



# SAFETY BULLETIN

FEDERAL TRANSIT ADMINISTRATION

## SB 19-02

April 18, 2019

## Safety Considerations Associated with Between-Car Barriers

### **Purpose**

*This Safety Bulletin (SB 19-02) provides safety considerations associated with between-car barriers (BCBs) used by rail transit systems.*

### **Background**

Regulations implementing the Americans with Disabilities Act (ADA) at 49 C.F.R. § 38.63 and § 38.85 require rapid rail and light rail transit systems to use BCBs to protect blind and low-vision passengers from mistaking the space between railcars as a doorway and inadvertently stepping off the platform between cars and falling to the track bed. Rail transit systems operating multicar trains and servicing elevated, level-boarding platforms must adhere to these regulations.

### **Actions Taken**

After a visually-impaired passenger failed to detect a BCB and fell through a 10-inch gap to the track bed in May 2018, FTA issued a Request for Information to State Safety Oversight Agencies (SSOAs) to gather information associated with gaps between railcars and rail transit agency (RTA) compliance with the ADA BCB requirements. FTA received submittals from the 31 SSOAs that oversee the 65 RTAs in the SSO program. The 65 RTAs operate 77 rail transit modal systems, including heavy rail, light rail, hybrid rail, streetcar, automated guideway/monorail, cable car, and inclined plane modes. BCBs are required for 27 (or 35 percent) of these 77 transit modal systems.



## Analysis

FTA gathered information on the configurations and uniformity of BCBs currently in use and on related concerns or accidents that occurred in the past five years.

- **Configuration and uniformity of BCBs:** FTA found that RTAs use a variety of BCBs, including platform-mounted devices (bollards, fencing, and screens) and car-mounted devices (bars and end barriers, chains, retractable belts, pantograph gates, and rubber barriers). Some BCBs fully span and block the horizontal gap between cars, while others do not. SSOAs reported gaps between BCBs ranging from 0 to 12 inches. They also noted inconsistencies in BCB usage from one train to another, one platform to another, or between systems.

Blind and low-vision passengers rely heavily on familiarity with environmental arrangements and routines. Inconsistencies can confuse these passengers. Additionally, large horizontal gaps between railcars hinder their ability to clearly and quickly determine if the gap they are approaching is the railcar doorway they want to step through or a gap between railcars they want to avoid.

- **Safety events:** FTA learned that the accident in May 2018 is the only such event to meet FTA’s SSO Program reporting thresholds over the last five years. However, seven SSOAs have identified and addressed issues involving the absence, configuration, or performance of BCBs with their RTAs since 2014. In addition, because RTAs and SSOAs do not typically collect information on “near-misses,” such as when blind or low-vision passengers may catch themselves before falling or fall without injury, the likelihood of these occurrences and their potential severity may not be fully understood.

## Next Steps

The ADA BCB regulations do not prescribe a standard design or specification for BCBs. Compliance with the regulations may not sufficiently mitigate the safety risk associated with gaps between railcars. Therefore, SSOAs and RTAs should consider assessing any safety risk associated with BCB mitigations currently in place.

RTAs also may explore ways to capture, track, and analyze incidents and near-misses associated with BCBs and integrate this information into their safety management system processes to monitor the effectiveness of BCBs. RTAs also may consider how inconsistent BCB application across fleets and platforms may affect BCB effectiveness. RTAs may consider these BCB-related concerns when procuring new railcar vehicles (for car-mounted barriers) or when building new stations and facilities (for platform-mounted barriers).

## Additional Resources

This Safety Bulletin and related documents can be found on the FTA Webpage link below.  
<https://www.transit.dot.gov/regulations-and-guidance/safety/transit-safety-oversight-tso>

