

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** August 19, 2014

**SUBJECT:** EXPLANATION OF SUBWAY CLOSURES

## **INFORMATION ITEM**

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### **RECOMMENDATION**

It is recommended the Board receive this report for information.

### **FUNDING**

This report has no effect on the TTC's Operating or Capital Budgets.

### **BACKGROUND**

As we deliver on our commitments to modernize the TTC, there is a renewed focus on ensuring our subway lines and the assets that support them are fit for purpose, both today and for the future. This note provides background and context on why regular maintenance, renewal and upgrade work is critical to improving service reliability, how these works are scheduled to minimize the impact on customers, and what can be expected over the next year and in future years.

The TTC's Five-Year Corporate Plan and longer term capital program outlines the significant work being implemented that are designed to modernize and improve TTC services. The subway infrastructure and the existing system assets, from track to signals, are showing their age under the ever increasing service and ridership demands.

The TTC is not alone in facing these challenges. A number of subway systems around the world are and have been tackling the same issues. We are dealing with them and at the same time preparing for the future, in the same way, by investing in essential major improvement projects. This includes new trains, track replacements, a subway extension and the re-signaling of Line 1 (Yonge-University-Spadina), all of which are vital to improve service reliability and capacity in North America's third largest transit system.

**DISCUSSION**

To carry out these essential improvements, which include complex installations, commissioning and testing, it is increasingly necessary to work outside the short, nightly 3-hour maintenance window available (6 hours on Saturday). This means sections of the subway need to be closed early, for a full day, weekends or potentially longer.

On weekends there are fewer customers travelling, so this is often the best time for full day closures to be used.

Each full day closure is the equivalent of about five weeks of night work. Weekend closures give us more than 50 uninterrupted hours, so closures of this type enable us to significantly speed up delivery of track and signaling renewals.

During closures we provide replacement buses for customers. Despite this, we know planned service changes still cause significant disruption to customers and increases travel times. With more buses on the roads, we also know road users can be affected from increased traffic congestion. It is for these reasons we do our best to keep closures to an absolute minimum.

We work closely with the City when considering closures. We take a number of factors into consideration:

- The impact each closure has on service levels across the city and how this will affect the way customers can travel
- The detailed requirements of each project (including signal upgrades, general maintenance and other external works) where specific jobs must be carried out in order or at a specific time
- The availability of suitable alternative routes (including the provision of replacement bus services)
- The need to support major events

By coordinating closures in this way we aim to keep the level of disruption to TTC customers and road users to a minimum.

Closures on Line 1 will be required for the replacement of the entire signal system, as will vital track renewal work on Line 1 and Line 2 (Bloor-Danforth). The entire signal system replacement on Line 1, including the new Spadina subway line extension, will be completed by 2020, so between now and then at the very least, full day and weekend closures will be needed each year.

There are 10 planned closures remaining in 2014:

- |     |               |                                |                                  |
|-----|---------------|--------------------------------|----------------------------------|
| 1.  | August 16/17  | – St. Andrew to Union          | (Union 2 <sup>nd</sup> platform) |
| 2.  | August 23/24  | – Bloor to Eglinton            | (track & signaling)              |
| 3.  | September 6/7 | – Bloor to Lawrence            | (track, signaling & CCTV)        |
| 4.  | October 11-13 | – St. George to Union to Bloor | (signaling)                      |
| 5.  | October 18/19 | – Bloor to Eglinton            | (track & signaling)              |
| 6.  | November 1/2  | – Bloor to Eglinton            | (track & signaling)              |
| 7.  | November 8/9  | – Bloor to Eglinton            | (signaling)                      |
| 8.  | November 15   | – Bloor to Eglinton            | (track)                          |
| 9.  | November 15   | – Kennedy to Warden            | (track)                          |
| 10. | December 6/7  | – Union to Bloor               | (signaling)                      |

A further 27 planned as a minimum in 2015. Dates and locations of those will be announced well in advance and all will be supported by comprehensive customer communications.

By way of comparison; the signaling upgrade of the Jubilee line on the London Underground required over 50 different full and part line weekend closures over 3 years completing in 2011. Closures still happen on sections of the line even today, this is to meet the continuing need for track and asset maintenance in order to sustain improved levels of reliability.

Critical subway infrastructure – be it signal systems, tunnel structures or track beds – requires constant maintenance and, after more than half a century of service in some cases, full replacement. As we deliver these improvements the subway system will become more reliable, more efficient and provide greater capacity for the TTC’s 1.7 million daily riders.

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August 6, 2014