

TRANSIT AGENCY SAFETY HAZARDS

As originally published in Paul Comfort's book, *The Future of Public Transportation*.

Transit Safety and Hazard Awareness

Safety is a top priority for public transportation agencies. The Federal Transportation Administration (FTA) requires transit employees be trained to recognize and report safety hazards, or risk losing grant funds. The million dollar question is, "how will hazards be reported?" Authorities can only mitigate hazards they know about.

■ I have a concern about the of the track going east on the line in between [redacted] station. I am on car [redacted] and it was shaking hard at high speed on that segment. I have been riding for six years and have not felt the train rock so hard as it did today.
Dave

Safety-minded transit agencies need employees and passengers to report hazards they observe. Often a phone number is provided to report hazards, but people dislike making phone calls. Phone calls are inconvenient for the caller, expensive to process, and error prone to transcribe. Talking with a dispatcher leaves the caller feeling more involved than they want to be. As a result, they don't call. Employees and transit riders want to help but they are in a hurry. It's a lot easier to use a mobile app to discreetly report something to a transit agency.

Proactive transit agencies know how important it is to listen to their customers. Periodic surveys indicate what riders think about past experiences. There is no substitute for receiving real-time messages from passengers and employees who have a serious concern right now.

👁 Safety Issue

■ Door is swinging open between stations on [redacted] train car [redacted]. There is also no train car number over the emergency intercom. A child could fall out of this door and it would be impossible for a rider to report.



Social Media is lousy for incident reporting

Riders want to vent when they see a problem. Complaints often end up on social media where they live forever, damaging the transit's reputation, and are often not actionable. One transit agency noticed a post with a photo of a discarded Christmas tree on its tracks, but with no location information. The agency learned exactly where the tree was when the train hit it!

Human Hazards

People want to help. The fuel that drives ELERTS communication system is the person who reports a hazardous or quality of life condition. "Crowd-sourcing" safety concerns leverages the eyes and ears of employees and passengers to keep the system safe and comfortable for all.

👁 Safety Issue

📍 Bus

■ Route [redacted], bus [redacted] This driver had a attitude, and he was driving erratically at times. He would hit the brakes hard occasionally while driving very slow, and he almost ran another driver off the road on the highway near station. That other driver figuratively had to "lay" on the horn to get the bus driver's attention. Y'all might wanna have a manager or supervisor to check him out and make sure he's not falling asleep or DUI.

Human Sensors drive Situational Awareness

Transit riders make excellent sensors; when something looks suspicious or out of the ordinary they notice and report their concerns. Agencies have received over 500,000 incident reports from the ELERTS mobile app. An attached photo or video says a thousand words about what is going on. The GPS location tells where it is happening so a dispatcher can respond. These early warnings make it possible to address a safety hazard promptly and sometimes save a life.



CRIME IN PROGRESS

I am Deaf I cannot make call! My name is [redacted] and I was driving behind bus #2820 along P then 5th and the bus turned into L (west) from my postal truck.

"CALL POLICE 911"

Visualize the Situation at your Transit Agency

Analysis of hazard data reveals what is going on in a transit system, both, at the incident level and in aggregate over time, through charts and graphs. Trends become apparent. Passenger's real-life experiences provide actionable data for dispatchers and managers.



Data changes your perception. Agencies are making huge investments in Safety Management Systems. The value of these systems increases exponentially when fed a steady flow of hazard reports from employees and riders.

Transit agencies use ELERTS system to protect over 2 billion passengers annually.

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| Amtrak | Atlanta MARTA | Atlanta STREETCAR | Boston MBTA |
| Buffalo NFTA | Charlotte CATS | Northern Indiana SOUTH SHORE LINE | Chicago METRA |
| Contra Costa TRI DELTA | Columbia, SC THE COMET | Delaware DART | Delaware River Port Authority |
| Denver INTL. AIRPORT | Dallas DART | Jacksonville JTA | Los Angeles FOOTHILL TRANSIT |
| Louisville TARC | Petersburg Area Transit | Minnesota Valley MVTA | Orlando LYNX |
| Phoenix VALLEY METRO | Sacramento SACRT | San Francisco BART | Santa Clara VTA |
| SE Pennsylvania SEPTA | South Jersey & Philadelphia PATCO | Toronto TTC | Victor Valley VVTA |