



## STAFF REPORT INFORMATION ONLY

### **Presentation to Board: TTC Modernization – A System Approach**

<b>Date:</b>	March 26, 2015
<b>To:</b>	TTC Board
<b>From:</b>	Chief Executive Officer

### **Summary**

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In 2012, the TTC began reporting a complete set of Key Performance Indicators (KPIs) through the monthly CEO's Report. The KPIs reflected the approach to managing service at that time and so it was understood that a review and revision would be required as the TTC adopted more modern management practices.

In 2014, additional KPIs were introduced as a means of determining the needs for the 2015 capital budget. As a result, significant funding was identified for establishing proactive bus and streetcar maintenance and overhaul programs as well as for new vehicle procurement. These initiatives will in turn result in significant improvements to vehicle reliability and service availability.

After a systematic review of all KPIs, a new set has been established as presented in this report. These new KPIs provide a more accurate and representative measure of service and the customer experience, they better reflect current industry best practices, and they will allow for continuous improvement of the more modern management practices that are being implemented.

### **Financial Impact**

This report has no financial impact beyond what has been approved in the current year's budget.

The 2015 operating budget includes sufficient funding to implement changes to existing routes, improving the reliability of our service to customers. Should any resources be required for continuous improvement initiatives beyond what can be accommodated through the reallocation of TTC's existing complement, a business case will be presented for consideration during the 2016 operating budget approval process.

## **Accessibility/Equity Matters**

Improved accessibility to bus service will coincide with improved vehicle reliability, schedule reliability and new buses. Streetcar accessibility will improve with improved vehicle reliability, schedule reliability and the delivery of the new streetcars (over the next 4 years).

## **Contact**

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## **Attachments**

Presentation will be distributed at the meeting.



# Richard Leary

## Chief Service Officer

March 2015





## Richard Leary

- **MBTA** (Massachusetts Bay Transportation Authority)
- **YRT/VIVA** (York Region Transit/VIVA)
- **TTC**
- **A System Approach**





- 1. Modernization – A System Approach**
- 2. Assessment**
- 3. New Approaches**
- 4. Benefits**
- 5. Way Forward**





## TTC Performance Targets Are Inconsistent With Industry Practices

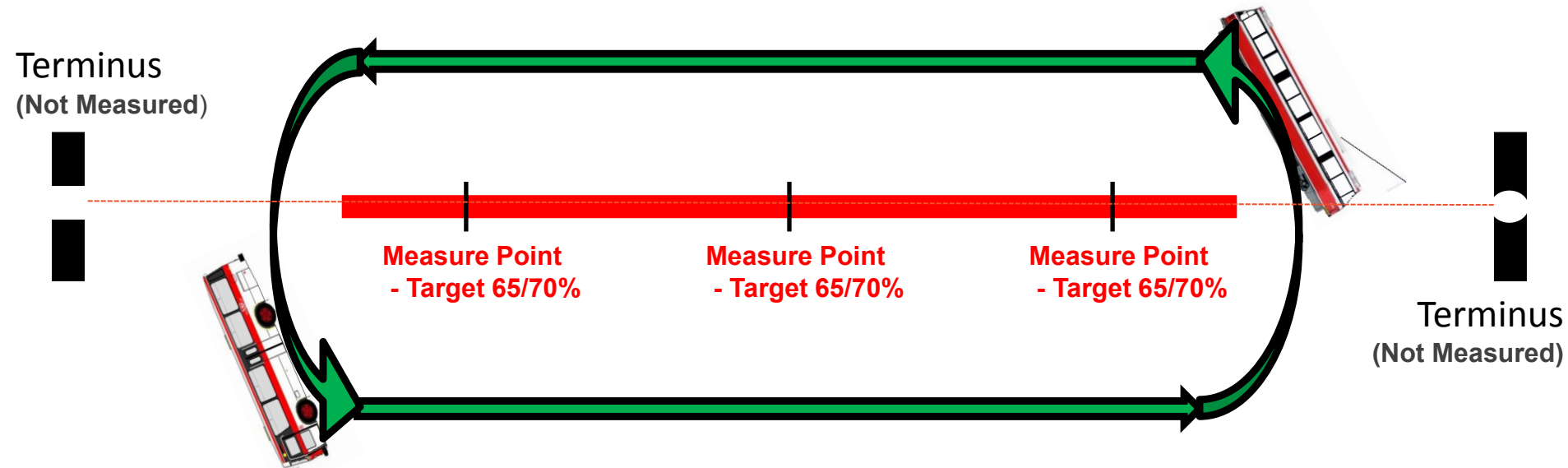
TARGET	TTC	INDUSTRY
Vehicle Availability	99%	101 to 103%
Spare Vehicle Ratio	11 to 12%	18 to 20%
% of Vehicles Breaking Down in Service	5 to 12%	< 2%
Vehicle Reliability – MDBF (Mean Distance Between Failures)	3,500 to 6,000k	10,000 to 12,000k
Punctuality	65 to 70%	90 to 95%
Short Turns	2,500 /wk	Negligible





## TTC Measurement System

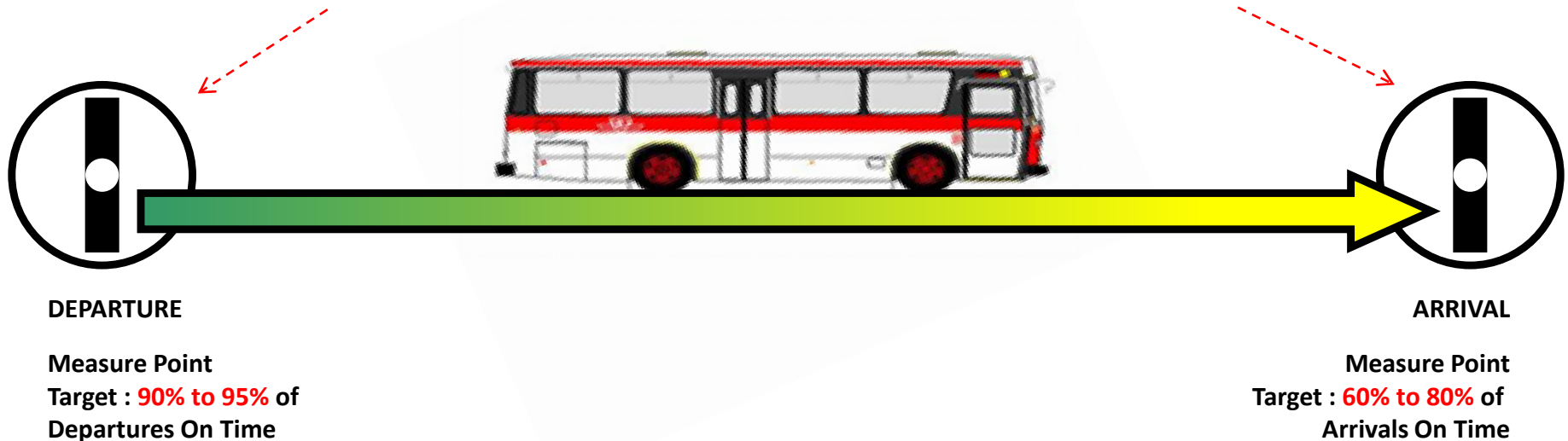
Focuses on *Mid-Route* Performance – Ends are not Counted





## Industry Standard Measurement

Focuses on Departures and Arrivals  
Resulting in Full *End to End* Service



**New Approach Discourages Short Turns**







## **NEW KPIs That Reflect Current Industry Practices:**

- **On Time Departures**
- **On Time Arrivals**
- **Missed Trips**
- **Short Turns – (temporarily until under control)**





## Service Improvement Pilot Projects:

- **512 St Clair and 504 King**
  - **Add Running Time to Schedule**
  - **Ensure Vehicle Availability; Fill Gaps With RADs**  
(Run As Directed - vehicles on standby)
  - **Supervise for Minimum Short Turns**
- **29 Dufferin**
  - **Dispatch Buses from Terminals on Headways**
  - **Ensure Vehicle Availability; Fill Gaps With RADs**
  - **Supervise for Minimum Short Turns**

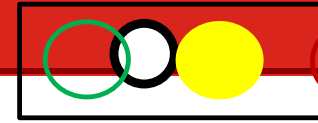


# SYSTEM APPROACH RESULTS

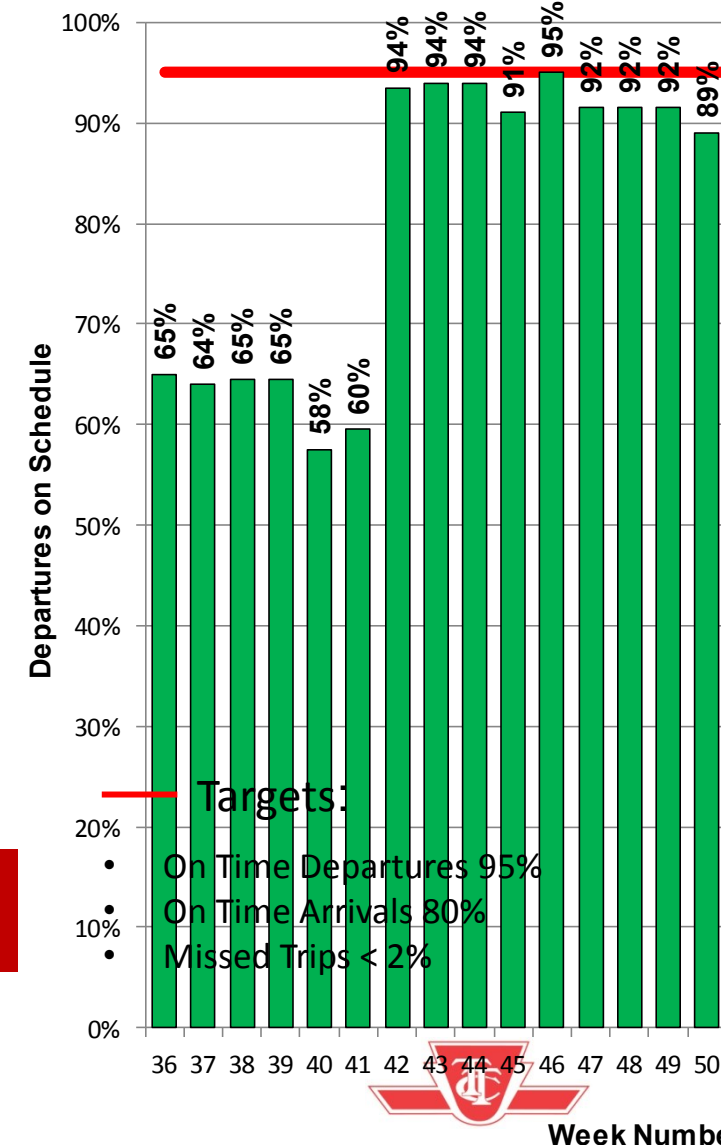
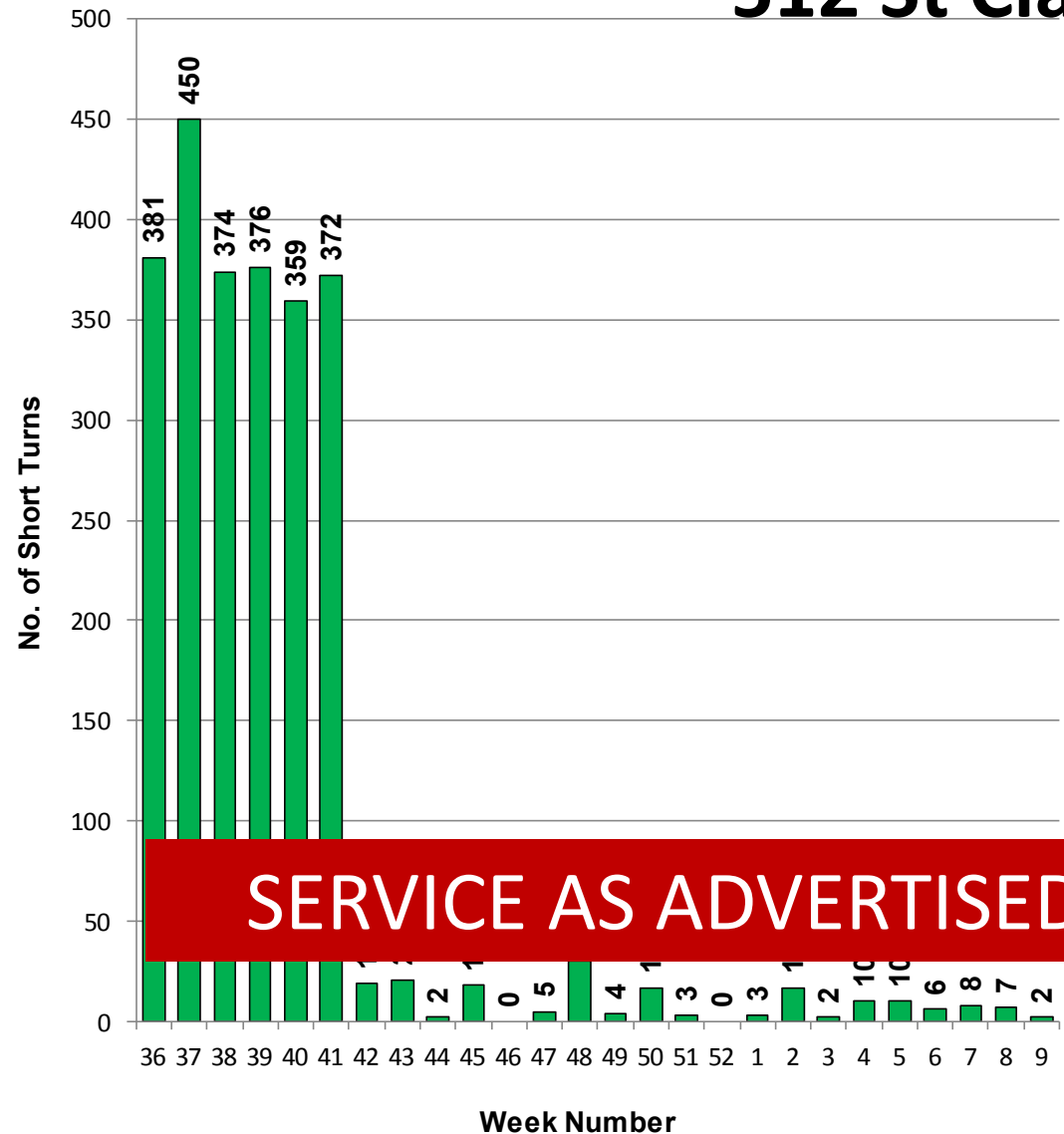
Short Turns



On Time Depa

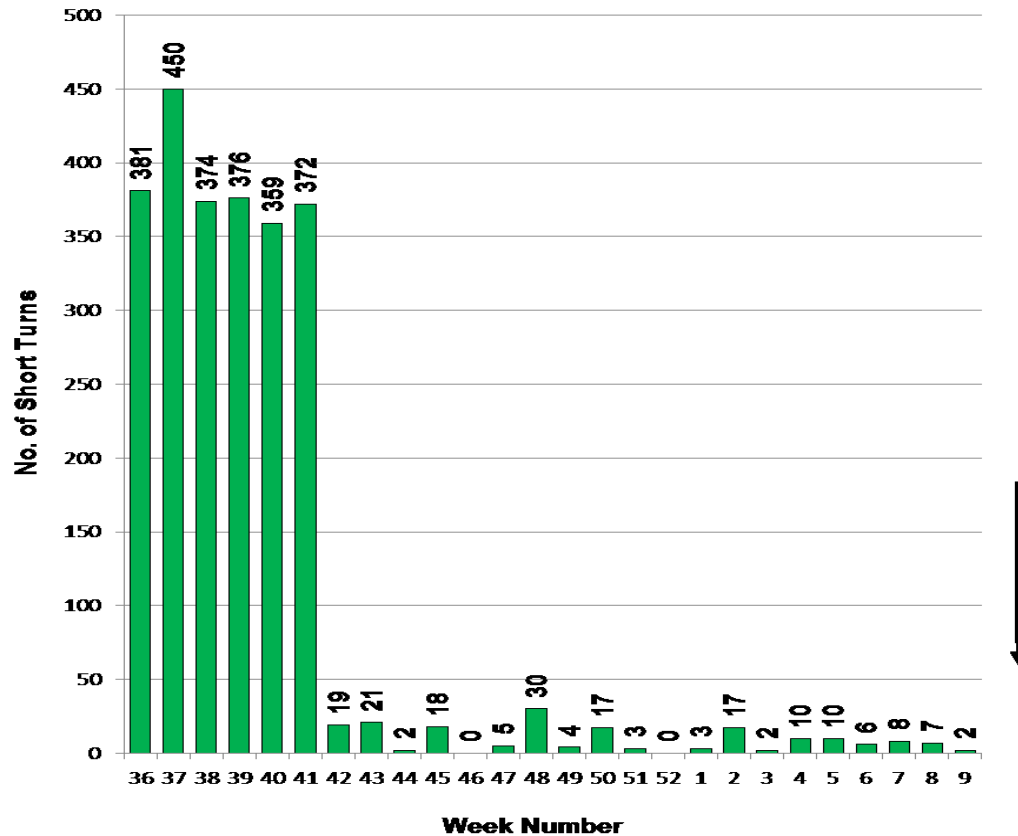


## 512 St Clair





## 512 St Clair – Short Turns

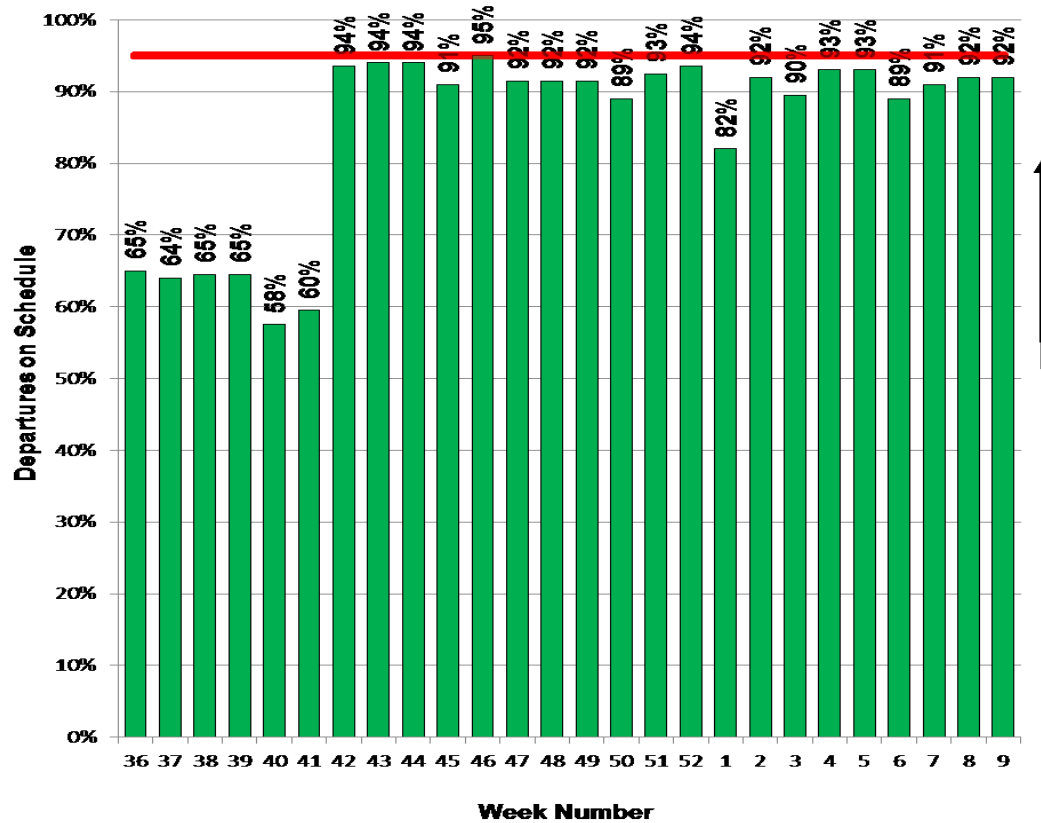


**FEWER SHORT TURNS**





## 512 St Clair – On Time Departures

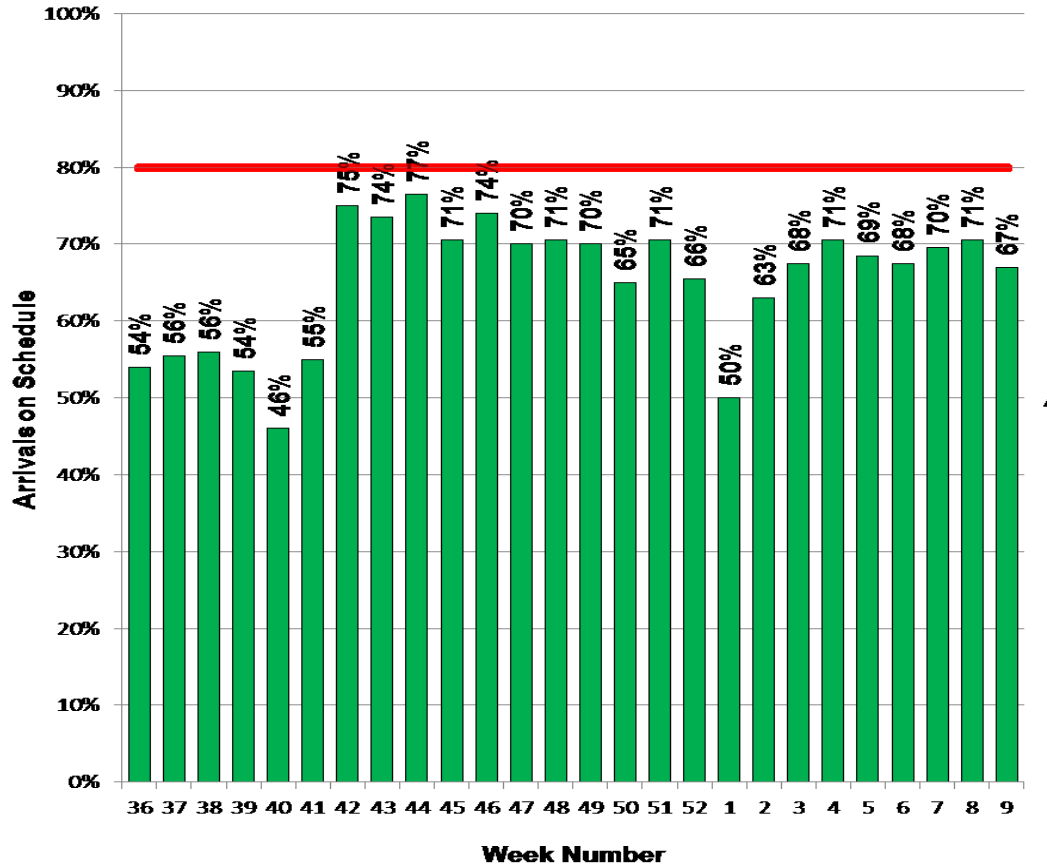


**PUNCTUAL SERVICE**





## 512 St Clair – On Time Arrivals

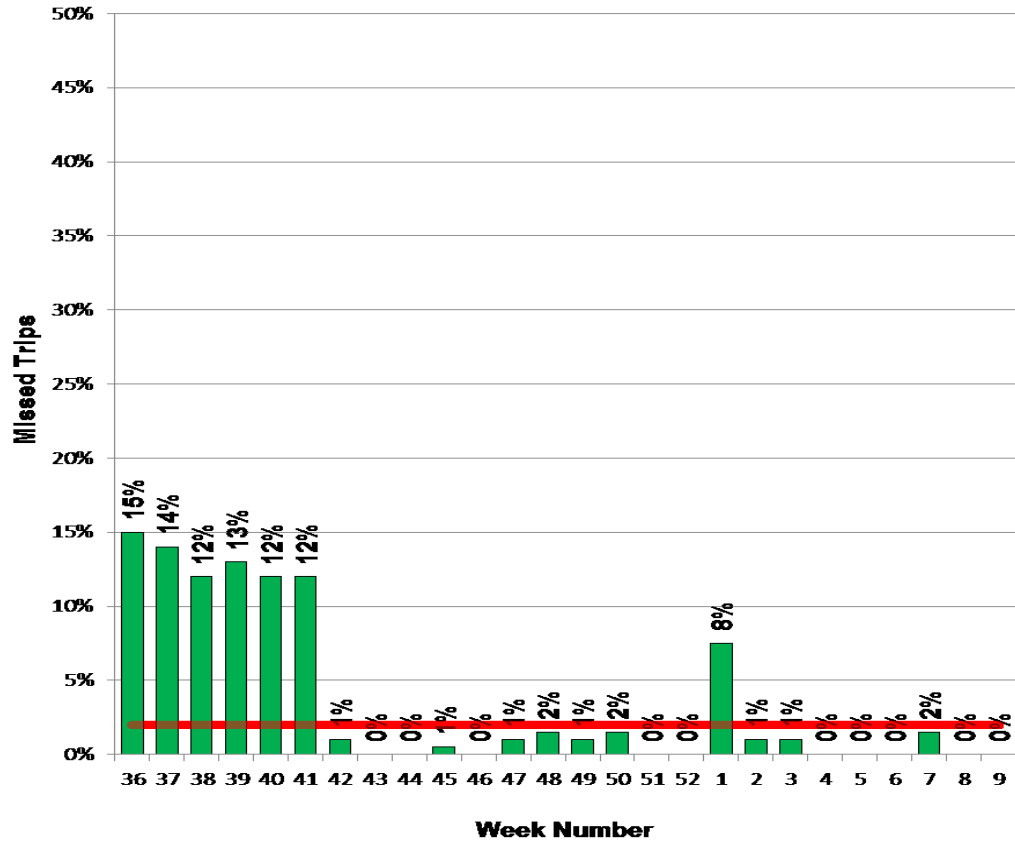


**RELIABLE SERVICE**





## 512 St Clair – Missed Trips



**SERVICE AS ADVERTISED**

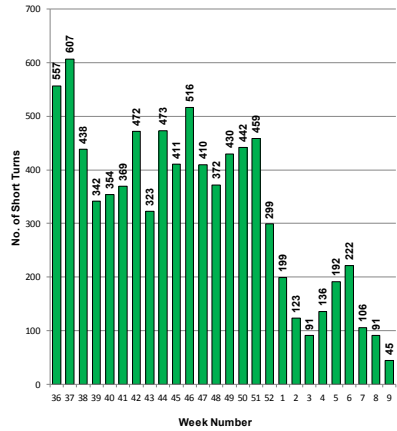


# SYSTEM APPROACH RESULTS

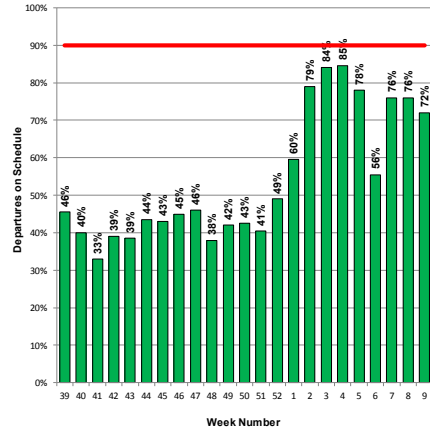
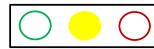


## 504 King

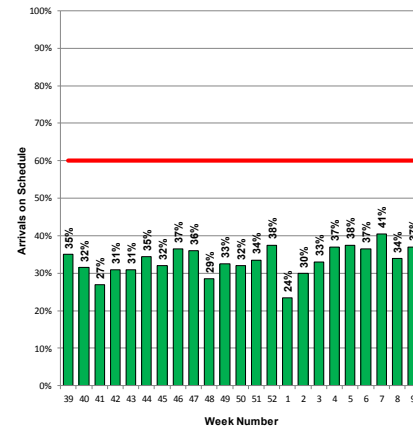
Short Turns



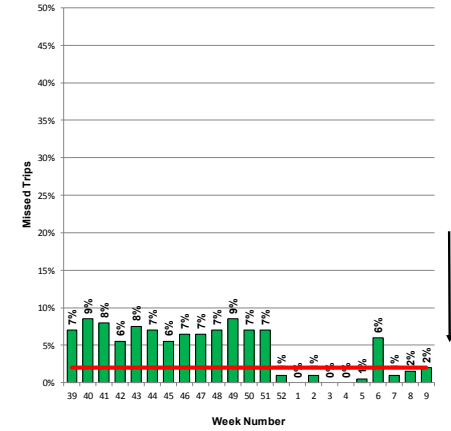
On Time Departures



On Time Arrivals



Missed Trips



IMPROVED RELIABILITY

— Targets:

- On Time Departures 90%
- On Time Arrivals 60%
- Missed Trips < 2%





# SYSTEM APPROACH RESULTS

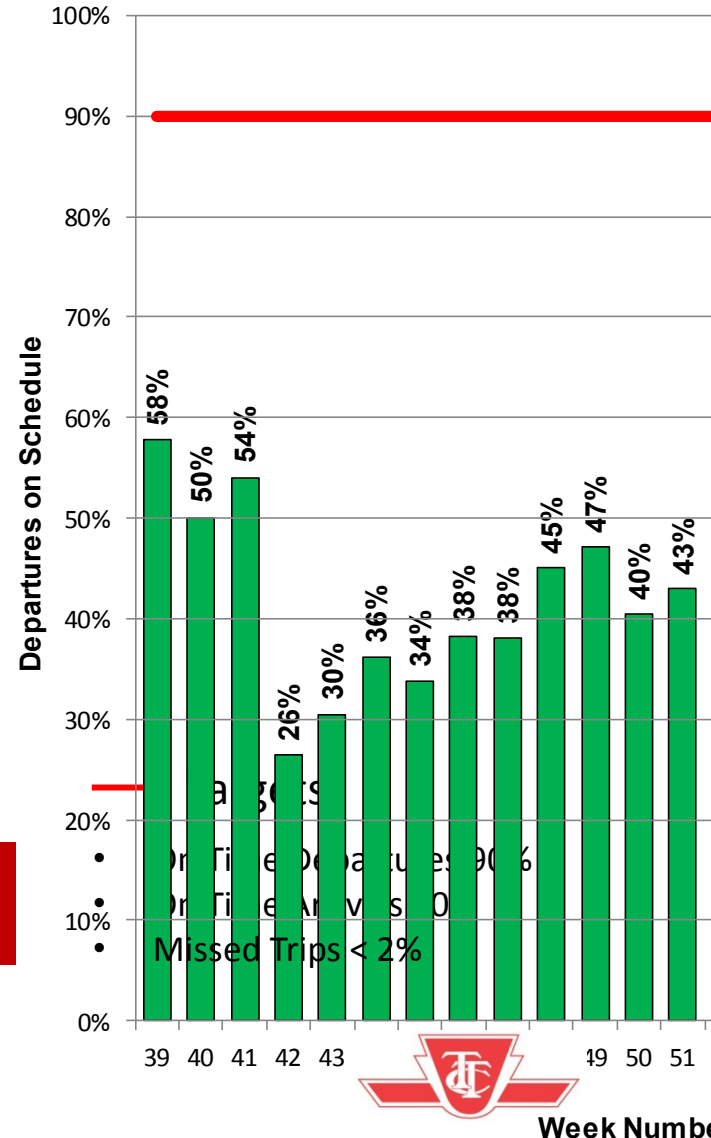
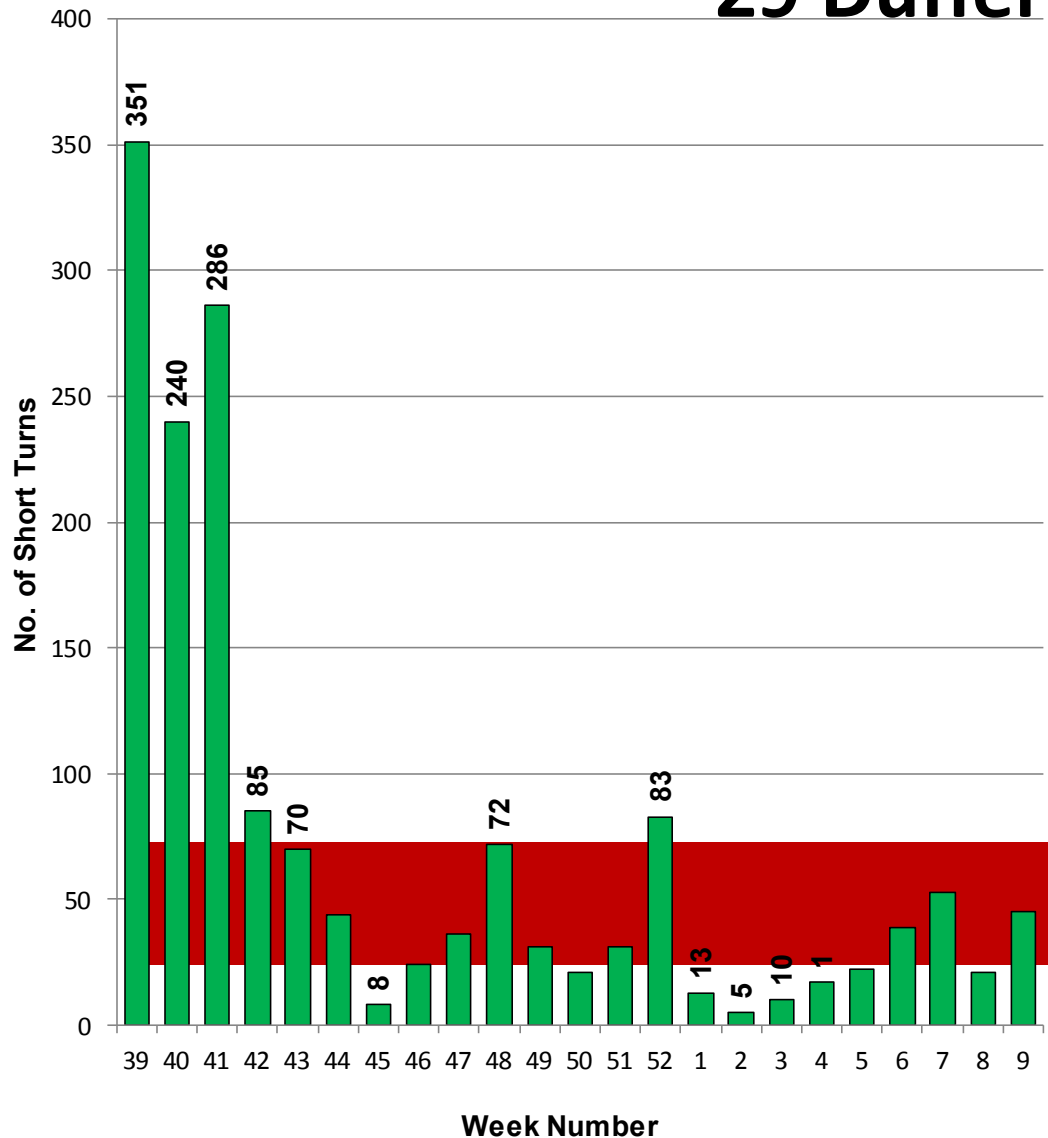
## Short Turns



## On Time Depa



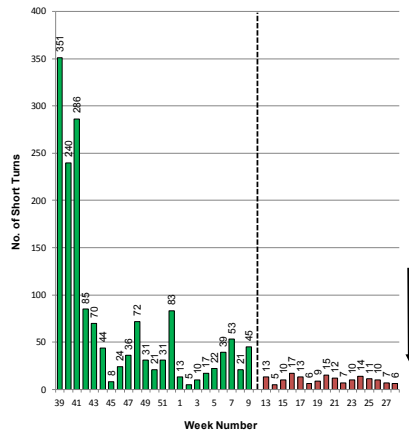
### 29 Dufferin



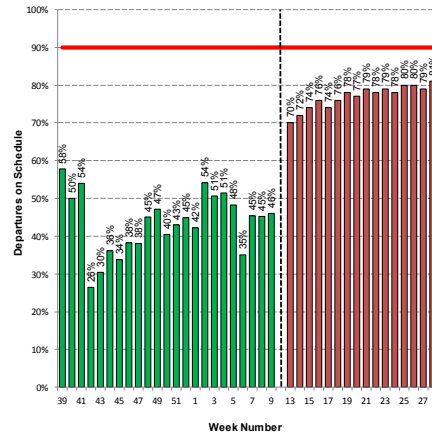


## Projection for 29 Dufferin with New Schedules

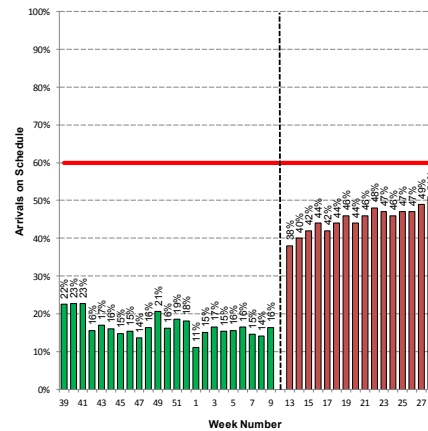
Short Turns



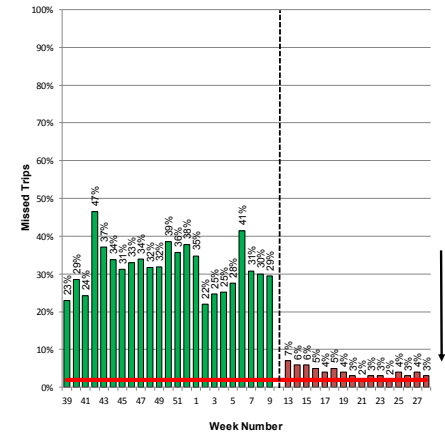
On Time Departures



On Time Arrivals



Missed Trips



ANTICIPATED RELIABILITY IMPROVEMENT

- On Time Departures 90%
- On Time Arrivals 60%
- Missed Trips < 2%



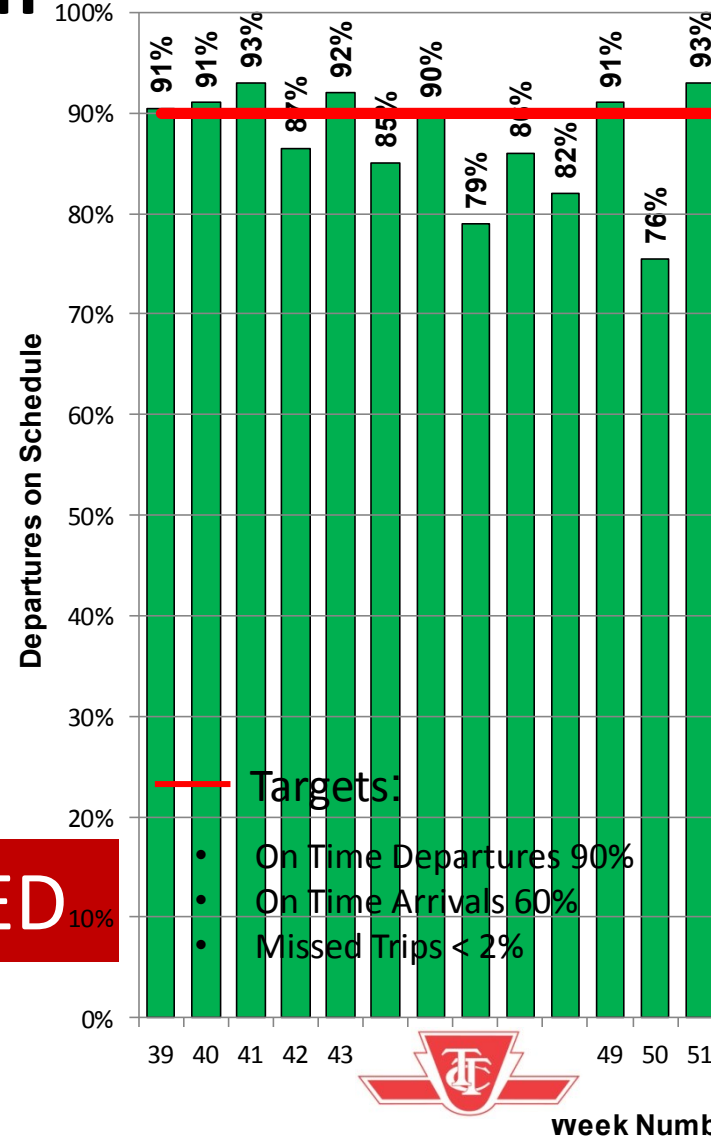
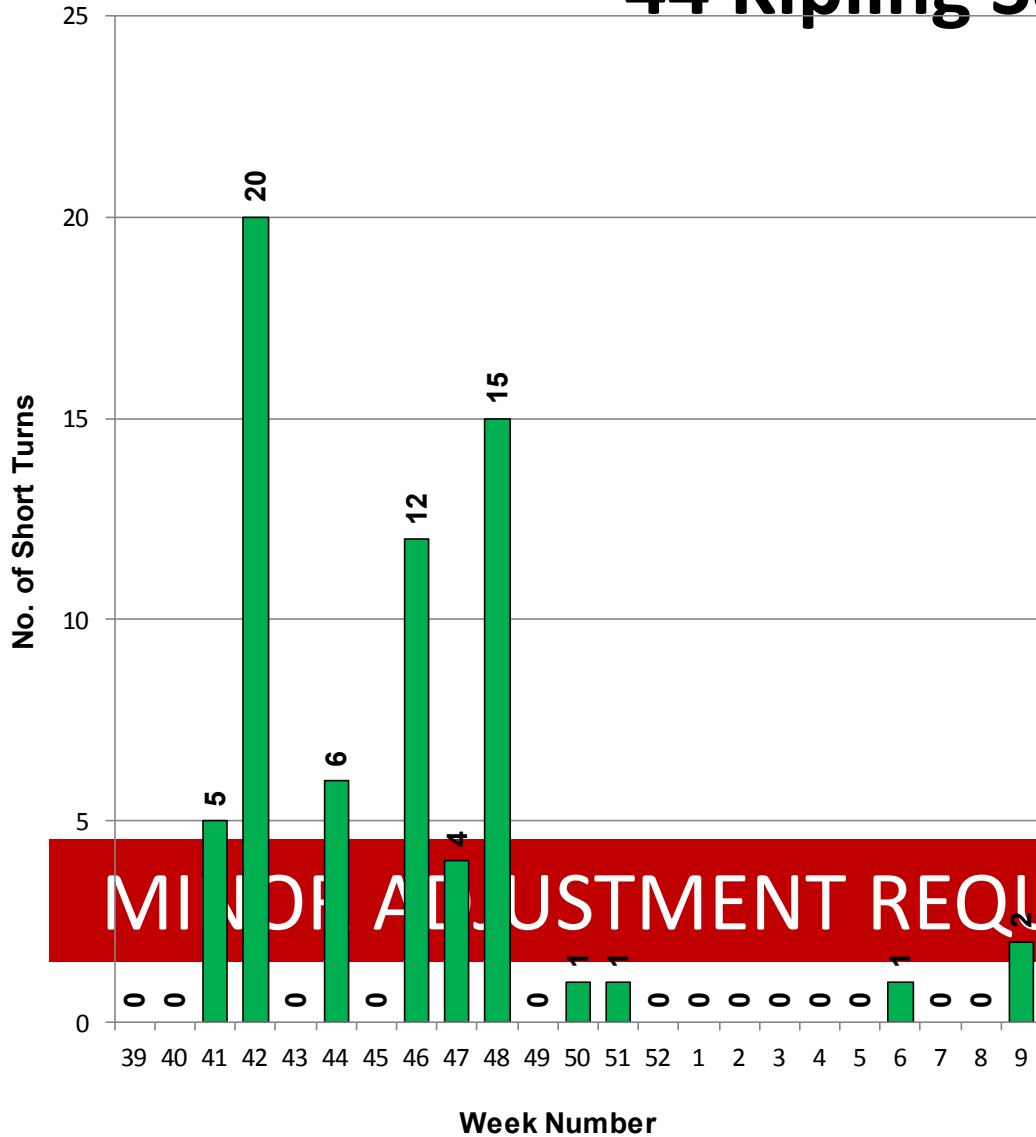
# NOT ALL SCHEDULES NEED FIXING

## Short Turns

## On Time Dep



### 44 Kipling South



## Beyond The Obvious

- **More Reliable and Consistent Service: 30% Increase**
- **Reduced Stress on Operators**
- **Fewer Customer Complaints: 65% Reduction**
- **Fewer Accidents and Claims: 67% Reduction**
- **Reduced Overtime due to Late Finishes: 30% Reduction**

**It That Works!**





**“I used to avoid Dufferin. Now that this project is in place, I always sign Dufferin. The day is so much less stressful and the teamwork between Operators and Supervisors makes the route enjoyable”.** - *Bus Operator Lacey #66675*

**“I love what we are doing with the new St. Clair route management. I was going to retire, but I’m sticking around for more.”** - *Supervisor Dennis Peters #23057*

**“This project has changed my attitude towards my job. I like coming to work, especially on Dufferin and working together with my Supervisors to improve the transit experience for our customers”.**  
- *Bus Operator Paolucci #66313*



# COMMENTS ON THE DIFFERENCES



**“Everyone I speak with, including other Operators and customers have noticed a positive change on Dufferin. There are still crowded buses, but the headways are consistent and that keeps the route running smooth”. - Operator Ahamad #66342**

**“I haven’t been kicked off a short turning bus in over a month. I, as well as numerous other riders hope this is the new normal. Excellent service is a reality. My faith in the TTC has been renewed”.**  
*- Customer Service Communication*

**“ The changes are fantastic.” - Operator Dickson #68458**

**“ I just wanted to thank you for improving the St. Clair route. I get on at Gunn’s Road and off at St Clair Station and it has run so smoothly the last couple of months. Thank YOU!” - Customer Service Communication**





## More to Come

- **CAD/AVL**  
(Computer Aided Dispatch/  
Automated Vehicle Location)
- **CJTM**  
(Customer Journey Time Metric)
- **Growing the Fleet**
- **Reviewing More Routes**



THANK YOU



Questions?

