Rail Transit Maintenance

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Transit Challenges. Practical Solutions.

Report 170

Establishing a National Transit Industry Rail Vehicle Technician Qualification Program - Building for Success

This report describes a system of qualification that has been developed for rail vehicle technicians. This qualification system is available for implementation through the Transportation Learning Center. The program integrates national training standards, progressive classroom curricula and introductory courseware, on-the-job learning modules, an apprenticeship framework that combines well-designed sequences of learning, mentoring to support learners, and coordination of classroom and on-the-job learning.

Report 155

Track Design Handbook for Light Rail Transit, Second Edition

This report provides guidelines and descriptions for the design of various common types of light rail transit (LRT) track. The track structure types include ballasted track, direct fixation ("ballastless") track, and embedded track. Characteristics and interfaces of vehicle wheels and rail, tracks and wheel gauges, rail sections, alignments, speeds, and track moduli are considered in this report.

Synthesis 107

Rail Transit Track Inspection Practices

This synthesis offers information across a range of older and newer U.S. rail transit agencies on track inspection practices and policies. Since there are no actual rail track safety or maintenance standards promulgated for transit, this report is designed to help to provide rail transit agencies with information that might help it develop its own set of track safety and maintenance standards. Issues addressed in the report include agency staffing, agency organization and characteristics, track inspection program criteria, training and certification, procurement, and track safety practices.

Synthesis 151

Maintenance Planning for Rail Asset Management – Current Practices

The occurrence of rail defects, broken rails, and broken rail derailments is consistent with the rate of development found in other studies that look at larger populations of rail defects. Likewise, the larger and more heavily used transit systems develop increased levels of defects, which is again consistent with what is seen in the railroad industry at large. This report presents the results of a survey and the analysis of the response data in an effort to synthesize current practices.

Synthesis 100

Elevator and Escalator Maintenance and Safety Practices

This synthesis documents elevator and escalator maintenance activities, safety practices, and passenger communication efforts at five U.S. transit agencies. The five agencies where information was gathered are MARTA (Atlanta, Georgia), NYCTA (New York, New York), SEPTA (Philadelphia, Pennsylvania), CTA (Chicago, Illinois), and BART (San Francisco, California).

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