FTA RESEARCH
FEDERAL TRANSIT ADMINISTRATION

REPORT SUMMARY

U.S. Department of Transportation
Federal Transit Administration

2016 Safety Research Demonstration (SRD) Independent Evaluation

Interim Report

Background

FTA's Transportation Innovative Improvement Program is authorized in Federal public transportation law (49 U.S.C. §5312(b)). The Safety Research and Demonstration (SRD) Program, which was developed under this authority, is a competitive demonstration opportunity under FTA's Safety Research Emphasis Area in support of U.S. Department of Transportation safety goals. The SRD program provides technical and financial support for transit agencies to pursue innovative approaches to eliminate or mitigate known safety hazards through the demonstration of technologies and safer designs. In 2016, FTA awarded SRD funds to seven grantees for projects to deploy address collision avoidance and mitigation and transit worker protection technologies.

Objectives

Project objectives include the following:

- Evaluate demonstration projects awarded to 2016 SRD grantees.
- Assess the contribution of these projects towards advancing FTA SRD programmatic goals of improved collision avoidance and increased worker safety.
- Estimate the broader national-level impact of SRD projects.

Findings

This interim report summarizes seven SRD projects and includes the project performance measures established by grantees and lessons learned to date from grantees.

CUTR is using the data generated by the deployed technologies to independently evaluate the overall success of each project in meeting established performance measures, including safety improvement, system effectiveness, return on investment, and technology/knowledge transfer. Grantee-reported successes are being reviewed based on the performance measures and associated metrics, and relevant findings are being translated into the overall program evaluation, highlighting any large-scale benefits reflected in the individual SRD project outcomes.

The program evaluation is not comparing competing technologies or applications demonstrated in SRD projects, but the broad assessment will be scaled to indicate national implications associated with technology deployment successes. The results of the evaluations and lessons learned from each project will support the continuous evaluation of the SRD program's national implications and benefits in addressing the thematic areas of Collision Avoidance and Mitigation and Transit Worker Safety Protections.

CUTR will prepare a final report that will include the outcomes of each deployment, including comprehensive lessons learned, success of those projects in meeting self-defined performance, national implications associated with deployment successes, and applicability to all public transportation operating environments.

Benefits

The report may be used as a resource for transit agencies considering the deployment of these technologies or for those that are evaluating potential mitigation strategies, such as representative technologies to address transit collisions and the safety of transit workers. Multiple audiences may benefit, including transit agencies, state safety oversight agencies, state departments of transportation, and other organizations interested in using and/or promoting collision avoidance and transit worker protection technologies.

Project Information

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This research project was conducted by the Center for Urban Transportation Research (CUTR) at the University of South Florida. For more information, contact FTA Project Manager Roy Chen at (202) 366-0462 or RoyWei-Shun.Chen@dot.gov. All research reports can be found at **https://www.transit.dot.gov/about/research-innovation**.