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## 2016 OPERATING BUDGET BRIEFING NOTE

### TTC Service Improvements – Customer Benefits

#### (Jan. 26, 2016 - Additional Information)

#### Revised January 22, 2016

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#### Introduction

There is wide support for more and better-quality transit service in Toronto. There are many initiatives underway pertaining to rapid transit -- such as the Eglinton-Crosstown Light-Rail Line and the “Scarborough Subway” -- but these are 6-20 years away from implementation. Toronto needs better transit right now and, in support of this, the TTC has prepared a 2016 budget which includes new initiatives to make immediate improvements to public transit. These are:

- a) bus service reliability
- b) bus reliability centred maintenance
- c) streetcar service reliability
- d) new and enhanced express bus service
- e) subway service reliability
- f) Line 1-- 3 minute or better service

These planned 2016 service improvements are low-cost -- relative to current major capital-intensive projects -- would benefit hundreds of millions of customer-trips per year, and are quickly and easily implemented.

#### **a) Bus Service Reliability**

*Additional resources for bus operations to deliver more-punctual and dependable service.*

#### Background

- This initiative targets reducing the number of short turns, and increasing on-time departures and arrivals.
- This builds on on-street testing done in 2015 which achieved more than a 50% improvement in key performance metrics on the selected routes.

#### Key Points

- The 2016 initiative would consist of peak and off-peak service quality improvements on the TTC’s busiest and most operationally-challenging bus routes, including 85 SHEPPARD EAST, 96 WILSON, 102 MARKHAM ROAD, and 195 JANE ROCKET.

- Resources would be used for:
  - Schedule adjustments to reflect current traffic conditions and congestion; and
  - “Run-as-Directed” buses to counteract the effects of unplanned service irregularities and disruptions from traffic congestion, collisions, road closures, etc.
- This initiative would benefit approximately 27 million customer-trips each year and would attract additional, new ridership.
- This service initiative can be implemented in September 2016.

Annual Benefitting Customer-Trips (millions)	Improved Ride Time	Improved Frequency	Travel Time Savings	Net Operating Cost (millions)	
				2016	Annual
27	reduction in actual wait times	improvement in <u>delivered</u> headway	<ul style="list-style-type: none"> <li>▪ Reduction in short-turns save 2,900 weekday customer-trips app. 5 min in wait time or <b>242 total customer hours per weekday</b></li> <li>▪ Revised schedules save 108,000 weekday customer-trips 1-3 min in wait time or <b>3,600 total customer hours per weekday</b></li> </ul>	\$2.0	\$5.2

**Question & Answer:**

- What is the consequence, if not approved? If additional resources are not provided to address bus service quality, customers will continue to experience longer wait times, overcrowding, unacceptable on-time performance, and short turns.

**b) Bus Reliability Centred Maintenance**

*The Reliability Centred Maintenance (RCM) initiative would improve bus reliability and, thus, support reliable and on-time bus service.*

**Background:**

- Currently, the TTC uses only a reactive “Fix-on-Fail” maintenance approach.
- When buses fail while in service, they disrupt service to customers. On a typical day, upwards of 80 buses break down on the road, resulting in disruptions which affect approximately 5600 customers who are forced to de-board and wait for another bus to come along to pick them up.
- Customers may be forced to wait as long as 15 minutes, and sometimes more, if the first bus to come along can’t pick everyone up. The disabled bus also causes longer wait times, gaps, and overcrowding for all other customers on the line.

## Key Points

- RCM would improve vehicle reliability and availability by identifying possible component failures and replacing them before they occur.
- The RCM initiative would:
  - result in a shift from reactive to preventative maintenance practices; and
  - improve performance reliability from approximately 7,500kms mean kilometres between delays (MKBD) to 12,000kms MKBD by 2019.
  - improve the reliability of buses, reduce breakdowns and, therefore, improve passenger journey times
- The initiative would directly benefit approximately 1.7 million existing customers each year.
- This initiative can be implemented in 2016.

Annual Benefitting Customer-Trips (millions)	Improved Ride Time	Improved Frequency	Travel Time Savings	Net Operating Cost (millions)	
				2016	Annual
1.7	reduction in service disruptions and resulting delays	improvement in <u>delivered</u> headway	<ul style="list-style-type: none"> <li>▪ Reduction in "break-downs" save 5,600 weekday customer-trips app. 15+ min in wait time or <b>1,400 total customer hours per weekday</b></li> </ul>	\$7.7	\$15.9

## Question & Answer:

- What is the consequence, if not approved? If the RCM program is not approved, the TTC would not be able to materially reduce the number of mechanical breakdowns in buses, and customers will continue to experience gaps in service, longer wait times, and overcrowding.

## **c) Streetcar Service Reliability**

*Additional resources for streetcar operations to deliver more-punctual and dependable service.*

### Background

- This initiative targets reducing the number of short turns, and increasing on-time departures and arrivals.
- This builds on on-street testing done in 2015, which achieved significant performance improvements on the 512 ST CLAIR and 504 KING, including a nearly 90% reduction in short turns.

### Key Points

- In 2016, the streetcar service reliability program would consist of peak and off-peak service improvements on the busiest streetcar routes, including 501 QUEEN and 506 CARLTON, whose performance suffers due to traffic congestion and other operating challenges.

- Resources would be used to make operational improvements such as schedules which reflect current traffic and congestion conditions, and more resilient operations.
- The streetcar service reliability initiative would benefit approximately 36 million existing customer-trips each year and would attract additional new ridership.
- The initiative can be implemented in 2016.

Annual Benefitting Customer-Trips (millions)	Improved Ride Time	Improved Frequency	Time Savings	Net Operating Cost (millions)	
				2016	Annual
36	reduction in actual wait times	improvement in <u>delivered</u> headway	<ul style="list-style-type: none"> <li>▪ Reduction in short-turns save 3,900 weekday customer-trips app. 5 min in wait time or <b>325 total customer hours per weekday</b></li> <li>▪ Revised schedules save 90,000 weekday customer-trips 1-3 min in wait time or <b>3,000 total customer hours per weekday</b></li> </ul>	\$1.2	\$2.6

**Question & Answer:**

What is the consequence, if not approved? If additional resources are not provided to improve streetcar service quality, customers will continue to experience longer wait times, overcrowding, short turning, and unacceptable on-time performance. This may eventually result in a reduction in ridership.

**d) New Off-Peak Express Bus Service**

*New off-peak service on TTC express bus routes to make travel faster and more attractive.*

**Background**

- In early 2016, the TTC plans to implement new and enhanced express bus services on major corridors including Finch Avenue, Kipling Avenue, Don Mills Road, and Wilson Avenue.
- Almost 60 percent of TTC ridership occurs during off-peak times.
- This initiative is intended to provide time-saving express bus service to this huge base of off-peak ridership.

**Key Points:**

- New off-peak express service would be implemented during weekdays and on weekends.
- Off-peak express services would benefit approximately 10 million customer-trips each year and attract additional new ridership.
- This service initiative can be implemented in 2016.

Annual Benefitting Customer-Trips (millions)	Improved Ride Time	Improved Frequency	Time Savings	Net Operating Cost (millions)	
				2016	Annual
10	20% reduction in travel time	20%-25% improvement in headway	<ul style="list-style-type: none"> <li>▪ Express services save 30,000 weekday customer-trips app. 3-5 min in in-vehicle travel time or <b>2,000 total customer hours per weekday</b></li> <li>▪ Express services improves headway for 30,000 weekday customer-trips by app. 1-2 min or <b>750 total customer hours per weekday</b></li> </ul>	\$1.6	\$4.5

**Question & Answer:**

- What is the consequence, if not approved? If this initiative is not approved, new off-peak express service cannot be implemented, making transit less attractive for travel to employment, educational, and cultural opportunities.

**e) Subway Service Reliability**

*Additional resources for subway operations to deliver more-punctual and dependable subway service.*

**Background**

- Ridership increases on subway lines has resulted in a need to adjust schedules, signal timings, and terminal operations.
- This initiative is targeted at improving subway service regularity, reducing wait times and crowding, and increase actual throughput and capacity.
- This reliability initiative was piloted on LINE 1 in 2014 and 2015, and achieved significant performance improvements, with an increase in throughput of 6%, and service now meeting or exceeding the on-time performance target of 96%.

**Key Points**

- The 2016 initiative would consist of further operational enhancements, schedule improvements, and running time adjustments on both LINE 1 and LINE 2, seven days a week.
- The initiative would benefit approximately 375 million customer-trips annually on LINE 1 and LINE 2, and attract additional new ridership.
- This improvement can be implemented in 2016.

Annual Benefitting Customer-Trips (millions)	Improved Ride Time	Improved Frequency	Time Savings	Net Operating Cost (millions)	
				2016	Annual
375	reduction in actual wait times	5%-10% improvement in actual trains per hour	<ul style="list-style-type: none"> <li>Revised schedules save 1,200,000 weekday customer-trips app. up to 1 min in actual wait time or <b>10,000 total customer hours per weekday</b></li> </ul>	\$0.6	\$0.9

**Question & Answer:**

- What is the consequence, if not approved? If additional resources are not provided to improve subway service resiliency, customers will experience poorer service, including service irregularities, longer wait times, and overcrowding.

**f) Line 1: 3-Minute or Better Service**

*More frequent off-peak subway service on LINE 1 to reduce wait times and reduce crowding.*

**Background**

- The TTC’s network is anchored by the subway, which moves huge volumes of people efficiently and quickly.
- Almost 60 percent of TTC ridership occurs during off-peak times.
- On LINE 1, off-peak wait times for subway service is approximately every 4-5 minutes.

**Key Points**

- This initiative would result in LINE 1 off-peak service operating every three minutes or better until 10:00 p.m. every day, reducing wait times and crowding on Toronto’s busiest subway line.
- The three-minute-or-better service on LINE 1 initiative would benefit approximately 116 million customer-trips each year and attract additional new ridership.
- This service initiative can be implemented in 2016.

Annual Benefitting Customer-Trips (millions)	Improved Ride Time	Improved Frequency	Time Savings	Net Operating Cost (millions)	
				2016	Annual
116	15%-35% reduction in wait times	15%-35% improvement in headway	<ul style="list-style-type: none"> <li>Line 1 enhancements reduce wait times for 270,000 weekday customers by up to 1 min or <b>2,250 total customer hours per weekday</b></li> </ul>	\$2.8	\$7.1

**Question & Answer:**

- What is the consequence, if not approved? If this initiative is not approved, off-peak transit wait times and crowding on the system's single busiest service would remain unchanged and unimproved.

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