

The MBTA Builds a Safety-First Culture from the Ground Up

The Challenge

THE MBTA IN MASSACHUSETTS is one of the largest and oldest legacy transit systems in the United States, carrying 1.3 million passengers daily on commuter rail, heavy rail, light rail, BRT and underground bus, ferry, and paratransit. It is no secret that a decade ago, the MBTA's safety culture across all modes was considered "very poor," says MBTA Chief Safety Officer Ronald Nickle, who was brought in to make transformational changes. The agency has had its work cut out for it, given the necessity of coordinating with 27 separate unions, reversing a punitive culture that discouraged incident reporting, and winning top management's support for critical initiatives.

Nickle and his team have spent the last several years implementing (and laying the groundwork to implement) many of the concepts and best practices discussed in **TCRP Report 174: Improving Safety Culture in Public Transportation**. The report offers a rich trove of research on



the elements that make up and influence safety culture within public transportation and other industries. It identifies proven methods and tools for assessing safety culture, performance indicators and reporting practices, and guidelines for building a successful safety program.

Support for Safety at All Levels

ONE OF THE OVERARCHING conclusions of **TCRP Report 174** is that it is not possible to establish an effective,

sustainable safety culture within a transit organization without meaningful support from the top, middle, and bottom (front line) layers of the organization.

The MBTA has made measurable progress with top and senior management, and continues to develop strategies for improving safety-related engagement with union employees. At the top of the organization, a standing committee that includes the safety team and the COO, Chief Engineer, Assistant General Manager of Capital Delivery and other senior executives meets regularly to review safety objectives.

Support for Safety at All Levels (continued)

The committee “provides us funding we did not have before,” Nickle says. For example, the senior leadership team and the MBTA Board approved a multimillion-dollar investment for a train protection system to be retrofitted on the aging Green Line light rail system. The Board has also funded, as a strategic priority, the agency’s efforts to adhere to OSHA workplace safety standards. And senior management has approved a written policy prohibiting retaliation against employees who bring safety concerns forward.



As **TCRP Report 174** notes, “Leaders must walk the walk, fight for adequate resources to be budgeted to support safety and safety culture programs, hire and promote managers and supervisors who are similarly minded, and be willing to support innovative ideas...that will positively affect safety culture.”

The MBTA has also made progress in building trust at the employee level, although the work is ongoing. The report drives home the point that “Even the most committed leadership will not succeed in improving safety culture without significant employee involvement and buy-in.”

To this end, over the last six months, some of the MBTA’s unions have appointed chief safety officers for each facility within the system. This has opened the door to bottom-up reporting on issues needing attention. For example, the old Quincy Garage, originally built as a barn to move horse-drawn trolleys, needed extensive infrastructure upgrades to function as a modern bus barn. The union identified the needs and the MBTA’s safety team went to work organizing improvements. “That really started to build confidence,” Nickle says.

Tracking Performance Indicators and Attitudes

ANOTHER HIGHLY recommended practice documented in **TCRP Report 174** is the need for performance indicator tracking. Specifically, “[M]onitoring trends in leading performance indicators

as a function of time may provide insight into the strengths and weaknesses of a particular safety culture and may show the direction in which the state of safety culture is going.” The MBTA is tracking roughly 6,000 incidents and near-misses annually and assigns a hazard classification to each. One upshot is “an increase in the volume of safety concerns reported to us—better reporting and better data capture,” says Holly Durso, MBTA’s Director of Transportation Safety.

The other side of the measurement coin is assessing employee knowledge and perceptions about safety. **TCRP Report 174** recommends a combination of surveys and interviews as an effective approach. The MBTA is planning both an across-the-board perception survey and a smaller-scale set of interviews with a cross-section of employees.

The MBTA is on track to implement and integrate many of the key best practices and recommendations embodied in **TCRP Report 174**, whereby “a positive safety culture [is] characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy measures.” •

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