# Toronto Transit Commission CEO's Report May 2018



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# Toronto Transit Commission CEO's Report May 2018

# TTC performance scorecard

Key Performance Indicator	Description	cription Latest Measure Current		Target	Current Status	Ongoing Trend	Page	
Safety and Security								
Lost Time Injuries Injuries per 100 Employees		Mar 2018	4.33	3.81*	$\mathbf{x}$		14	
Customer Injury Incidents	Injury Incidents per 1M Boardings	Mar 2018	1.03	1.18*		<b>~</b>	15	
Offences against Customers	Offences per 1M Boardings	Mar 2018	Mar 2018 0.61				16	
Offences against Staff	Offences per 100 Employees	Mar 2018 4.38		4.63*		Ø	17	
Customer: Ridership	TTC Ridership	Mar 2018	50.7M	52.0M	×		18	
	TTC Ridership	2018 y-t-d to Mar	139.4M	143.3M	×	NA	18	
	PRESTO Ridership	Mar 2018	12.2M	12.2M		Ø	19	
	PRESTO Ridership	2018 y-t-d to Mar	32.3M	29.9M		NA	19	
	Wheel-Trans Ridership	Mar 2018	401K	455K	$\mathbf{x}$	$\checkmark$	20	
	Wheel-Trans Ridership	2018 y-t-d to Mar	1,082K	1,236K	$\bigotimes$	NA	20	
Customer: Satisfaction	Customer Satisfaction Score	Q1 2018	79%	79%		Ø	21	

Ongoing trend indicators

Favourable 😑 Mixed

\* Represents current 12-month average of actual results

 $\mathbf{\Theta}$ 

Unfavourable

Key Performance Indicator	Description	Latest Measure	Current	Target	Current Status	Ongoing Trend	Page
Customer: Environment							
Station Cleanliness	Audit Score	Q1 2018	74%	75%	$\bigotimes$	<b>S</b>	22
Streetcar Cleanliness	Audit Score	Q1 2018	88.6%	90%	$\boldsymbol{\otimes}$		23
Bus Cleanliness	Audit Score	Q1 2018	86.4%	90%	$\bigotimes$		24
Subway Cleanliness	Audit Score	Q1 2018	90.7%	90%		<b>S</b>	25
Customer: Service Performar	nce						
Subway							
Line 1 Yonge-University	Delay Incidents	Mar 2018	745	448	$\bigotimes$	$\bigotimes$	26
	Delay Minutes	Mar 2018	2,282	913	$\bigotimes$	$\bigotimes$	27
	Capacity Delivered in Peak	Mar 2018	91.6%	96%	$\bigotimes$	0	28
Line 2 Bloor-Danforth	Delay Incidents	Mar 2018	692	399	$\bigotimes$	$\bigotimes$	29
	Delay Minutes	Mar 2018	1,597	835	$\mathbf{x}$	$\bigotimes$	30
	Capacity Delivered in Peak	Mar 2018	95.3%	96%	$\mathbf{x}$	<b>—</b>	31
Line 3 Scarborough	Delay Incidents	Mar 2018	43	39	$\bigotimes$	0	32
	Delay Minutes	Mar 2018	301	232	$\bigotimes$	0	33
	Capacity Delivered in Peak	Mar 2018	97.6%	98%	$\bigotimes$	0	34

Ongoing trend indicators

Favourable 😑 Mixed

😢 Unfavourable

\* Represents current 12-month average of actual results

Dolay Incidents				Status	Trend	Page	
Delay Incidents	Mar 2018	50	32	$\mathbf{x}$	$\bigotimes$		
Delay Minutes	Mar 2018	151	78	$\mathbf{x}$	$\bigotimes$	36	
Capacity Delivered in Peak	Mar 2018	100%	98%		Ø	37	
On-Time Departure	Mar 2018	51.2%	90%	$\bigotimes$	•	38	
Short Turns	Mar 2018	931	1,074		Ø	39	
On-Time Departure	Mar 2018	82.6%	90%	$\bigotimes$	$\checkmark$	40	
Short Turns	Mar 2018	1,221	1,590			41	
% Within 10 Minutes of Schedule	Mar 2018	85.1%	90%	$\bigotimes$	0	42	
Weekly Service Hours	Feb 2018	18.7K	18.7K		$\checkmark$	43	
Weekly Service Hours	Feb 2018	143.2K	145.8K	$\bigotimes$	•	44	
Weekly Service Hours	Feb 2018	10.9K	10.8K			45	
Crewing Efficiency	Mar 2018	86.83%	87.15%	$\bigotimes$	×	46	
Absenteeism Rate	Mar 2018	6.65%	7.42%*		×	47	
	Capacity Delivered in Peak On-Time Departure Short Turns On-Time Departure Short Turns % Within 10 Minutes of Schedule Weekly Service Hours Weekly Service Hours Weekly Service Hours	Capacity Delivered in PeakMar 2018On-Time DepartureMar 2018Short TurnsMar 2018On-Time DepartureMar 2018Short TurnsMar 2018Short TurnsMar 2018Weekly Service HoursFeb 2018Weekly Service HoursFeb 2018Weekly Service HoursFeb 2018Crewing EfficiencyMar 2018	Capacity Delivered in PeakMar 2018100%On-Time DepartureMar 201851.2%Short TurnsMar 2018931On-Time DepartureMar 201882.6%Short TurnsMar 20181,221% Within 10 Minutes of ScheduleMar 201885.1%Weekly Service HoursFeb 201818.7KWeekly Service HoursFeb 2018143.2KWeekly Service HoursFeb 201810.9KCrewing EfficiencyMar 201886.83%	Capacity Delivered in PeakMar 2018100%98%On-Time DepartureMar 201851.2%90%Short TurnsMar 20189311,074On-Time DepartureMar 201882.6%90%Short TurnsMar 20181,2211,590% Within 10 Minutes of ScheduleMar 201885.1%90%Weekly Service HoursFeb 201818.7K18.7KWeekly Service HoursFeb 2018143.2K145.8KWeekly Service HoursFeb 201810.9K10.8KCrewing EfficiencyMar 201886.83%87.15%	Delay MinutesMar 201815178Image: constraint of the system of t	Delay MinutesMar 201815178XCapacity Delivered in PeakMar 2018100%98%Image: Constraint of the constraint	

#### Ongoing trend indicators

📄 Favourable 🧲 Mixed

\* Represents current 12-month average of actual results

Onfavourable

Key Performance Indicator	Description	Latest Measure	Current	Target	Current Status	Ongoing Trend	Page	
Assets: Vehicle Reliability								
Subway								
T1	Mean Distance Between Failures	Mar 2018	451,501 km	300,000 km			50	
TR	Mean Distance Between Failures	Mar 2018	407,535 km	600,000 km	$\bigotimes$	•	51	
Streetcar								
CLRV	Mean Distance Between Failures	Mar 2018	5,638 km	6,000 km	×		52	
ALRV	Mean Distance Between Failures	Mar 2018	2,357 km	6,000 km	×		53	
LFLRV	Mean Distance Between Failures	Mar 2018	14,777 km	35,000 km	⊗	•	54	
Bus	Mean Distance Between Failures	Mar 2018	20,000 km	12,000 km			56	
Wheel-Trans	Mean Distance Between Failures	Mar 2018	12,678 km	12,000 km			58	
Assets: Equipment Availabilit	у							
Elevators	Percent Available	Mar 2018	98.8%	98%			59	
Escalators	Percent Available	Mar 2018	97.3%	97%		Ø	60	
Fare Gates	Percent Available	Mar 2018	96.3%	99.5%	$\bigotimes$	$\bigotimes$	61	

Ongoing trend indicators

Favourable 🤤 Mixed 😢 Unfavourable

\* Represents current 12-month average of actual results

# CEO's commentary and current issues

#### **General Overview**

The CEO's Report we present each Board meeting continues to evolve from month-to-month. For example, "Delivery of Major Projects" has been folded into Critical Paths. Please note, that it has only been three weeks since we last met, so certain KPIs are not yet available. Nevertheless, we'll continue to ensure this report is as timely and transparent as possible, and one that reflects the service delivered, not just the service planned.

On April 23, the city, as you all know, experienced an unthinkable horror on our streets. Many TTC employees work near North York Centre. We will be forever grateful that no TTC employee was injured on this tragic day. Some, however, did witness this act. All supports were made available to TTC employees on the day of the event, and in the days following this tragedy.

Our Special Constables were some of the first responders who were first on the scene, performing CPR and giving first aid to victims. They also assisted police, ensuring a very large crime scene remained secure. The entire TTC team, in fact, stepped up, as we always do under trying circumstances. Stations staff were in place to assist customers during the subway closure north of Sheppard Station, and Bus Transportation swung into action, providing shuttles to get our customers up to Finch or down to Sheppard.

On the weekend of April 14 and 15, as well as the Monday morning on April 16, the city was hit with severe weather in the form of ice pellets, freezing rain, heavy rain and high winds. The TTC was well-prepared on all fronts, particularly on streetcars. The streetcar network is the most vulnerable asset for extreme weather, including extreme cold and ice. Staff actively monitored weather forecasts and put in place a plan to mitigate, impacts to service before the storm hit.

On streetcars, we applied an anti-freeze agent to the overhead network to keep ice free from the wires. We did the same to all switches across the network, as well as running "storm cars" on all track. A storm car is just a regular streetcar that is used to run across switches, to keep them active during a storm.

TTC staff were at the city's Emergency Operations Centre throughout the weekend, ensuring information was shared with our partners in City Transportation, and first responders. Priority for salting, for example, was given to hills where we know buses have difficulty in heavy snow or ice. I'd like to take the opportunity here to thank all TTC staff for their hard work and dedication to keeping this city moving.

This summer, as in most summers, will see a significant amount of construction in the city, including on streetcar routes. As such. those routes will see buses as a replacement. At Main Street Station, realignment of track and repaving is scheduled for May 2018. At the Gerrard and Parliament Sts intersection special track work replacement will occur. Broadview Ave will see significant work at intersections and on what is called tangent track - straight track along the route. Dundas St and Broadview Ave intersection work is scheduled for June. and Gerrard St and Broadview Ave intersection work is scheduled for July.

I won't repeat here what's in the rest of this report, except to remind you, and point to, the work we've been doing to tackle the one thing that frustrates customers more than anything: short turns on buses and streetcars. Performance in March is below target, which is good news. Some short turns will still occur, but limiting them through better route management and using "run-as-directed" vehicles to slot into gaps is key.

The number of short turns in March 2018 was 1,221. For March 2017, it was 1,717.

Six routes (60 Steeles West, 34 Eglinton, 52 Lawrence West, 75 Sherbourne, 89 Weston and 63 Ossington) were responsible for 50% of short turns by buses.

Richard J. Leary Chief Executive Officer (Acting) Toronto Transit Commission

# **Critical Paths**

## Critical Path 1: Financial Sustainability

#### SAP

The Senior Director of SAP Program Delivery continues to drive progress on the TTC's SAP program with a focus on the following key activities to ensure the delivery of Wave 1 in the latter half of 2018:

- Optimizing the project schedule to maximize resource capacity, especially for those who are supporting both the project and critical business areas.
- Preparing for the second test cycle in May with TTC staff leading the planning and execution of this testing.
- Implementing tight controls for change requests and issues management to maintain project schedule delivery.

- Conducting SAP Quality Assurance Solution audits to ensure leading practices are adhered to for critical SAP integrated areas.
- Completed the initial TTC/City SAP Collaboration Committee meeting with future meetings to be scheduled to determine SAP collaboration activities.

The project team will provide an update to the Board in June on SAP program progress, schedule and budget.

#### **Critical Path 2: People**

The TTC, CUPE Local 5089 and IAMAW Lodge 235 have negotiated and ratified new collective agreements for four-year terms. These agreements reflect the changing business needs of the TTC, while also providing fair and affordable compensation and benefit improvements for employees.

With respect to negotiations with the Amalgamated Transit Union Local 113, the TTC has applied to the Ministry of Labour for a conciliator, in an effort to obtain the assistance of a third-party in securing a negotiated collective agreement with ATU Local 113.

In the event the conciliator is unable to assist the parties in reaching a collective agreement, the Ministry of Labour will issue a No-Board report, which will allow the parties to proceed to interest arbitration.

The TTC was declared an essential service in 2011 and workers cannot strike and the TTC cannot lockout workers.

## Critical Path 3: Growth and Assets

#### **New Streetcars**

The target for new streetcar deliveries in Q2 2018 is 16 approved for shipping and 16 approved for service. As of April 13, 2018, the project team approved one to be shipped off the production line and two to enter into service.

**Recent Progress:** 

While challenges remain, the TTC and Bombardier have been working together to systematically identify, plan corrective action, and bring closure to the remaining issues that affect production and service reliability.

In April 2018, the project team was further strengthened with the secondment of engineering and quality assurance resources from the Toronto Rocket project. The staff's familiarity with rail vehicle procurement and Bombardier operations have helped address the root causes of persistent design and quality issues.

#### Cumulative No. of New Streetcars Entered into Service

(Actual vs Original Schedule and Actual vs Latest Schedule)

	2013	2014	2015	2016	2017	2018	2019
Actual	0	3	14	30	57	68*	TBD
vs 2012 Original Schedule	7	37	73	109	148	184	204
					Actual	68*	TBD
		V	121	204			

	Q1	Q2	Q3	Q4	Total
Actual	11*	TBD	TBD	TBD	TBD
vs 2018 Latest Schedule	12	16	15	21	64

\*As of April 13, 2018

Immediate Next Steps:

- At the June Board meeting, the TTC will consider the procurement of additional streetcars to meet customer demand.
- Bombardier to begin production at their Kingston plant in October. This has added some confidence that they will meet the original commitment of delivering 204 new streetcars by the end of Q4 2019.

#### **Scarborough Subway Extension**

There is no change from the last report. Work continues to progress design towards Stage Gate 3. At this time, the project will provide initial cost inputs from the TTC team (includes detailed costs for the Scarborough Centre Station, tunnel, Kennedy Station, systems, property and utilities). Continued work is underway by the Chief Project Manager with key stakeholders within the TTC and the City to define the activities, approval process and timelines to arrive at the final Class 3 Cost Estimate, Level 3 Project Schedule, and associated Risk Analysis. As requested by City Council, a report will be presented at the first opportunity to the Executive

Design

2024

Construction

2025

Committee, TTC Board and City Council, which is expected to be Q1 2019.

#### Critical Path 4: Make Taking Public Transit Seamless

### Easier Access Phase III (Accessibility)

Up to six stations will be awarded contracts in the latter half of 2018 – Runnymede, Wilson, Bay, Keele, Sherbourne and Lansdowne. In order to meet the Legislative commitment to make all TTC stations accessible by 2025, the program has been accelerated where possible. In the coming years, there will be a noticeable increase in the number of Easier Access Projects being awarded annually as we ramp up to meet our 2025 commitment.

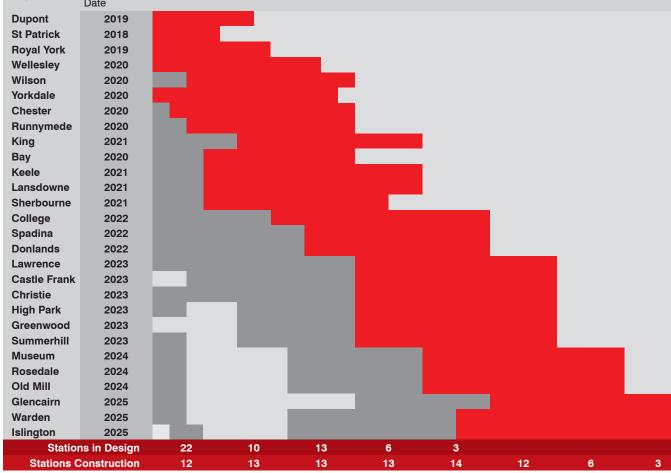
#### PRESTO

The TTC continues to track the key performance indicators for fare gates that are in revenue service – fare gate average availability in March was 96.29%.

Fare gates are available at 65 stations and 118 entrances.



Easier Access - Design/Construction Schedule April 2018



Construction continues on the remaining stations and entrances with expected completion this summer, with the exceptions being Commerce Court entrance at King Station, and the main entrance at Yorkdale Station, as these entrances are tied to additional work or projects.

The TTC is working closely with PRESTO to complete the rollout schedule confirming the delivery of the remaining PRESTO products required to enable full PRESTO adoption. Once the rollout schedule is finalized, the TTC and PRESTO will finalize the joint plan to increase card adoption, promote the fare options available on PRESTO, and lay out the activities and timeline to transition and retire TTC legacy fare media products. The TTC continues to work closely with Metrolinx to finalize the PRESTO schedule for functionality and adoption. By August 26, 2018 the two-hour transfer will be available to customers. A comprehensive PRESTO update, including the revised schedule and plan, will be provided at the June Board meeting.

#### **King Street Transit Pilot**

The TTC continues to provide additional vehicles in support of the King Street Transit Pilot aimed at improving transit reliability, speed and capacity. We have directed as many new accessible streetcars to the King Street Transit Pilot as possible. Each delivery of a new accessible streetcar replaces a legacy streetcar.

As of April, the TTC is providing 33 streetcars for the 504 King route,

10 of which are new, accessible streetcars.

#### **Critical Path 5: Partnerships**

#### **Battery Electric Buses**

During the week of April 16, TTC front line employees, management, as well as the Mayor, TTC Chair and Commissioners, had a first look at three different all-electric long-range buses (eBuses) from manufactures BYD, New Flyer, and Proterra. The eBus project



First look at future eBus vehicles

#### 2018 - 2020 Bus Procurements

		2018			2019			2020					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Clean Diesel	Actual	40*											
	vs Scheduled	40*	78	104	89								
Bus	Cumulative Actual	40*											
	vs Cumulative Scheduled	40*	118	222	311	311	311	311	311	311	311	311	311
	Actual												
Hybrid Electric	vs Scheduled			1	53	115				85			
Bus	Cumulative Actual												
	vs Cumulative Scheduled	0*	0	1	54	169	169	169	169	254	254	254	254
	Actual												
Battery Electric	vs Scheduled				10	20			10**	20**			
Bus (eBus)	Cumulative Actual												
(eBus)	vs Cumulative Scheduled	0*	0	0	10	30	30	30	40**	60**	60**	60**	60**
	Total Actual	40*											
Total	vs Total Cumulative Schedule	40*	176	242	375	510	510	510	520	625	625	625	625

\* As of April 13, 2018

\*\* Additional 30 eBus procurement is pending approval at May 2018 Boarding Meeting

team, Toronto Hydro and the bus manufactures were on hand to address questions and learn from operators, maintainers, technical support staff, trainers and ACAT as to what needs to be considered or addressed in this and future procurements.

During the week of April 9, the TTC and Toronto Hydro formalized their partnership through a non-binding Memorandum of Understanding, the basis of which is an agreement to share both the costs and benefits of the TTC's bus fleet electrification plan.

Immediate Next Steps:

- Complete commercial and technical negotiations and award contracts to eBus manufactures
- Issue design-build contract, administered by Toronto Hydro, to upgrade the garage electrical systems at Arrow Road, Mount Dennis, and Eglinton Garages
- Detailed design of electrical upgrades
- Pre-production design review meetings with each of the eBus manufacturers

- Quality assurance reviews of production facilities
- Detailed modelling of the entire bus network by our partners at the Canadian Urban Transit Research and Innovation Consortium
- Advancing the project plan along with partners at the National Research Council for the head-to-head evaluation.

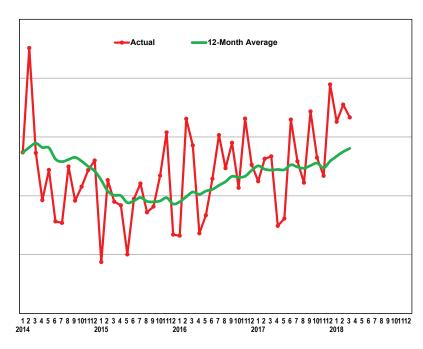
#### **Cornerstone: Safety**

The TTC initiated a Subway Air Quality Study in 2017, which is still underway.

The first round of air sampling has been completed and focused on positions that involve employees who spend the greatest amount of time in the subway during revenue service. Based on the interim sampling results, the subway air quality continues to be deemed safe for employees, and is not expected to affect the health of employees in the work positions assessed who do not have pre-existing serious respiratory conditions. Formal reports have been issued to affected work locations. Further sampling will be conducted throughout 2018 followed by final reports.

# **Safety and Security**

#### **Lost-time Injuries**



#### Results

The lost-time injury rate (LTIR) for March 2018 was 4.33 injuries per 100 employees.

#### Analysis

The 12-month average LTIR to the end of March 2018 was 3.81 injuries per 100 employees. The LTIR for the current period was 14% higher than the 12-month average LTIR. This increase was mainly attributed to the increase in Acute Emotional Event and Assault injuries in this period.

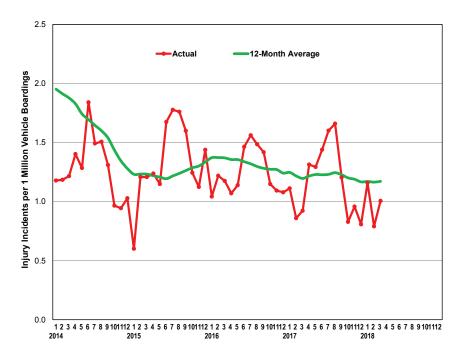
The 12-month average line shows the movement of the LTIR from 2014 to 2018. An upward movement can be observed since December 2015.

#### **Action Plan**

Further analysis by injury type reveals that musculoskeletal/ ergonomic type (MSD) injuries (e.g. overexertion, reach/bend/twist, repetition) represent the highest injury event and account for 24% of all lost-time injuries.

The new Ergonomic Musculoskeletal Disorder (MSD) Prevention Program, focused on preventing such injuries and resolving ergonomic concerns, will be implemented from April 2018 through to the end of 2019. Implementation of the program will include communication, training, and MSD hazard assessments.

#### **Customer Injury Incidents**



#### Results

The customer injury incident rate for March 2018 was 1.03 injury incidents per one million vehicle-boardings.

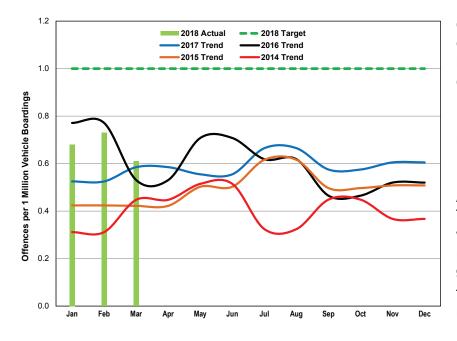
#### Analysis

The 12-month average customer injury incident rate to the end of March 2018 was 1.18 injury incidents per 1 million vehicle boardings. The customer injury incident rate for the current period was 13% lower than the 12-month average rate. This decrease was mainly attributed to the decrease in station related subway injuries on Line 2 and 3 in this period.

#### **Action Plan**

The 12-month average line shows the movement of the customer injury incident rate from 2014 to 2018. The observed reduction in the moving average customer injury incident rate can partly be attributed to the introduction of the Station Management Model with an increased focus on ensuring a safe, clean, and secure system for customers. Also contributing to this improved rate is the ongoing actions taken as part of the Safe Service Action Plan initiated in 2015, to reinforce good safety behaviours and improve safety performance. Incidents by mode are currently being assessed to more effectively focus resources into continually reducing future incidents.

#### **Offences Against Customers**



#### Results

Total offences against customers decreased in March to 0.61 offences per one million vehicle boardings. The moving annual rate of offences against customers to March 2018 was 0.62, which was 13% higher than the corresponding moving annual rate of 0.55 to March 2017.

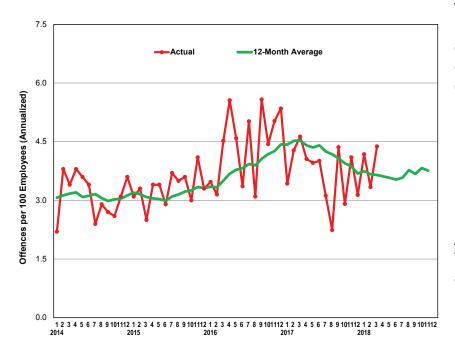
#### Analysis

The rate of offences in March was lower than those seen in the preceding three months, but was 9% above the corresponding rate for March 2017. The ongoing trend remains mixed.

#### **Action Plan**

Twelve new Transit Enforcement Special Constables were sworn in at the end of March and have been deployed into the field, answering calls for service and providing a proactive presence across all modes. Transit Enforcement Special Constables were also assigned to provide additional support at designated stations in the month, in response to specific concerns.

#### **Offences Against Staff**



#### Results

Total offences against TTC staff increased in March to 4.38 offences per 100 employees. The current rate is 5% lower than the corresponding rate of 4.63 for March 2017. The moving annual rate of offences against staff to March 2018 was 3.65, which was 19% lower than the corresponding moving annual rate of 4.53 to March 2017.

#### Analysis

Year-over-year decreases in crimes against employees were observed in eight of the nine previous periods and the ongoing trend remains favourable.

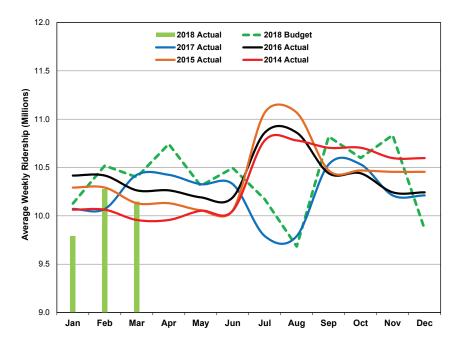
#### **Action Plan**

Transit Enforcement Special Constables have continued to provide visible support along designated streetcar and bus routes across the city, as well as conducting regular safety talks at divisions as part of a multi-pronged approach to reducing crimes against operating staff.

# Customer

### **Customer: Ridership**

#### TTC Ridership



#### Ridership

Ridership in March 2018 was 50.7 million, which was 1.3 million (2.5%) below the budget of 52.0 million. In terms of year-over-year growth, March's ridership of 50.7 million was 0.2 million (0.4%) below the comparable period in 2017. Year-to-date to the end of March 2018, ridership was 3.9 million (2.7%) below budget and 1.8 million (1.2%) below the comparable period in 2017.

#### Analysis

The sluggish ridership results to-date in 2018 are partially attributable to the frequency of severe cold weather. To the end of March, Toronto Public Health issued 19 Extreme Cold Weather Alerts (forecasted temperatures of -15C or colder) compared with 17 to the same point in 2017.

Another factor continuing to impact ridership is the ongoing decrease in Metropass sales. There were 60,000 (-7%) fewer passes sold from January to March in 2018 compared with the corresponding months in 2017. Some of these lost sales have likely been offset by an increase in PRESTO epurse transactions; however, Metropasses currently generate about 46% of total ridership; therefore, declining sales will have a significant impact on overall ridership trends.

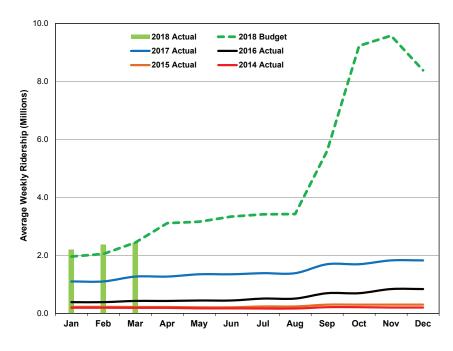
#### **Action Plan**

Ridership flat-lined since 2014 in part due to slowing employment growth, city growth, traffic and congestion, changes in customer mobility and the growth in digital ride-hailing services.

To re-establish sustained ridership growth, a new Ridership Growth Strategy is being rolled out in 2018.

Research is also underway to analyze the changes in monthly Metropass sales and corresponding ridership impact. Results of this analysis will help develop future action plans.

#### **PRESTO Ridership**



#### Results

Ridership using the PRESTO Farecard (epurse balance, period pass) in March totalled 12.2 million, which virtually met the budget (-46K). In terms of year-over-year growth, PRESTO ridership in March totalled 12.2 million and was 5.9M (94%) above the ridership of 6.3 million for the comparable period in 2017.

Year-to-date to the end of March 2018, ridership was 2.4 million (8%) above budget and 17.2 million (114%) above the comparable period in 2017.

#### Analysis

The PRESTO component of total TTC ridership continues to grow. The PRESTO adoption rate increased from 23.2% to 24.0% in March 2018.

The 2018 PRESTO ridership budget was calendarized in late 2017 and the sharp increase in September 2018 arises from the then anticipated discontinuation of the sale of legacy monthly passes, tokens and tickets. However, this may shift as the TTC finalizes the key deliverables for 2018 by PRESTO.

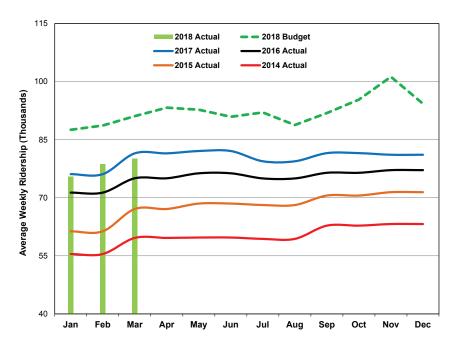
#### **Action Plan**

The PRESTO adoption rate is expected to accelerate throughout 2018 in conjunction with the phasing-out of legacy fare media and the commensurate uptake of PRESTO-based fare media. The TTC will continue to work with PRESTO staff on enabling functionality to support the elimination of legacy fare media.

#### Note:

Ridership on PRESTO is included in TTC ridership totals.

#### Wheel-Trans Ridership



#### Results

Ridership in March 2018 was 401K, which was 54K (12%) below the budget of 455K. In terms of year-over-year growth, March's ridership of 401K was 7K (2%) below the ridership of 408K for the comparable period in 2017.

Year-to-date to the end of March 2018, ridership was 154K (12%) below budget but 65K (6%) above the comparable period in 2017.

#### Analysis

Wheel-Trans has not experienced a drop in ridership in the past four years but has not achieved the typical March bump up as in previous years. Some of the drop can be attributed to poor weather which has a greater impact on Wheel-Trans customers however. applications for new Wheel-Trans eligibility has not slowed. In order to most efficiently schedule trips, Wheel-Trans service planning has delayed confirmation of precise trip times to one day prior to the trip. Staff has noticed a corresponding increase in cancellations and same-day cancellations indicating customers are selecting alternative methods of travel including the TTC conventional system.

#### **Action Plan**

With the launch of the Family of Service Pilot in May 2017 and the Wheel-Trans Transformation Program in general, many changes are being initiated which will create an impact on Wheel-Trans KPIs. Further analysis continues to be conducted to determine the impacts on customers as well as on Wheel-Trans services. Wheel-Trans customers have been encouraged to travel on the conventional system where possible, should the trip match their ability and the accessibility of the system along their required route.

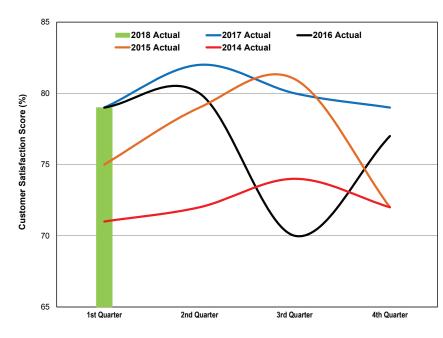
The introduction of a more flexible cancellation policy enables customers to wait until nearer the time of departure to determine if they feel able to travel on the conventional system. The benefit of more same-day booking opportunity is more consistent with the freedom and flexibility of using the conventional system. Wheel-Trans continues to closely monitor its KPIs and the resulting impacts.

#### Note:

Wheel-Trans ridership is not included in TTC ridership totals.

### **Customer: Satisfaction**

#### **Customer Satisfaction Score**



#### Results

Nearly eight in ten customers have high perceptions of overall customer satisfaction in Q1 2018 (79%); similar perceptions to last quarter and a year ago. Looking at the monthly scores, satisfaction remained consistent from last year this time.

The areas of highest customer satisfaction (≥80%) for all three modes included: trip duration, helpfulness of TTC staff/operators, appearance of TTC staff/ operators, and the quality of stop announcements.

#### Analysis

Two-fifths (40%) of customers believe that the TTC has improved over the last two years, similar to last quarter (37%) but significantly higher than in Q1 2017 (29%). This trend is consistent across subway/ bus/streetcar users and across frequent/occasional users.

Pride in the TTC and what it means for Toronto has decreased wave to wave but is consistent year to year (Q1 2017: 71%; Q4 2017: 75%; Q1 2018: 69%). Customers also agree that the TTC is a reliable way to travel around the City (77%) and that it provides them with the flexibility they need to travel around the city (81%).

Perceptions of value for money remain consistent wave to wave with just over two-thirds indicating they received excellent/good value for money on their last trip (Q1 2017: 63%; Q4 2017: 65%; Q1 2018: 63%).

#### **Action Plan**

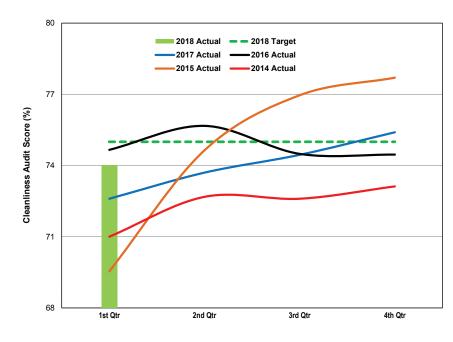
Perceptions of capacity and overcrowding will improve with the service improvements recommended in the report to the Board this month on capacity improvements for both Line 1 subway service and bus service.

As the network continues to improve, mitigate any pain points by communicating solutions to customers and offering messaging that diffuses situations surrounding delays, confusion and crowding.

The congruence between awareness of service improvements and consistently high levels of customer satisfaction suggests customers are recognizing recent efforts. Maintaining this trend will contribute to incremental ridership growth.

### **Customer: Environment**

#### **Station Cleanliness**



#### Results

The average station score missed target is registering at 74.01%. The average score is down slightly from Q4 2017, but was higher than what is traditionally seen in the first quarter. TYSSE stations were excluded due to ongoing construction.

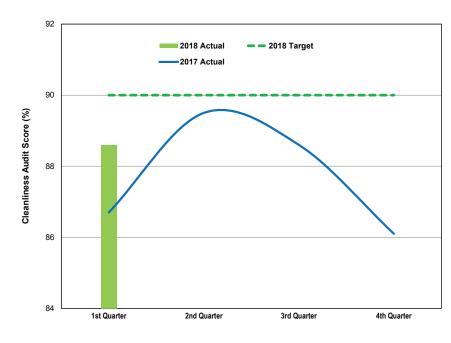
#### Analysis

Inclement weather during the winter months traditionally has a direct impact on the audit scores, compounded by the fact that inclement weather prevents Janitors from being able to address detail-oriented work in the stations. With the start-up of annual projects, the audit scores are expected to rise throughout the remainder of 2018.

#### **Action Plan**

New methods and processes continue to be investigated/ considered. One process being explored is to increase the number of heavy cleaning crews to increase the frequency of heavy cleaning activities in stations. The goal is to reduce the current four-week cycle to a two-week cycle. The proposed plan involves converting some Maintenance Servicepersons to Heavy-Clean Servicepersons, which would be a cost neutral improvement.

**Vehicle Cleanliness - Streetcar** 



#### Results

The audit score for streetcar cleanliness for Q1 2018 was 88.6%. This score is an increase from both Q1 2017 (same period last year) and Q4 2017 (previous period). Overall performance on cleanliness, however, remained below the target of 90%.

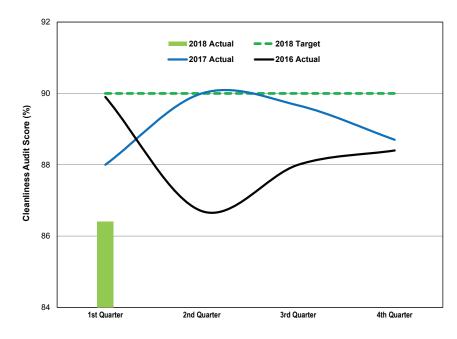
#### Analysis

Poor weather conditions in January impacted the overall Q1 quarterly cleanliness. Exterior washes were not completed regularly since they were not performed in temperatures below -10 C. Although the floors were washed regularly, accumulation of salt and sand deposits contributed to overall rating.

#### **Action Plan**

In addition to investigate methods to wash vehicles in all weather conditions, staff will investigate additional procedures to remove deposits that have accumulated on the flooring. The warmer weather and absence of salt and sand on the roads will also contribute to increase in cleanliness.

Vehicle Cleanliness - Bus



#### **Results**

The bus cleanliness audit score in Q1-2018 was 86.4% which is below the target of 90%. Q1-2018 results were slightly lower than Q4-2017. Extreme cold temperatures and precipitation (snow) during winter months impacts the cleanliness of the exterior and interior.

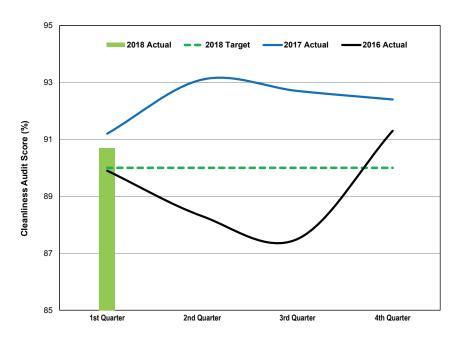
#### Analysis

The performance scores take into account pre-service, inservice and post-service audit results. Therefore, the scores are impacted by changes to in-service operating conditions. Fifty per cent of the audits were conducted in -11C temperatures, which limited exterior and floor washing. This resulted in lower scores. Preservice audit scores were 96.4% for temperatures above -10 C. Q2 2018 results are expected to be favourable as temperatures rise.

#### **Action Plan**

Manually cleaning the front and back exteriors was stepped up in Q1 and will continue throughout 2018. Opportunities are being reviewed to clean the interior of buses at end terminals which will help to further enhance the customer experience.

#### **Vehicle Cleanliness - Subway**



#### Results

The average rating of 90.7% in Q1-2018 is above the target of 90.0%. Subway recorded a score of greater than 90% in six consecutive quarters.

#### Analysis

Floors and exterior cleanliness appeared as an area where further improvement can be made. Inclement weather prohibited the exterior wash program and resulted in lower than expected scores.

#### **Action Plan**

On Line 1, exterior washes were affected due to facility constraints at Wilson and construction at Davisville Carhouse. Currently, floors are washed every 14 days during the floor wash cycle. Exterior vehicle cleanliness is an area where further improvements can be made on all lines when weather conditions are more favourable.

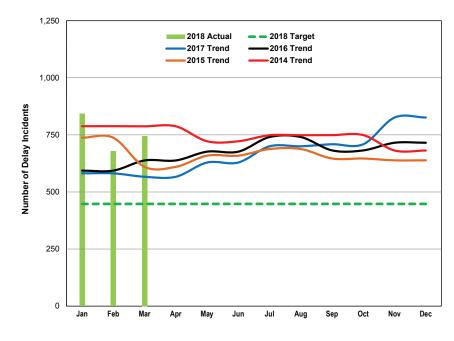
#### Note:

The target for this measure has been changed to 90% in Q4-2017, which is more reflective of the ongoing level of performance and is consistent with the targets for Bus and Streetcar.

### **Customer: Service performance**

#### Subway

#### Line 1: Delay Incidents



#### Results

The number of delay incidents increased by 9.9% as compared to February, to 745 from 678.

#### Analysis

The most significant increase of incidents is attributable to passenger-related events. Overall, passenger incidents increased by 24% and accounted for 50% of incidents in March.

While the number of incidents increased, the average number per day is similar to those registered in February, at 24 per day.

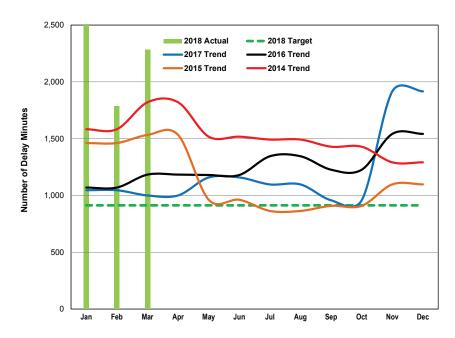
#### **Action Plan**

The subway schedule changes in April and May are expected to reduce the number of incidents.

#### Note:

The 2018 target is based on a 40% or more reduction in delay incidents from the 2014 monthly average baseline.

Line 1: Delay Minutes



#### Results

The number of delay minutes increased in March to 2282. This was an increase of 27.8% compared to January.

#### Analysis

There were three events on Line 1 that accounted for 20% of the total delay minutes; two security related incidents that required station evacuation and one personal injury at track level incident. These three incidents are all categorized in the passenger-related area, adding to the 1282 minutes of overall passenger incidents incurred during March.

In March, the Infrastructure and Rail Vehicle teams experienced an increase in delay minutes as a result of a third-party construction incident. This incident led to a smoke/fire event and an extensive clean-up of both wayside and vehicles.

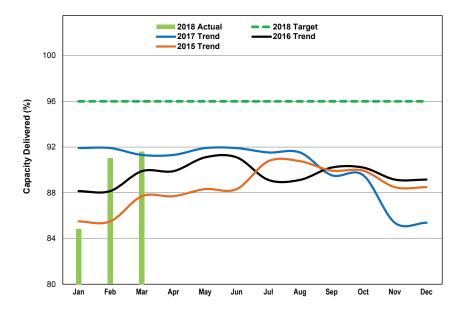
#### **Action Plan**

Technical delays related to equipment such as ATC, decreased from February to March. In an effort to decrease these types of events further, a new pre-check inspection is being added to trains as they run-out in the morning. This additional check will virtually eliminate the risk of a train entering service with a known issue that is associated to ATC migration from the legacy system to the new area.

#### Note:

The 2018 target is based on a 40% or more reduction in delay minutes from the 2014 monthly average baseline.

#### Line 1: Capacity Delivered In Peak



#### Results

Despite an increase in incidents and minutes, the peak capacity delivered on Line 1 improved again over February and is the best since July 2017.

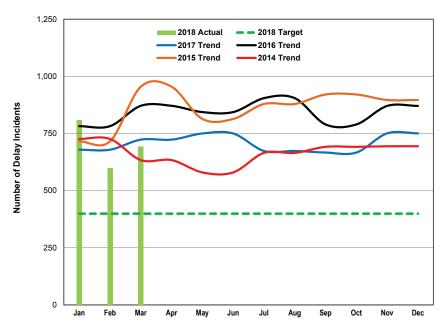
#### Analysis

In February, two additional trains were added to the morning peak service. In the early stages, the positioning and timing of the deployment of these trains had to be adjusted in coordination with Stations staff. This process is now well-established and requires little adjustment.

#### **Action Plan**

The schedule will commence in April and more significant adjustments will take place in May. These permanent changes should continue to improve the capacity levels moving forward.

Line 2: Delay Incidents



#### Results

The number of delay incidents increased by 15.7% in March, to 692 from 598.

#### Analysis

The increased numbers of incidents on Line 2 are related to passenger events, as they increased 42.5% to 258. All other categories of delay incidents decreased with the exception of speed control.

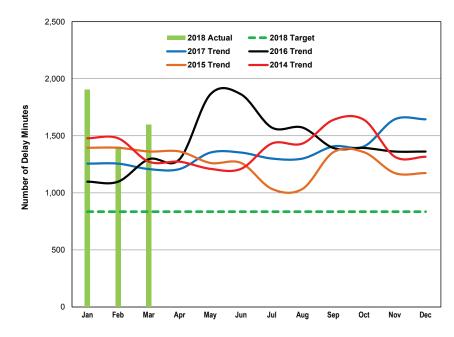
#### **Action Plan**

Despite controllable incidents decreasing from February to March, there are still areas that should be experiencing a more noticeable decrease. Delays related to subway staff, in particular signal contacts and over speeds, are being addressed through additional training, audits and campaigns for Operators.

#### Note:

The 2018 target is based on a 40% or more reduction in delay incidents from the 2014 monthly average baseline.

#### Line 2: Delay Minutes



#### Results

The number of delay minutes increased in March to 1597 minutes or 13.7% higher than February.

#### Analysis

Passenger related events contributed 65% of the overall minutes generated in March. 30% of these events are related to three singular events. One of the security incidents that impacted Line 1 for 195 minutes, also had the same impact on Line 2.

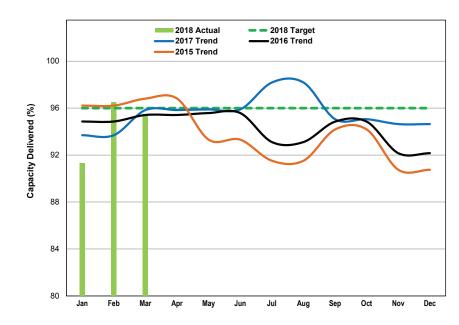
#### **Action Plan**

Compared to February, March experienced an increase of smoke/ fire events on Line 2. The spring season will allow for additional corridor maintenance including removal of debris that has collected over the winter months.

#### Note:

The 2018 target is based on a 40% or more reduction in delay minutes from the 2014 monthly average baseline.

#### Line 2: Capacity Delivered In Peak



#### Results

The peak capacity delivered on Line 2 decreased slightly to 95.3 in March from 96.5 in February. These results are still positive and are less than a point away from the target of 96.

#### Analysis

Increased staffing during the peak post periods has aided in faster response to commonly occurring incidents such as emergency alarm activations for medicals or disruptive people. This has a positive impact on keeping trains moving with a consistent headway.

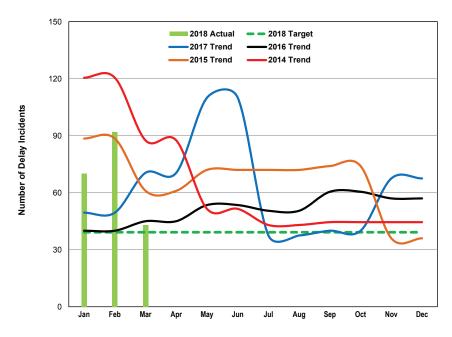
#### **Action Plan**

Morning and afternoon peak periods will continue to have additional resources to minimize disruption and enhance safety on both lines.

#### Note:

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

Line 3: Delay Incidents



#### Results

Line 3 delay incidents experienced a drop of 55.3%, to 43 in March from 92 in February. This improvement trend is almost at the target of 43, an achievement that hasn't occurred since October 2017.

#### Analysis

The Scarborough Line is significantly impacted by weather, and the reduction in extreme temperatures and precipitation resulted in a 95.7% drop in weather related delays. There were minimal door delays or timeouts.

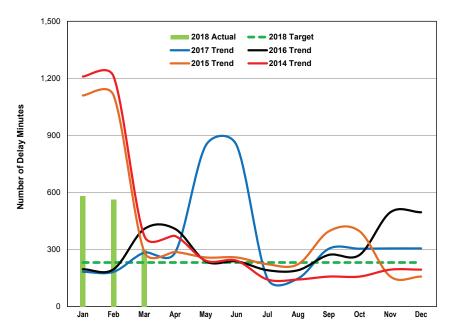
#### **Action Plan**

The Rail Vehicle team continues to refurbish and improve the reliability of this aging fleet. More precise adjustments to the vehicles during specific weather, in both the winter and summer months will ensure performance continues to improve.

#### Note:

The 2018 target is based on a 40% or more reduction in delay incidents from the 2014 monthly average baseline.

Line 3: Delay Minutes



#### Results

The delay minutes on Line 3 decreased along with the number of incidents, to 301 from 563, a reduction of 46.5%.

#### Analysis

The improvement in weather as well as the elimination of smoke/ fire events on the line this month aided in the reduction of minutes. The target of 231 minutes would have been achieved had there not been two subway infrastructure problems that jointly caused 108 minutes in delays.

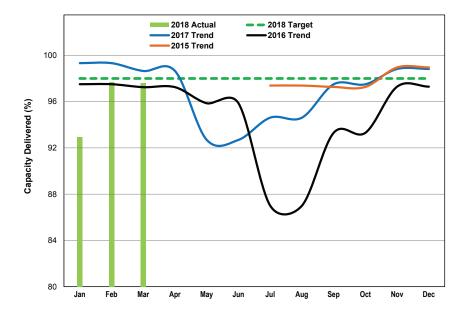
#### **Action Plan**

Subway Infrastructure had the first Line 3 construction closure of the year in March and has two more scheduled in 2018 for required maintenance. In the meantime, on-going preventative maintenance, including regular nightly planned work will aid in reducing delay minutes like those experienced this month.

#### Note:

The 2018 target is based on a 40% or more reduction in delay minutes from the 2014 monthly average baseline.

#### Line 3: Capacity Delivered In Peak



#### Results

The peak capacity delivered on Line 3 in the morning and afternoon peak service was on par with the previous month and just shy of the 98% target.

#### Analysis

An incident related to subway infrastructure occurred that impacted morning service for 70 minutes. This one significant delay accounts for the reason the target was missed.

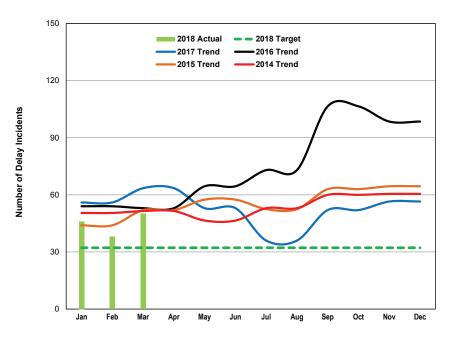
#### **Action Plan**

Continued preventative maintenance of the trains and infrastructure as well as improving weather conditions will help meet the target in the coming months.

#### Note:

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

Line 4: Delay Incidents



### Results

The number of delay incidents experienced on Line 4 remains low, with 1.6 per day, or 50 for the month. This is an increase from February.

# Analysis

The only notable difference on Line 4 this month is related to speed control issues, which increased to 21 in March from nine in February. Eight of these incidents are related to equipment on the trains, but all repairs have been made and improvements should be experienced in the coming months.

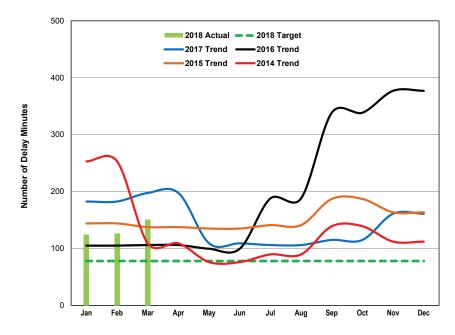
# **Action Plan**

Regular maintenance of the four-car units on Line 4 is contributing to keeping incidents to levels within the threshold. Additional customer staffing can be allocated to this line and this may address customer issues before they become an incident.

### Note:

The 2018 target is based on a 40% or more reduction in delay incidents from the 2014 monthly average baseline.

### Line 4: Delay Minutes



### Results

The number of delay minutes increased in March to 151. This was an increase of 19.8% compared to February.

# Analysis

There was a 263% increase in passenger delays on Line 4. This increase is solely related to a suspicious package that was reported and resulted in a 93 minute delay while the police investigated and cleared the scene.

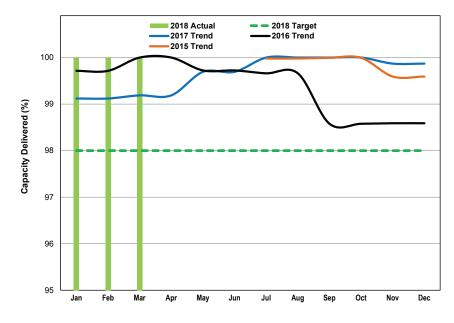
# **Action Plan**

With the exception of the single, anomalous incident, delay minutes on Line 4 would have achieved target in this period. Continued high levels of reliability with infrastructure and rolling stock will result in achievement of target in coming months.

### Note:

The 2018 target is based on a 40% or more reduction in delay minutes from the 2014 monthly average baseline.

### Line 4: Capacity Delivered In Peak



### Results

The daily average number of trains per hour (TPH) in the morning and afternoon peak service periods was 100% of what was scheduled.

As this measure focuses exclusively on the AM and PM peak periods, any incidents that occur anywhere on the line during that period will adversely impact results.

# Analysis

Despite a slight increase in incidents and minutes on Line 4, line management was still maintained during the AM and PM peaks. This is the ninth time in ten months that Line 4 has met or surpassed 100% of promised peak capacity.

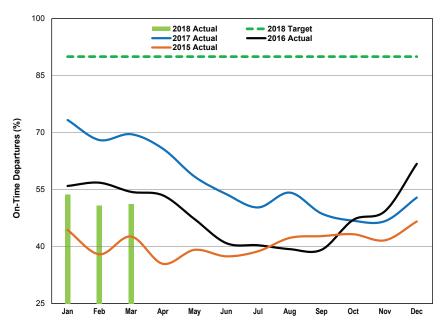
# **Action Plan**

Subway Transportation will continue to actively manage train movement and will work with the Rail Cars and Shops Department to ensure all maintenance issues are dealt with immediately and have spare trains available to prevent any delay to service.

# Note:

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

# Streetcar On-Time Performance



### Results

On-Time Performance (OTP) was higher than last month, but well below that for the same period last year.

### Analysis

The current period has remained below 2016 and 2017 OTP achievements due to the aging legacy fleet, which is now more susceptible to colder climates and further reductions in the spare ratio. The TTC is still experiencing a slightly slower average speed of the new streetcar fleet, partially due to operators becoming accustomed to the new vehicles, as the new accessible streetcars are deployed on more routes. A total of 56 new vehicles operated during this period, increasing the capacity on 504 and 512 routes.

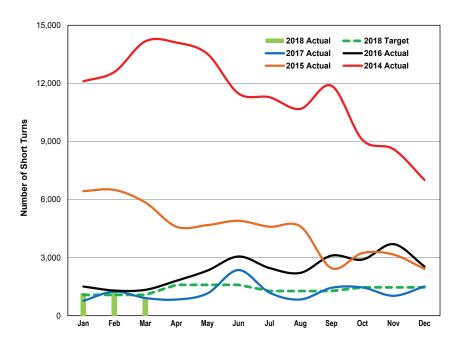
# **Action Plan**

A work plan was developed, recommending schedule changes to numerous routes. In particular, routes with new accessible streetcars will be updated to reflect the operational requirements of the new vehicles. The work plan is in place and results are projected to improve by the September Service Board Period. It is expected that On-Time Departures will remain unfavourable to target and, trend "mixed" until that time.

### Note:

This KPI measures adherence to scheduled (59 seconds early to five minutes late) departure times from end terminals.

**Streetcar - Short Turns** 



### Results

Short turns for the period decreased (favourable) compared to last period and close to the same period last year.

### Analysis

Short turns are maintaining target levels for March. This period continued to experience challenges with events related to weather and downtown core traffic congestion due to the Gardiner Expressway overflow. These issues negatively impacted our route performance.

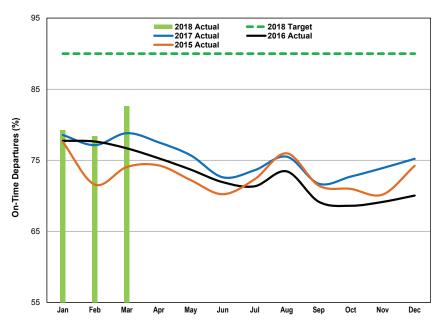
# **Action Plan**

With streetcar peak vehicle service now at 150, from 160, and the ongoing focus on our September 2018 work plan to improve OTP, short turn figures will remain below our target.

### Note:

Data is based on all seven days of service from Sunday to Saturday.

# Bus On-Time Performance



### Results

There has been year-over-year improvement in OTP for Bus Transportation since 2015. Performance in March increased to 82.6% and although there was an improvement over 2017, it continued to miss target levels.

### Analysis

Route performance continues to be closely monitored and despite continued delays related to Crosstown construction along Eglinton Avenue and utility relocations related to the Finch West LRT, March 2018 was the best performing period since 2015.

The following schedule changes were implemented in the February Service Period (February 18 to March 31):

Metrolinx Construction: 63 Ossington, 71 Runnymede and 79 Scarlett Rd

Service Reliability Improvements: 40 Junction, 42 Cummer, 102 Markham Rd and 186 Wilson Rocket

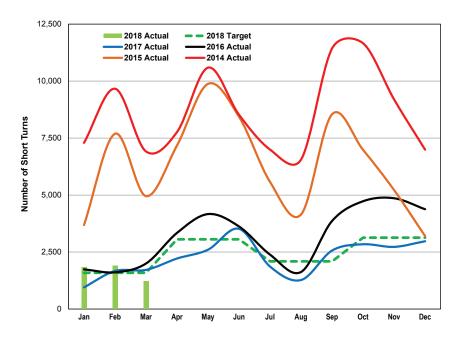
### **Action Plan**

Operators' performance continued to be closely monitored to maximize the effectiveness of schedule improvements. Since March 2017, 1,112 Operators have been interviewed for schedule adherence irregularities and occurrences of early departures continue to decrease as a result of this initiative. Staff will continue to closely monitor adherence to schedules.

### Note:

This KPI measures adherence to scheduled (59 seconds. early to five minutes late) departure times from end terminals.

### **Bus - Short Turns**



### Results

This multi-year view illustrates continuous reductions in the number of short turns from 2014 to today, resulting in a greatly improved customer experience.

### Analysis

Performance in March remained well below the threshold (favourable). The number of short turns in March decreased to 1,221 as compared to 1,717 in the same period last year. Six routes (60 Steeles West, 34 Eglinton East, 52 Lawrence West, 75 Sherbourne, 89 Weston and 63 Ossington) were responsible for 50% of short turns in Bus Transportation.

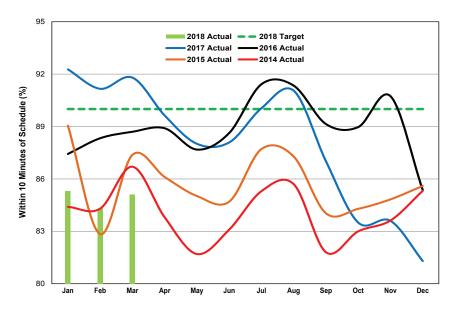
### **Action Plan**

Focused attention on high incident routes, schedule improvements and increased utilization of run-as-directed (RAD) bus deployments has reduced the need for service adjustments.

### Note:

Data is based on all seven days of service from Sunday to Saturday.

# Wheel-Trans On-Time Performance



### Results

On-Time Performance (OTP) in March increased by 0.8% to 85.1% from February. This represents a 6.7% decline from the same period in 2017.

# Analysis

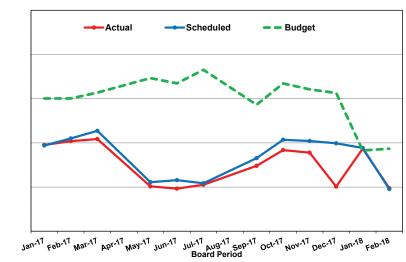
This KPI was improving. However, computer system delays in processing service adjustments during peak travel periods contributed to the OTP results that were forecast to be slightly higher for March.

# **Action Plan**

On March 10, 2018, a scheduling system upgrade was implemented to improve Passengers Per Hour (PPH) levels on Wheel-Trans buses. Wheel-Trans expects that this upgrade, along with increased monitoring by supervisory staff will improve bus productivity, shared riding, move shorter trips to Wheel-Trans buses, and allow for same-day bookings to accommodate Family of Service trips. As mentioned in the previous CEO's Report, this KPI is stricter compared to other paratransit operations and will be reviewed following consultation with the Advisory Committee on Accessible Transit (ACAT).

# **Customer: Amount of service**

# **Streetcar - Weekly Service Hours**



### **Results**

In the February 2018 Service Period, 18,737 streetcar weekly hours were budgeted for service while 16,914 streetcar weekly hours were scheduled to operate which represents a variance of -9.73%.

This is a result of the streetcar fleet shortage. Streetcars have been removed from 505 Dundas and 506 Carlton routes and replaced with bus service.

Of the 16,914 streetcar weekly hours scheduled to operate,

16,949 streetcar weekly hours were actually delivered which represents a variance of 0.21%.

### Analysis

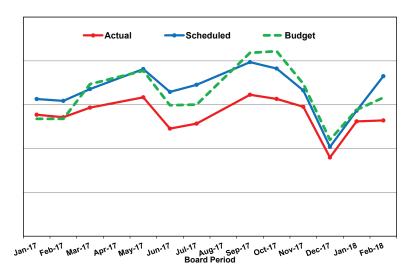
This is a result of the streetcar fleet shortage. Streetcars have been removed from 505 Dundas and 506 Carlton routes and replaced with bus service.

### **Action Plan**

Staff continue to monitor the Bombardier delivery schedule. Bombardier met its Q1 target for 2018.

Date	Budgeted Streetcars for AM Peak Service	Scheduled Streetcars for AM Peak Service
June 2016	170	167
October 2016	202	179
January 2017	189	169
April 2017	190	170
July 2017	200	156
November 2017	200	166

### **Bus - Weekly Service Hours**



### Results

In the February 2018 Service Period, 145,817 bus weekly hours were budgeted for service while 148,250 bus weekly hours were scheduled to operate which represents a 1.67% variance.

Of the 148,250 bus weekly hours scheduled to operate, 143,213 weekly hours were actually delivered which represents a variance of -3.4%.

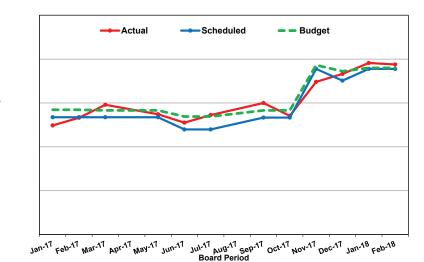
# Analysis

This is a result of the streetcar fleet shortage. Buses are replacing streetcars on 505 Dundas and 506 Carlton.

### **Action Plan**

Staff continue to monitor the Bombardier delivery schedule. As more new streetcars are delivered, it is anticipated that buses will be removed from streetcar routes.

### **Subway - Weekly Service Hours**



### **Results**

In the February 2018 Service Period, 10,800 subway weekly hours were budgeted for service while 10,777 subway weekly hours were scheduled to operate which represents a -0.21% variance.

Of the 10,777 subway weekly hours scheduled to operate, 10,878 weekly hours were actually delivered which represents a variance of 0.94%.

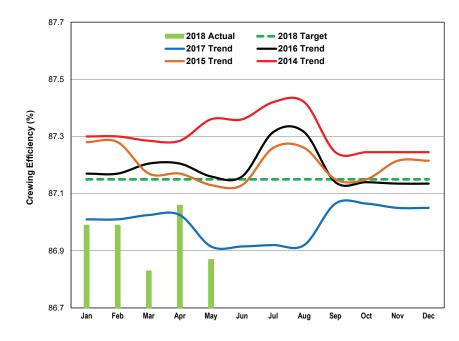
### Analysis

The scheduled and delivered subway weekly hours for February remain on budget.

### **Action Plan**

Maintain current strategy

## **Operator Crewing Efficiency**



### Results

Operator crewing efficiency decreased in May to 86.87%; performance remained below target.

### Analysis

Crewing efficiency has been below target due to the large number of buses replacing streetcars, resulting in longer driving distances to streetcar routes from bus divisions. Also contributing to the drop in efficiency is the closure of Roncesvalles Division for track replacement. This required longer travel times for streetcars to reach their designated routes.

# **Action Plan**

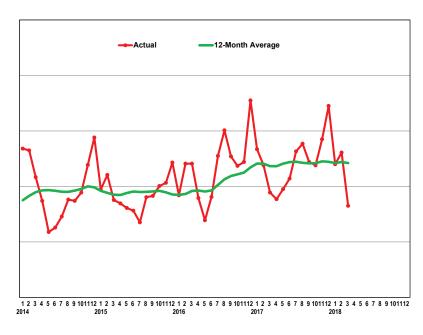
Staff will review the process for dispatching buses. Efforts will focus on dispatching buses from divisions that are closer to streetcar routes that are being served. It's anticipated that efficiencies will not reach targets until additional accessible streetcars are delivered by Bombardier.

### Note:

Crewing efficiency is defined as the ratio of scheduled hours to pay hours.

# People

# **Employee Absence**



### **Results**

The absenteeism rate in March 2018 decreased to 6.65%.

### Analysis

The absenteeism rate for March dropped .77% from the 12 month average, from 7.42% to 6.65%; almost a full percentage point from the actual rate in February. Although the ongoing trend is unfavourable, efforts are in place to reduce these levels further.

# **Action Plan**

Staff continues to manage absence with a focus on reducing the number of complex absence cases and the duration of these absences. Through data anlytics, focus will be placed on determining the root cause of absence and the increasing absence rate for the TTC. Opportunities to continue efforts in management of absences will be sought through ongoing collective bargaining, and staff is monitoring the anticipated impacts of Bill 148 on the organization's attendance levels.

At the Group Level, in the Service Delivery Group, an attendance management project team was established in 2017 to focus on employees with concerning absence levels.

### **Fitness For Duty Update**

Total number of employees who were non-compliant or refused to test under the random program: Data are from May 8, 2017 to April 13, 2018.

Random Testing Summary – Unionized Employees				
Test Category	2018	2017	Total*	%
Compliant tests	573	1381	1954	98.1%
Non-Compliant (drug, alcohol, refusal)	9	29	38	1.9%
Total	582	1410	1992	100%

\* Currently 32 drug results have yet to be reported as they are still at the lab undergoing analysis or have been cancelled.

Random Testing Summary – Staff (non-unionized) Employees				
Test Category	2018	2017	Total*	%
Compliant	119	270	389	99.2%
Non-Compliant (drug, alcohol, refusal)	0	3	3	0.8%
Total	119	273	392	100%

\* Currently 4 drug results have yet to be reported and are either at the lab undergoing analysis or have been cancelled.

Non-Compliance by Substance				
Substance Type	2018	2017	Total	Percentage
Oxycodone	0	1	1	2.4%
Opiates	0	2	2	4.9%
Marijuana	6	15	21	51.2%
Cocaine	4	6	10	24.4%
Amphetamines	0	1	1	2.4%
Alcohol	1	5	6	14.6%
Total*	11	30	41	100.0%

This chart is updated quarterly. This information is up to date as of April 13, 2018. Next update will be July, 2018. \* 3 Drug results have came back positive for two substances

Non-Compliance Breakdown			
Category	2018	2017	
Drug Non-compliant results	8	24	
Alcohol non-compliant results	1	5	
Refusals	0	3	
Total 41	9	32	

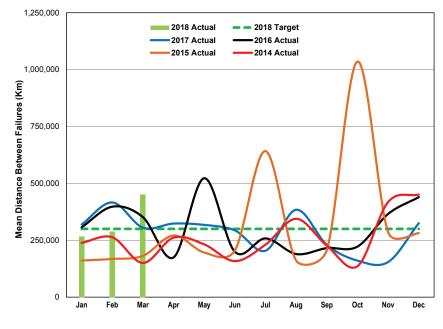
Other Policy Violations	
Alcohol non-compliant for 0.02 - 0.039	2
3 safety sensitive flags	3

# Assets

# **Assets: Vehicle reliability**

# Subway

# T1 Train: Mean Distance Between Failures (MDBF)



### Results

The MDBF in March was 451,501 kilometres.

# Analysis

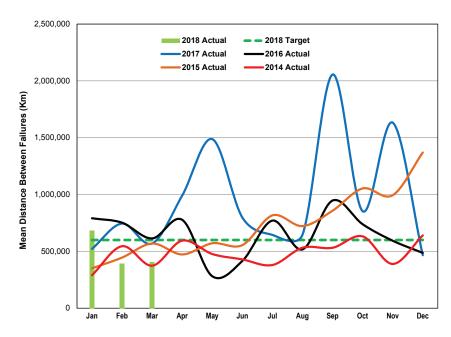
In March, there were seven delay incidents. The top offending system was the Passenger Door System with three delay incidents greater than or equal to five minutes. This was followed by the Propulsion Invertor System with two delay incidents and the Alarm and Speed Control Systems each with one delay incident.

# **Action Plan**

A program is scheduled in 2018 to install re-manufactured door lock assemblies, which include upgraded door close switches that would restore reliability to the Passenger Door System. The door-related delays were a result of a misaligned door guide, a faulty door relay panel and a fault door control panel. The T-1 Door Pocket Guides overhaul program was completed in 2017, which has resulted in a reduction in passenger door-related incidents due to this failure mode.

In addition to this, Master Controller Brake upgrades were completed in Q1 2017. Benefits from both the Door Pocket Guides and Master Controller overhauls have been observed and performance will be monitored in the coming periods. The Rail Vehicle Engineering team will be implementing a solution to increase the reliability of the Friction Brake Electronic Control Units.

### TR Train: Mean Distance Between Failures (MDBF)



### Results

The MDBF in March is 407,535 kilometres.

### Analysis

In March there were 12 delay incidents. The top offending system was the Passenger Door System with seven delay incidents each greater than or equal to five minutes. This was followed by the Brakes and Body Systems with two delay incidents each. The traction motor system experienced one delay incident.

# **Action Plan**

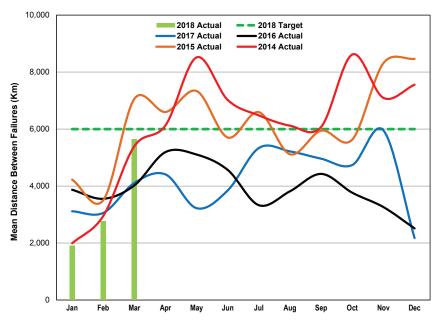
The passenger door related incidents were a result of two malfunctioning door locking mechanisms, two malfunctioning door closure units (DCU), a close switch, door guide and a malfunctioning door electronic closure unit (DECU). Monitoring and corrective actions for these failure modes are in process. The two Brake related incidents were a result of a faulty valves. Monitoring and corrective actions for these failure modes are in progress.

In addition, the Passenger Door System has received numerous modifications to the control units; fleet retrofits of the new modifications are in progress. The Carhouse and RAMS (Reliability, Availability, Maintainability, Safety) technical staff are closely monitoring door failures while the Equipment Control Desk and Transit Control are working towards ensuring that the incident recovery times are returned to average levels (below the five-minute threshold).

The brake system continues to receive numerous modifications/ improvements to the electronic controls; fleet retrofits of the new modifications and validation testing of the proposed upgrades are in progress, with anticipated improvements in future periods.

### Streetcar

# CLRV Streetcar: Mean Distance Between Failures (MDBF)



### Results

The Mean Distance Between Failure (MBDF) for March was 5,638 kilometres. This is an increase of 1,527 kilometres from March 2017. The period-to-period comparison from February 2018 to March 2018 also increased by 2,878 kilometres.

The year-over-year and the periodto-period trend is positive, however the MDBF still remains below the target of 6,000 kilometres.

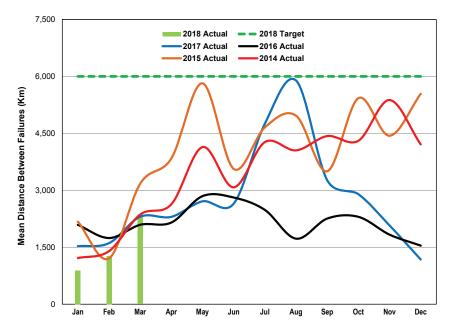
### Analysis

Improving weather conditions and continued focus on maintenance activities (State of Good Repair Programs and accelerated decommissioning of poor performing vehicles) contributed to the improved reliability results in March.

# **Action Plan**

Staff will continue with existing maintenance and fleet management plans that include the SOGR programs and decommissioning of vehicles. As of April 2018, 68 of the original 196 CLRV have been decommissioned from service.

# ALRV Streetcar: Mean Distance Between Failures (MDBF)



### **Results**

The Mean Distance Between Failure (MBDF) of the ALRV Fleet for March was 2,357 kilometres. This is an increase of 53 kilometres when compared to March 2017.

The period-to-period comparison also resulted in a favourable trend with an increase of 1,083 kilometres from February 2018. The ALRV fleet, however, continues to have an overall reliability below the target of 6,000 kilometres.

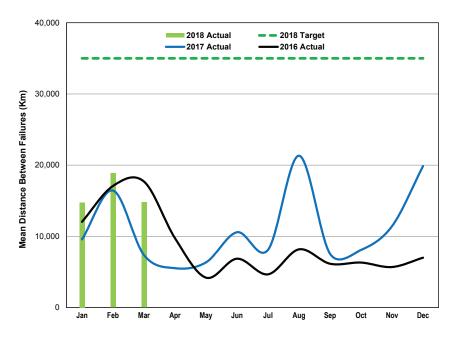
### Analysis

The increase in MDBF in March can be attributed to improved weather conditions and similar maintenance initiatives that are being applied to the CLRV Fleet.

### **Action Plan**

Staff will continue with existing maintenance plans and initiatives that include the SOGR programs and decommissioning of vehicles.

# LFLRV Streetcar: Mean Distance Between Failures (MDBF)



### **Results**

The Mean Distance Between Failure (MBDF) for the LFLRV Fleet in March was 14,777 kilometres. This is an increase when compared to March 2017, but is a decrease when compared to the previous month of February 2018.

Although the overall MDBF remains below the 35,000kilometres target, the 12-month moving annual trend continues to be positive.

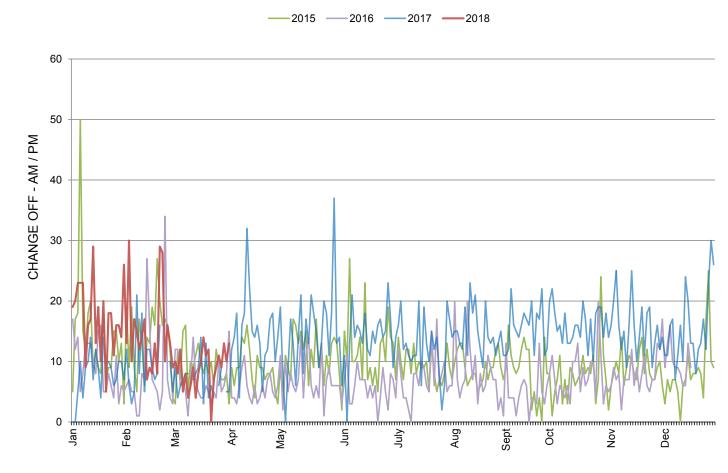
# Analysis

The number of door related failures increased in March which caused the reliability to decrease.

### **Action Plan**

Staff continue to work with Bombardier and its suppliers to resolve technical and design issues on the vehicles.

### Streetcar: Road Calls & Change Offs (RCCO's)



### Result

The target for the maximum number of Road Calls and Change Offs (RCCOs) is 1.5% of peak daily service. In March, the peak daily service was 150 streetcars. The average number of RCCOs was 8.8 vehicles per day which equated to 5.9% of peak daily service. While the percentage of RCCO in March did not meet the target, there was an improvement from February 2018 when the average number of RCCO per day was 14.6 vehicles.

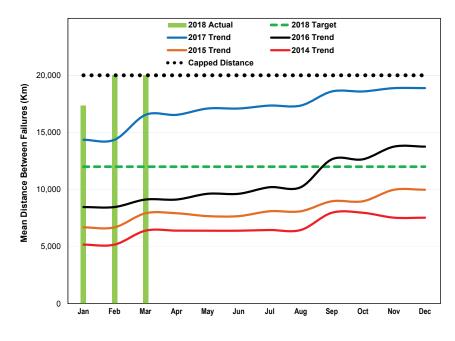
### Analysis

The decrease in streetcar change offs in March was a result of improving weather conditions and various maintenance and fleet management initiatives. These include the State of Good Repair maintenance programs, the continued decommissioning of worst performers in the ALRV and CLRV fleets, and the addition of new accessible streetcars.

### **Action Plan**

Staff will continue with existing maintenance and fleet management plans to improve overall fleet reliability. In turn, this will help reduce the number of RCCO that impact customer travels.

### **Bus: Mean Distance Between Failures (MDBF)**



### Results

The March 2018 Mean Distance Between Failure (MDBF) of 20,000 kilometres has exceeded the target of 12,000 kilometres and is well above the March 2017 average of 16,107 kilometres.

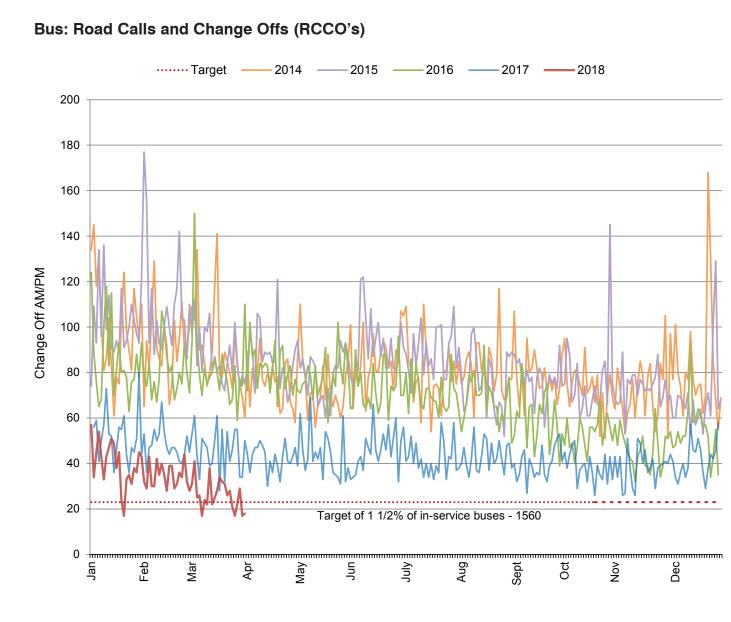
# Analysis

Bus Maintenance received 342 new Nova buses in 2017 and 40 new Nova buses in Q1-2018 which has contributed to the consistent increase in MDBF. Efforts to reduce repeater Road Call Change-Off's (RCCO) contribute to the increase in MDBF. A favourable MDBF score is expected to remain throughout 2018.

# **Action Plan**

Ongoing Scheduled Maintenance Programs:

- Cooling System Nova articulated buses at Wilson Garage to address high failure with coolant leaks.
- Heating Systems Orion VII 1274CD at Queensway Garage to correct high level of no heat conditions.
- State of Good Repair Ongoing at all locations.
- Roof Repair All Orion VII buses to address water egress caused by environmental/sun damage to roof and antenna seals.
- Spring Checks From March to May on all buses to prepare the air conditioning systems for warmer weather.



#### Result

The average number of change offs in March 2018 was 25.3 per day. This is a decrease from February 2018 where the average number of change offs per day was 33.6 per day. Incremental improvement can be seen over the period 2014 to 2018, resulting in a higher level of equipment availability.

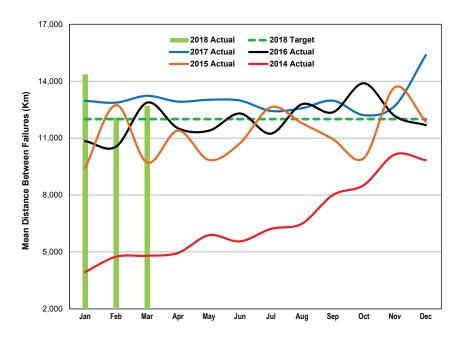
### Analysis

With peak revenue service at 1,600 buses per day, including Run As Directed (RAD) buses in March 2018, the average number of change offs per day equates to 1.58% of service. The decrease in bus change offs in March 2018 is a result of improved reliability and the addition of new Nova buses entering revenue service.

### **Action Plan**

Vehicle change offs are directly related to the overall fleet reliability. Maintenance initiatives, decommissioning of the Orion VII 7400-7882 bus fleet and receipt of new Nova buses to improve vehicle reliability is supporting a reduction in the number of change offs.

### Wheel-Trans: Mean Distance Between Failures (MDBF)



#### Results

The March 2018 Mean Distance Between Failure (MDBF) of 12,678 kilometers is marginally above target but slightly below March 2017 performance. Above-target MDBF is expected throughout 2018.

### Analysis

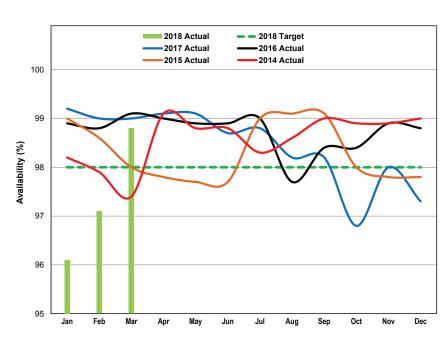
20 new RAM ProMaster buses were in service as of the end of March 2018. Drive-line failures contribute to 20% of chargeable road calls for the Friendly bus fleet, review is ongoing. Ramp handles and engine problems continue to influence MDBF negatively.

# **Action Plan**

Newly engineered ramp handles are expected in April. Diesel particulate filter replacements continue to help reduce the number of emission failures. Spring checks will be completed between March and May to prepare the air conditioning systems for warmer weather. Improved planning of differential overhaul has been initiated to reduce vehicle out-ofservice time. The remaining 60 ProMaster buses are scheduled to start arriving in April and delivery is expected to be completed by the end of the year.

# **Assets: Equipment availability**

**Elevators** 



### Results

Performance was improved in March and achieved the target.

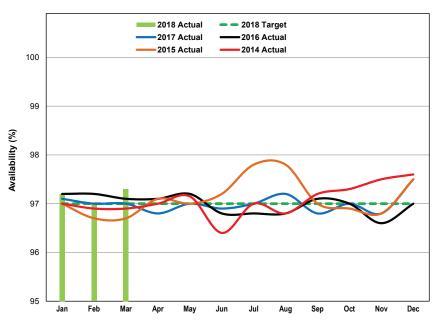
### Analysis

Elevator maintenance was completed as planned and scheduled. During the month of March, Elevating Device Services (EDS) has seen a decrease is overall system related emergency calls and a decrease in corrective maintenance downtime.

# **Action Plan**

Continue performing preventative maintenance to meet reliability and availability targets.

### **Escalators**



### Results

The availability level surpassed the target of 97% in March.

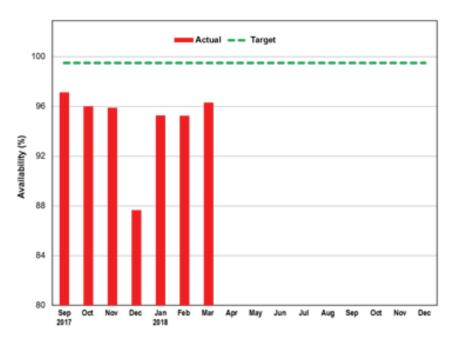
### Analysis

Maintenance activities were completed as planned and scheduled.

# **Action Plan**

Continue performing preventative maintenance to meet reliability and availability targets.

### **Fare Gate Availability**



### Results

Faregate availability increased by approximately 1% to 96.29% in March 2018 remaining below target of 99.5%.

### Analysis

This increase reflects the efforts of a number of groups ensuring issues are addressed in a timely manner and our work with S&B to address gates with habitual problems. With the current hardware and software modification programs, performance is expected to improve through 2018.

# **Action Plan**

TTC staff continue to work with S&B to address ongoing hardware and software issues. A number of plans have been developed and are currently being implemented, including: replacing the computers inside the gates, the continued replacement of gate motors with a modified version and software patches. These plans address issues such as: ghosting, tap/ no entry, breakthroughs, and motor failures. Additional software updates are scheduled in 2018 which will add functionality and provide fixes to known problems and improve gate availability.

For further information on TTC performance, projects and service, please see www.ttc.ca



