For Information

Addressing Service Delays on the TTC

Date: July 17, 2025
To: TTC Board
From: Chief Corporate Affairs Officer, Chief Operations and Infrastructure Officer and Chief Strategy & Customer Experience Officer

Summary

This report responds to the motion adopted by the TTC Board in January 2025 "Addressing Service Delays on the TTC" by providing an update on five key areas: the ongoing external International Association of Public Transport (UITP) review of TTC maintenance with a focus on signalling performance, communication protocols for customers during disruptions, shuttle bus operational improvements, surface transit redundancy, and measures to prevent unauthorized track access.

This report responds to the Board's motion by outlining the TTC's current and planned initiatives in each area and identifying ongoing improvements to ensure a more resilient, reliable, and rider-focused transit system.

Financial Summary

The cost of the UITP review underway is fully funded under the TTC's existing operational program. Other initiatives described including new signage, staff training, and system upgrades, are being implemented within existing budgets or through approved operational allocations. There are no new costs directly associated with the issuance of this report.

The Executive Director – Finance has reviewed this report and agrees with the financial impact information.

Equity/Accessibility Matters

A key principle of the TTC's current Corporate Plan is accessibility, and as a proud leader in providing accessible public transit in Toronto and beyond, we are committed to ensuring reliable, safe, and inclusive transit services for all our customers.

Accessible communications and services are integral to the TTC's Corporate Plan, including Strategic Direction 2.2, *Improve the Customer Experience by Providing a Safe, Accessible, and Comfortable Journey*. The in-station PA system audits and enhancements include consultation with the TTC's Advisory Committee on Accessible

Transit (ACAT) to ensure clarity and consistency for customers with hearing impairments. Station video displays and wayfinding improvements specifically target better service for deaf and hard-of-hearing customers. These measures align with the TTC's commitment to provide reliable, accessible, and inclusive transit services for all customers.

Decision History

January 27, 2025: The Board adopted the motion "Addressing Service Delays on the TTC" (TTC1.10), directing staff to report in Q2 2025 on five specific items: UITP review, customer communications, shuttle bus operations, surface transit redundancy, and track access prevention.

April 11, 2024: The TTC Board endorsed a UITP peer review of subway and streetcar maintenance programs.

Comments

1. UITP Maintenance Review (ATC Signalling):

In 2024, the TTC contracted the UITP to conduct a peer review of subway and streetcar asset maintenance, including subsystems. The review examines the TTC's maintenance processes against industry best practices. As directed by the Board, the review explicitly covers Automatic Train Control (ATC) performance to identify any root causes of recent signal failures.

This review is underway, and preliminary findings will be provided to the Board this year. Meanwhile, the TTC has begun implementing supporting reliability measures (e.g. enhanced trackside fault detection) to address issues in parallel with the review.

2. Customer Communication Protocols:

a) Auditing PA Systems:

An internal audit of subway train PA systems was launched to verify announcement intelligibility. The TTC is actively collaborating with ACAT on this ongoing audit process. ACAT members will participate in conducting train PA audits and provide feedback to ensure accessibility perspectives inform findings. Audits are conducted at end terminals with stationary trains and in motion across tunnels and open-cut sections of Lines 1, 2, and 4. Early results indicate more than 90% clarity, with remaining issues (e.g. low volume, signal dropouts, muffled audio) identified and assigned for correction. Maintenance teams are addressing identified defects in trackside communications infrastructure and vehicle PA systems. Audits will continue over the coming months, with a refined focus on isolating technical failures versus human performance factors.

In parallel, the Public Address (PA) upgrades at stations is complete, and the new digital PA system has been implemented at all stations. Going forward, the technical team will focus on addressing minor deficiencies. (e.g. noise-sensing microphones are

being added to train platforms, and some existing microphone cables at certain stations are not compatible with the new system and now require replacement).

Standardized messaging and consistent volume are being reinforced: Transit Control staff have completed retraining on scripted announcements, and trials of automated voice announcements are underway to improve clarity throughout the network.

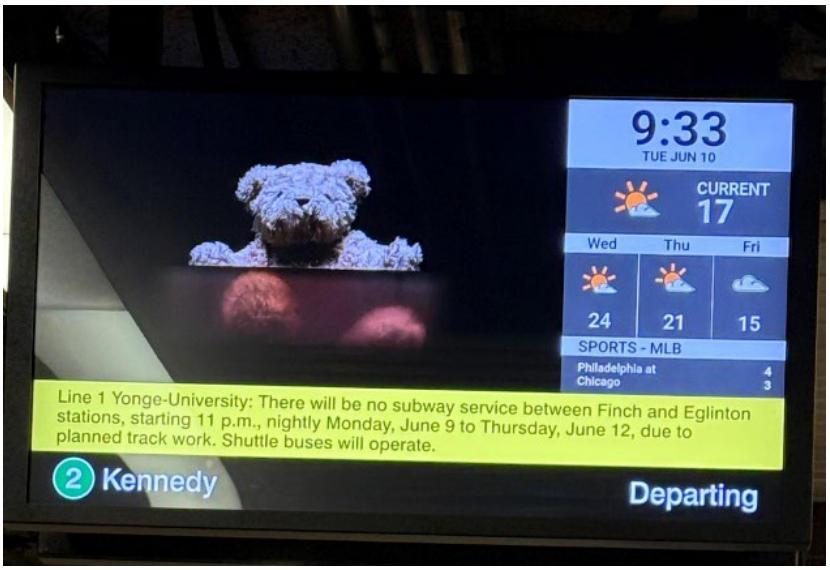
b) Notices for Hearing-Impaired:

During service disruptions, Platform Video Screens (PVS) at track level and Station Information Screens (SIS) at station entry highlight affected lines and stations. At stations without video screens, on-site staff provide assistance.

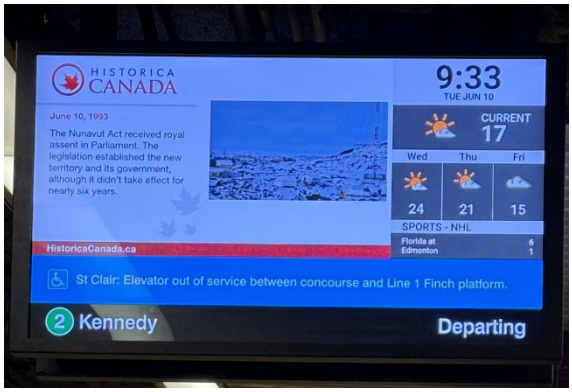
In the event of a service disruption, Transit Control immediately pushes an update to @ttcnotices on X (formerly Twitter). Subsequent service alerts are posted every five minutes until the service disruption ends. This posting frequency is part of focused communication:

- **Visibility:** X posts have a short lifespan in users' feeds. Reposting ensures that people who check the platform at different times still see the alert.
- **Customer turnover:** Someone entering a station after the initial alert may not scroll back to see earlier messages. Reposting helps ensure all customers are informed.
- **Third-party apps and feeds:** Some apps and systems pull real-time posts to display service alerts. Frequent updates help keep those platforms accurate and timely.
- **Expectations management:** Even if the disruption has not changed, a new post can reassure users that the issue is still being actively monitored and has not been resolved yet.

The image below is a screen capture of a PVS located at or near the platform level of a subway station, displaying information related to a service interruption:



The image to the right provides another example of how the TTC communicates accessibility-related information to customers. Accessibility alerts, such as elevator outages, are also displayed on PVS, coded in blue to distinguish them from general service disruptions. This ensures that riders with accessibility needs are clearly and proactively informed during their journey.



In addition to existing measures, the TTC is enhancing these visual displays by adding new shuttle routing information, and alternate-route instructions, to be displayed on SIS, PVS, and station booth posters. Efforts are also underway to improve onboard information, such as investigating the feasibility of pushing service alerts to the ceiling-mounted screens on Line 1 trains. The use of supplemental signage (tear-sheets and simplified maps) and emerging technologies (e-ink displays at shuttle stops) will be piloted in 2025 to ensure deaf and hard-of-hearing riders receive timely information.

The TTC will also be bringing forward a Wayfinding Strategy in 2025, which will establish system-wide guidelines and standards for improved signage, information, and navigation. This strategy will support both typical customer journeys and disruptions, enhancing wayfinding across all customer touchpoints—digital and physical—and improving the consistency and clarity of service communications.

Staff are also ensuring that stations remain equipped with physical signage, including sandwich boards and platform-level posters during closures to clearly direct and inform customers during full station closures or major service changes. These physical resources are part of the TTC's commitment to maintaining accessible, timely, and multi-channel communication during service disruptions.

c) Disruption Notice Timeliness:

When an incident occurs, Transit Control immediately posts a Customer Service Disruption Notice (CSDN) that appears on Station Information Screens, the TTC website, and updates the system-wide line-status icons (a red "X" on affected lines). To further speed communications, 100% of stations are equipped with handheld megaphones for staff use during disruptions.

Staff are also reviewing on-site deployment protocols and training for station staff to ensure announcements reach affected customers quickly. Additional measures that are/have been implemented in 2025 include:

Initiative	**Details**	**Target Completion**
Megaphone deployment	Handheld megaphones have been procured, delivered, and staff are trained on their use. Stations Department staff now use them during disruptions to supplement PA announcements.	Completed

Initiative	Details	Target Completion
Station-specific checklists	Checklists tailored to each station are being developed to ensure consistent disruption responses. Once approved, they will be distributed to station booths and platform-end blue cabinets.	Q4 2025
Advanced staff training	Group Station Managers are developing hands-on TOE (Training, Observation, Evaluation) training for Station Supervisors, with audits to follow to assess knowledge retention.	Q1 2026
Signage development	Collaboration with the TTC Sign Shop and Customer Communications teams is underway to create physical and digital signage for disruptions, including digital boards controlled by Zone Hubs and Transit Control.	Q4 2025
Comprehensive standard operating procedures	A detailed Standard Operating Procedure for turnback and overcrowding disruptions, including station-specific appendices and clear personnel roles, is being developed. Existing procedures are being updated.	Q4 2025
Customer education content	In partnership with Customer Experience and Customer Communications teams, video and written content is being created to educate customers on disruptions, information sources, and TTC personnel roles.	Q4 2026

d) Media and Public Alerts:

A dedicated Communications Desk in Transit Control issues e-mail and social media alerts for service disruption incidents. The Live Service Alerts section of the TTC's website (ttc.ca), X (@TTCnotices), and the MyTTC e-mail alert system provide continuous updates to customers.

In Q1 2025, Corporate Affairs launched a pilot to centralize system disruption announcements. Two dedicated members of Corporate Communications are embedded in Transit Control to make real-time announcements to customers onboard subway trains (Wayside announcements). The initiative aims to improve the consistency and clarity of announcements as well as the usefulness of the information provided to customers, including alternate travel options. This summer, Corporate Communications will begin to extend real-time announcement coverage to in-station PAs.

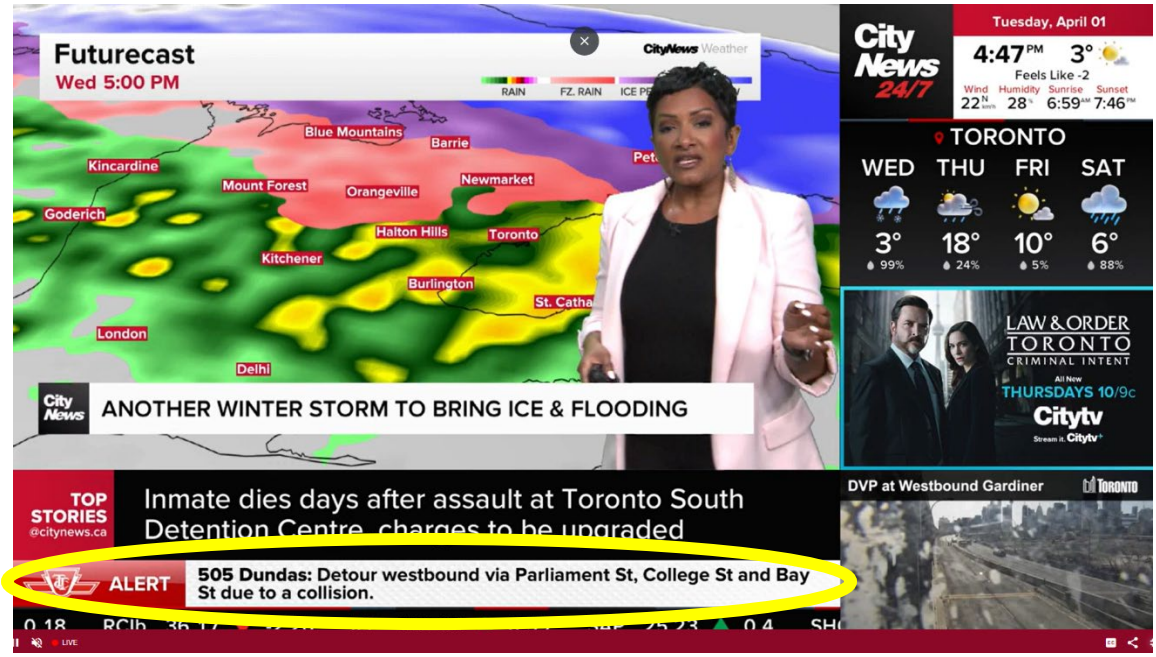
Staff have set an internal goal to notify the public within three minutes of a confirmed disruption.

- Real-time updates are provided through:
    - TTC website (ttc.ca)
    - @TTCnotices (X/Twitter)
    - My TTC e-Alerts system

The picture, left, is an example of how service disruption messages are communicated through social media. These posts are published at five-minute intervals to ensure timely and consistent updates during an active disruption. The original post remains quoted in each subsequent update until normal service resumes, providing customers with clear continuity of information throughout the incident:

News media provides efficient real-time communication to customers during a service disruption, with service alerts posted to @TTCNotices used as a primary source of information for journalists. Corporate Communications staffs a 24/7 media hotline that provides real-time information for members of the media.

The TTC also maintains a live-feed arrangement with CityNews 24/7 on Rogers channel 1, where Live Service Alerts posted to the TTC website are automatically populated to a TTC Alert ticker, as shown in the image below:



As part of the TTC's commitment to improvement, the TTC has reached out to American Public Transit Association (APTA) member agencies in the U.S. for benchmarking. Discussions with the Chicago Transit Authority (CTA) indicate a delay to posting disruptions until the 10-minute mark. The Metropolitan Transportation Authority (MTA) in New York delays subway alerts for 10 minutes and bus delays for 30 minutes due to severe traffic. These practices reflect challenges similar to Toronto's, offering valuable context for refining the TTC's approach.

Challenges such as limited radio channels and peak workload on the Transit Control Desk have been identified. To streamline messaging, the creation of a unified communications team (centralizing PA, CSDN posts and media updates) is under review.

Proposed enhancements to public alerts:

- **Unified communications team:** Shift station PAs to Corporate Communications for streamlined messaging.
- **Real-time disruption messaging:** Implement AI-driven automated updates to provide timely and consistent information across all communication channels.
- **Live updates on social:** Similar exercise to 680 News on the ones – live hits every 15 minutes on X during Monday-Friday rush hour periods to advise of issues across the network real-time.

A funding source will need to be identified to operationalize these proposed enhancements.

e) Real-Time Information Apps:

Currently, the TTC does not have an app. The TTC promotes the following apps in the Ride Guide and at various locations in subway stations: Citymapper, Google Maps, Apple Maps, Moovit, Transit, Transit Now, TranSee, and Triplinx.

The TTC has a partnership in place with Transit app (a third-party mobile application) and has been piloting its automatic-detours feature for buses and streetcars since July 2024. The Transit app is the only app that provides this feature at the moment. The Transit app, along with the other third-party apps mentioned above, post TTC service disruption alerts pulled from www.ttc.ca/service-alerts. TTC service information (scheduled service and real-time information) is also available via Track TTC available at www.bustime.ttc.ca.

Several TTC teams are working together to explore the feasibility of developing a TTC-specific app, or whether to partner more exclusively with an existing third-party transit app, to provide customers with a user-friendly platform for trip planning, accessing real-time information, and receiving updates on service changes and delays.

The TTC's Innovation and Sustainability Group (ISG) recently hosted a TTC youth hackathon, where the winning team created a prototype of a singular TTC app to elevate the transit experience by delivering seamless, dependable, and personalized journeys tailored to customers' daily needs. Core features included gamification and rewards, offering discounts from popular retail brands to attract new users and foster long-term loyalty. Additional features, such as real-time journey updates, AR-powered wayfinding, chatbot assistance, and a gamified 'sustainability score' could further enhance rider engagement and enhance the overall benefits of transit.

Current challenges with developing a TTC app include lack of internal resources and expertise to develop and maintain it. Another challenge related to partnering exclusively with a small-scale, third-party transit app provider is ensuring they can provide customers with the most comprehensive information they need to plan their trip reliably, access real-time information and receive updates on service changes and delays. Staff

are exploring targeting resources toward leading third-party applications whose advanced technical investments, internal expertise and international experience will provide Torontonians and visitors the desired digital customer experience.

Staff are exploring ways to improve the General Transit Feed Specification (GTFS), and General Transit Feed Specification Real Time (GTFS-RT) information shared on Open Data to enable more consistency across app platforms.

3. Shuttle Bus Operations:

Discussions to enhance shuttle bus deployment efficiency through continued consultation with ATU Local 113 are ongoing. In collaboration with Local 113, TTC staff have been reviewing emergency dispatch protocols to reduce response times. Close engagement with Local 113 ensures that frontline expertise informs the design of practical, workforce-supported solutions that improve response time, service continuity, and customer experience during emergencies.

Traffic Priority: The TTC is coordinating with the City's Traffic Management group to request temporary traffic priority for shuttle buses. During recent disruptions, the TTC advocated for dedicated lanes or signal priority on congested corridors (e.g. temporary bus lane on Bloor/Danforth during peak outages) to speed shuttle movement. Ongoing discussions aim to pre-authorize such measures so that shuttle buses can bypass traffic and maintain better connections for customers.

4. Surface Transit Redundancy:

In consultation with the City's Division of Transportation Services, the TTC is identifying surface corridor improvements to provide transit redundancy. The City's RapidTO and Congestion Management initiatives already provide many priority measures (dedicated bus lanes, transit signal priority, and queue-jump lanes) on key routes.

The TTC is actively collaborating with the City of Toronto on dedicated bus lanes on Dufferin Street and centre-running streetcar lanes on Bathurst Street. Priority bus lanes are also installed on Queens Quay East. These initiatives aim to improve travel time reliability and enhance the overall customer experience, while strengthening surface transit as a viable alternative during subway disruptions.

While the TTC remains committed to advancing these initiatives in the interest of its customers, the implementation and delivery of transit priority infrastructure is the jurisdiction of the City of Toronto. The TTC will continue to work closely with the General Manager of Transportation Services to identify, design, and implement improvements to priority bus corridors across Toronto.

5. Unauthorized Track Access:

Preventing track trespassing is a critical safety and reliability issue for the TTC. The TTC continues to emphasize enforcement and detection to ensure the safety of both passengers and staff. Station staff and Special Constables are trained to immediately cut power and detain any trespassers, issuing a fine or Provincial Offence Notice under

the Trespass to Property Act. In some cases, trespassers may be individuals who are emotionally disturbed or experiencing a mental health crisis. These individuals are apprehended under Section 17 of the Mental Health Act and transported to hospital for appropriate care.

The TTC is exploring the feasibility of retrofitting physical barriers or installing intrusion-detection sensors at high-priority stations. Collaborative reviews with security experts are underway to deploy advanced CCTV, analytics, and alarm systems that can automatically alert Transit Control in the event of a track intrusion. The TTC is also reviewing industry best practices and new technologies to enhance early detection, intervention, and overall passenger safety.

As part of this broader strategy, the TTC is closely monitoring the deployment of a Guideway Intrusion Detection System (GIDS) on Line 5 (Eglinton Crosstown). This system uses laser-based sensors installed at underground stations and tunnel portals to detect unauthorized entry into the track area. Upon detection, the system automatically triggers alarms, halts train movement, and transmits live CCTV footage to Transit Control for immediate response. Once Line 5 is in service, the performance and reliability of the GIDS will be reviewed to assess its applicability on the existing subway system and help guide future safety investments.

Innovation and Sustainability Matters

The TTC's Innovation and Sustainability Strategy, approved by the Board in September 2024, recognizes the need to conduct innovation challenges to solve real-world transit problems (workstream 1.1) and explore the use of emerging technologies and solutions to improve the customer experience and enhance safety for riders (workstream 1.2). It also emphasizes the importance of engaging the industry, not-for-profit, and next-generation customers to build the innovation pipeline of ideas. In alignment with the above, the TTC is exploring the following early-stage concepts and evaluating them through the innovation pipeline process:

- Piloting **E-ink displays** at bus stops to enhance customer experience, providing real-time journey updates.
- **AI chatbot:** The integration of an AI-powered chatbot into existing communication channels to respond to common inquiries related to public alert information and real-time journey updates. Similar solutions have been successfully piloted and implemented by North American agencies, such as the Chicago Transit Authority and the Metropolitan Transportation Authority (MTA).
- **Dynamic digital display solutions:** AI-powered digital display systems that incorporate American Sign Language (ASL) in service announcements to enhance accessibility for the deaf and hard-of-hearing community. This concept has been piloted by the MTA using an AI avatar capable of delivering real-time ASL passenger announcement updates.
- **Smart CCTV systems:** To combat a suite of use cases to enhance safety and operational efficiency, including suicide prevention, track-level intrusion, aggressive behaviour, weapons detection, and unidentified objects at stations.
- **Bus Stop of the Future Innovation Challenge:** the TTC is launching a public-and-industry facing challenge later this year to solicit ideas for transit stop modernization using a bus stop as a living lab (real-time updates, accessibility and sustainability considerations, revenue-generating opportunities, and leveraging the use of

technology to enhance the overall rider experience. These ideas will be vetted through the innovation pipeline process with criteria such as desirability, feasibility, viability, risk, and safety before the start of the pilot.

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