# TTC performance scorecard

<table>
<thead>
<tr>
<th>Key Performance Indicator</th>
<th>Description</th>
<th>Latest Measure</th>
<th>Current</th>
<th>Target</th>
<th>Current Status</th>
<th>Ongoing Trend</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safety and Security</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lost Time Injuries</td>
<td>Injuries per 100 Employees</td>
<td>Sep 2018</td>
<td>4.29</td>
<td>4.52*</td>
<td>✔</td>
<td>❌</td>
<td>16</td>
</tr>
<tr>
<td>Customer Injury Incidents</td>
<td>Injury Incidents per 1M Boardings</td>
<td>Sep 2018</td>
<td>0.83</td>
<td>0.95*</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Offences against Customers</td>
<td>Offences per 1M Boardings</td>
<td>Sep 2018</td>
<td>0.72</td>
<td>1.00</td>
<td>✔</td>
<td>❌</td>
<td>18</td>
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<tr>
<td>Offences against Staff</td>
<td>Offences per 100 Employees</td>
<td>Sep 2018</td>
<td>3.91</td>
<td>3.91*</td>
<td>✔</td>
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<tr>
<td><strong>Customer: Ridership</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>TTC Ridership</td>
<td>TTC Ridership</td>
<td>Sep 2018</td>
<td>52.4M</td>
<td>54.1M</td>
<td>❌</td>
<td>❌</td>
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<tr>
<td>TTC Ridership</td>
<td>2018 y-t-d to Sep</td>
<td>400.3M</td>
<td>413.5M</td>
<td></td>
<td>❌</td>
<td>NA</td>
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<tr>
<td>PRESTO Ridership</td>
<td>PRESTO Ridership</td>
<td>Sep 2018</td>
<td>17.7M</td>
<td>28.0M</td>
<td>❌</td>
<td>✔</td>
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<td>PRESTO Ridership</td>
<td>2018 y-t-d to Sep</td>
<td>105.6M</td>
<td>127.1M</td>
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<td>❌</td>
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<tr>
<td>Wheel-Trans Ridership</td>
<td>Wheel-Trans Ridership</td>
<td>Sep 2018</td>
<td>322K</td>
<td>459K</td>
<td>❌</td>
<td>✔</td>
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</tr>
<tr>
<td>Wheel-Trans Ridership</td>
<td>2018 y-t-d to Sep</td>
<td>3,092K</td>
<td>3,617K</td>
<td></td>
<td>❌</td>
<td>NA</td>
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</tbody>
</table>

Ongoing trend indicators: ✔ Favourable  ➥ Mixed  ❌ Unfavourable  

* Represents current 12-month average of actual results
<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer: Satisfaction</strong></td>
<td>Customer Satisfaction score</td>
<td>Q3 2018</td>
<td>80%</td>
<td>80%</td>
<td>✔</td>
<td>✔</td>
<td>25</td>
</tr>
<tr>
<td><strong>Customer: Environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Station Cleanliness</td>
<td>Audit Score</td>
<td>Q3 2018</td>
<td>77.47%</td>
<td>75%</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Streetcar Cleanliness</td>
<td>Audit Score</td>
<td>Q3 2018</td>
<td>94.8%</td>
<td>90%</td>
<td>✔</td>
<td>✔</td>
<td>27</td>
</tr>
<tr>
<td>Bus Cleanliness</td>
<td>Audit Score</td>
<td>Q3 2018</td>
<td>94.7%</td>
<td>90%</td>
<td>✔</td>
<td>✔</td>
<td>28</td>
</tr>
<tr>
<td>Subway Cleanliness</td>
<td>Audit Score</td>
<td>Q3 2018</td>
<td>93.3%</td>
<td>90%</td>
<td>✔</td>
<td>✔</td>
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</tr>
<tr>
<td><strong>Customer: Service Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subway</td>
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<tr>
<td>Line 1 Yonge-University</td>
<td>Delay Incidents</td>
<td>Sep 2018</td>
<td>863</td>
<td>448</td>
<td>✖</td>
<td>−</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Delay Minutes</td>
<td>Sep 2018</td>
<td>1,453</td>
<td>913</td>
<td>✖</td>
<td>−</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Capacity Delivered in Peak</td>
<td>Sep 2018</td>
<td>92.9%</td>
<td>96%</td>
<td>✖</td>
<td>−</td>
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<td>Line 2 Bloor-Danforth</td>
<td>Delay Incidents</td>
<td>Sep 2018</td>
<td>719</td>
<td>399</td>
<td>✖</td>
<td>−</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Delay Minutes</td>
<td>Sep 2018</td>
<td>1,328</td>
<td>835</td>
<td>✖</td>
<td>−</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Capacity Delivered in Peak</td>
<td>Sep 2018</td>
<td>96.3%</td>
<td>96%</td>
<td>✖</td>
<td>−</td>
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<td>Line 3 Scarborough</td>
<td>Delay Incidents</td>
<td>Sep 2018</td>
<td>62</td>
<td>39</td>
<td>✖</td>
<td>−</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Delay Minutes</td>
<td>Sep 2018</td>
<td>179</td>
<td>232</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td></td>
<td>Capacity Delivered in Peak</td>
<td>Sep 2018</td>
<td>97.8%</td>
<td>98%</td>
<td>✖</td>
<td>−</td>
<td>38</td>
</tr>
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Ongoing trend indicators: ✔ Favourable  ➖ Mixed  ✖ Unfavourable  
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<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Line 4 Sheppard</td>
<td>Delay Incidents</td>
<td>Sep 2018</td>
<td>43</td>
<td>32</td>
<td>X</td>
<td>X</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Delay Minutes</td>
<td>Sep 2018</td>
<td>72</td>
<td>78</td>
<td>✓</td>
<td>✓</td>
<td>40</td>
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<tr>
<td></td>
<td>Capacity Delivered in Peak</td>
<td>Sep 2018</td>
<td>100%</td>
<td>98%</td>
<td>✓</td>
<td>✓</td>
<td>41</td>
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<tr>
<td>Streetcar</td>
<td>On-Time Departure</td>
<td>Sep 2018</td>
<td>57.2%</td>
<td>90%</td>
<td>X</td>
<td>X</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Short Turns</td>
<td>Sep 2018</td>
<td>2,953</td>
<td>1,272</td>
<td>X</td>
<td>X</td>
<td>43</td>
</tr>
<tr>
<td>Bus</td>
<td>On-Time Departure</td>
<td>Sep 2018</td>
<td>71.5%</td>
<td>90%</td>
<td>X</td>
<td>✓</td>
<td>44</td>
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<tr>
<td></td>
<td>Short Turns</td>
<td>Sep 2018</td>
<td>2,837</td>
<td>2,091</td>
<td>X</td>
<td>✓</td>
<td>45</td>
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<tr>
<td>Wheel-Trans</td>
<td>% Within 2 0 Minutes of Schedule</td>
<td>Sep 2018</td>
<td>90.4%</td>
<td>90%</td>
<td>✓</td>
<td>✓</td>
<td>46</td>
</tr>
</tbody>
</table>

**Customer: Amount of Service**

|          | Weekly Service Hours | Sep 2018 | 18.8K | 18.8K | ✓ | ✓ | 47   |
|----------|----------------------|----------|-------|-------|   |   |      |
| Streetcar|                      |          |       |       |   |   |      |
| Bus      |                      | May 2018 | 147.2K| 150.6K| X | - | 48   |
| Subway   |                      | Sep 2018 | 10.8K | 10.9K | X | ✓ | 49   |
| Operator Efficiency |                      | Sep 2018 | 86.78%| 87.15%| X | X | 50   |

**People**

|          | Absenteeism Rate      | Sep 2018 | 7.81% | 7.51%*| X | X | 51   |
|----------|-----------------------|----------|-------|-------|   |   |      |
| Employee Absence |                  |          |       |       |   |   |      |

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<tbody>
<tr>
<td><strong>Assets: Vehicle Reliability</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Subway</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>Mean Distance Between Failures</td>
<td>Sep 2018</td>
<td>387,128 km</td>
<td>300,000 km</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td>TR</td>
<td>Mean Distance Between Failures</td>
<td>Sep 2018</td>
<td>528,953 km</td>
<td>600,000 km</td>
<td>✗</td>
<td>✗</td>
<td>55</td>
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<tr>
<td><strong>Streetcar</strong></td>
<td></td>
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<td></td>
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<tr>
<td>CLRV</td>
<td>Mean Distance Between Failures</td>
<td>Sep 2018</td>
<td>3,956 km</td>
<td>6,000 km</td>
<td>✗</td>
<td>✗</td>
<td>56</td>
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<tr>
<td>ALRV</td>
<td>Mean Distance Between Failures</td>
<td>Sep 2018</td>
<td>1,934 km</td>
<td>6,000 km</td>
<td>✗</td>
<td>✗</td>
<td>57</td>
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<tr>
<td>LFLRV</td>
<td>Mean Distance Between Failures</td>
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<td>12,378 km</td>
<td>35,000 km</td>
<td>✗</td>
<td>✗</td>
<td>58</td>
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<tr>
<td><strong>Bus</strong></td>
<td>Mean Distance Between Failures</td>
<td>Sep 2018</td>
<td>20,000 km</td>
<td>12,000 km</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td><strong>Wheel-Trans</strong></td>
<td>Mean Distance Between Failures</td>
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<td>16,715 km</td>
<td>12,000 km</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td><strong>Assets: Equipment Availability</strong></td>
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<tr>
<td>Elevators</td>
<td>Percent Available</td>
<td>Sep 2018</td>
<td>97.9%</td>
<td>98%</td>
<td>✗</td>
<td>✔️</td>
<td>63</td>
</tr>
<tr>
<td>Escalators</td>
<td>Percent Available</td>
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<td>97.2%</td>
<td>97%</td>
<td>✔️</td>
<td>✔️</td>
<td>64</td>
</tr>
<tr>
<td>Fare Gates</td>
<td>Percent Available</td>
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<td>99.5%</td>
<td>✗</td>
<td>✗</td>
<td>65</td>
</tr>
<tr>
<td>Fare Card Reader</td>
<td>Percent Available</td>
<td>Sep 2018</td>
<td>98%</td>
<td>99.9%</td>
<td>✗</td>
<td>✗</td>
<td>66</td>
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</table>

Ongoing trend indicators: ✔️ Favourable  ➾ Mixed  ✗ Unfavourable

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General Overview

Thanks to the record investment in transit approved by this Board and Council, TTC customers are getting improved service on all modes. Since the beginning of September, when we increased service on many surface routes, including new express bus service, we have consistently delivered the service we advertise. As the Board who oversaw these improvements, you can be proud of your part in helping us regularly deliver 100% or better bus service to our customers.

Improvements are also noticeable on Line 1 Yonge-University, where we met or exceeded our 96% on-time performance target for the vast majority of morning and afternoon peak periods. In fact, there were three days in October when 27 trains were put through Bloor-Yonge Station in one hour during morning rush and three days when 28 trains were put through, going well beyond the 25.5 trains that are scheduled.

We are moving forward with our work on the Scarborough Subway Extension, acquiring property for tunnel construction and working with utility companies to start utility relocation. We achieved the 30% design milestone in Q3 of this year, and continue working on the design and the Stage Gate 3 submission.

The Transit Project Assessment Process (TPAP) for Relief Line South was approved on October 17. In Q2, consultant contracts were awarded for the design of eight stations, geotechnical work, tunnelling and subway systems. The Memorandum of Understanding (MOU) between Metrolinx, the TTC and City Council for the Planning, Design and Engineering (PDE) phase was approved by the TTC Board and City Council earlier this year.

Also earlier this year, the MOU for the PDE phase of the Yonge Subway Extension was approved by the Board and Council. This MOU is between Metrolinx, the City of Toronto, the TTC, York Region and the York Region Rapid Transit Corporation. Consultant contracts have been awarded, for geotechnical work, geotechnical management, tunnelling, five station designs and subway systems design.

For both the Relief Line South and Yonge Subway Extension, we are in the process of awarding contracts for project management services, and we continue hiring staff to assist with the management of design work. It is important to remember that at its meeting of May 24, 2017, Toronto City Council
passed a motion “Advancing Planning and Design for the Relief Line and Yonge Subway Extension” in which it reaffirmed the position that it would “not agree to an extension of the Yonge North subway line unless construction of the Relief Line South, including required improvements to the Yonge/Bloor station, has been fully funded with a firm schedule for completion; if both projects proceed concurrently, the Relief Line must be in operation prior to the opening of the Yonge North extension.”

As referenced in the Growth and Assets Critical Path section of this report, the TTC took delivery of its first Hybrid Electric bus in October. We are now in the process of preparing it for revenue service, which involves inspection, installing PRESTO equipment, training our operators and final commissioning before it hits the road. It is expected to go into service in mid-November. We expect to have 54 more hybrid vehicles delivered and commissioned for service by the end of December. These buses represent a key piece in our Green Procurement Plan and our Corporate Plan commitment to achieving our 100% zero emission target by 2040.

The TTC ended its Metropass Discount Plan (MDP) program at the end of October, two months earlier than originally planned. The decision was made due to the ongoing uncertainty created by the Canada Post labour negotiations that would impact delivery of November or December Metropasses. The MDP program was already scheduled to end in December as the TTC transitions to PRESTO.

MDP customers will not be charged for November and December Metropasses. Instead, they are receiving credits each of those months in the amount of the MDP discount on a Metropass. On November 1, they also received a $6 credit that can be used to purchase a PRESTO card. In the meantime we have started rolling out a robust communications and marketing campaign reminding customers of the discontinuation of the Metropass and about the different pass options now available to them on PRESTO.

On October 9, we held a public consultation session on our proposed use of external-facing cameras on buses and streetcars. We heard from the public, both in person and via a survey online, on this very important safety and security initiative. External cameras will allow the TTC to investigate incidents involving our vehicles, support the investigation of customer complaints and claims, and enhance public and customer safety. More than 300 people completed the survey, and 86% of respondents support the cameras.

On October 16, we honoured dozens of outstanding employees for going above and beyond the call of duty in the areas of Leadership, Safety, Customer Service, Teamwork, and Innovation and Creativity. This was part of our Rewards and Recognition Program that celebrates employees who demonstrate diligence and
Fun and Informative – TTC Family Day 2018

dedication to the organization, and who exemplify The TTC Way. The program aligns with our Corporate Plan’s critical path of enabling our employees to succeed.

Last month I started an extensive tour of our workplaces. On October 18, I visited the TTC’s Customer Service Centre, talking to the folks who answer the Information Line and those behind the tweets of @TTChelps. The following week, I visited our Danforth Division and met with many collectors, clerical staff and subway operators. I am looking forward to visiting virtually all of our locations and speaking with, and listening to, as many employees as I can over the next few months, to hear about the challenges, the ups and downs that the 15,000 women and men of the TTC face as they pull off the daily miracle of moving close to 1.8 million customers across our city.

I was pleased to see so many employees bring their families to join us on Sunday, October 14 at TTC’s Family Day. This year it was held at Mount Dennis Garage. Interactive, informative and fun were the themes of the day, as guests of all ages toured the TTC’s Command Bus, the bus wash station, and numerous emergency vehicles courtesy of our first responder partners. Kids played in bouncy castles while their parents were informed about SAP, TTC workplace wellness initiatives, rewards programs and much more. It was a great day to come together as an organization and thank our families for supporting us as we work all shifts at all hours of the day and night. Thanks to all the TTC volunteers who helped put this special day together.

Richard J. Leary
Chief Executive Officer
Toronto Transit Commission
Critical Paths

People

CUPE Local 2 and the TTC attended interest arbitration on September 27, 2018. Each party made submissions to the arbitrator about what the next contract should include. The TTC argued that the tentative agreement reached with CUPE Local 2 in April 2018, but subsequently voted down by the membership, is what should be imposed upon the parties. The arbitrator accepted this position and imposed all of the terms and conditions of the tentative collective agreement. The terms of this contract are generally consistent with what other bargaining units negotiated with the TTC. The TTC and ATU Local 113 attended interest arbitration on October 13, 2018. On October 23, 2018 the arbitrator released the decision, which provided for benefits and wage increases in each year of a three-year contract. The TTC is reviewing the decision for cost and operational implications.

As of October 17, 2018, it is legal to use and possess cannabis in Canada. The TTC has an extensive drug and alcohol testing program in place to support its health and safety goals and is prepared to address any challenges from legalization. To ensure that employees are aware of the facts around the new legislation and the standards for Fitness for Duty, the TTC has released corporate notices, FAQs and mailed information booklets to all employee homes.

Growth and Assets-Vehicle procurement update

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative Actual</td>
<td>9</td>
<td>25</td>
<td>42*</td>
<td>47</td>
</tr>
<tr>
<td>vs Cumulative Schedule</td>
<td>9</td>
<td>31</td>
<td>50</td>
<td>69</td>
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</tbody>
</table>

*As of October 18, 2018

2018 Wheel-Trans Vehicle Procurement

The 69 vehicles scheduled for delivery in 2018 will bring the fleet of ProMaster buses up to 80.

Recent Progress

As of October 18, 2018, a total of 47 ProMasters have been delivered of the expected 69 scheduled for 2018. Creative Carriage missed
the Q3 target by eight vehicles; however, the production rate is increasing and it is expected that the end-of-year target is achievable.

**Immediate Next Steps:**
- Metrolinx has executed a contract amendment with Creative Carriage to extend the existing contract to June 2019. Doing this allows the TTC to procure 48 additional ProMasters required as part of the 2019 Fleet Plan requirements.

### Bus Procurements

In accordance with the Green Bus Technology Plan approved by the Board in November 2017, 625 new buses are scheduled for delivery in 2018 and 2019.

**Clean Diesels (310 diesels)**

As of October 18, 2018, Nova Bus have delivered a total of 272 of the expected 310 buses scheduled for 2018. Production started off slowly, but ramped up significantly by the end of Q2 and early Q3. Nova is now slightly ahead of their contractual schedule for the clean diesel buses.

New buses delivered by Nova are equipped with VISION, the latest in computer-aided dispatch and automated vehicle location. Upon delivery, buses are inspected, fitted with PRESTO equipment and

<table>
<thead>
<tr>
<th></th>
<th>2018 Q1</th>
<th>2018 Q2</th>
<th>2018 Q3</th>
<th>2018 Q4</th>
<th>2019 Q1</th>
<th>2019 Q2</th>
<th>2019 Q3</th>
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<td>Actual</td>
<td>40</td>
<td>71</td>
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<td>60**</td>
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| Total | 40 | 118 | 223 | 365 | 500 | 500 | 510 | 625 |

* As of August 22, 2018
** Additional 30 eBus procurement was approved at June 2018 Board Meeting
*** BYD’s preliminary schedule had their buses delivered in Q4 2018; however, it has now advised that they will deliver in Q1 of 2019.
commissioned for service through the Ministry of Transportation. To date, 188 of the 272 buses are available for service.

**Hybrids (255 hybrids)**

Driven by an electric motor powered by an on-board battery system, hybrid buses today are very close to being fully electric than ever before. The only distinction between a hybrid and an all-electric bus is that the hybrid has an on-board generator that produces electricity when needed. Also, all on-board systems such as doors, HVAC, power steering etc. are now fully electrified. The hybrid bus is a key step in the natural progression to a fully electric battery bus and allows the TTC to start gaining early operating and maintenance experience with all the electrified on-board systems. The Green Procurement Plan currently projects a mix of hybrid and fully electric bus procurements for years 2021-2024 as we transition to steady state procurement of solely fossil fuel-free/zero emissions buses in 2025 and beyond.

The latest generation hybrid-electric bus was delivered on October 17, 2018. Inspection, PRESTO installation, operator training, and commissioning will take place prior to its release into service. The in-service date is currently planned for the week of November 12. The remaining 54 hybrids for 2018 are expected to be received in latter part of November and December.

In accordance with the Board decision on June 12, 2018, the TTC has procured 200 additional hybrid-electric buses for delivery in 2019. This increases the total number of hybrid-electric buses to 255.

The hybrid bus procurement is an essential part of the TTC’s transition plan to a fossil-fuel-free fleet as directed by the TTC Board. Hybrid buses offer significant improvements in reliability, environmental benefits and operating cost savings. The capital investment is funded by the Government of Canada’s Public Transit Infrastructure Fund program, the Province of Ontario’s Gas Tax and the City of Toronto.

**Electric Buses (60 eBuses)**

TTC will be securing 10 buses from each of the following three suppliers. These will undergo evaluation and assessment through their life cycle to determine their suitability in our fleet.

BYD

Design: Pre-production meetings with BYD held in June are complete. The final design review is pending, as is the approval of an acceptable corrosion protection plan to ensure that the only carbon steel frame eBus (others are stainless steel or composite) can withstand 12-to-13 years of service with road salt and brine, which are known to accelerate corrosion of primary structures.

Production and Delivery Schedule: BYD reports that there may be a delay in their production and delivery schedule. The original plan for delivery of BYD buses was December 2018 and the current contract schedule is for March 2019. Parts supply issues and a change of plans for their Canadian finishing facility may impact the schedule. A revised production
plan and schedule is expected in the coming weeks.

New Flyer Industries Group Inc.
Design: Pre-production meetings and final design reviews were completed with New Flyer.

Production and Delivery Schedule:
New Flyer remains on track to start production in November 2018 for delivery in February/March 2019.

Proterra
Contract: The contract with Proterra is expected to be completed by the end of November.
Design: Pre-production meetings that Proterra proceeded with at their risk pending contract award, were held in late September.

Production and Delivery Schedule:
Production and delivery are scheduled to commence in Q2 2019 and Q3 2019, respectively.

eBus Infrastructure
The first eBus infrastructure work began and was completed on-time at Arrow Road Garage during the week of October 14, 2018. Toronto Hydro and the TTC worked together to complete a transformer upgrade that would provide additional power to charge the eBuses at that location.

A Service Agreement between the TTC and Toronto Hydro has been approved by the TTC. Once approved by Toronto Hydro, a notice of award for the Engineering, Procurement and Construction (EPC) contractor will be issued to begin the next phase of infrastructure works.
As reported in the August CEO’s Report, risks remain in regard to lead times for the energy storage system, infrastructure works, substation and emergency back-up generator. Once the EPC contract is finalized, an update will be provided through future CEO Report.

Immediate Next Steps: Staff will continue to work towards finalizing the contract with Proterra and obtain an updated schedule from BYD. For infrastructure work, the TTC and Toronto Hydro expect to award the contract to the winning EPC contractor by the end of November. The stream of work to prepare the organization for this transformational change in technology is now underway.
New Streetcars
The target for Q4 2018 is 21 new streetcars in service. As of October 19, 2018, two streetcars have been shipped to the TTC and three have entered service. Of the 204 streetcars ordered, 106 have been shipped and 103 have entered service.

Recent Progress:
Bombardier’s focus to reduce and eliminate repeat snags and one-off issues continues with some improvements noted. Measures are in place to provide feedback to the production line and correct at source, but there remains work to be done to eliminate known issues on a consistent basis. The TTC is monitoring and looking for positive trends that provide confidence that these issues are under control. The approach was initiated at Thunder Bay and is now in place in Toronto. The equivalent feedback loop is being included for rollout at Bombardier’s other plants in Kingston, La Pocatière and Sahagun, Mexico.

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*As of October 19, 2018

Immediate Next Steps
- Bombardier to confirm delivery of the first car from their Kingston Plant. The first streetcar assembled at Bombardier’s Kingston plant is expected to be delivered mid-to-late November. Projections indicate Kingston will supply two new streetcars in 2018. With the improved production quality and frequency in Thunder Bay, achievement of the first car will help to provide further confidence that Bombardier can recover and possibly meet the original commitment of 204 new streetcars by the end of Q4 2019.

Scarborough Subway Extension
Work continues to progress on all elements towards 60% design and the Stage Gate 3 submission. At Stage Gate 3, the project will provide final Class 3 Cost Estimate, Level 3 Project Schedule and associated risk and schedule risk analysis. The Chief Project Manager is continuing his work with key stakeholders within
the TTC and the City to define the activities, approval process and timelines for a Stage Gate 3 report, which is anticipated to be presented to the Executive Committee, the TTC Board and City Council in Q1/Q2 2019.

Make Taking Public Transit Seamless

The PRESTO Update and Transition Overview was provided to the TTC Board in June 2018. Commissioners then received a brief update in mid October. The TTC will provide the Board with a comprehensive update in early 2019. We outlined the substantial progress that has been made since the start of the PRESTO project in 2012. Specifically:

• PRESTO adoption is currently 30% and is expected to rise to more than 50% by December.
• PRESTO fare gates and fare vending machines have been installed at essentially all subway entrances.
• PRESTO fare readers have been installed on all buses and streetcars.
• Numerous fare products are available on PRESTO, including basic “e-purse” (pay as you go), monthly and annual Adult, Child (free), Youth and Senior concessions. As of June 2019, single-use tickets will be available from PRESTO vending machines.
• Legacy Metropasses will be discontinued as of January 1, 2019.
• Legacy tickets and tokens will no longer be sold after August 3, 2019
• PRESTO revenue is expected to be $453 million for 2018 (39% of total fare revenue), rising to $1.057 billion during 2019 (91%)

Other positive news included the PRESTO card promotion. The PRESTO adoption strategy includes the TTC providing about 500,000 complimentary PRESTO cards to children and youth enrolled in a Toronto school (English, French, private and independent), low-income adults and seniors (with assistance from the City of Toronto’s Poverty Reduction office) and to our Volume Incentive Program and Metropass Discount Plan Metropass customers.

Metrolinx has agreed to reduce the cost of the card to the TTC, which allows us to purchase the cards within our operating budget at an approximate cost of $1.5 million. We are working out the logistics with Metrolinx and our partners on this initiative. Cards are scheduled to be delivered and distributed, starting Q4 2018 and continue into early 2019. This campaign will increase adoption by getting cards to children, youth, low-income customers and our VIP and MDP customers. We appreciate Metrolinx’s partnership in this initiative.

We also outlined some challenges, including PRESTO system functionality. The planned solution to allow customers to pay the premium Downtown Express fare and the Cross-Boundary fare was unsuccessful. Since providing the update, we have had very positive news from Metrolinx that it is committed to finding a solution and is doing a comprehensive review of different technical solutions. We will continue to support the review and will provide an update to the Board as needed.
On lost revenue and other financial issues, we will engage in a mediated discussion to reach a resolution. Again, we will provide information to the Board as we progress.

The TTC is a committed partner with Metrolinx with a goal to providing a positive experience for our customers. The system must be reliable for our customers as well as have the capacity to reliably collect revenue for the TTC.

**Cornerstone: Safety**

Since September 2018, there have been a number of streetcar collisions involving pedestrians and cyclists, with two incidents resulting in fatalities. No loss of life involving the TTC fleet is acceptable. As such, the TTC has committed to conduct a rigorous review of the recent incidents and amplify efforts on existing collision prevention measures and new road safety initiatives. The TTC’s Collision Prevention Strategy employs a holistic and data-driven approach that targets five main areas: streetcar operator competency and wellness; streetcar safe operating rules; vehicle technology; city infrastructure; and community outreach.

For instance, the new Streetcar Operator Risk Management and Support Program identifies high-risk streetcar operating behaviour and provides early interventions, such as coaching to ensure operator-defensive driving competency. To monitor adherence of safe operating rules, there is regular auditing of rules compliance by supervisors through the Streetcar Rules Compliance Program, which has performed close to 5,000 observations since its inception. To improve the effectiveness of safety communication, operators will receive regular face-to-face safety briefings from supervisors on safe streetcar operation. Furthermore, a number of technological solutions to reduce road collisions, such as collision avoidance system and pedestrian alert systems, will be evaluated for their applicability to the TTC fleet. The TTC has also recently joined the City of Toronto’s Vision Zero Road Safety Committee, which will lend support to assessing pedestrian treatment options to reduce pedestrian midblock crossings and improve pedestrian/cyclist/streetcar interface. Finally, the TTC will continue to deliver streetcar safety workshops to educate and engage vulnerable populations within communities who have shown to be at greater risk of streetcar/pedestrian contacts.
Results
The LTIR for September 2018 was 4.29 injuries per 100 employees.

Analysis
The 12-month average LTIR to the end of September 2018 was 4.52 injuries per 100 employees. The LTIR for the current period was 5% lower than the 12-month average LTIR.

The 12-month average line shows the movement of the LTIR from 2014 to 2018. An upward trend can be observed over this period.

Action Plan
Musculoskeletal/ergonomic type injuries (e.g. overexertion, reach/bend/twist, repetition) account for 23% of all lost time injuries and continue to represent the highest injury event type since 2014. The Ergonomic Musculoskeletal Disorder Prevention Program focused on preventing such injuries and resolving ergonomic concerns is currently being implemented, with anticipated completion by the end of 2019.

Acute Emotional Event injuries caused by sudden and unexpected traumatic event continue to represent the second highest injury type and account for 16% of all lost-time injuries since 2014. In January 2018, the Province adopted a broader definition for emotional trauma claims under the Workplace Safety and Insurance Board Act to include chronic stress in the workplace. Staff anticipate that this change may continue to increase the prevalence of claims for emotional trauma.

The TTC Peer Support Program and the Employee and Family Assistance Program both provide emotional and psychological support following traumatic incidents. These programs help mitigate the impact of being involved or witnessing such incidents. Additional mental health support is being provided to employees through an increase in benefits for psychological services. As of August 1, 2018, BEACON digital therapy, which is personalized therapy via computer or mobile device, has been added to this service.
Results
The customer injury incident rate for September 2018 was 0.83 injury incidents per 1 million vehicle boardings.

Analysis
The 12-month average customer injury incident rate to the end of September 2018 was 0.95 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.

Action Plan
The 12-month average line shows the movement of the customer injury incident rate from 2014 to 2018. A downward trend in the customer injury incident rate continues to be observed over this period.

The continuous reduction in the station related subway injuries over the years are partly attributed to the reduction in the elevator/escalator injury incidents compared to previous years. Since March 2018, elevator and escalator safety videos have been playing every hour on most TTC platform video screens and station information screens.

In addition, the reduction in the 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.
Results
The Offences against Customers rate increased to 0.72 offences per 1 million vehicle boardings in September 2018. This indicates a 4% increase from the previous months’ (August 2018) rate of 0.69 offences.

Analysis
An increase was observed in the crime area of Assault, and Sex Assault. As well as a decrease in the crime area of Theft compared to the previous month. There does not appear to be a pattern in reported incidents.

Action Plan
Transit Enforcement Special Constables will continue to engage with the public to provide a visible presence across the system, with a special focus on designated areas of concern.
Results
Total offences against staff increased in September 2018 to 3.91 offences per 100 employees. The current rate is 10% lower than the corresponding rate of 4.36 for September 2017. The moving annual rate of offences against staff for September 2018 is 3.88, which was 5% lower than the corresponding moving annual rate of 4.08 in September 2017.

Analysis
Increases were observed in crime types such as Assault and Threats compared to the previous month. There was a slight increase in the other crime type category due to an indecent exposure case as compared to August 2018, but there does not appear to be a pattern in reported incidents.

Action Plan
Transit Enforcement Special Constables will continue to provide support to surface personnel via the BUS STOP initiative and to conduct special details and initiatives to assist with ongoing and emerging issues identified by TTC personnel across the system.
### Customer: Ridership

**Results**

Ridership in September was 52.4 million, which is 1.7 million (3.1%) below the budget of 54.1 million and 0.8 million (1.6%) below the comparable period in 2017.

The year-to-date ridership was 13.2 million (3.2%) below budget and 8.0 million (2.0%) below the comparable period in 2017.

Adult ridership was about 41 million (78% of the September total), senior/student ridership was about 8 million (15%) and children ridership was about 2 million (5%).

**Analysis**

Ridership has flatlined since 2014 due to various factors, including congestion, changes in customer mobility, and growth in digital ride-hailing services.

Another important factor that has adversely impacted the measurement of rides is the ongoing decrease in Metropass sales, which currently generate approximately 40% of total ridership. Specifically, there were 197,000 (-7%) fewer passes sold between January and September 2018, compared with the corresponding months in 2017. Although some of these lost sales have likely been offset by an increase in PRESTO e-purse transactions, the declining Metropass sales and termination in December 2018 will continue to have a significant impact on overall ridership measurements.

**Action Plan**

To re-establish sustained ridership growth, a new Ridership Growth Strategy is being implemented.
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Customer ridership 2017 – 2018
**Results**

There were 17.7 million customer journeys using the PRESTO Farecard (i.e. e-purse, period pass) in September, which was 10.3 million below the budget, but up 9.5 million (114.3%), compared to the same time period last year.

Looking at the year-to-date result, ridership was 21.5 million (16.9%) below budget, but up 53.8 million (104%), compared to the same time period last year.

The PRESTO component of total TTC ridership continues to grow and the adoption rate is now at 33.8% (excluding ridership counts from Single Ride Vending Machines).

**Analysis**

The 2018 PRESTO ridership budget was calendarized in late 2017 and the sharp increase in September 2018 arises from the anticipated discontinuation of the sale of legacy monthly passes, tokens and tickets.

The launch of the two-hour transfer for “Hop On Hop Off” trips on August 26 has seen an encouraging uptake in TTC legacy fare customers switching to PRESTO as well as additional trips taken overall within that free-ride window. In terms of PRESTO adoption as evidenced by the number of PRESTO cards in use, there were 150,000 new card customers on the system between July and September 2018 (0.85 million to 1.0 million cardholders). More specifically, in September, there was an increase of 75,000 unique cards using the system, and more than 90% of these customers used e-purse (compared to period pass) arguably to take advantage of the two-hour transfer. During the week when the two hour transfer was introduced, 40,000 cards (included in the aforementioned...
150,000 new cards) were added to the system, which is almost three times the number of cards added during the same week the prior year.

In terms of ridership, shifts were noted in PRESTO usage compared to historical data that suggest:
• approximately 500,000 rides would have occurred anyway within the two-hour window, but no longer required a fare;
• approximately 500,000 rides would have occurred anyway by legacy Metropass riders who switched to PRESTO e-purse in part to take advantage of the two-hour transfer; and
• approximately 300,000 new rides occurred because of the two-hour transfer.

Further study by TTC staff will be required to determine what proportion of the new rides generated added revenue (i.e. were not an added stop on an already planned journey). However, assuming that one-half of the rides generated new revenue, the introduction of the two-hour transfer benefited 1.3 million rides in September 2018 with a net revenue loss impact of about $1.7 million, equivalent to a full year revenue loss of about $20 million. This is consistent with TTC budget estimates.

The foregoing has been estimated from best available data over a limited time period with significant underlying dynamics as TTC riders continue their shift away from legacy payment and over to PRESTO. As such, the estimates are believed to be accurate within a range of +/- 25%.

**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:**
PRESTO ridership is included in TTC ridership totals.
Results
Ridership in September 2018 was 322,000, which was 137,000 (29.8%) below the budget of 459,000. In terms of year-over-year growth, the September ridership of 322,000 was 81,000 (20.1%) lower than the comparable period in 2017 (403,000).

Year-to-date to the end of September 2018, ridership was 525,000 (15%) below budget and 29,000 (1%) below the comparable period in 2017.

Analysis
Wheel-Trans average weekly ridership for September is flat in comparison to the same period in 2017. The 2018 monthly ridership trend has deviated from the five-year historical data trend. However, ridership is following the budgeted ridership trend for 2018. We continue to monitor weekly ridership and will have a revised ridership projection for October. Customers continue to have the option and are encouraged to use the more spontaneous travel choice of Family of Services trips. As well, we are surveying customers to learn their travel patterns, including using conventional modes instead of Wheel-Trans.

Action Plan
The TTC continues to prepare for a new scheduling and dispatching software upgrade that will also allow customers to book their Family of Services trips online. This will be a new feature for customers and will offer more options for travel planning. The Wheel-Trans 10-Year Strategy supports customers in choosing the best mode of travel for their trips. The TTC also continues to support this through offering travel training to customers on the conventional system.

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

Results
Eight in 10 customers have high perceptions of overall customer satisfaction in Q3 2018 (80%). This is in line with last quarter (77%) and last year’s overall satisfaction scores (80%).

Analysis
Pride in the TTC and what it means for Toronto has significantly increased from last quarter (70%) with three-quarters of customers agreeing they are proud of the TTC.

Value for money has returned to a higher score this quarter (62%), 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 last quarter and last year.

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

Station Cleanliness

Results
The average station score exceeded target, coming in at 77.47%. The average score remained essentially the same from Q2 2018 (77.45).

Analysis
Station Services continues to schedule extra cleaning projects during weekend closures where possible to ensure that stations are in top condition following the closures.

Regular cleaning projects (Accelerated Relamping, Luxalon Cleaning, Station Enhancement/Blitz) continue to have a positive influence on audit scores.

While audit scores have exceeded the 75% target for the last two quarters, these scores have been influenced by the inclusion of the scores from the TYSSE stations. The six new stations (still within their first year of operation) have averaged 94.80%. The average score for the other 69 stations have averaged 75.87% in Q2 and 76.04% in Q3, showing that there has still been an improvement across the system and that target would have been met even without inclusion of the TYSSE scores.

Action Plan
Regular programs will continue. The Q4 Audit will be conducted in December 2018, with the results available in early 2019.
Vehicle Cleanliness - Streetcar

Results
The audit score for streetcar cleanliness for Q3 2018 was 94.8%. This score is an increase from both Q1 2018 and Q2 2018, and is above the target of 90%.

Analysis
Similar to Q2, favourable weather helped to increase the overall cleanliness in Q3.

Action Plan
Scheduled cleaning activities will continue. Staff is investigating opportunities to further improve cleanliness scores and customer experience.
Results
The bus cleanliness audit score in Q3 2018 was 94.7%, which is above the target of 90%. Q3 2018 results are higher than Q2 2018 and the highest score achieved to date.

Analysis
The performance scores take into account pre-service, in-service and post-service audit results. Q3 2018 saw the implementation of a new mid-day cleaning initiative to improve in-service audit scores. This initiative focuses on spot cleaning problematic areas such as glass, floor stains, seat stains and the operator area, and will help improve customer experience. Q4 2018 results are expected to remain favourable.

Action Plan
New cleaning measures implemented will continue to be monitored to determine effectiveness. Staff will work to identify areas for continued improvement.
Results
The average rating of 93.2% in Q3 2018 is above the target of 90.0%. The department has recorded a score of greater than 90% in eight consecutive quarters.

Analysis
Areas of strength in the vehicle cleanliness across all fleets and lines were the ceilings, mandatory decals, and walls. In Q4 2017, floors and the exterior cleanliness of our vehicles recorded the lowest scores due to inclement weather conditions. Floors and exterior cleanliness again appeared as an area where further improvement can be made in the following quarter where there is an ongoing exterior wash program.

Action Plan
On Line 1, an exterior-focused cleaning program to manually power wash the exterior of the entire fleet has been instituted. This manual, interim practice was implemented while construction improvements are underway at the Wilson Carhouse. This effective power wash program has now also been introduced for the Line 2 fleet. Currently, the floors are cleaned every 14 days during the floor wash cycle.

Note:
The target for this measure was changed to 90% in Q4 2017, a target more reflective of the ongoing level of performance and consistent with the targets for bus and streetcar.
Customer: Service performance

Subway
Line 1: Delay Incidents

Results
The number of delay incidents decreased by 7% from August to 863 from 928.

Analysis
A decrease in incidents was recorded in almost all monitored categories during this month, both controllable and non-controllable. The most substantial drop in any category was related to staff-related incidents, showing a 51% improvement. Despite the reduction from the previous month, delay incidents on this line are significantly higher than our target, an ambitious 40% reduction of total incidents as compared to 2014. With the current trend, it is unlikely that target can be achieved.

Action Plan
The improvement to staff-related issues is directly related to the increase in staffing levels, with many new operators available for work during this period. More operators continue to come on line during the remainder of the year, which will continue to bolster the service provided. Efforts to reduce customer delays, specifically Emergency Alarm incidents, are underway, and a campaign is ongoing to remind customers to use the Emergency Alarm for emergencies only. The results of this campaign are being tracked and will be reported out in future months.

Note:
The 2018 target is based on a 40% or more reduction in delay incidents from the 2014 monthly average baseline.
Results
The number of delay minutes decreased in September to 1,453 from 2,273 in August. This was a decrease of 36.2%.

Analysis
Much like the Line 1 incident figures, there was a decrease in delay minutes in many categories, including a 281-minute drop in customer-related delays and a 52% drop in staff-related delays. In August, due to staffing levels, there were scheduled trains cancelled. In September, there were no trains cancelled on Line 1.

Action Plan
Providing 100% of scheduled service is a priority, and staffing has been increased to ensure it is provided. During peak periods, increased resources have been deployed to key locations to ensure that any delay incident that occurs is responded to as quickly as possible.

Note:
The 2018 target is based on a 40% or more reduction in delay minutes from the 2014 monthly average baseline.
Results
Peak capacity delivered on Line 1 increased by 2.3% to 92.9%. This is equal to the best result experienced since 2014.

Analysis
September peak capacity delivered was better than any in recent months despite having a number of incidents occur during the a.m. and p.m. peak service.

There are two specific changes that have helped make subway service on Line 1 more reliable. The first is the opening of the North Hostler at Wilson Yard. This additional access point from the yard permits a steadier flow of trains to the north and south of Wilson Yard during the critical time of service build up. It also increases resiliency to react to issues that may occur in the yard.

The second factor that aided in improving service for our customers was the addition of another Run-As-Directed (RAD) train available during the a.m. peak. There are now three of these trains available during the morning peaks, which are strategically placed to enter service when any unexpected delay occurs that might cause an undesired gap in the service.

Action Plan
By the end of November, a fourth RAD train will be added to the a.m. peak, and one will be scheduled for the p.m. peak. This equipment will further aid our ability to be resilient during delays and improve throughput at critical interchanges.
Results
The number of delay incidents decreased on Line 2 by 9.4% in September to 719 from 794.

Analysis
Much like Line 1, the largest improvement in September compared to the previous month was related to staff incidents, which decreased 47.1% to 64 from 121.

Passenger-related incidents remained steady and still account for the highest number of incidents with 274. This accounts for 38.1% of the total incidents.

Action Plan
The improvement to staff-related issues is directly related to the increase in staffing levels, with many new operators available for work during this period. More operators continue to come on line during the remainder of the year, which will continue to bolster the service provided.

Note:
The 2018 target is based on a 40% or more reduction in delay minutes from the 2014 monthly average baseline.
Results
The number of delay minutes on Line 2 decreased in September to 1,328, a 22.2% reduction.

Analysis
Staff-related delays decreased by 46% to 197 minutes as compared to 365 minutes in August. More operators were available and a change to the Employment Standards Act ESA agreement with ATU Local 113 prevented any cancellations during this month.

A positive reduction in customer delays was also experienced. An overall drop of 32% occurred, which includes a 70% drop in trespassers or injured customers at track level.

Action Plan
During peak periods, increased resources have been deployed to key locations to ensure that any delay incident that occurs is responded to expeditiously. In addition, to mitigate any mechanical issues that may be experienced, the rail vehicle department ensures there are spare trains available to ensure service is restored promptly.

Note: The 2018 target is based on a 40% or more reduction in delay minutes from the 2014 monthly average baseline.
Results
During this month, the target was exceeded by achieving 96.3%, a 4.3% increase compared to August.

Analysis
In August, there were cancellations of trains during peak service when there were no operators available. There have been no cancellations during peak service in September. This ensures the planned schedule is met and promised service is delivered.

Action Plan
Continued focus on the peak service hours is a priority. All efforts will be made to move trains according to the schedule.

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.
**Results**

On Line 3, the number of incidents decreased by 22.5% in September to 62, an average of two per day.

**Analysis**

Year-to-date in 2018, equipment-related incidents account for 46.1% of all delay incidents. However, innovative solutions for maintaining this aging fleet continue daily. This is reflective in the reduction from 25 incidents in August to 16 incidents in September. The greatest improvement in this area is due to fewer door issues, down by 35%.

**Action Plan**

The Line 3 fleet life extension program continues, and coupled with a strong preventative maintenance program has resulted in the decreases.

**Note:**

The 2018 target is based on a 40% or more reduction in delay incidents from the 2014 monthly average baseline.
Results
The number of delay minutes decreased to 179 from 254 in August and exceeded target for the first time in 10 months.

Analysis
Across all categories, there were reductions in minutes related to vehicles, subway infrastructure and staff that accounted for a total of 29.5%.

There was only one area that saw a marked increase in minutes – that was customer delays. This is not unexpected given the increased volume of customers as people return from summer holidays.

Action Plan
Additional resources are deployed across the system, particularly during the peak service when a higher number of passengers are travelling. When an incident does occur, the delay minutes are reduced as responders are available in close proximity to resolve any issues.

Note:
The 2018 target is based on a 40% or more reduction in delay minutes from the 2014 monthly average baseline.
Results
The peak capacity delivered for Line 3 in September was 97.8%. This target of 98% was narrowly missed.

Analysis
Performance on Line 3 was satisfactory during September. There were two instances during peak service when the capacity delivered dropped due to vehicle issues.

Action Plan
Proactive vehicle maintenance and the life extension overhaul program will continue with the Mark 1 fleet, improving reliability. Equally important is ensuring the track infrastructure is maintained. There is one final subway closure in 2018, which will allow staff to address any outstanding issues, as well as undertake proactive measures to prepare for the winter season.

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.
**Results**
The number of delay incidents on Line 4 Sheppard stayed virtually the same in September as compared to August, only increasing by three to 43.

**Analysis**
When considering such a small number of incidents (less than one per day), a jump from two subway infrastructure incidents in August to six in September accounts for close to 15% of the overall.

**Action Plan**
The Subway Infrastructure Department continues to have dedicated resources available to Line 4 Sheppard to address any incidents that arise. New personnel have been added to the team to provide additional support to signal maintainers in the field.

**Note:**
The 2018 target is based on a 40% or more reduction in delay incidents from the 2014 monthly average baseline.
Results
The number of delay minutes decreased by 1.4% in September and exceeded the target by achieving 72 minutes.

Analysis
There was a decrease in delay minutes related to staff as well as smoke/fire at track level events. However, these decreases were offset by subway infrastructure events. Two incidents involving train stops occurred causing 53 delay minutes compared to the previous month’s accomplishment of only six minutes total.

Action Plan
With an expected decrease in subway infrastructure minutes as a result of increased staffing and support, the target is expected to be met, and may be the lowest number of minutes achieved since 2014.

Note:
The 2018 target is based on a 40% or more reduction in delay minutes from the 2014 monthly average baseline.
**Results**
The peak capacity on Line 4 Sheppard exceeded the target and achieved 100% for the ninth consecutive month.

**Analysis**
There were no lengthy delays during the a.m. or p.m. service in the month of September.

**Action Plan**
This line continues to run as scheduled. Proactive maintenance continues to be an important tool in delivering anticipated 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.
Results
OTP decreased over August, but was above the September 2017 figures.

Analysis
Performance decreased in September, which is historically a challenging month in terms of performance due to increased road traffic and an end to summer vacations and a return to school for many residents. The modified 504 King summer service (which made up almost 25% of the network trips) came to an end with a temporary return to older schedules for the September Board Period (for the 504 King and the 514 Cherry routes). Performance for the 504 King route was also seriously impacted by the TIFF diversions occurring between September 6-16, and to a lesser extent, the Roncesvalles Polish Festival weekend when all service turned back short of the western end terminal. The 512 St Clair route was also negatively impacted by the ongoing overhead conversion to pantograph-ready infrastructure, requiring weekend shuttle buses on the route for the last two weekends of the month.

Action Plan
The Performance Management Group (PMG) will continue to monitor performance and work with Strategy and Service Planning to continue to improve streetcar schedules in a systematic and ongoing basis. Performance is expected to improve for the October Board Period with the rollout of new schedules for the two-branch 504 King service, replacing the previously existing 504 King and 514 Cherry routes.
Results
Short turns for this period increased compared to the previous period, and were above the same period last year, and were well above the established threshold.

Analysis
Short turns historically increase from August to September and this trend occurred again this year. TIFF diversions on the 504 King route between September 6-16 led to a significant number of short turns due to the unscheduled extra run time requirement. The 505 Dundas route, and to a lesser extent the 506 Carlton route, were also negatively impacted by the construction work at Dundas and Lansdowne throughout the month. Further, several overhead-related incidents on the 512 St Clair route negatively contributed to the increase in short turns for the month.

Action Plan
Ongoing reviews of schedules and run times will continue to be conducted on a regular and consistent basis. A new process for determining run time, generally allowing for additional run time, will be piloted on the weekend 506 Carlton schedule for January. If deemed successful, this new process may be utilized for future schedule revisions.
Results
OTP for September failed to achieve target. However, the information provided continues to be affected by a new data source from vehicles operating on the new VISION system which, at the time of printing, accounted for approximately 30% of the bus fleet.

Analysis
Route performance continues to be closely monitored to assess the impact of traffic congestion as well as delays related to Crosstown construction along Eglinton Avenue, ongoing TTC/City of Toronto construction projects and street festivals/events.

Action Plan
The program for continuous monitoring and improvement to schedules to better match observed operating conditions resulted in new schedules for the following routes: 23 Dawes, 26 Dupont, 36 Finch West, 60 Steeles West, 63 Ossington, 72 Pape, 88 South Leaside and 123 Sherway.

New Express service was introduced along Islington Avenue, Sheppard Avenue West, Sheppard Avenue East, Markham Road and Progress Avenue.

Operators’ performance continued to be closely monitored to maximize the effectiveness of schedule improvements. Since March 2017, 1,593 operator interviews (including 24 in September) have been conducted for schedule adherence irregularities, and occurrences continue to decrease as a result of this initiative.

Note:
This KPI measures adherence to scheduled (59 seconds early to five minutes late) departure times from end terminals.
Results
Short turns for the month of September were above target (unfavourable) as expected due to the increase in traffic congestion as a result of back to school traffic, with a minor increase from the same period last year.

Analysis
Short turns in September increased to 2,837 as compared to 2,566 in the same period last year, and were above the quarterly target of 2,091.

29 Dufferin (10.9%), 35 Jane (6.7%), 24 Victoria Park (3.8%), 34 Eglinton East (3.7%) and 54 Lawrence East (3.7%) were the top five routes for short turns.

Short turns were mainly driven by traffic congestion (44.8%), construction (28.9%) and passenger volumes (13.2%)

Action Plan
Implementation of schedule changes to better reflect operating condition on routes with a high number of short turns, and the utilization of construction extras on routes impacted by Metrolinx, City of Toronto and TTC construction.

Note:
Data is based on all seven days of service from Sunday to Saturday
Results
OTP in September decreased by 1.5% from the previous period to 90.4%. OTP is higher by 3.4% compared to the same period in 2017.

Analysis
The September Board Period was revised to match customer demand in order to improve efficiencies and effectively schedule passenger trips. This has resulted in Wheel-Trans continuing to operate above our target OTP of 90%. The slight decrease can be attributed to increased traffic volume and trip volume.

Action Plan
Dispatch and Service Support continue to receive additional resources through transfers and new hires. We have begun implementing revised Business Processes of Dispatch and Service Support that have identified various methods on improving performance and providing a consistent service. We continue to increase operator levels and training, as well as scheduling more vehicles for improved customer service. We are also looking forward to a dispatching software upgrade in Q4 2018.

Note:
As of July 1, 2018, Wheel-Trans started recording the OTP KPI in accordance with the industry standard of plus/minus 20 minutes of schedule.
Customer: Amount of service

Streetcar - Weekly Service Hours

<table>
<thead>
<tr>
<th>Board Period</th>
<th>Actual</th>
<th>Scheduled</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan '18</td>
<td>22,000</td>
<td>22,000</td>
<td>22,000</td>
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<td>Feb '18</td>
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<tr>
<td>Mar '18</td>
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<td>19,000</td>
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<tr>
<td>Apr '18</td>
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<tr>
<td>May '18</td>
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<td>16,000</td>
<td>16,000</td>
</tr>
<tr>
<td>Jun '18</td>
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<td>14,500</td>
<td>14,500</td>
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<tr>
<td>Jul '18</td>
<td>13,000</td>
<td>13,000</td>
<td>13,000</td>
</tr>
<tr>
<td>Aug '18</td>
<td>11,500</td>
<td>11,500</td>
<td>11,500</td>
</tr>
<tr>
<td>Sep '18</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Results
In the September 2018 Board Period, 19,988 streetcar weekly hours were budgeted for service while 18,838 streetcar weekly hours were scheduled to operate, which represents a -5.75% variance.

Of the 18,838 streetcar weekly hours scheduled to operate, 18,778 streetcar weekly hours were actually delivered, which represents a variance of -0.32%.

Analysis
This is a result of the streetcar fleet shortage. Streetcars have been removed from 505 Dundas and 511 Bathurst and replaced with bus service.

Action Plan
Staff continue to monitor the Bombardier delivery schedule. Bombardier met their Q3 target.
Bus - Weekly Service Hours

Results
In the May 2018 Board Period, 152,642 bus weekly hours were budgeted for service while 150,564 bus weekly hours were scheduled to operate which represents a -1.36% variance.

Of the 150,564 bus weekly hours scheduled to operate, 147,221 weekly hours were actually delivered, which represents a variance of -2.22%.

Analysis
This is a result of some roadway construction projects ending earlier than budgeted and other construction projects being delayed.

Action Plan
Staff continue to consult with relevant staff regarding status of roadway construction projects to ensure an understanding of the revised timelines.

Note:
Current data was unavailable since May 2018 as we upgrade technology on our vehicles with the new VISION system. This will provide real-time data and improve the quality of reporting.
**Results**

In the September 2018 Board Period, 10,800 subway weekly hours were budgeted for service while 10,938 subway weekly hours were scheduled to operate, which represents a 1.28% variance.

Of the 10,938 subway weekly hours scheduled to operate, 10,793 weekly hours were actually delivered, which represents a variance of -1.33%.

**Analysis**

The variance from scheduled to budget is a result of an in-year Board-approved service enhancement to modify the Line 1 schedule.

**Action Plan**

No action required at this time.
Results
Operator crewing efficiency decreased in September to 86.78% from 86.87%.

Analysis
The September board period included many service changes, seasonal changes and service improvements such as the new 900 Express service. In addition, ESA restrictions limiting hours of work has also challenged crewing and rostering.

Action Plan
We are investigating different methods of crewing and rostering to reduce the weekly work platform for ESA compliance, and also to reduce travel time to the start of work locations.

We anticipate that efficiencies will not reach targets until Roncesvalles Division reopens and additional streetcars are delivered and enter service.

Note:
Crewing efficiency is the ratio of platform hours to pay hours. Pay hours includes all costs, including fixed costs mandated by collective agreements, such as paid breaks, travel time and overtime. Platform hours includes the time the vehicle is in revenue service and deadheading (non-revenue).
People

Employee Absence

Results
The absenteeism rate in September 2018 decreased to 7.81% from 8.22% in August.

Analysis
Despite the reduction in the absenteeism rate from Period 8, the 12-month average continues to increase. Total absenteeism continues to increase overtime as reflected in the ongoing trend indicator.

A total of 9,978 employees showed perfect attendance in Period 9. This is 67% of the total workforce, which is down by 1% from Period 8 (i.e. more employees were absent than in the previous period). The remaining 4,910 employees were absent for a total of 20,423 days, averaging 4.2 days of absence per absent employee for Period 9. This is consistent with what was observed in Period 8.

Bill 148 changed entitlements to Personal Emergency Leave (PEL) provisions of the Employment Standards Act (ESA). This has effectively doubled PEL usage from previous years. Employees have used 30,256 PEL days Year-to-date YTD as of Period 9. This has exceeded the entire 2017 total PEL usage by approximately 8,250 days (40% increase).

Action Plan
Human Resources and Service Delivery staff are working together to strategically address the high number and variety of employee absences. Efforts are underway to obtain and leverage attendance related data to identify areas of focus. An HR Data Analyst was hired as of September 17, 2018.
Updated management resources and training are currently being reviewed by various internal stakeholders and will be delivered in Q4. Increased efficiencies with respect to administering the TTC’s Attendance Management Program should improve attendance rates over time. However, the impact of recent legislative changes has shown a significant impact on attendance rates.

On October 23, 2018, the Provincial Government introduced Bill 47, *Making Ontario Open for Business Act, 2018* which proposes the elimination of Personal Emergency Leave. We are assessing the impact the legislation may have on the TTC.

**Fitness For Duty Update**

Total number of employees who were non-compliant or refused to test under the random program: 69

Data is from May 8, 2017 to October 12, 2018.

<table>
<thead>
<tr>
<th>Test Category</th>
<th>2018</th>
<th>2017</th>
<th>Total *</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliant Tests</td>
<td>2071</td>
<td>1627</td>
<td>3698</td>
<td>98.2%</td>
</tr>
<tr>
<td>Non-Compliant (drug, alcohol, refusal)</td>
<td>37</td>
<td>32</td>
<td>69</td>
<td>1.8%</td>
</tr>
<tr>
<td>Total</td>
<td>2108</td>
<td>1659</td>
<td>3767</td>
<td>100.0%</td>
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</table>

<table>
<thead>
<tr>
<th>Test Category</th>
<th>2018</th>
<th>2017</th>
<th>Total *</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliant Tests</td>
<td>1719</td>
<td>1360</td>
<td>3079</td>
<td>97.9%</td>
</tr>
<tr>
<td>Non-Compliant (drug, alcohol, refusal)</td>
<td>37</td>
<td>29</td>
<td>66</td>
<td>2.1%</td>
</tr>
<tr>
<td>Total</td>
<td>1756</td>
<td>1389</td>
<td>3145</td>
<td>100.0%</td>
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</tbody>
</table>

* Currently 15 drug results have yet to be reported as they are still at the lab undergoing analysis or have been cancelled.*
This chart is updated quarterly. This information is up to date as of Oct 1, 2018. Next update will be January, 2019.

* Multiple results have come back positive for two substances.
** Oxycodone is no longer a separate test and is now tested and reported in the Opioids category.

<table>
<thead>
<tr>
<th>Test Category</th>
<th>2018</th>
<th>2017</th>
<th>Total *</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Compliant Tests</td>
<td>352</td>
<td>267</td>
<td>619</td>
<td>99.5%</td>
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<tr>
<td>Non-Compliant (drug, alcohol, refusal)</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0.5%</td>
</tr>
<tr>
<td>Total</td>
<td>352</td>
<td>270</td>
<td>622</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Currently 3 drug results have yet to be reported and are either at the lab undergoing analysis or have been cancelled.

<table>
<thead>
<tr>
<th>Substance Type</th>
<th>2018</th>
<th>2017</th>
<th>Total</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Oxycodone</td>
<td>/ **</td>
<td>1</td>
<td>1</td>
<td>1.5%</td>
</tr>
<tr>
<td>Opiates</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4.6%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>24</td>
<td>15</td>
<td>39</td>
<td>60.0%</td>
</tr>
<tr>
<td>Cocaine</td>
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<td>6</td>
<td>14</td>
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<tr>
<td>Amphetamines</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3.1%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>1</td>
<td>5</td>
<td>6</td>
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<tr>
<td>Total*</td>
<td>35</td>
<td>30</td>
<td>65</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Results
The MDBF in September is 387,128 kilometres.

Analysis
In September, there were seven delay incidents. The top offending system was the passenger door system with four delay incidents greater than or equal to five minutes. This was followed by the alternating current, body and vehicle systems with one delay incident each.

Action Plan
The four-passenger-doors system related failures were a result of two defective door control relay panels, one defective off cab side drum switch and one damaged door belt which had frayed. All passenger-related door issues have since been rectified and tested. A program implemented in 2018 to install remanufactured door lock assemblies which include upgraded door close switches would restore reliability to the passenger door system. The T1 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.

The alternating current system had one failure due to Low Battery Voltage Assembly, which was corrected by replacing the heat sink.

The body system had one failure due to a broken bumper strap which is still under investigation. The vehicle system had one failure due to a propulsion related fault which has been rectified and tested.
**Results**

The MDBF in September is 528,953 kilometres.

**Analysis**

For September results, they were below target for the current period, but the YTD performance remains above target of 600,000 kilometres.

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

**Action Plan**

The passenger door system incidents were due to two defective door electronic control units, and one loose motor cable. All incidents have since been repaired and tested OK. 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 technical staff are closely monitoring door failures while ECD and Transit Control staff are working towards ensuring that the incident recovery times are returned to average levels (below the five-minute threshold).

The incidents involving the brake system were due to a defective release magnet valve, a sticky traction brake control and low brake cylinder pressure. These brake-related issues have since been rectified and tested OK. The brake system continues to receive numerous modifications/improvements to the electro-pneumatic controls; fleet retrofits of the new modifications and validation testing of the proposed upgrades are in progress, with anticipated improvements in future periods.

The body-related failure was due to an operator seat that would not lock, which has since been fixed.
Results
The MDBF of the CLRV Fleet for September was 3,956 kilometres. This was a decrease of 1,004 kilometres from the same period last year, September 2017 and an increase of 1,269 kilometres from the prior month of August 2018. The MDBF remains below the target of 6,000 kilometres.

Analysis
Propulsion-related failures remained high, but were reduced compared to both the previous month of August 2018 and the same time last year due to detailed analysis of the failures for repair and favourable weather.

Investigation shows that substation operation was normal during the increase in propulsion-related failures in July and did not affect vehicle operation. Door failures were also reduced from last month due to more detailed inspections and preventative maintenance.

Action Plan
Staff will continue to monitor workmanship and review scope of inspections and preventative measures to reduce potential failures. Additional preventative maintenance initiatives will be implemented before the cold weather arrives.

Decommissioning Schedule

<table>
<thead>
<tr>
<th>Year</th>
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<th>ALRV</th>
<th>Total</th>
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</thead>
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</tr>
<tr>
<td>2014</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2015</td>
<td>7</td>
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</tr>
<tr>
<td>2016</td>
<td>16</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>2017</td>
<td>30</td>
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</tr>
<tr>
<td>2018</td>
<td>28</td>
<td>36</td>
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</tr>
<tr>
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<tr>
<td>2021</td>
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<tr>
<td>Total</td>
<td>196</td>
<td>52</td>
<td>248</td>
</tr>
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</table>
Results
The MDBF of the ALRV Fleet for September was 1,934 kilometres.

The reliability decreased by 1,330 kilometres from September 2017, and decreased by 523 kilometres when compared to the previous month of August 2018. The MDBF still remains below the target of 6,000.

Analysis
Propulsion failures continue to be a major contributor of poor reliability of the CLRV fleet. The amount of propulsion related failures in September 2018 however declined from the previous month due to favourable weather conditions and increased maintenance focus on this system.

Action Plan
Staff is assessing the state of all remaining ALRVs and will implement additional preventative initiatives to the current State of Good Repair programs to prevent propulsion failures. Unreliable vehicles will continue to be decommissioned.
Results

The MDBF for the LFLRV Fleet in September was 12,378 kilometres.

This is an increase of 4,824 kilometres when compared to September 2017, but is a decrease of 2,110 kilometres when compared to the previous month of August 2018.

Overall, the LFLRV MDBF remains below the 35,000-kilometre target, however the 12-month moving annual trend continues to be positive.

Analysis

While the MDBF has improved from the same month last year, the decrease from last month can be attributed to ongoing challenges related to door and communication systems. In addition, there was an increase in the number of master controller-related issues.

Action Plan

Implementation of door system modifications by Bombardier on the fleet is still ongoing. The TTC continues to investigate failures related to the communication system and train and cab controls systems with Bombardier staff.
Results
The target for the maximum number of Road Calls & Change Offs (RCCOs) is 1.5% of peak daily service. In September, 7.3% (or 12 of 164 vehicles) of the peak daily service resulted in a road call/change off. This was an increase of 1.9% from the previous month.

Analysis
The number of streetcar road calls and change offs increased in September compared to August due to a high number of LFLRV trolley pole de-wirements. There was also a higher number of wiper, Automated Station Stop Announcements and Passenger Stop Request failures on the legacy fleet that led to the increase.

Action Plan
Staff has identified specific causes of trolley pole de-wirement issues and is working with Bombardier to expedite a modification. In addition, St. Clair has been converted to Pantograph only operation with Bathurst to follow, which will reduce pole use on the system. More frequent assessments of the legacy fleet and targeted maintenance tasks will be initiated to reduce the number of failures.
Results
The September 2018 MDBF of 20,000 kilometres exceeded the target of 12,000 kilometres, and is well above the September 2017 average of 18,130 kilometres.

Analysis
396 of the 482 Orion VII 7400 to 7882 Series diesel bus fleet has been removed from service. The remaining 86 buses will be removed by the end of 2018. 50 of the poorest performing Orion VII Hybrid NG buses have also been decommissioned. 173 new Nova buses have entered revenue service in 2018. A favourable MDBF score is expected to remain throughout 2018.

Action Plan
Ongoing 2018 Scheduled Maintenance Programs:
1) Heating Systems – On hold due to material issues.
2) State of Good Repair – Ongoing at all locations.
3) Roof Repair – All Orion VII buses to address water egress caused by environmental/sun damage to roof and antenna seals. 294 of 464 buses are completed as of September 2018.
4) Coolant System – Ongoing at Arrow Road Garage.
**Bus: Road Calls and Change Offs (RCCO)**

**Results**
The average number of RCCOs in September 2018 was 28 per day. That’s a decrease from August 2018 where the average number of change offs per day was 33 and below the YTD average of 32. Incremental improvement can be seen over the period from 2014 to 2018, resulting in a higher level of equipment availability.

**Analysis**
Peak revenue service was 1,616 buses per day, including RunAs-Directed (RAD) buses in September 2018. The average number of change offs per day equates to 1.73% of service. Body exterior issues are now the leading cause of RCCOs with the bus fleet.

**Action Plan**
The Nova LFS40 coolant scheduled maintenance program is in progress at Arrow Road Garage. A root cause investigation is underway for body exterior issues.
Results
The September 2018 (MDBF) of 16,715 kilometres exceeded the target of 12,000 kilometres, and is well above the September 2017 average of 12,971 kilometres.

Analysis
The performance of the new Ram ProMaster buses has helped to improve the fleet MDBF results. 53 of the 80 new RAM ProMaster buses have been delivered as of September 2018. 49 buses are in service and four are in the pre-delivery inspection process.

The exhaust diesel particulate filter in the Friendly bus fleet continues to account for the highest number of change-offs in September. The State of Good Repair Program, which started in May 2018 is also helping to improve MDBF in the Friendly bus fleet. Wheel-Trans is expected to sustain above-target results for MDBF throughout 2018.

Action Plan
Additional service requests in 2018 delayed the decommissioning of the Friendly bus fleet. A body and paint overhaul program was initiated to extend the life of the Friendly fleet and 23 of the 30 buses scheduled for overhaul in 2018 are now completed. Preventative maintenance to meet reliability and availability targets continues.
Assets: Equipment availability

Elevators

Results
Escalator availability was slightly under target for September 2018, and performance decreased to 97.9% from 98.9%.

Analysis
Lower performance in September was attributable to elevator overhaul at Kennedy Station and shutdown of an elevator at Scarborough Centre Station due to HVAC failure (overheating).

Action Plan
The overhaul at Kennedy Station is ongoing and scheduled to complete by December 31, 2018. The HVAC system failure was repaired and the unit back in service.
Results
The availability was above target. Performance increased to 97.2% from 96.8%.

Analysis
Escalator maintenance was 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 0.49% to 97.66% in September 2018, remaining below target of 99.5%.

Analysis
This increase reflects the continued ongoing efforts by both the TTC and the faregate supplier, S&B, to address issues with the faregates. With the current hardware and software modification programs, we expect performance to continue to improve.

Action Plan
We 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. These include:
• the program to replace the computers in the faregates, which is 1/3 complete and scheduled for full completion in early 2019.
• New software, which was deployed in late September.
• Replacement of faregate motors with a modified version.

These plans address the following issues: ghost flapping, tap/no entry, breakthroughs and motor failures. We have additional software updates scheduled, which will add functionality and provide further fixes to known problems and improve gate availability.
PRESTO Card Reader Availability

Results
PRESTO card reader availability averaged 98% during September, which represents an increase of 0.3% over August and is below of the target of 99.9%.

Analysis
Availability performance increased by 1.9% during the month of September. This reversed the downward trend in availability performance that was experienced over the previous two months.

Action Plan
Increased PRESTO resources to reset and reload software on card readers more frequently.
For further information on TTC performance, projects and service, please see www.ttc.ca