Enhancing Real-Time Service Disruption Notifications

To accompany SR 25-271, May 14, 2025

Jonathan Bair, Communications Manager

On behalf of the Communications, Transportation, and Innovation & Technology Departments

Purpose & Goals

Purpose:

Improve real-time disruption alerts for a better rider experience

Goals:

- Reduce uncertainty during detours
- Automate and streamline alert workflows
- Support GTFS-RT and CAD/AVL enhancements
- Align with service quality and reliability goals

Definitions

- **CAD/AVL**: Computer-Aided Dispatch / Automatic Vehicle Locator. Software that is the communications and “brains” behind dispatching and managing buses in service. Furnished by Clever Devices
- **GTFS**: General Transit Feed Specification, an open standard for communicating transit data, both schedules and realtime (RT). Used by Google Maps, Transit App, etc. Learn more at gtfs.org
- **Realtime / Transit API / Mobile App**: Different ways that AC Transit transmits and displays real time transit information to riders and the public.
- **Service Alert**: A text-based notification to riders, defined by GTFS-RT, that can be appended to a line or stop in Realtime and GTFS.

Why do real-time predictions matter?

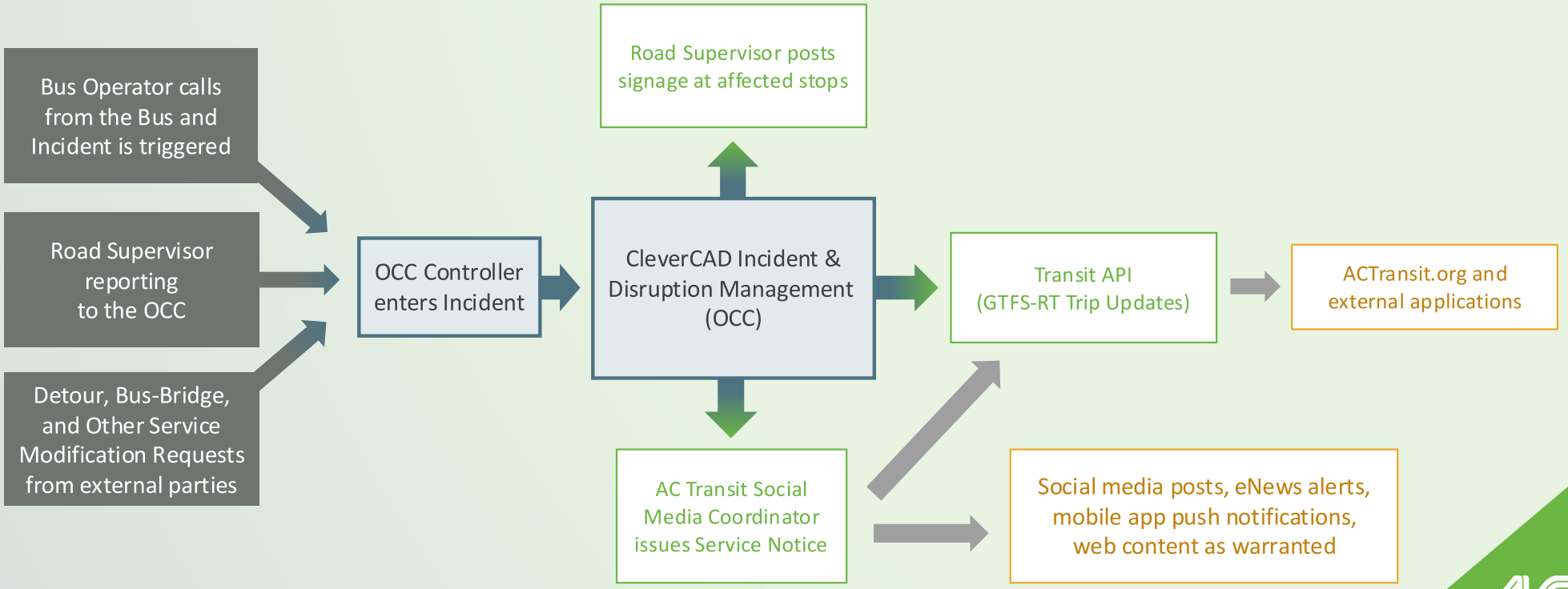
- Less waiting. Less guessing.
- Riders trust the system more.
- Helps people choose transit with confidence.

"The results suggest that the primary behavioural changes associated with providing RTI *(Real Time Information)* to passengers pertain to decreased wait times, reductions in overall travel time due to changes in path choice, and increased use of transit. RTI may also be associated with increased satisfaction with transit service and increases in the perception of personal security when riding transit."

Brakewood, C., & Watkins, K. (2018). A literature review of the passenger benefits of real-time transit information. *Transport Reviews*, *39*(3), 327–356. https://doi.org/10.1080/01441647.2018.1472147

actransit.org

Current Service Disruption Management



Why It's Hard Today to Notify Real-Time Disruptions

- **Operational**
  - OCC moves fast – hard to keep up
  - Drawing detours and marking stops takes time
- **Organizational**
  - Limited Social Media Coordinator staffing at OCC
  - Same info entered in too many places
  - Far-flung bus routes in some areas and traffic congestion in other areas limit ability of road supervisors to post closure notices at stops
- **Technical**
  - AC Transit tools don't display "effect" of service alert (ie, stop closed)
  - Information that's contained in Clever has to be extracted and posted to the public by a staff member
  - Indirect relationship between Clever Devices software and industry standard GTFS
  - System setup time prevents quick updates for short-term detours

CleverCAD improvements coming in 2025

Controllers will be able to:

- Save/reuse detours
- schedule detours for arbitrary and repeating times
- more easily identify impacted stops
- improve dissemination of detour driving directions to operators
- easily apply service notices to multiple stops

Plus: integration with Clever GTFS-RT detours module

Future Steps

- Communications and IT are continuing to research best practices
- GTFS-RT disruptions module is published and will be adopted over time by third parties like Google Maps
- IT is looking at potential CAD 2.0 feature needs, including further improvements to disruptions communications

End