

SB 20-1 December 30, 2020 End-of-Railcar Door Signage and Messaging

### Purpose

This Safety Bulletin (SB 20-1) provides safety considerations for Rail Transit Agencies (RTAs) associated with end-of-railcar door signage and messaging in rail transit vehicles.

### Background

On September 23, 2018, a Southeastern Pennsylvania Transportation Authority (SEPTA) subway train operator stopped a southbound train between Alleghany Station and the North Philadelphia Station due to a passenger activating an emergency alert. The train operator performed a ground level inspection of the train and discovered a seven-year-old boy who was struck and killed by the train about ten feet south of the Alleghany Station platform.

A National Transportation Safety Board (NTSB) investigation determined the child fell between the railcars as he was walking through the end-of-railcar doors as the train moved out of the Alleghany Station.

Numerous RTAs use railcars with end-of-railcar doors, which provide a pathway between two adjoined railcars for employee use and for passenger use during emergency situations. The gaps in the floor area between the adjoined railcars can be dangerous to traverse when the train is moving. At the time of the SEPTA accident, the only warning in the railcar was lettering on the door frame above the end-of-railcar doors stating "NO PASSING THROUGH."



### Federal Transit Administration, December 30, 2020

The guidance in this document is not legally binding in its own right and will not be relied upon by the Federal Transit Administration as a separate basis for affirmative enforcement action or other administrative penalty. Compliance with the guidance in this document (as distinct from existing statutes and regulations) is voluntary only, and noncompliance will not affect rights and obligations under existing statutes and regulations.

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Additional signage by transit rail operators with end-of-railcar doors may increase the likelihood that passengers are informed of the danger of traveling between railcars, especially when the train is in motion.

## Safety Risks

The term "end-of-railcar doors" describes a specific configuration used to couple two or more rail vehicles. These doors are located at the front and rear of a railcar and open onto an exterior space between or beyond the railcars.

RTAs display a variety of end-of-railcar door messaging and signage to discourage passenger use of railcar doors; however, the signage and the messaging is not standardized across the industry and, in some cases, within an RTA. Inadequate signage and messaging on the dangers of passing between end-of-railcar doors poses a safety risk to transit employees and passengers.

## **Resources Available**

To address this risk, RTAs may consider evaluating the design and placement of the warning signs and messages within their railcars. For example, RTAs may consider whether end-of-railcar signage and messaging clearly communicates basic information such as the safety risk associated with moving between railcars and who to contact in case of emergency. RTAs also may consider the extent to which the signage and messaging attracts the reader's attention, clearly communicates the RTA's policies and guidance, and reflects best practices for communicating safety messages.

The American Public Transportation Association (APTA) has two existing voluntary standards for emergency signage:

- 1. <u>APTA PR-PS-S-002-98</u>, Rev.3, Emergency Signage for Egress/Access of Passenger Rail Equipment that specifies requirements for letter-size, luminance/illuminance criteria, sign size, and color and contrast of emergency signage.
- 2. <u>APTA RT-VIM-S-021-10</u>, Rev.1, Emergency Signage for Rail Transit Vehicles that offers minimum performance criteria for emergency signage.

Although RTAs may not classify their end-of-railcar doors as emergency exits, the design principles of the APTA standards may be applied to safety-critical end-of-railcar door signage.

There are additional resources that contain information on developing end-of-railcar door signage and messaging:

- 1. (OSHA) Regulation 29 CFR 1910.145, Occupational Safety and Health Administration, *Specifications for Accident Prevention Signs and Tags.*
- 2. International Organization for Standardization (ISO) 3864-1:2011 and ISO 7010:2019.
- 3. American National Standards Institute (ANSI) Z535 series.



# Resources

# FTA

This Safety Bulletin can be found on the FTA webpage link below:

FTA Safety Bulletins

External

NTSB Hazards of Moving Between Transit Railcars - RSR19-01. August 27, 2019

APTA Standard for Emergency Signage for Egress/Access of Passenger Rail Equipment. October 22, 2007

APTA Emergency Signage for Rail Transit Vehicles. December 6, 2017

OSHA Specifications for accident prevention signs and tags. December 14, 2007

ISO 3864-1:2011 Graphical Symbols – Safety Colours and Safety Signs -Part 1 Design principles for safety signs and safety markings. April 2011

ISO 7010:2019 Graphical Symbols – Safety Colours and Safety Signs – Registered Safety Signs. July 2019

