to the TTC U-Pass program and our partnership with Ryerson University.

Construction on Finch Station's East and West commuter parking lots was completed in December 2018.

These lots help approximately 3,000 customers connect to TTC services on a typical weekday. Construction work included the resurfacing of both lots and installation of energy efficient LED lighting to improve visibility. Entry gates have been replaced with pay-and-display machines and the Green P mobile app for convenient access and payment. Nearly half of the customers at these lots are making use of the mobile app.

City Council recently approved the “Housing Now” plan for affordable housing. Four of the 11 properties identified as priority locations for affordable housing in the city are existing TTC commuter parking lots. The four locations are Victoria Park, Wilson-Main, Warden-North and Islington-Main commuter lots. These total approximately 2,500 spaces.

These four properties were declared surplus by the TTC Board in 2009.

TTC staff will continue to work with the City and CreateTO staff on the redevelopment of these properties with the inclusion of commuter parking replacement within each development where feasible.

Finally, the TTC Executive and I were deeply grateful last month when the Board unanimously approved *Making Headway, Capital Investments to Keep Transit Moving*, our 15-year Capital Investment Plan. It’s an assessment of the projects and programs that need to be funded if we are to meet the challenges presented by aging assets, a growing city and new and emerging mobility options for our customers.

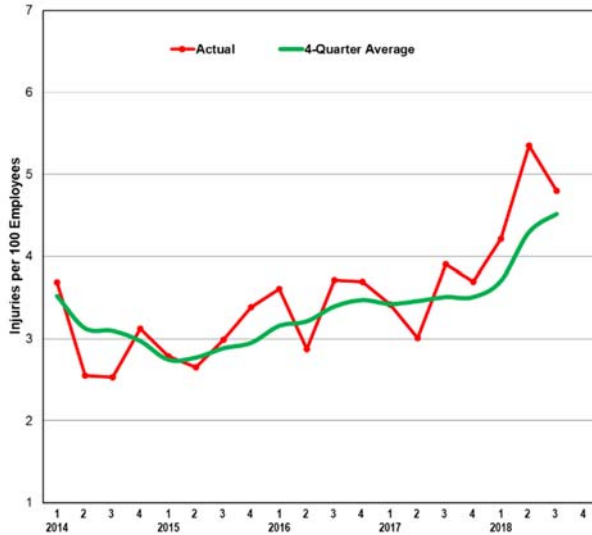
Along with it was the approval of our \$10.3 billion 2019-2028 Capital Budget that invests in longer-term projects to reduce crowding, keep the system in a state of good repair, improve accessibility and purchase new vehicles.



**Richard J. Leary**  
**Chief Executive Officer**

# 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 the third quarter of 2018 was 4.80 injuries per 100 employees.

## Analysis

The 4-quarter average LTIR to the end of Q3 2018 was 4.51 injuries per 100 employees. The LTIR for the current quarter was 6% higher than the 4-quarter average LTIR. This increase was mainly attributed to an increase in Acute Emotional Event (AEE) injuries in this quarter.

The 4-quarter average line shows there has been an upward trend in LTIRs since 2015.

## Action Plan

AEE injuries caused by sudden and unexpected traumatic events continue to represent the second highest injury type and account for

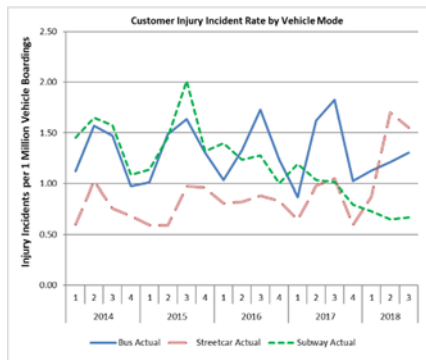
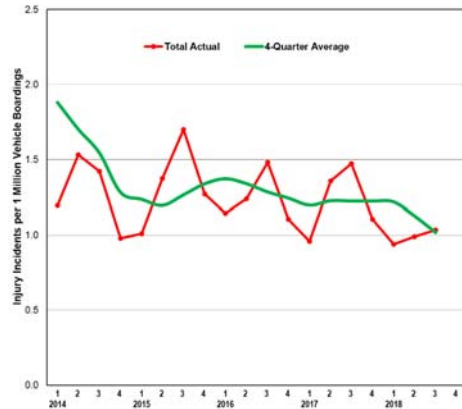
16% of all lost-time injuries since 2014. In January 2018, under the Workplace Safety and Insurance Board Act, the Province expanded its definition for emotional trauma claims to include chronic stress in the workplace. Staff anticipate that this change may continue to increase the prevalence of claims for emotional trauma.

Musculoskeletal/ergonomic type injuries (i.e. 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. The program is expected to be fully in place by the end of 2019.

**Note:** Q4 2018 data will be available in the March 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 (includes bus, streetcar and subway customer injury incident rates) for Q3 2018 was 1.04 injury incidents per one million vehicle boardings.

## Analysis

The 4-quarter average CIIR to the end of the third quarter of 2018 was 1.02 injury incidents per one million vehicle boardings. The CIIR for the current quarter was 2% higher than the 4-quarter average rate.

The 4-quarter average line shows there has been an overall continued downward trend in CIIRs since 2014. This decrease is mainly attributed to a reduction in customer injury incident rates in the subway.

## Action Plan

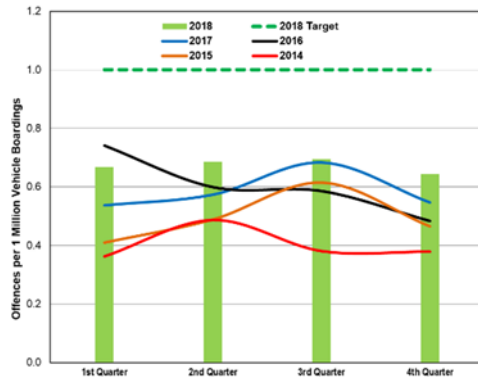
The continuous reduction in station-related subway injuries since 2015 is partly attributed to a reduction in elevator/escalator

injury incidents compared to previous years. Since March 2018, elevator and escalator safety videos play hourly on most TTC platform video screens and station information screens.

In addition, the reduction in station-related subway injuries over the years is partly attributed to the reduction in slip/trip injury incidents due to the application of slip resistant coating on selected station floor areas.

**Note:** Q4 2018 data will be available in the March 2019 CEO’s Report.

## Offences Against Customers



### Definition

Number of offences against customers per one million vehicle boardings.

### Contact

Collie Greenwood,  
Chief Service Officer

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## Results

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Total offences against customers decreased in Q4 2018 to 0.64 offences per one million vehicle boardings. The current rate is 16.4% higher than the corresponding rate of 0.55 in Q4 2017.

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## Analysis

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An increase in the *Assault* category was observed in Q4. A slight increase in *customer thefts*, and *other* categories, as well as a decreases in robberies, and sexual assaults were observed compared to the previous quarter. No patterns observed.

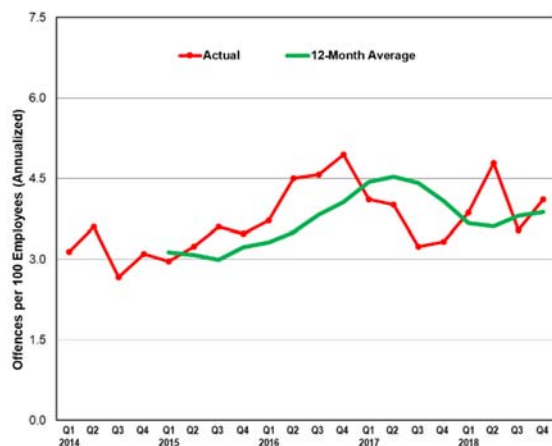
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## Action Plan

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Transit Enforcement Special Constables continue to engage with the public to provide a visible presence across the system with a specific focus on areas identified through trend analysis as being high-risk for offences.

## Offences Against Staff



### Definition

Number of offences per 100 employees.

### Contact

Collie Greenwood,  
Chief Service Officer

## Results

Total offences against staff increased in Q4 2018 to 4.11 offences per 100 employees. The current rate is 23.8% higher than the corresponding rate of 3.32 in Q4 2017. A slight decrease was observed in the moving annual rate of offences against staff, with Q4 2018 being 3.88, lower than the corresponding moving annual rate of 4.08 in Q4 2017.

## Analysis

Increases were observed in all crime types - *Assaults*, *Threats* and *Other* compared to Q3 2018. No patterns observed.

## Action Plan

Transit Enforcement Special Constables will continue to increase support to surface personnel via the BUS STOP initiative, and conduct special details and initiatives to assist with ongoing and emerging issues identified by staff across the system.

## Fitness for Duty

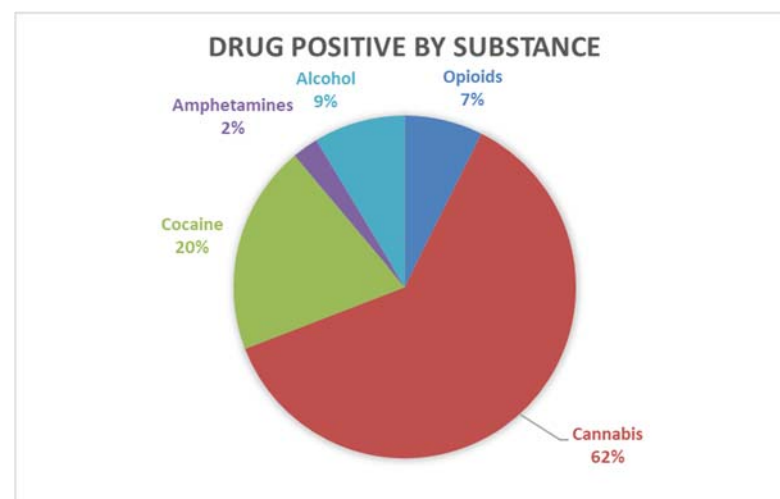
A total of 82 employees were non-compliant or refused to test under the random program from May 8, 2017 to December 31, 2018.

During the same period, 4,299 employees (98.1%) tested under the random program were compliant.

Data reflects the period through the end of Q4 2018.

Random Testing Summary - Q4 2018				
	2018	2017	Total *	%
Compliant Tests	2672	1627	4299	98.1%
Unionized Employee Non-Compliant Test Results (Drug, alcohol, refusal)	50	29	79	1.8%
Staff Employee (non-unionized) Non-Compliant Test Results (Drug, alcohol, refusal)	0	3	3	0.1%
<b>Total</b>	<b>2722</b>	<b>1659</b>	<b>4381</b>	<b>100.0%</b>

Non-Compliance Breakdown				
Category	2018	2017	Total	Percentage
Drug	47	24	71	86.6%
Alcohol	2	5	7	8.5%
Refusals	1	3	4	4.9%
<b>Total</b>	<b>50</b>	<b>32</b>	<b>82</b>	<b>100.0%</b>



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

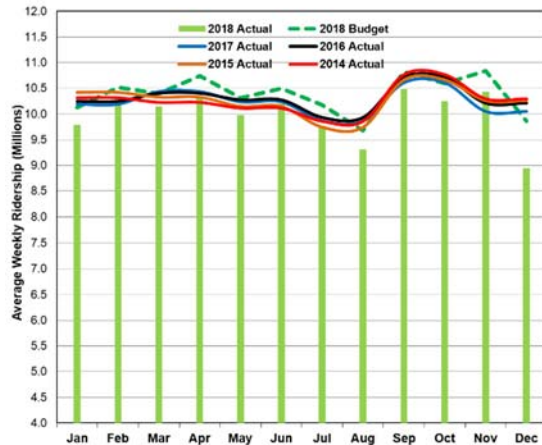
Note; The next quarterly update will be provided in the May 2019 CEO's Report.

### Contact

Megan MacRae,  
Executive Director of  
Human Resources

# Ridership

## TTC Ridership



### Definition

Average number of journeys per week, including paid and free journeys (e.g. two-hour transfers and children under the age of 12). 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 12 (December 2 to 31, 2018) revenue ridership was 38.4 million or 8.9 million passengers per week. This was approximately 1.8 million (4.4%) below the budget of 40.2 million rides and 1.7 million (4.3%) below the same period in 2017.

2018 full-year ridership was 521.4 million, 18.0 million (3.3%) below budget and 12.3 million (2.3%) below the comparable period in 2017.

## Analysis

After increasing steadily for 12 years, revenue ridership stabilized in 2016 and declined in 2017 and 2018. This trend is similar to other large mature North American transit systems, many of which are experiencing falling ridership on one or more of their transit modes. Ongoing analysis is required, but contributors could include changes in demographics, travel behaviour and technology that is changing how people travel in

cities. Transit systems are also finding that revenue control measures (e.g. monitoring fare payment) are required to a greater extent than in the past, which in turn affects measured ridership. The TTC likely experienced some revenue (and measured ridership) loss during the PRESTO introductory period. Subway closures have also affected weekend ridership.

During 2018, although measured revenue ridership dropped by about 2%, the average fare increased by about 2% (to \$2.23) as some customers converted from monthly passes (e.g. Metropass) to single fares (e.g. PRESTO e-purse). As a result, total revenue was essentially flat despite the change in measured revenue ridership. The conversion from Metropass to e-purse could be affecting measured ridership to the extent that customers switching to e-purse ride less often than the average of 72 rides assumed for each adult monthly Metropass sold.

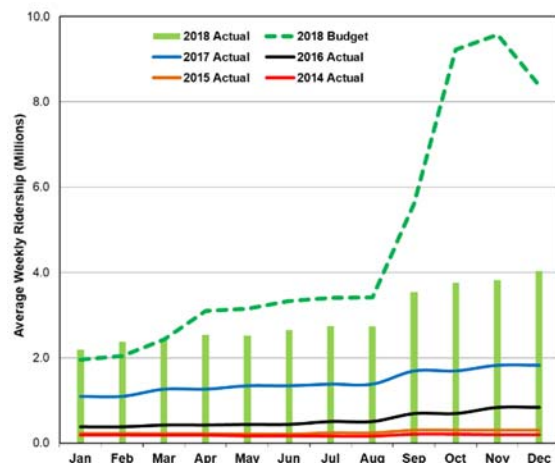
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## Action Plan

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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 and PRESTO adoption now greater than 75% (up from 25% a year ago), we will be increasing our emphasis on fare payment monitoring, education, inspection and compliance.

## 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 12 (December 2 to 31, 2018) PRESTO ridership was 17.3 million or 4.0 million passengers per week. Although this was below budget due to slower-than-budgeted PRESTO adoption, this was nonetheless 130% higher compared to the same period in 2017.

2018 full year PRESTO ridership was 155.5 million, again below budget, but more than double the comparable period in 2017.

## Analysis

Substantial progress has been made over last year with numerous fare products now available on PRESTO. PRESTO fare readers have been installed on all buses and streetcars and PRESTO fare gates and fare vending machines at all subway entrances. While substantial progress has been made on PRESTO adoption (45.5% adoption in December), the expected increase in adoption rates was slowed because of delays in retiring legacy pass products, in turn due to PRESTO implementation delays.

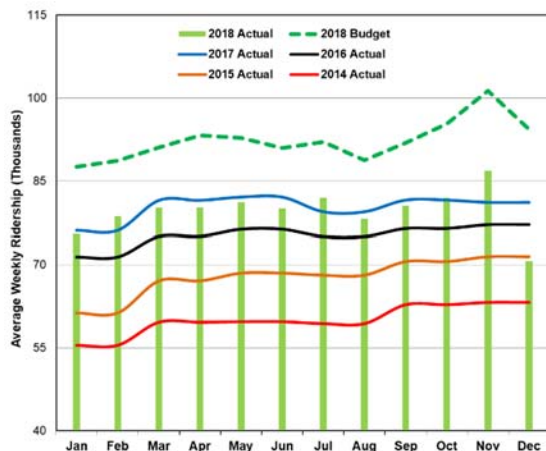
That said, there was an increase of over 80,000 unique PRESTO cards using the system in December, driven both by the end of Metropass as of December 31 and the introduction of the two-hour transfer in August that is only available using PRESTO.

## Action Plan

PRESTO adoption will continue to increase over time with the phasing out of legacy fare media, more fare options made available under PRESTO and a number of marketing and communication activities, which encourage PRESTO adoption. PRESTO adoption rate is expected to reach 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

Dan Wright,  
Chief Financial Officer

## Results

Ridership in Period 12 (December 2 to 31, 2018) was 303,311, or 70,700 passengers per week. This was 25% lower than the budgeted 94,300 customers per week. In terms of year-over-year growth, the December weekly ridership of 70,700 is 7% lower compared to the same period in 2017.

The 2018 full-year ridership was 651,000 (13.5%) below budget and 28,300 (0.7%) below the comparable period in 2017.

## Analysis

Analysis of customer behaviour patterns indicates that customers are fully diverting trips to conventional services where possible, indicating early success of the Family of Services initiative. The customer base has been increasing at a rate of more than 1,000 per month, with slightly more than half classified 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.

Lower ridership in December can also be attributed to a higher cancellation rate by Wheel-Trans customers. In December 2018 there were a total of 207K cancellations versus 187k in the same period in 2017. This is an increase of 20k (11%) cancelled trips. Cancelled trips can be partially attributed to poor weather conditions, and issues with the launch of the new booking software.

On December 9, 2018 TTC launched a new Wheel-Trans website, which is the first phase of the new scheduling and dispatch system as part of the Wheel-Trans 10-Year Strategy. After the launch of the new system we and our customers experienced some technical issues and several features did not function as expected. This resulted in our contact centre receiving a larger than expected volume of calls and longer wait times for customers. Our technical team has worked very hard at resolving most of the initial issues experienced with the launch of the new website.



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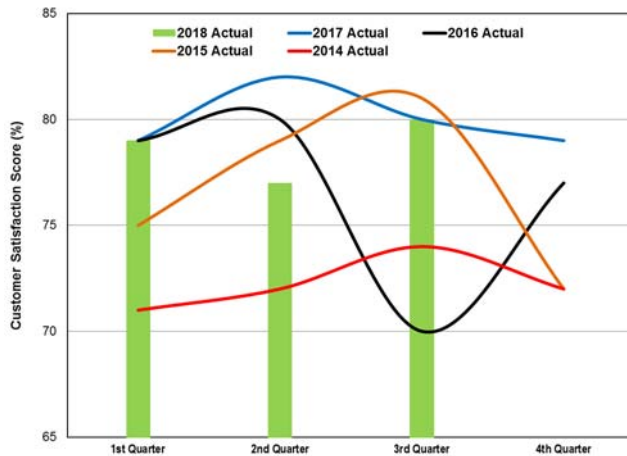
## Action Plan

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The new Scheduling and Dispatching software upgrade that will allow customers to book online Family of Services trips will enable Wheel-Trans to provide shorter trips and achieve the goals established by the 10-Year Strategy, while also offering customers better service to match their abilities for travel. To address the longer wait times customers are experiencing, we are in the process of increasing resources as well as researching a second source availability to handle the overflow of calls so that our customers are better served. The TTC will monitor customer trips and volume of trips booked, both through reservations and online, to better understand new travel trends and better forecast demand. A follow-up survey will be completed in early 2019 regarding diverted trips by customers in order to incorporate this information into the ridership trend analysis.

# 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

Eight in 10 customers expressed high overall satisfaction (80%) with the quality of TTC service in Q3 2018. This is in line with the last quarter (77%) and last year's overall satisfaction scores of 80%.

## Analysis

Pride in the TTC and what it means for Toronto is steady and has increased from last quarter (77%) with over three-quarters of customers agreeing they are proud of the TTC. Value for money has returned to a higher score this quarter, consistent with the scores experienced in Q2 2018 (57%).

Customer satisfaction with levels of crowding remains consistent and higher than average for subway and bus customers this quarter, while streetcar customers experienced a decrease in levels of satisfaction with levels of crowding compared to the last quarter and last year.

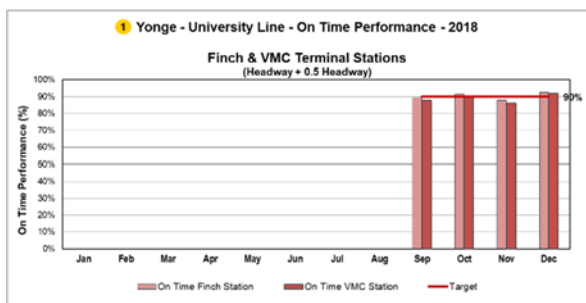
## Action Plan

Rising customer satisfaction with levels of crowding on subways and buses signals that various capacity improvements made this year are having a real impact on customer perceptions of TTC service. Improvements include, adding more trains to Line 1 in the a.m. peak and expanding the network of Express buses. This positive trend is expected to continue as these initiatives continue to be rolled out for bus and subway service. Decreasing customer satisfaction with levels of crowding for streetcar service will be monitored as various service improvements are made, including a service increase for the 505 Dundas streetcar.

Note: Q4 results will be presented in the March 2019 CEO's Report.

## Subway Services

### Subway: Line 1 On-Time Performance (OTP) – Finch and Vaughan Metropolitan Centre (VMC) Terminal Stations



#### Definition

*On-Time Performance (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 December 2018, the performance on Line 1 improved to 92.6%, from 87.8% at Finch and to 91.7%, from 86.1% at VMC. The target is 90%.

## Analysis

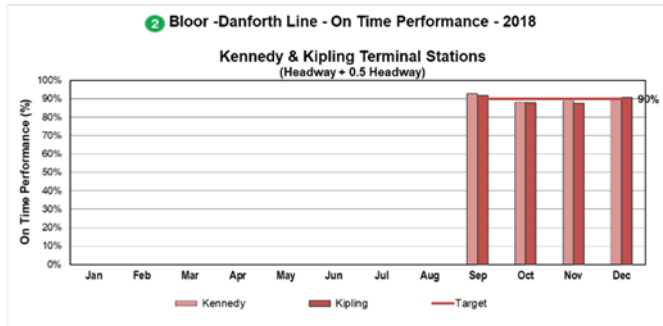
On December 1, 2018, the next phase of the Automatic Train Control (ATC) was commissioned. The ATC area is now in service from Vaughan Metropolitan Centre to Dupont Station. This change in technology contributed to the improved performance on the line as there were fewer delay incidents that would have formerly been attributed to the legacy subway signal system.

## Action Plan

Performance on Yonge-University will continue to improve as the ATC area of operation grows. The delay incidents will decrease as reliability improves, and trip times become more consistent, helping to maintain the schedule. The next phase of ATC will extend to St Patrick Station in Q2 2019.

Additional focus on-end terminal dwell times, including increasing supervision on platforms, is being implemented and will help improve on-time performance.

## Subway Line 2 On-Time Performance (OTP) – Kennedy and Kipling Terminal Stations



### Definition

*On-Time Performance (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 December the performance on Line 2 increased to 90.4%, from 88.7% at Kennedy and to 90.6%, from 87.6% at Kipling. Both terminals achieved target of 90%

## Analysis

Despite the improvement in on-time performance for the majority of December, the speed across all open cut areas remained at 35 km/hr to help address an ongoing issue with increased wheel flats on T-1 trains.

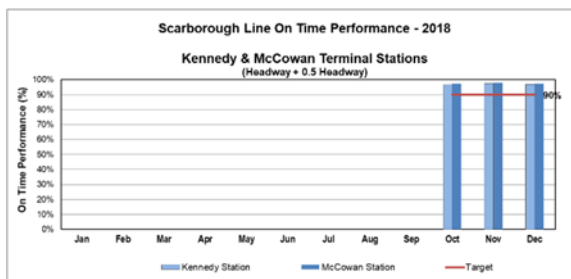
The slower speed is having a positive impact on wheel spin/slide, which causes the flats, however it also negatively impacts schedule adherence. Infrastructure and Vehicle engineering teams are working closely on identifying a longer term strategy forward for this complex problem.

## Action Plan

With the restricted speeds in place across the line, additional focus is being implemented at end terminals

to ensure prompt departures. This will provide consistent wait times for customers and reduce bunching and gapping.

## Subway Line 3 On-Time Performance (OTP) – Kennedy and McCowan Terminal Stations



### Definition

*On-Time Performance (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

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## Results

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The target for Line 3 schedule performance is 90%. In December 2018, the target was exceeded with 97% of trains leaving the departure locations within the specified parameters.

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## Analysis

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There were 38.3% fewer delay minutes in December. There were, however, a couple of occasions during the month when a Line 3 (SRT) train had to be removed from service. This significantly impacted the schedule as there are only four to five trains in service throughout the day.

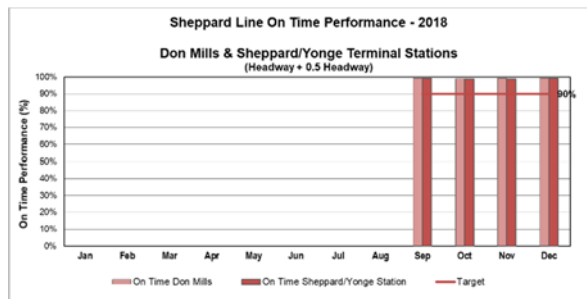
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## Action Plan

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For improved overall service, the vehicle maintenance program and schedule will be reviewed to determine if an additional train should remain in service in off-peak periods.

## Subway Line 4 On-Time Performance (OTP) – Don Mills and Sheppard Terminal Station



### Definition

*On Time Performance (OTP) measures the headway adherence of all service trains at end terminals. Data represents Monday-to-Friday service between 6:00am and 2:00am. To be on time a train must be within 1.5 times of its scheduled headway.*

### Contact

*James Ross,  
Chief Operating Officer*

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## Results

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Service on Line 4 continued to meet the target of 90% in December 2018. Performance increased to 99.3%, from 99.2% at Don Mills and to 99%, from 98.9% at Sheppard-Yonge Station.

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## Analysis

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Line 4 runs consistently with four trains throughout the day. The number of delay minutes on this line are very low, averaging two minutes per day.

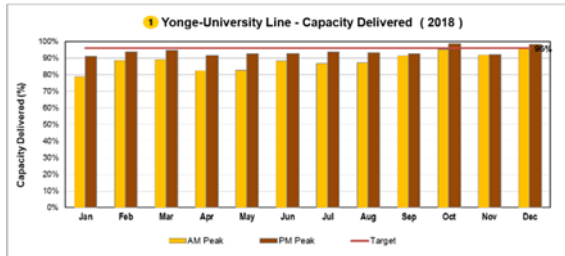
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## Action Plan

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

## Subway Capacity – Line 1



### 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 am to 9 a.m. and 3 p.m. to 7 p.m.

### Contact

James Ross,  
Chief Operating Officer

## Results

The target for capacity delivered on Line 1 is 96% for the a.m. and p.m. peaks. Line 1 exceeded the target of 96% during both peaks at 96.1% in the a.m. and 98.3% in the p.m.

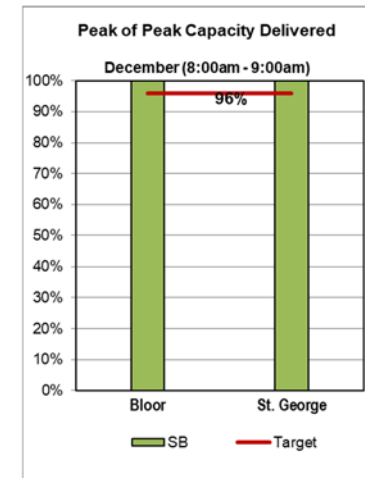
## Analysis

The target for capacity delivered is 25.5 trains per hour. This occurred on almost every weekday of the month, with one day achieving 30 trains through St George and Bloor stations. A 19% reduction in delay incidents contributed to this service. The coordination between Stations staff at key locations, as well as with the Tower Controllers and the timing of the use of Run-as-Directed (RAD) trains also helped achieve these results.

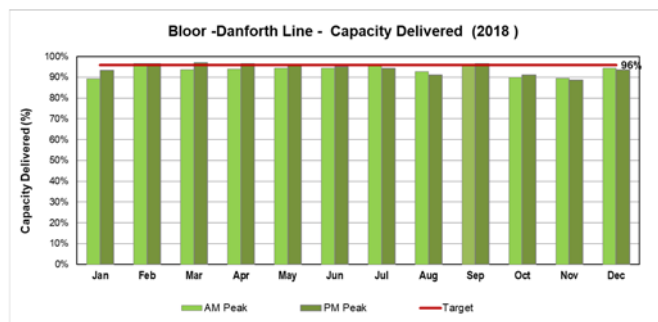
## Action Plan

Subway capacity can be impacted severely during prolonged incidents, for example, signal faults. A review of protocols to manage service during those incidents is ongoing and is expected to result in changes to how

Transit Control manages the line in degraded service conditions.



## Subway Capacity – Line 2



### 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 capacity delivered in December 2018 on Line 2 in the a.m. and p.m. peaks increased from the previous month. In the a.m., service capacity in November was 89.5% and increased to 94.4% in December. In the p.m., capacity increased to 93.5% from 88.8%, falling short of the 96% target.

## Analysis

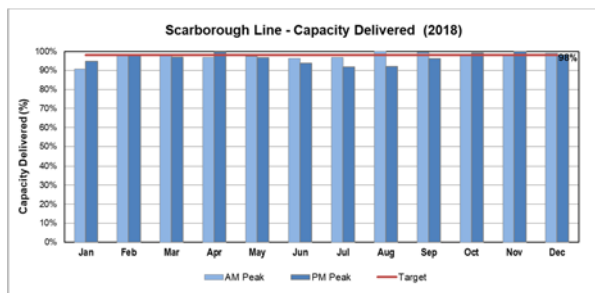
Overall, the line performed well with fewer equipment issues as well as 16.5% fewer passenger-related incidents, which resulted in 21.5% fewer delay minutes. The milder temperatures and decreased passenger volume due to the holidays also contributed to the improved performance.

## Action Plan

During December, two RAD trains were added to the p.m. peak service on a trial basis as crowding levels indicated this would be beneficial. Consideration will be made to making this a permanent addition.



## Subway Capacity – Line 3



### 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

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## Results

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Performance improved to 99.2% during the a.m., but decreased to 98.3% during the p.m. peak. Both periods exceeded the target of 98%.

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## Analysis

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The capacity in the p.m. peak decreased to 98.3% from 100% in December. One lengthy delay that impacted the performance occurred when a train experienced multiple door issues on December 14 and eventually had to be removed from service without replacement.

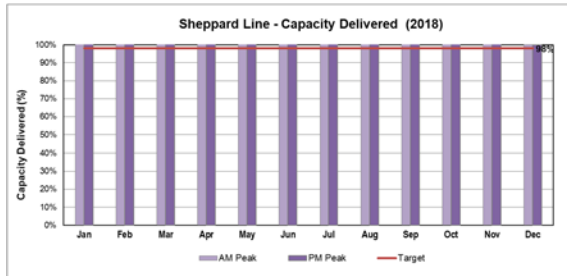
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## Action Plan

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There were no delays related to Subway Infrastructure on Line 3 in December. This is a decrease from 124 minutes in November. This reduction is related to the consistent work conducted by the Track and Signals team as well as the mild start to the winter.

## Subway Capacity – Line 4



### 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

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## Results

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The capacity on Line 4 exceeded the target and achieved 100% capacity.

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## Analysis

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There were no lengthy delays on Line 4 during the a.m. or p.m. service. There were 31 total incidents, an increase of two from November.

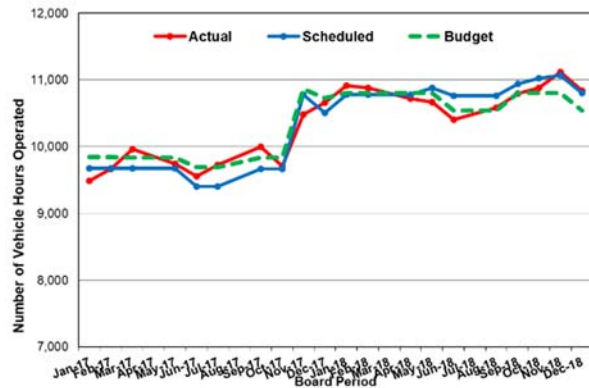
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## Action Plan

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Line 4 continues to run as scheduled. Proactive maintenance continues to be an important tool in delivering service.

## 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 December Board Period, 10,540 subway weekly hours were budgeted for service while 10,800 subway weekly hours were scheduled to operate, representing a variance of 2.47%.

Of the 10,800 subway weekly hours scheduled to operate, 10,834 weekly hours were actually delivered, representing a variance of 0.31%.

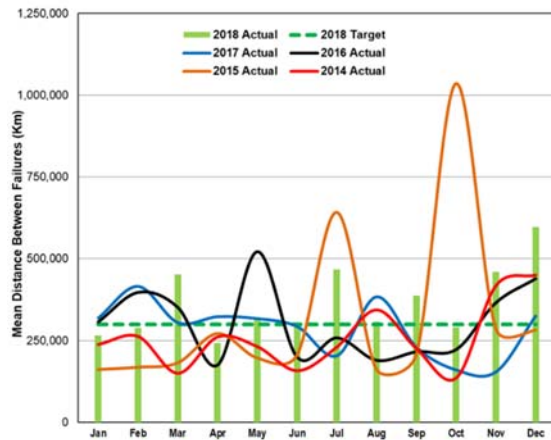
## Analysis

The variance between budgeted and scheduled is the result of an in-year Board-approved service enhancement to modify the Line 1 schedule.

## Action Plan

No action required at this time.

## Vehicle Reliability – 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 December was 597,269 kilometres, which exceeded the target of 300,000 kilometres.

## Analysis

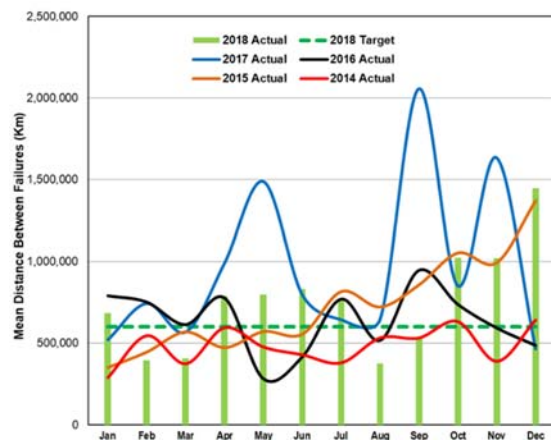
In December, there were five delay incidents greater than or equal to five minutes. The top offending system was the passenger door system with three delay incidents greater than or equal to five minutes. This was followed by the body and the propulsion inverter systems with one delay incident each.

## Action Plan

Failures related to the three-passenger-doors system were a result of a defective door control relay panel, and two faulty door lock assemblies. All passenger door related issues have since been rectified and tested positively. A program implemented in 2018 to install remanufactured door lock assemblies, which include upgraded door close switches will restore reliability to the passenger door system. The T1 door pocket guides

overhaul program was completed in 2017, and has resulted in a reduction in passenger-door-related incidents. The body related incident was due to cracked sealant above the cab, allowing water to enter the vehicle. sealant has since been replaced, and tested positively. The propulsion-inverter related delay incident was a result of a no-motion fault. The unit is being monitored and tested.

## Vehicle Reliability – 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 5 minutes or more. Includes all seven days of service.

### Contact

Rich Wong,  
Chief Vehicle Officer

### Results

The MDBF in December is 1,445,828 kilometres, which exceeded the target of 600,000 kilometres.

### Analysis

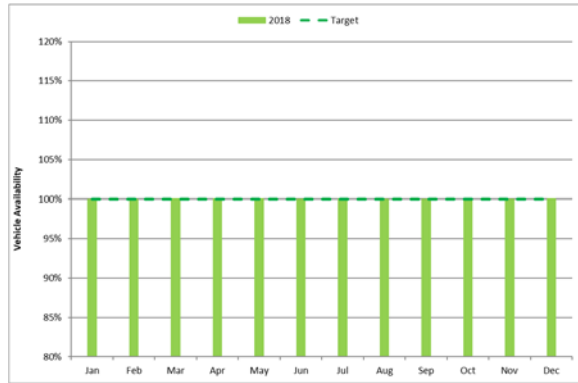
The TR trains have achieved three consecutive months of greater than one million kilometres of vehicle reliability. In December there were three delay incidents. The top offending systems were the passenger door system, the automatic train control system and the cab door system, each with one delay incident greater than or equal to five minutes.

### Action Plan

The passenger door related incident was due to a loose door coupler, which was secured and tested positively. The automatic train control system was related to a loose power connector to the automatic train operator modem. The loose power connector was secured and tested positively. The cab-door related incident was due to an out-of-

adjustment window latch which prevented the window from opening. The latch was repaired and tested positively. The passenger door system has received numerous modifications to the control units; fleet retrofits of the new modifications are in progress. The Carhouse and Reliability, Availability, Maintainability and Safety (RAMS) technical staff are closely monitoring door failures while the Equipment Control Desk (ECD) together with Transit Control are working to ensure that the incident recovery times are achieved below the five-minute threshold.

## Service Availability – Subway



### 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

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## Results

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The vehicle availability percentage for the month of December is 100%.

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## Analysis

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With two additional service trains added to both Lines 1 and 2 in November, we continued in December to meet the increased service requirements and reached our target of 100%. All vehicles were available for service when required.

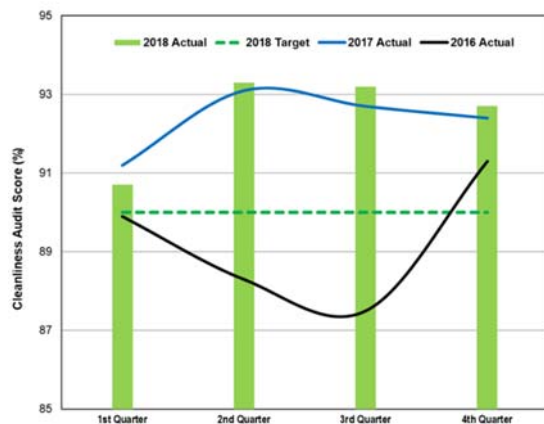
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## Action Plan

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Continue with the delivery of reliable vehicles to serve all four subway lines.

## Vehicle Cleanliness – Subway



### 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

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### Results

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The average rating of 92.7% in Q4 2018 is above the target of 90.0%. This department has recorded a score of greater than 90% for each quarter since Q4 2016.

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### Analysis

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Areas of strength in vehicle cleanliness across all fleets and lines were the ceilings, mandatory decals, lights, passenger seat conditions and walls. Major factors affecting the quarter-over-quarter cleanliness scores in Q4 2018, were the floors, the exterior cleanliness of the vehicle and the windows. The scores were lower than the previous quarter due to the colder winter.

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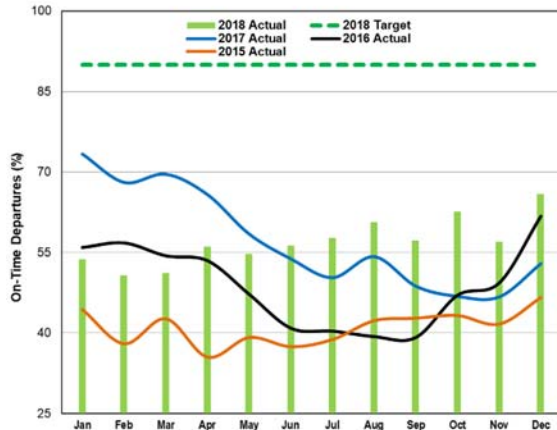
### Action Plan

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Exterior vehicle washes were limited due to winter weather conditions in Q4 2018. Focused exterior programs will be picked up in the spring and summer months of 2019. The floors are addressed every 14 days during the floor wash cycle.

Exterior vehicle washes were limited due to winter weather conditions in Q4 2018.

## 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

*Collie Greenwood,  
Chief Service Officer*

## Results

Streetcar OTP for December 2018 was 65.9%; an increase over November, and above December 2017 OTP figures, but falling below the target of 90%.

## Analysis

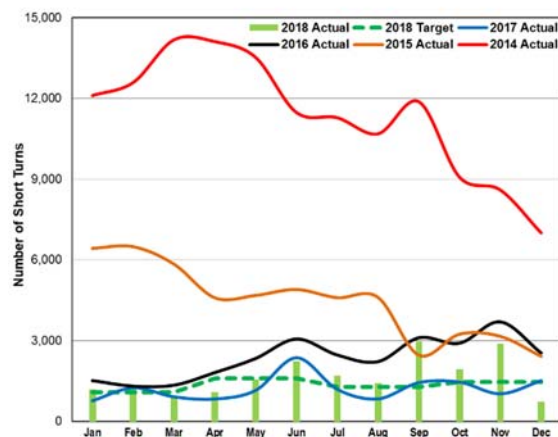
OTP on the streetcar network was negatively impacted by several events through the December period, including planned infrastructure repairs on King Street between Sumach and Shaw Streets (December 8-9) and emergency road work on Lake Shore Boulevard impacting the 501 Queen route (December 6-12). Further, the 505 Dundas route was negatively impacted throughout the month due to ongoing infrastructure repair work between Bathurst Street and University Avenue. The 505 route was also impacted by lane reductions between Ossington and Lansdowne in the middle of the month. Construction-related delays at the south end of Bathurst Street negatively impacted the performance of the 511 Bathurst route through most of the period.

## Action Plan

The performance results highlight a need for continued improvement of network schedules and route management on a day-to-day basis. Continued efforts will be made to monitor performance and develop improved streetcar schedules through 2019. The 512 St Clair schedule will see additional run time added in February 2019 and the King routes (504A and 504B) will see additional run time added for the April 2019 Board Period.



## Streetcar – Short Turns



### Definition

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

### Contact

Collie Greenwood,  
Chief Service Officer

## Results

Short turns in December 2018 decreased compared to November 2018 and were lower than December 2017.

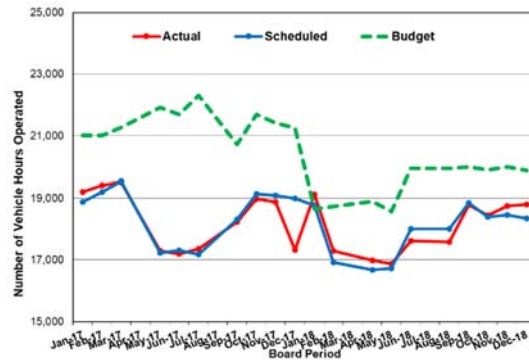
## Analysis

There were 719 streetcar short turns during December 2018, representing the lowest number of short turns per month for the past five years. This achievement was largely due to the utilization of up to four "extras" and up to two RAD streetcars, made available since the end of November. These vehicles were largely utilized on the 501, 504, and 512 routes and allowed for the significant decrease in short turns by assisting with delays and Operator changeovers between vehicles, as required. Further, extra focus and diligence has been placed on yard pull-outs and day-to-day route management in order to achieve these results. This has included a review of Central Supervisor workloads with the goal of increasing staff effectiveness.

## Action Plan

Ongoing efforts focusing on yard pull-outs and day-to-day route management continue. Planning efforts will continue to be made to provide for the "extra" and RAD vehicles moving forward. As well, streetcar schedules and run times will continue to be reviewed and improved in a systematic basis throughout 2019.

## 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 December 2018 Board Period, 19,877 streetcar weekly hours were budgeted for service while 18,347 streetcar weekly hours were scheduled to operate, representing a variance of -7.7.

Of the 18,347 streetcar weekly hours scheduled to operate, 18,794 streetcar weekly hours were actually delivered, representing a variance of 2.44%.

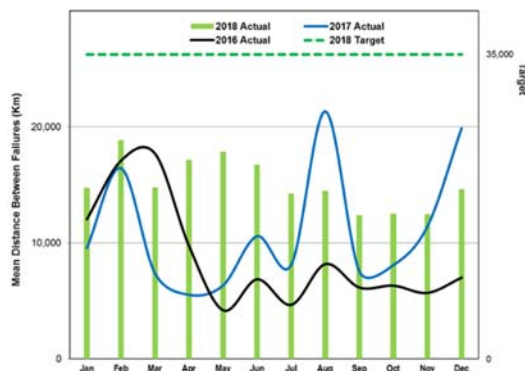
## Analysis

The variance between budgeted hours and scheduled hours is a result of the streetcar fleet shortage. Streetcars have been removed from the 505 Dundas and 511 Bathurst routes and replaced with bus service. The introduction of six run-as-directed, low-floor streetcars to weekday service, resulted in the variance between scheduled and delivered.

## Action Plan

Staff continue to monitor the Bombardier delivery schedule. At the end of 2018, 117 new low-floor streetcars were available for service.

## Vehicle Reliability - 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 December 2018 was 14,646 kilometres. This is a decrease of 5,219 kilometres when compared to December 2017 and an increase of 2,161 kilometres compared to November. The overall LFLRV MDBF remains below the 35,000-kilometre target.

## Analysis

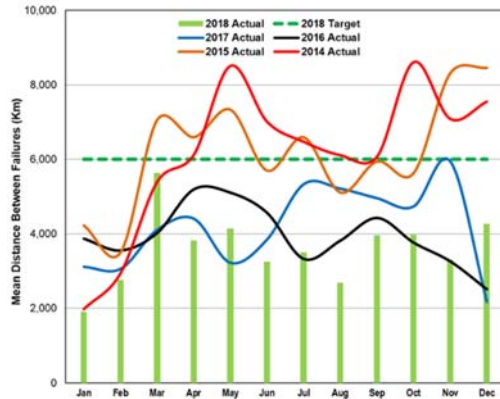
A reduction in the number of faults involving the coupler & train control Management Systems, helped to improve the MDBF in December. Door-system faults continue to plague the fleet, however, ongoing modifications to the door system have helped to keep the number of faults consistent from the past month. Other system faults that are starting to appear include hydraulic seal leaks and heating system issues.

## Action Plan

Bombardier is aware of the brake system and heating failures and is

working with staff to identify and implement technical solutions. Door system modifications by Bombardier are still underway to further improve system reliability.

## Vehicle Reliability – 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 for December, 2018 was 4,270 kilometres.

This was an increase of 2,093 kilometres from the same period in 2017 and an increase of 960 kilometers from November. The MDBF continues to remain below the target of 6,000 kilometres.

## Analysis

The increase in reliability of the CLRV streetcars is attributed to a reduction in the number of sander and compressed air failures, which were the main factors affecting reliability in November. In addition, braking, high voltage and windshield system failures were also reduced. The decrease in failures is attributed to the implementation of winter-readiness maintenance and targeted preventative maintenance processes.

## Action Plan

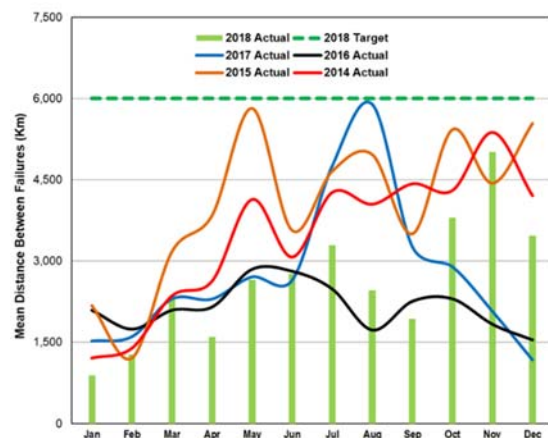
The Streetcar Maintenance department will continue to

implement winter and preventative maintenance on the main systems affected by inclement weather, including: sander, compressed air, overhead interface and windshield systems. In addition, the State of Good Repair programs and decommissioning of unreliable vehicles will continue to increase the reliability of the CLRV fleet.

## Streetcar Decommissioning Schedule

Year	CLRV	ALRV	Total
2015	7	0	7
2016	16	5	21
2017	30	0	30
2018	28	31	59
2019	113	15	128
<b>Total</b>	<b>194</b>	<b>51</b>	<b>245</b>

## Vehicle Reliability- ALRV Streetcar Mean Distance Between Failures (MDBF)



### Definition

Total kilometres travelled by Articulated Light Rail Vehicles (ALRVs) compared to the number of mechanical incidents resulting in delays of five minutes or more. Data includes all seven days of service.

### Contact

Rich Wong,  
Chief Vehicle Officer

## Results

The MDBF of the ALRV fleet for December 2018 was 3,464 kilometres. This was an increase of 2,287 kilometres from December 2017, but a decrease of 1,551 kilometres when compared to November. The MDBF still remains below the target of 6,000 kilometres.

## Analysis

An increase in the number of warning/alarm system failures, including the horn, gong and door chimes in December decreased overall ALRV reliability. The failures in all other systems, particularly the compressed air and propulsion equipment remained consistent with the previous month and are attributed to systematic repairs and the reduction of backlog maintenance.

## Action Plan

ALRVs will continue to be repaired and analyzed. Unreliable vehicles will continue to be decommissioned to improve overall reliability.

## 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 Vehicle Officer

## Results

The target for the maximum number of RCCOs is 1.5% of peak daily service. In December 2018, 8.1 % (or 13 of 160 vehicles) of peak daily service vehicles resulted in a RCCO. This was an increase of 0.5% from November.

## Analysis

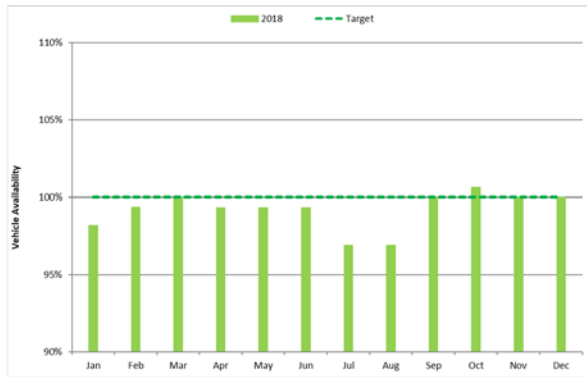
Streetcar warning systems, particularly gongs/horns and passenger stop requests on the legacy vehicles contributed to the high number of RCCOs for the month of December. In addition, random failures on the electrical equipment due to the age of the legacy vehicles continue to cause propulsion-related failures. Although the number of high voltage issues were reduced on the Low-Floor Light Rail Vehicles (LFLRV) month to month, there remain a high number on the legacy vehicles. Door and body failures, which include knobs, compartment panels and operator seats affected the number of RCCOs on the LFLRVs in December.

## Action Plan

Staff will review each incident and provide guidance on how to minimize these defects by improving on pre-service inspection performance and options for focused maintenance activity. Carbon inspections and replacements will continue to be monitored to reduce high voltage failures. Bombardier continues to address door issues with the LFLRVs and is working with TTC staff to reduce other failures resulting in RCCOs.

As we continue to retire the older ALRVs and CLRVs, the reliability factor is expected to improve significantly.

## Service Availability – Streetcars



### 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*

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## Results

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The target for streetcar availability is 100% of peak daily service. In December, the target requirements were met with an average of 160 vehicles available for service.

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## Analysis

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Low-Floor Light Rail Vehicle (LFLRV) numbers continue to increase and are used to replace and supplement the unreliable legacy vehicles so that target availability numbers can continue to be met.

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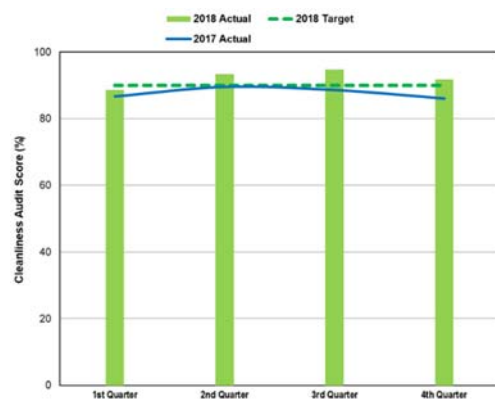
## Action Plan

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The Streetcar Maintenance department will continue to commission LFLRVs and decommission the legacy fleet to meet service requirements.



## Cleanliness – Streetcar



### 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

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## Results

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The audit score for streetcar cleanliness for Q4 2018 was 91.8%. This is an increase from Q4 2017, but a decrease from Q3 2018. Streetcar cleanliness remains above the target of 90%.

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## Analysis

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High demand for service vehicles limits availability for exterior/interior wash scheduling. Inclement weather has also affected cleanliness results, particularly flooring.

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## Action Plan

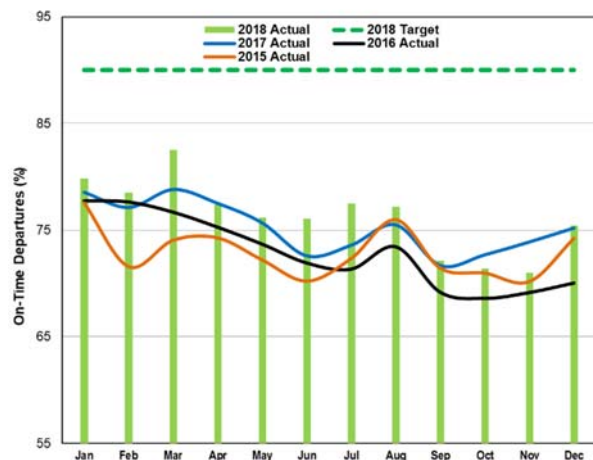
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Staff continues to investigate and identify further improvements, including additional equipment to make cleaning more efficient.



## Bus Services

### Bus – 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 up to five minutes later than their scheduled departure time. Includes all seven days of service. Night routes are excluded.*

#### Contact

Collie Greenwood,  
Chief Service Officer

### Results

Despite results below the target of 90%, there has been year-over-year improvement in OTP for Bus Transportation since 2015. Performance in December, 2018 has remained constant at 75.5% similar to the same period in 2017.

### Analysis

Route performance continues to be closely monitored to assess delays related to Crosstown construction along Eglinton Avenue and the impact of road construction projects on city streets.

The following schedule changes were implemented in the November-December Board Period (Effective November 18 to January 5, 2019):

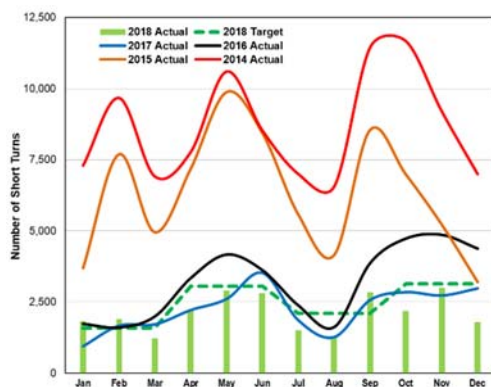
Service Reliability Improvements: 7 Bathurst and 81 Thorncliffe Park.

### Action Plan

Employee performance continued to be closely monitored to maximize the effectiveness of schedule

improvements. Since March 2017, 1,923 employee interviews (including 89 in December, 2018) have been conducted for schedule adherence irregularities. Occurrences continue to decrease as a result of this initiative.

## Bus – Short Turns



### Definition

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

### Contact

Collie Greenwood,  
Chief Service Officer

## Results

Short turns for this period remain below target (favourable) and have decreased compared to the same period in 2017.

## Analysis

The number of short turns in December 2018 decreased to 1,796 as compared to 2,973 in the same period in 2017, and remained below the quarterly target of 3,131 per month.

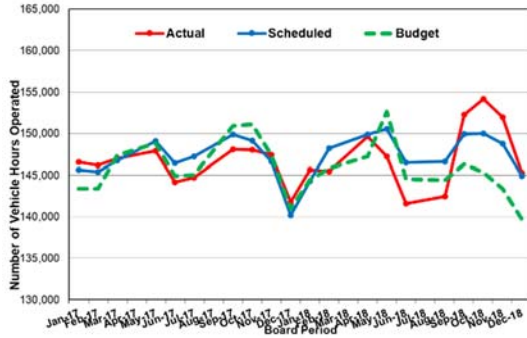
The top five routes for short turns include; 32 Eglinton West (6.1 %), 96 Wilson (6.0%), 95 York Mills (5.4%), 165 Weston Rd North (5.3%) and 24 Victoria Park (4.9%)

Short turns in December were mainly driven by traffic congestion (55.1%), construction (15.2%) and passenger volumes (12.9%).

## Action Plan

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.

## 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

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## Results

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In the December 2018 Board Period, 139,692 bus weekly hours were budgeted for service while 144,929 bus weekly hours were scheduled to operate, representing a variance of 3.75%.

Of the 144,929 bus weekly hours scheduled to operate, 145,299 weekly hours were actually delivered, representing a variance of .26% (favourable).

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## Analysis

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The variance between budgeted and scheduled is a result of buses operating on streetcar routes and TTC Board-approved service initiatives to address overcrowding (e.g. expanded Express bus network).

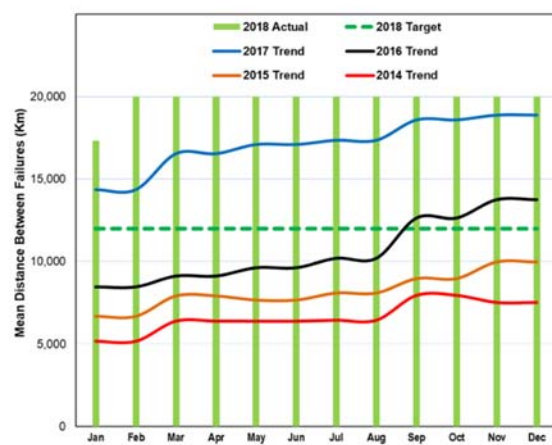
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## Action Plan

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No action required at this time.

## Vehicle Reliability – 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 December 2018 MDBF of 20,000 kilometres far exceeded the target of 12,000 kilometres. Significant improvements can be seen over the five-year period since 2013.

## Analysis

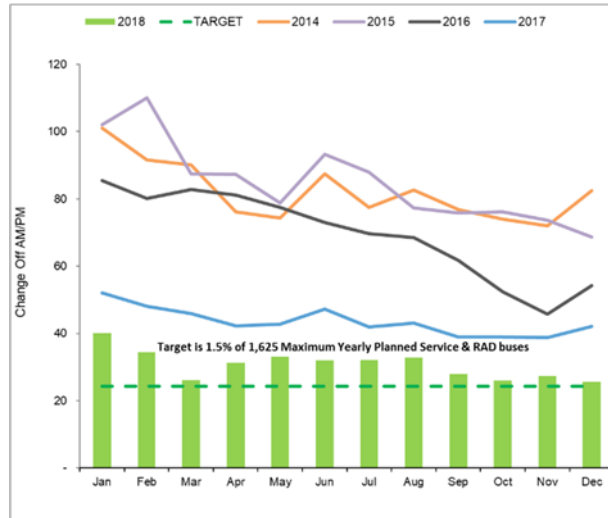
The entire Orion VII series diesel bus fleet (7400-7882) was removed from service and replaced in 2018 with 297 new Nova buses. Nova bus coolant leaks affecting the fleet have been reduced to 14% of road calls as compared to 17% in November. Exhaust emission-filter failures accounted for approximately 8% of chargeable road calls.

## Action Plan

Technical Bulletins have been released to correct Nova coolant design issues, including revised coolant fill procedure, coolant hose clamping instructions, and method for low coolant identification on the Service Line.

The Technical Support Services department is working with the Materials and Procurement Department to evaluate the diesel particulate filter cleaning vendor. The Vehicle Reliability and Quality Assurance department is developing VISION (CAD/AVL) process/reports to proactively identify potential after-treatment failures before a road call.

## 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 Vehicle Officer

## Results

The average number of change offs in December 2018 was 26 per day, one percent lower than November 2018. This is also well below the year-to-date average of 31.

## Analysis

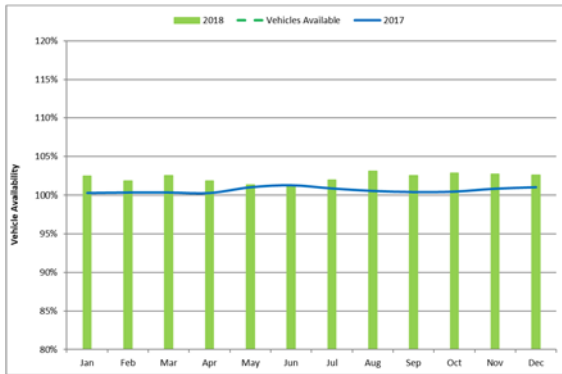
During December 2018 there were 1,631 buses per day operating during peak revenue service, including Run-as-Directed (RAD) buses. The average number of change offs per day represented 1.63% of service.

Body interior/exterior issues are the leading cause of RCCOs.

## Action Plan

One of the main causes of RCCOs are the failing components of the Operator barrier shields (e.g. hinges, latches and locks). An Operator barrier maintenance program is currently being designed to address these issues. Once implemented, this program will help support the reduction in body interior RCCOs. Corrective action for body exterior road calls is still under review.

## Service Availability – Bus



### 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

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## Results

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The average number of buses provided for peak service in December, 2018 was 1,629 per day or 102.6% of planned service. This is well above the target of 1,588 buses.

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## Analysis

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The average daily number of buses provided year-to-date is 1,594 or 102.2% of the average planned service of 1,559 buses. The significant number of new bus procurements from 2016 to 2018 has boosted the fleet performance and permitted a lower-than-projected spare ratio. The lower spare ratio supports additional buses available for service.

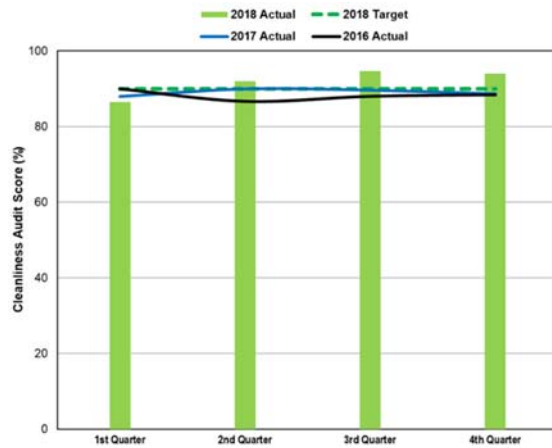
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## Action Plan

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Continue to monitor and control all aspects of maintenance that support continuous improvement initiatives.

## Cleanliness – Bus



### 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

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## Results

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The bus cleanliness audit score in Q4 2018 was 94.0% which is above the target of 90%. Q4 2018 results are slightly below Q3 2018 results.

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## Analysis

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The performance score takes into account pre-service, in service and post-service audit results. Scores are impacted by changes in in-service operating conditions. Q1 2019 results are likely to have a minor negative variance due to inclement weather conditions.

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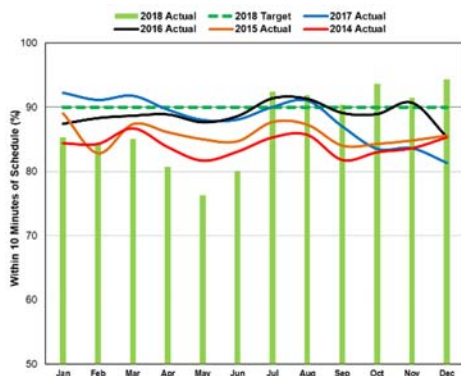
## Action Plan

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Continue manually cleaning the front and back of the bus exteriors. The mid-day cleaning trial continues to the end of Q1 2019 and will then be evaluated.

## 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

Collie Greenwood,  
Chief Service Officer

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#### Results

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OTP in December 2018 was 94.4%, an increase of 2.9% from the previous period.

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#### Analysis

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Wheel-Trans has dedicated specific staff members to monitor OTP daily, in order to provide efficient and effective scheduling of passenger trips. This has resulted in Wheel-Trans continuing to operate above the target OTP of 90% in December. Some of the new features in the upgraded scheduling software implemented in early December 2018 allow for improved functionality when considering passenger rate per hour.

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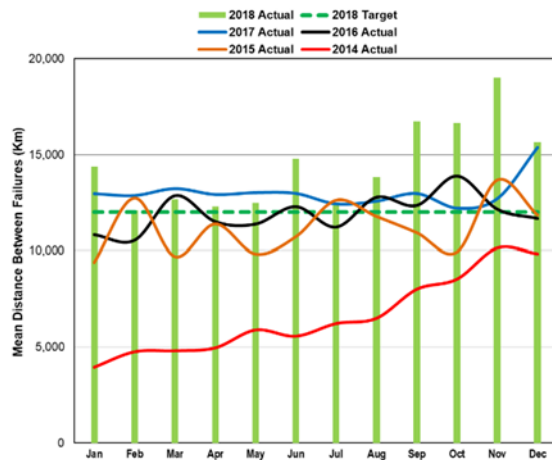
#### Action Plan

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We continue to focus on filling vacancies in the Dispatch Centre. The upgraded scheduling/monitoring system includes enhanced features which provide improved monitoring of late vehicles, managing of customer trips and reduction of incident delay times.



## Vehicle Reliability – 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 December 2018 MDBF of 15,633 kilometres exceeded the target of 12,000 kilometres, and is slightly above the December 2017 average of 15,375 kilometres.

## Analysis

73 of 80 ProMaster buses are now in service with the remaining seven buses awaiting pre-service equipment installations. Diesel exhaust fumes reported by Operators, account for most of the failures in the Friendly bus fleet.

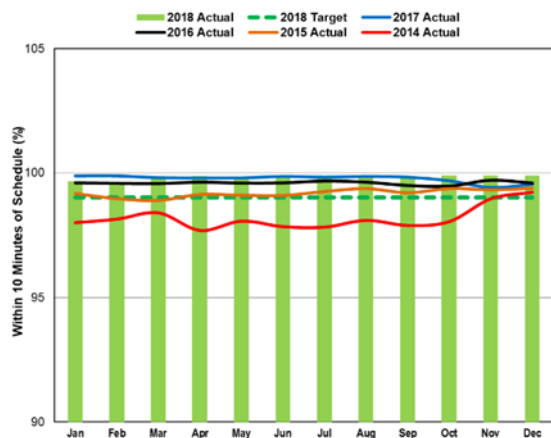
## Action Plan

All 30 Friendly buses scheduled for body exterior overhaul in 2018 have been completed. An additional 40 buses are scheduled for 2019.

Discussions are continuing with the Transportation department to help mitigate fume issues caused by the diesel exhaust after-treatment system on the Friendly bus fleet. Initial investigation into this issue indicates that the Friendly vehicles

are not completing the exhaust regeneration cycle (cleaning), which is necessary to clear the exhaust filters. This is primarily due to the fact that the vehicles never reach the required speed to activate the process. The Lakeshore Maintenance Garage is mitigating the problem by forcing exhaust regeneration on-property during servicing to avoid road calls.

## 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

Collie Greenwood,  
Chief Service Officer

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## Results

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The rate for Wheel-Trans accommodated service in December 2018 was 99.9%. This is 0.9% higher than the Wheel-Trans target and 0.4% higher than the same period in 2017.

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## Analysis

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The accommodated rate has consistently been above the 99% target, indicating that virtually all customers receive the trip(s) they are requesting.

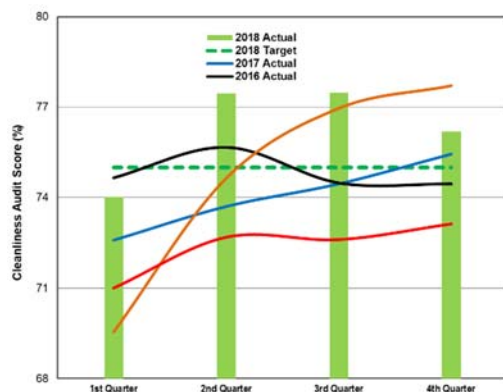
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## Action Plan

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Wheel-Trans will continue to monitor trip requests and trip scheduling to ensure that we are consistently above the 99% target and that customers receive the trip(s) they require.

## Station Services Cleanliness – Station



### Definition

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

### Contact

James Ross,  
Chief Operating Officer

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### Results

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The average cleanliness station score for Q4 2018 was 76.2%, exceeding the target of 75%.

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### Analysis

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Enhanced cleaning projects such as the accelerated re-lamping, Luxalon cleaning, station enhancement and blitz will run again, starting in March 2019.

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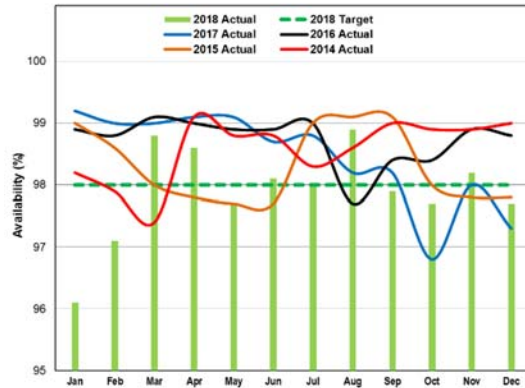
### Action Plan

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The Station Services department continues to schedule extra cleaning projects during weekend closures where possible, to ensure that stations are in top condition when reopened following the closure work.

Note: The Q1 2019 audit score will be available in the May 2019 CEO's Report.

## Equipment Availability – Elevators



### 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

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## Results

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Elevator availability was 97.7% in December 2018, falling just shy of the 98%. This is a decrease from November's level of 98.2%.

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## Analysis

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Performance in December was negatively impacted by a temporary closure of an elevator at Victoria Park Station for City of Toronto construction work (pedestrian bridge repairs).

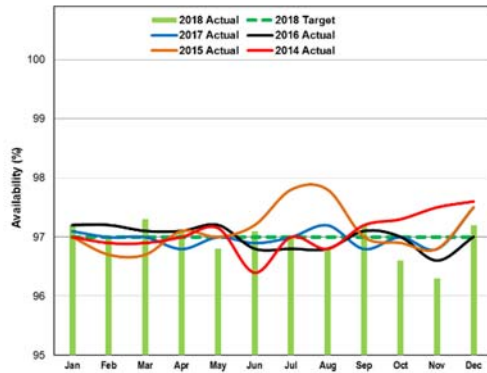
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## Action Plan

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The construction work was completed on December 27 and the elevator returned to service.

## Equipment Availability – Escalators



### Definition

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

### Contact

Fort Monaco,  
Chief Infrastructure and Engineering  
Officer

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## Results

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Escalator availability was above the target of 97% for December 2018, and performance increased to 97.2% from November's level of 96.3%.

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## Analysis

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Completion of life extension work on Line 3 escalators in November contributed to favourable performance in December.

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## Action Plan

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Continue performing preventative maintenance to meet reliability and availability targets.

## Equipment Availability - 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 decreased marginally to 97.7% in December 2018 remaining below the target of 99.5%.

### Analysis

The decrease in December reflects the ongoing hardware and software issues with the fare gates. With the current modification programs in place, we expect performance to improve throughout 2019.

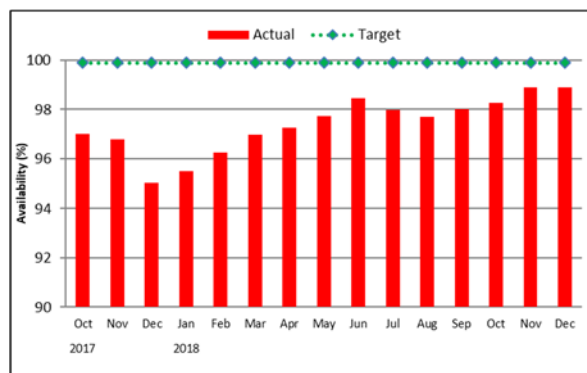
### Action Plan

We continue to work with Scheidt and Bachmann to address ongoing hardware and software issues relating to fare gates. A number of plans have been developed and are currently being implemented.

For the month of January 2019, we are rolling out an additional software upgrade to address a number of outstanding software issues with the fare gates. In addition, we are continuing with the motor and industrial computer replacements

which are on schedule to be completed in early 2019.

## 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 CEO - Operations*

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## Results

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PRESTO card reader availability averaged 98.9% during December 2018, remaining at the same level as November, and below the target of 99.9%. The availability trend remains positive for 2018.

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## Analysis

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The level of availability for PRESTO card reader devices in subway stations and onboard buses and streetcars has remained consistent with the previous month. This is a result of equipment improvements and maintenance process enhancements.

The consistent increase in availability that has occurred since August 2018 continues with an overall positive trend since January 2018.

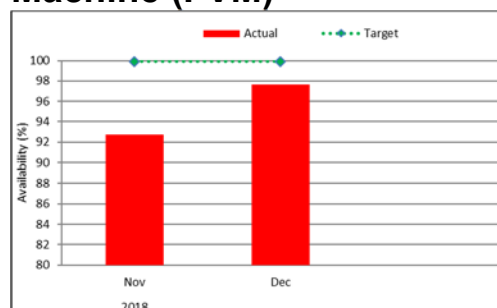
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## Action Plan

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A number of hardware and software improvements are planned for rollout commencing in Q1 2019.

## PRESTO Fare Vending Machine (FVM)



### Definition

*The average percentage of daily availability of PRESTO Fare Vending Machine (FVM) based on duration of incidents from open to resolution.*

*PRESTO Fare Vending Machines (FVM) 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 subway station entrances*

### Contact

*Kirsten Watson,  
Deputy CEO - Operations*

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## Results

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PRESTO FVM availability averaged 97.6% during December 2018, representing an increase from November's level of 92.7%. These values remain below the target of 99.9%.

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## Analysis

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The increase in availability of the FVMs is due to adjustments to the maintenance processes for these machines in order to support the uptake resulting from the elimination of TTC Metropasses. These included enhanced remote monitoring of the FVMs and an increase in equipment maintenance crews.

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## Action Plan

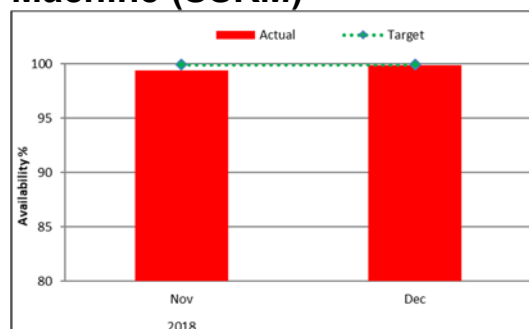
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The adjusted processes are expected to be maintained through the February 2019 sales period. Following the end of the February sales period, with two months of information and practical experience, The TTC will identify trends and if required, make further adjustments to these processes.

Future software and hardware changes are not planned until the end of Q1/early Q2 2019. There are no significant changes resulting from software/hardware updates expected until Q2 2019.



## PRESTO Self-Serve Reload Machine (SSRM)



### Definition

*The average percentage of daily PRESTO Self-Serve Reload Machine (SSRM) availability based on duration of incidents from open to resolution.*

*PRESTO Self-Serve Reload Machine (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 CEO - Operations*

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## Results

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PRESTO SSRM availability averaged 99.8% during December 2018, representing an increase from November's level of 99.4%. The values still remain below the target of 99.9%.

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## Analysis

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The increase in availability of the SSRMs is due to adjustments to the maintenance processes for these machines to support the uptake that resulted from the elimination of TTC Metropasses. These included enhanced remote monitoring of the SSRMs and an increase in equipment maintenance crews.

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## Action Plan

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The adjusted processes are expected to be maintained through the February, 2019 sales period. Following the end of the February sales period, with two months of information and practical experience, the TTC will identify trends and if required, make further adjustments to these processes.

Future software and hardware changes are not planned until the end of Q1/early Q2 2019. There are no significant changes resulting from software/hardware updates expected until Q2 2019.

## PRESTO Fares and Transfer Machines (FTMs)



### Definition

*The weighted percentage of all Fares and Transfer Machines onboard and off board that are in working order and available for customer use.*

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

### Contact

*Kirsten Watson,  
Deputy CEO - Operations*

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## Results

PRESTO FTM availability averaged 94.2% in December 2018, representing an increase over November's value of 90%, but remaining below the target of 99.9%.

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## Analysis

Metrolinx completed the removal of debit and credit payment feature from all FTMs located onboard streetcars and at streetcars stops in December. This change improved the availability of these machines.

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## Action Plan

The priority and timing for additional changes to payment features on FTMs is currently being assessed and planned.

For further information on TTC  
performance, projects and services,  
please see [www.ttc.ca](http://www.ttc.ca)

