

TORONTO TRANSIT COMMISSION

TO TTC Board, City Councillors and Mayor

FROM Andy Byford – TTC Chief Executive Officer

DATE November 15, 2013

SUBJECT Davisville Area Rehabilitation Project

For several months now, the TTC has discussed the need to redo all tracks, track ties, track bed ballast, subgrade/drainage and other vital elements of the mainline subway track between Eglinton and St Clair Stations on Line 1 (the Yonge-University-Spadina subway line). This and other areas of the subway system with wood tie/stone ballast track will be 60 years old in 2014. This is well past the normal operating life for such systems.

Detailed investigations have determined that in addition to normal wear and tear, the area below the stone ballast and the associated subgrade drainage systems have both failed, allowing enough movement of the track system to cause abnormal track movement which, in turn, can cause the signal system to fail safe. Subway service in the area is safe, but reliability on our busiest line is not where it needs to be.

A speed restriction, or slow order, in the area has been implemented to ensure the safe operation of subway trains. The slow order also helps ensure the signal system remains reliable and stable, though that is not guaranteed. The speed restriction does have a knock-on effect, however, slowing subway service across the line – a line that is already at capacity during peak periods.

The TTC examined several repair/replacement methods to complete this necessary work, including a full subway closure between Eglinton and St. Clair stations that would last for several weeks. Extensive preparatory work would take place prior to the closure; demolition, excavation to an eight foot depth, and installation of a new drainage system, subgrade, track bed, track system, signal system and communication systems would all be completed during the shutdown.

Scenarios to provide alternate transit services, including a bus shuttle between Eglinton and St Clair stations, were also examined. During peak periods, upwards of 250 new buses and more than 400 additional operators would be required for this endeavour alone. This is neither practical nor affordable.

In short, no prolonged shutdown of the subway in this area will occur before 2016. The TTC is now developing a maintenance program to extend the life of the existing track systems in the Davisville area by a minimum of five years that will allow the restricted speed zone to be lifted prior to the 2015 Pan Am Games. Staff also continue to investigate international transit organizations for best practices in subgrade/drainage replacement in an operating subway environment.

Subway closures over weekend periods may be required. When required, the TTC will ensure the most efficient use of any shutdown to do work on multiple projects concurrently, such as resignalling/ATC work that is under way across Line 1. As well, with tunnelling of the Eglinton-

Crosstown line proceeding east, there will be a need to halt subway service at Eglinton Station for periods to allow for construction activities there, such as connections to the existing station with the new LRT station. The TTC will advise you, and the public, well in advance, of these activities.

Subway systems, of course, require ongoing, routine maintenance. There also comes a time when major components of a subway system need all-out replacement; the signal system is one such component you're all likely familiar with. But track systems that are approaching 60 years of age and are exposed to Toronto's winters and summers also need to be replaced at certain periods. Our engineers are working hard to devise a plan that will allow us to do this work with a minimal amount of disruption to TTC customers, city residents, businesses and motorists.

Andy Byford

A handwritten signature in black ink that reads "Andy Byford". The signature is written in a cursive, slightly slanted style.

Chief Executive Officer
Toronto Transit Commission