

Subway Closures - 2021 Review and 2022 Forecast

Date: February 10, 2022

To: TTC Board

From: Deputy Chief Executive Officer

Summary

This report summarizes the work achieved through the use of subway closures in 2021, including initiatives implemented to improve service during closures and provides the forecast for subway closures in 2022.

While this report only covers the subway closures, the TTC will provide further updates on the 2022 streetcar diversions through the April Chief Executive Officer's Report.

Recommendations

It is recommended that the TTC Board:

- 1. Endorse the 2022 Subway Closure Forecast and direct staff to report on changes through the Chief Executive Officer's Report; and
- 2. Direct staff to forward this report to the General Manager, Transportation Services, City of Toronto for their information.

Financial Summary

Funding has been included as part of the TTC's 2022-2031 Capital Budget and Plan, approved by the TTC Board on December 20, 2021 and to be considered by City Council on February 17, 2022, primarily within the Automatic Train Control (ATC) project and various State-of-Good-Repair (SOGR) projects, for associated subway closure costs.

Costs of the Eglinton Crosstown LRT (ECLRT) closures will be funded through the proceeds of the recently finalized settlement with Metrolinx. In addition, the TTC will make best efforts to leverage ECLRT closures for other TTC capital requirements and charge closure costs associated with these instances to the appropriate TTC project.

Closure costs are variable and dependent on duration and distance of the closure and the complexity of the work. The cost for each closure is attributed to the operating costs for buses, advertising and staffing, which includes operators, contracted customer

service support staff, TTC staff to supervise the closure, paid duty police officers and parking enforcement officers. The average early closure cost is approximately \$40,000 per evening and the average full two-day weekend closure cost is \$500,000 per weekend (\$250,000 per day).

Closure of the subway with no trains operating offer larger maintenance windows to complete work and allow for scheduling of more complicated scopes of work.

The Chief Financial Officer has reviewed this report and agrees with the financial impact information.

Equity/Accessibility Matters

The TTC continues to work to provide a barrier-free transit system for all, in accordance with the Accessibility for Ontarians with Disabilities Act, 2005 (AODA).

The TTC is a proud leader in providing accessible transit in the city of Toronto and continues to work towards an inclusive and barrier-free transit system for all customers, as accessibility is a key priority in the TTC's Corporate Plan 2018-2022. All projects and programs are designed to be in compliance with AODA. Providing reliable transit service includes carrying out necessary inspections and infrastructure repairs on the transit system, while minimizing impact on customers.

2021 Accessibility Plan Status Update

https://ttc-cdn.azureedge.net/-/media/Project/TTC/DevProto/Documents/Home/Public-Meetings/Board/2021/May-

<u>12/6_2021_Accessibility_Plan_Status_Update.pdf?rev=44f126cbbdc14423a2305d725b</u>4a71f7&sc_lang=en&hash=74D8C7DFA6BCBB19489281E8F416F90F

Subway closures result in route diversions and other temporary changes to transit service. These changes affect access to transit service for various TTC customers, including families, people with disabilities and seniors.

All subway closures are extensively planned and co-ordinated to have as little impact on our customers as possible. The TTC takes into consideration the impact each closure has on service levels across the city and how this will affect customer travel patterns. While the TTC does its best to minimize the impact on its customers, it is important to note that shuttle services cannot duplicate the carrying capacity of subway trains. During subway closures, the TTC provides various alternate services by:

- Operating accessible shuttle buses along the affected portion of the subway line and servicing closed stations;
- Increasing service on existing routes affected by the subway closure;
- Modifying traffic signals to give priority to shuttle buses, minimizing traffic congestion and improving shuttle bus efficiency;
- Using scheduled construction buses along routes impacted by subway closures and surface construction projects (including Eglinton Crosstown construction);

- Employing Toronto Police Paid Duty Officers to assist shuttle buses through busy intersections, as well as Toronto Parking Enforcement Officers, to enforce parking restrictions along the shuttle route;
- Staffing stations and shuttle bus stops with supervisory staff and customer service representatives to provide customer information and respond to the needs of customers. Staff and customer service representatives are trained on the AODA and the Ontario Human Rights Code in order to respond to the needs of customers;
- Communicating to customers in advance of, and during, all closures through signage, announcements and media outlets;
- Providing Wheel-Trans buses that are available upon request to assist customers to reach an accessible subway station; and
- Using accessible, low-floor buses equipped with ramps and a kneeling feature.
 These buses have route destination signs, as well as automated audible and visual next stop announcements.

The TTC provides advance notification of subway closures and temporary and extended service disruptions and delays to customers via:

- Media releases.
- Audible and visual displays on video screens on subway platforms and stations.
- Website postings at <u>Service Advisories</u>, on <u>Twitter@ttcnotices</u>

 and <u>Facebook</u> f.
- E-mail alerts to customers who registered to My TTC e-Alerts.
- Information updates at <u>mywheel-trans.ttc.ca</u> when booking a trip.
- Escalator and elevator disruption information posted on the TTC website at
 <u>Elevators and escalators planned maintenance</u>. Status is also available by calling
 416-539-5438 (LIFT), Telecommunications Relay Service 1-800-855-0511, or by e mail at <u>My TTC e-Alerts</u> (elevators only).

Decision History

At its meeting on November 18, 2013, the TTC Board received a report that provided an overview of Metrolinx's Eglinton Crosstown Light Rail Transit Project and summary of the Metrolinx/City of Toronto/TTC Master Agreement. The Master Agreement includes a provision that all costs associated with any closures for Eglinton Crosstown are to be absorbed by Metrolinx.

Yonge-Eglinton and Eglinton West Interchange Stations – Metrolinx Eglinton Crosstown Light Rail Transit Project – Preliminary Concept Design Approvals https://ttc-cdn.azureedge.net/-/media/Project/TTC/DevProto/Documents/Home/Public-Meetings/Board/2013/November-18/Reports/Yonge-Eglinton_and_E.pdf?rev=aa54242bd1df4485a68b96cccc4b8c18&hash=9223367D7CAE60F662AEB905F675E579

At its meeting on August 19, 2014, the Board received a report that explained the need for, and purpose of, subway closures.

Explanation of Subway Closures

https://ttc-cdn.azureedge.net/-/media/Project/TTC/DevProto/Documents/Home/Public-Meetings/Board/2014/August-

19/Reports/Explanation_of_Subway_Closures.pdf?rev=79a1e5dd2b0b40358ccb72f737cf67c8&hash=6B28242F23A7042EAA0AE6858C23ECBB

At meetings on January 18, 2017, November 13, 2017, April 11, 2019, December 12, 2019 and December 15, 2020 staff made presentations to the TTC Board on subway closures.

<u>201.pdf?rev=c5c8d36fc6d147a1af17a9aafa544f5d&hash=A631430139503160A277D44</u> 4FED5D0F6

Subway Closures – 2017 Review and 2018 Forecast

https://ttc-cdn.azureedge.net/-/media/Project/TTC/DevProto/Documents/Home/Public-Meetings/Board/2017/November-

13/10 Subway Closures 2017 Year in Review and 2018 Forecast.pdf?rev=50fb4e 339a2e4a6fbe4a58e62610941d&hash=300EA76C864D9D5A414E486422FDD46B

Subway Closures – 2018 Review and 2019 Forecast

https://ttc-cdn.azureedge.net/-/media/Project/TTC/DevProto/Documents/Home/Public-Meetings/Board/2019/April_11/Reports/20_Subway_Closures_2018_Review_and_2019_Forecast.pdf?rev=822e784be0fe42619c87164d01883a2f&hash=53B3C33EC197C372_D196CDABC961C74D

Subway Closures – 2019 Review and 2020-2022 Forecast

https://ttc-cdn.azureedge.net/-/media/Project/TTC/DevProto/Documents/Home/Public-Meetings/Board/2019/December_12/Reports/15_Subway_Closures_2019_Review_and 2020_2022_Forecast.pdf?rev=17576792a98540fd97d2b47414d13bf7&hash=9B6110_C6132DE98D4077A9758DB03405

Subway Closures – 2020 Review and 2021 Forecast

https://ttc-cdn.azureedge.net/-/media/Project/TTC/DevProto/Documents/Home/Public-Meetings/Board/2020/December 15/Reports/10 Subway Closures 2020 Review and 2021 Forecast.pdf?rev=b84f17c919b84ffdb397552269351eef&hash=0E1CD85BF4E2 021DED8F61D868DAC1BE

Issue Background

The TTC is committed to providing safe, reliable and efficient service. In order to do so, the TTC performs regular inspections and repairs to its infrastructure nightly at the conclusion of subway service.

Currently, the subway system opens at 6 a.m., six days a week and at 8 a.m. on Sundays, with a closing time between 2 a.m. and 3 a.m. These operating hours result in a small window of opportunity to carry out required maintenance work. On weeknights and Saturdays, TTC staff have an approximate three-hour time frame for work, and from Saturday night into Sunday morning, a five-hour time frame is available. Further, because the nature of the work requires TTC staff to set up work zones and move equipment into the work area, typically less than two hours of physical work can be achieved each night.

The TTC typically uses five types of closures. These include:

Weeknight Early Closure: A section of the line is closed early, at 11 p.m. on weeknights, Monday to Thursday. This approach was trialled in the fall of 2018 and was fully implemented in 2019.

One Day Weekend Closure (Single Day): Section of the line is closed for one day from end of service the previous night to the start of service the following morning.

Full Weekend Closure: Section of the line is closed for two days from end of service Friday night to the start of service on Monday morning. One full weekend closure is equivalent to approximately five weeks of night work for many projects.

One Day Late Opening: Section of the line is closed, usually on a Sunday, for approximately four hours and regular scheduled service begins at 12 p.m.

Station By-Pass: Whereby one bound direction of the station area is closed while the other platform remains open. This will be utilized in 2022 for the Station Finishes Program.

In 2022, the TTC will also utilize station by-pass whereby one bound of the station platform area is closed. This will aid with the Station Finishes Program, specifically at St Patrick Station.

Two major projects on Line 1 Yonge-University are currently progressing with the intent of being completed in 2022: the ATC Re-signalling project and Metrolinx's Eglinton Crosstown project. These make up the majority of the full weekend closures as the complexity of these projects does not allow for work to be conducted efficiently during the regular nightly maintenance window.

Additionally, based on TTC ridership data, there are fewer customers travelling on weekends than weekdays and therefore full weekend subway closures minimize disruption to a greater number of customers.

Comments

2021 Closure Review

In 2021, the TTC planned 37 full weekend closures, two single-day closures, eight late openings, 196 nights of early closures and one 10-day closure.

Due to the COVID-19 pandemic, the majority of events in the city were cancelled, which resulted in 24 weekend closures, five single-day closures, 13 late openings, 135 nights of early closures and four 10-day closures.

The subway closures facilitated work on Line 1 Yonge-University and Line 2 Bloor-Danforth. A significant amount of work was carried out on Line 1 Yonge-University to reduce the backlog of SOGR projects and maintain the schedule for the ATC project as noted below. The statistics indicate the work completed on closures only and do not represent the overall annual accomplishment to date.

Line 1 Yonge-University

- SOGR Projects:
 - o Installation of seven rail turnouts at York Mills and Wilson Yard. This work required both early access and weekend closures.
 - Approximately 6,300 feet of rail replaced.
 - Approximately 20,000 square feet of asbestos removed (sprayed acoustic material).
 - Replacement of 15 switch machines.
 - 10 tunnel liners and just under 100 leak locations repaired.
 - Advanced the traction power cable replacement at Osgoode Station by six months.

ATC Project:

- Construction installations, including strut, tray and cable completed for Phase
 5 (Eglinton to Finch).
- Phase 4 (Rosedale to Eglinton) commissioned. ATC now operational on Line
 1 from Vaughan Metropolitan Centre to Eglinton.

- Stations Finishes Renewal Program:
 - Advancement of asbestos abatement at St Patrick and Queen's Park Stations/Tunnels. The three 10-day closures allocated to this program reduced the need to have 20 to 30 future weekend closures. The larger benefit was saving an estimated two years of trains by-passing the platforms while abatement would be taking place behind barriers.

Advancement of TTC work for the ECLRT project at Eglinton Station to include a variety of live line communication and electrical systems cutovers, as part of the back-of-house (BOH) initiatives, to support work advancement for Crosslinx Transit Solutions (CTS) work in conjunction with our Metrolinx partners.

Line 2 Bloor-Danforth

- SOGR Projects:
 - Major maintenance including replacement of switch points, stock rail, lead rails, closure rail and frogs completed at eight locations.
 - Approximately 5,000 feet of rail replaced.
 - o Eight beams replaced on the Prince Edward Viaduct.
 - One switch machine and two train signalling instrument cases replaced.

Signals, Track and Electrical maintenance work was completed on all lines, including but not limited to: cable sleeving, lighting deficiencies, heating cable checks and replacement, track defect items, tamping, addressing non-destructive testing (NDT) defects, train stop replacement, miscellaneous track/station cleaning, Signals and Track quality assurance and quality control checks.

Below is a summary of our annual achievements as a ratio of our annual target contrasted to the percentage of the work done in the closure to highlight the benefit of closures:

- Full turnout replacement: 140% completed, 100% completed in closures (this work requires early and weekend closures).
- Major maintenance: 160% completed, 40% completed in closures.
- Tangent rail replacement: 130% completed, 50% completed in closures.
- Asbestos removal: 140% completed, 65% completed in closures.
- PEV beam replacement: 100% completed, 60% completed in late openings.
- Signals switch machine replacement: 110% completed, 100% completed in closures.
- Tunnel leak remediation: 120% completed, 20% completed in closures.
- Utilizing 10 weekend closures maintained the goal of commissioning ATC Phase 4 allowing Line 1 to be ATC operational from VMC to Eglinton.
- Utilizing six weekend closures completed all ATC Phase 5 construction work.
- Other work advanced due to closures: Stations Finishes Renewal Program at St Patrick and Queen's Park; traction power cable work at Osgoode; Permanent Work Area Warning (PWAW) system cable terminations at Kipling: Islington and Finch to North York Centre; PRESTO Terrazzo flooring replacement at Queen's Park; Osgoode and St Patrick.

2022 Subway Closures Forecast

As a result of several demands for aggressive capital construction activities, the following is the tentative 2022 closure plan.

ECLRT = Eglinton Crosstown Light Rail Transit; ATC = Automatic Train Control; SOGR = State of Good Repair; ECE = Engineering, Construction and Expansion.

35 Full Weekend Closures, including 5 backup Closures for ATC Testing (15 – ECLRT, 10 – ATC, 6 – SOGR, 4 – ECE)

Line **1** 27

Line **2** 8

8 Late Sunday Openings (8 – SOGR)

Line **2** 8

177 Early Weeknight Closures (162 – SOGR, 5 – ECE, 10 – ECLRT)

Line **104**

Line **2 73**

20 Days of Station By-Pass (20 – ECE)

Currently under review, exploring alternate strategies to execute the required work. Line **① 20**

The outlined tentative 2022 Closures Forecast has been drafted to ensure that ATC, Line 5 Eglinton expansion initiatives, TTC SOGR requirements and the TTC Easier Access Program are prioritized and executed in as efficient a manner as possible to minimize disruption to our customers, while allowing for modifications where possible. The calendar provides for eight available weekends for any additional work needs that may arise, being mindful of scheduled streetcar diversions and unconfirmed City of Toronto events. The TTC's priority for 2022 weekend closures remains supporting the implementation of ATC on Line 1. Attachment 1 of this report outlines in detail the closure activities.

Given the outlined 2022 closures, the Infrastructure and Engineering Group will work in unison with the Talent Management Department to fill key vacancies and the Procurement and Category Management Department to ensure all requirements for success (e.g. tools, equipment, etc.) are in place for the 2022 construction season to ensure continued SOGR targeted works can be achieved as planned.

Impacts of the TTC Vaccine Policy and workforce availability due to the Omicron variant has resulted in reduced availability of bus operators to support bus shuttles for weekend closures. In January 2022, for these reasons, we have not been able to support the request for Line 5 Eglinton construction closures. The TTC will continue to work with Metrolinx to help facilitate this work.

Contact

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Signature

Kirsten Watson Deputy Chief Executive Officer

Attachments

Attachment 1 – 2022 Subway Closures Forecast

Attachment 1 – 2022 Subway Closures Forecast

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
Jan 23-27 (cancelled)	EA	ECLRT		St Clair to Lawrence
Jan 30-Feb 3 (cancelled)	EA	ECLRT		St Clair to Lawrence
Feb 5-6	FW	ATC P5 – SIT13 (Part 2)		St Clair to Finch
Feb 12-13	FW	(Contingency) ATC P5 – SIT13 (Part 2) ECLRT		St Clair to Finch
Feb 26-27	FW	ECLRT	+ECE Easier Access - Asbestos Abatement	St Clair to Sheppard
Mar 1-3	EA	SOGR Structure Maintenance		Eglinton to Finch
Mar 5-6	FW	ATC P5 – SAT5 (Part 1)		St Clair to Finch
Mar 7-10	EA	SOGR Structure Maintenance		Eglinton to Finch
Mar 12-13	FW	ECLRT		St Clair to Lawrence
Mar 14-17	EA	SOGR Structure Maintenance		Eglinton to Finch
Mar 19-20	FW	ECLRT	+ECE Easier Access - Asbestos Abatement +ECE/SOGR SEC relocate cables for rehab wall and platform project	St Clair to Sheppard
Mar 21-24	EA	SOGR Structure Maintenance		Eglinton to Finch

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
Mar 26-27	FW	(Contingency) ATC P5 – SAT5 (Part 1)		St Clair to Finch
		ECLRT (tentative)		
Mar 28-31	EA	SOGR Structure Maintenance		Eglinton to Finch
Apr 3	LO	SOGR Structure Maintenance PEV Beam Replacement		St George to Broadview
Apr 4-7	EA	SOGR Track Maintenance – Union Crossover Rehab	+SOGR Structure Maintenance	Bloor to Osgoode
Apr 9-10	FW	ECLRT	+ECE St Clair to Lawrence: S75-5 Davisville DC Feeder Upgrade + AA Lawrence Platform Type 3 enclosure	St Clair to Sheppard
Apr 11-14	EA	SOGR Track Maintenance – Union Crossover Rehab	+SOGR Structure Maintenance	Bloor to Osgoode
Apr 16-17	FW	ECE – Metrolinx/Signals Maintenance Kennedy		Kennedy to Warden
Apr 18-21	EA	SOGR Structure Maintenance		King to Osgoode
Apr 23-24	FW	ECLRT	+ECE/SOGR SEC relocate cables for rehab wall and platform project	St Clair to Lawrence
Apr 25-28	EA	SOGR Structure Maintenance		King to Osgoode
May 2-5	EA	SOGR Track Maintenance – Chester S64 FTR Closure Prep		St George to Woodbine

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
May 7-8	FW	ECLRT	+ECE/SOGR SEC relocate cables for rehab wall and platform project	St Clair to Lawrence
May 8	LO	SOGR Structure Maintenance PEV Beam Replacement		St George to Broadview
May 9-13	EA	SOGR Track Maintenance – Chester S64 FTR Closure Prep		St George to Woodbine
May 14-15	FW	SOGR Track Maintenance - Chester S64 FTR		St George to Woodbine
May 16-19	EA	SOGR Track Maintenance – Chester S64 FTR Post Closure		St George to Woodbine
May 21-22	FW	ECLRT		St Clair to Lawrence
May 24-26	EA	SOGR Structure Maintenance		Ossington to St George
May 28-29	FW	ATC P5 – SAT5 (Part 2)		St Clair to Finch
May 30-Jun 2	EA	SOGR Structure Maintenance		Ossington to St George
Jun 4-5	FW	(Contingency) ATC P5 – SAT5 (Part 2) ECLRT		St Clair to Finch
Jun 5	LO	SOGR Structure Maintenance PEV Beam Replacement		St George to Broadview
Jun 6-9	EA	SOGR Track Maintenance: Open cut maintenance		Eglinton to Bloor

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
			+ECE/SOGR SEC relocate cables for rehab wall and platform project	
Jun 11-12	FW	ECLRT	+ECE St Clair to Lawrence: S75-5 Davisville DC Feeder Upgrade + AA Lawrence Platform Type 3 enclosure	St Clair to Sheppard
Jun 13-16	EA	SOGR Track Maintenance: Open cut maintenance		Eglinton to Bloor
Jun 17	EA	SOGR Track Maintenance Keele DXO FTR		Jane to Ossington
Jun 18-19	FW	SOGR Track Maintenance Keele DXO FTR		Jane to Ossington
Jun 20-23	EA	SOGR Track Maintenance: Open cut maintenance		Eglinton to Bloor
Jun 25-26	FW	ECLRT	+ECE/SOGR SEC relocate cables for rehab wall and platform project	St Clair to Lawrence
Jun 26	LO	SOGR Structure Maintenance PEV Beam Replacement		St George to Broadview

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
Jun 27-30	EA	SOGR Track Maintenance: Lawrence West 3- Track Major Maint. + To be combined with 6622 - Soft Spot / NDT / Tamping + Spadina Open cut maintenance + Wilson SB C142 HR/RR Replacement		St Clair West to Sheppard West
Jul 1	EA	SOGR Track Maintenance Keele DXO FTR		Jane to Ossington
Jul 2-3	FW	SOGR Track Maintenance Keele DXO FTR		Jane to Ossington
Jul 4-7	EA	SOGR Track Maintenance: Spadina Open cut maintenance + Wilson SB C142 HR/RR Replacement		St Clair West to Sheppard West
Jul 9-10	FW	ECLRT	+ECE/SOGR SEC relocate cables for rehab wall and platform project	St Clair to Lawrence
Jul 10	LO	SOGR Structure Maintenance PEV Beam Replacement		St George to Broadview
Jul 11-14	EA	SOGR Track Maintenance: Spadina Open cut maintenance + Wilson SB C142 HR/RR Replacement		St Clair West to Sheppard West

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
Jul 11-21	Station Bypass (tentative)	ECE U60-9 Stations Finishes (Asbestos Abatement)		No shuttle buses required. St Patrick Southbound platform will be closed
Jul 15	EA	SOGR Track Maintenance Keele DXO FTR		Jane to Ossington
Jul 16-17	FW	SOGR Track Maintenance Keele DXO FTR		Jane to Ossington
Jul 18-21	EA	SOGR Track Maintenance PREP for Greenwood WYE weekend closure	+SOGR Maintenance (other Sections within I&E)	Broadview to Woodbine
Jul 23-24	FW	ECLRT	+SOGR Structure Maintenance Davisville rehab wall project +ECE Easier Access Lawrence Station Elevator Access	St Clair to Sheppard
Jul 24	LO	SOGR Structure Maintenance PEV Beam Replacement		St George to Broadview
Jul 25-29	EA	SOGR Track Maintenance PREP for Greenwood WYE weekend closure	+SOGR Maintenance (other Sections within I&E)	Broadview to Woodbine
Jul 30-31	FW	SOGR I&E Maintenance: Greenwood WYE		Broadview to Woodbine
Aug 2-4	EA	SOGR Track Maintenance Post Greenwood WYE weekend closure	+SOGR Maintenance (other Sections within I&E)	Broadview to Woodbine

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
Aug 2-12	Station Bypass (tentative)	ECE U60-9 Stations Finishes (Asbestos Abatement)		No shuttle buses required. St Patrick Northbound platform will be closed
Aug 8-11	EA	SOGR Track Maintenance: C79 WB HR Replacement and West Zone Open- cut Maintenance		Kipling to Jane
Aug 13-14	FW	ECLRT	+SOGR Structure Maintenance Davisville rehab wall project +ECE Easier Access Lawrence Station Elevator Access	St Clair to Sheppard
Aug 14	LO	SOGR Structure Maintenance PEV Beam Replacement		St George to Broadview
Aug 15-18	EA	SOGR Warden to Vic Park WB SR Tangent Rail Replacement + East Zone Open- cut Maintenance (Fall Preparedness)		Woodbine to Kennedy
Aug 20-21	FW	(Contingency) ATC P5 – Performance and Acceptance testing		St Clair to Finch
Aug 20-21	FW	ECE AW60-2 Infrastructure Work for Signals and Miscellaneous Site Services (Wilson Yard)		Sheppard West to Wilson

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
Aug 22-25	EA	SOGR Warden to Vic Park WB SR Tangent Rail Replacement + East Zone Open- cut Maintenance (Fall Preparedness)		Woodbine to Kennedy
Aug 27-28	FW	ATC P5 – Performance and Acceptance testing		St Clair to Finch
Aug 29-Sep 1	EA	SOGR Track Maintenance: Dufferin to Lansdowne C42 WB HR Replacement; Lansdowne to Dundas West Tangent WB SR Replacement; Track Reinsulation Dundas West to Dufferin		Keele to Ossington
Sep 11	LO	SOGR Structure Maintenance PEV Beam Replacement		St George to Broadview
Sep 12-15	EA	SOGR Structure Maintenance		Ossington to St George
Sep 17-18	FW	ATC P5		St Clair to Finch
Sep 19-23	EA	SOGR Structure Maintenance		Eglinton to Finch
Sep 24-25	FW	(Contingency) ATC P5		St Clair to Finch
Sep 26-29	EA	SOGR Structure Maintenance		Eglinton to Finch
Oct 3-6	EA	SOGR Structure Maintenance		Bloor to Osgoode
Oct 11-13	EA	SOGR Track Maintenance		Bloor to Osgoode

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
Oct 17-20	EA	SOGR Track Maintenance		Eglinton to Finch
Oct 24-27	EA	SOGR Track Maintenance Lawrence to Eglinton SB Tangent ER / WR Replacement	Maintenance Lawrence to Eglinton SB Tangent ER / WR	
Oct 31-Nov 3	EA	SOGR Track Maintenance – Chester S65 FTR Closure Prep		St George to Woodbine
Nov 7-11	EA	SOGR Track Maintenance – Chester S65 FTR Closure Prep		St George to Woodbine
Nov 12-13	FW	SOGR Track Maintenance - Chester S65 FTR		St George to Woodbine
Nov 14-17	EA	SOGR Track Maintenance – Chester S65 FTR Post Closure		St George to Woodbine
Nov 21-24	EA	SOGR Structure Maintenance		Eglinton to Finch
Nov 26-27	FW	ECE Easier Access Lawrence Station Elevator Access		Eglinton to Sheppard
Nov 28-Dec 2	EA	ECE / Track Maintenance Kipling Storage Track – Prep for Kipling weekend closure		Kipling to Islington
Dec 3-4	FW	ECE / Track Maintenance Kipling Storage Track		Kipling to Islington

DATE	CLOSURE TYPE	PROJECT	OTHER PROJECT	SHUTTLE BUS SERVICE
Dec 5-8	EA	SOGR Structure Maintenance		Eglinton to Finch
Dec 12-15	EA	SOGR Structure Maintenance		Eglinton to Finch

EA	Early Weeknight Closure	FW	Weekend Closure
SA	Single Day Closure	LO	Late Opening
ECLRT	Eglinton Crosstown Light Rail Transit State-of-Good Repair	ATC ECE	Automatic Train Control Engineering, Construction & Expansion