To the TTC Commission, 14 November 2013. From Philip **W**ebb.
Re Subway Maintenance Scheduling.

C-3

At your October meeting, you considered Report 11, the final analysis of the causes of the fatal accident near Yorkdale Station in September 2012.

The crux of the problem is set out on p 26 'Interplay of Time & Rules':

The tight time window for track maintenance work is a constant constraint ... the limited amount of time is being aggravated as the system grows & ages, requiring more maintenance work ... The tight maintenance window has a profound impact on the work culture ... waiting for a TCC response can take longer than the time needed for a "quick look" on the other bound ... Unauthorised access provides soon, certain & positive behavioural incentives.

In 2004, 2006 & 2008, I made 3 submissions to the Commission on this question, following one accident which resulted in serious injury to two workers, another which caused a fire & a third which caused another fatality.

In 2008, I urged the Commission to be realistic about changed circumstances:

The original section Union-Eglinton is more than 50 years old; the central part of Bloor-Danforth is more than 40 years old; even the Spadina extension is 30 years old. Your staff need to consider basic changes in how they do this type of work. The present approach goes all the way back to the 1950s, when the subway was short & almost new. In those far-off days, a few brief hours in the middle of the night were more than adequate for the small maintenance jobs which were needed. Today, the subway is much larger & the work is much more demanding. It is no longer wise or indeed safe to try to maintain your subway infrastructure in 3 hour stints during the night. I asked you in 2004 & again in 2006 to try the alternative of closing a section of the subway for a whole weekend in order to better co-ordinate the work & almost certainly to reduce the overall cost of subway maintenance.

Soon afterwards, staff did indeed begin to adopt my suggestion & we are now familiar with such weekend "possessions", the most recent being earlier this month at the west end of the Bloor line.

However, the tragic event in 2012 shows that this is still not enough. Report 2b (page 4) for this meeting describes the typical work window of 2.5 hours, which includes time to set up the site & dismantle it again.

This is no longer a sensible, let alone safe, method of doing the work.

One night in each week -- early Monday morning -- has much lower ridership than the other six nights on the Blue Night network & late subway trains.

This provides an opportunity to improve the safety of your workforce.

PRESENTED TO THE COMMISSION NOV 1 8 2013 You should close the subway lines at midnight (24:00) on Sunday, giving workers 4 hours (01:00-05:00) in which to do maintenance.

If they believe more time is needed to get a job done properly & safely, a section of line could be closed on Sunday evening, eg 22:00 or 20:00.

The usual night buses would start earlier & customers would be informed: with proper explanations, there should not be any negative reactions.

In 2008, I said of my proposal to hold weekend possessions:

My guess is that your subway maintenance staff would love to work this way, but have a fatalistic attitude that "the politicians would never permit it". I suggest that the public at least would be quite willing to agree, if properly educated about the advantages, & you politicians would go along. You need to try it out & see how your staff & your riders react. I predict that it would be a clear success, cheaper & safer than present methods & acceptable to your customers.

Time has proved me correct & I would say the same now of the option of undertaking work in a longer window on Monday mornings.

My concern here is with the safety of your workforce, but the proposal offers a further incidental advantage.

If maintenance were normally concentrated on a Sunday/Monday night, it would become possible for the Commission to consider running subway service all night on the other six nights of the week.

At present, there is much dead-heading of trains out of & into service.

The cost of this & of the replacement bus services would be avoided.

Train service would be much less frequent than during the day

-- say a headway of 20 min, depending on how demand developed -- & a few stations could be closed at night (eg Bay & Museum); trains would run very fast, reducing the number needed.

The costs of night-time services are lower than in daytime, as capital + maintenance costs are already incurred for peak hours & electricity is cheap or even cost-free during the night, leaving only the cost of train crews + station collectors; in fact, most Blue Night services recover costs at the daytime level.

It should be remembered that nearly all customers for the Blue Night network are the working poor -- cleaners, cab drivers, restaurant workers -- , who keep the city running while others are asleep, & that around a third are women travelling alone; very few are revellers or party-goers. Better service would not be wasted on your typical all-night riders.

I hope you will ask staff to report on the option of a longer window for subway maintenance on early Monday morning & that you will start to consider trying out all-night subway service on the other six nights.

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