



# U.S. Department of Transportation Federal Railroad Administration

## Railroad Crossings and Pedestrian Safety



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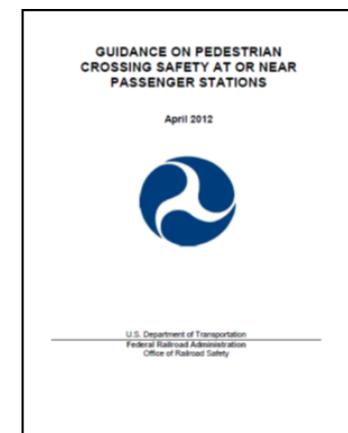
# Section 201 of 2008 RSIA

## SEC. 201. PEDESTRIAN CROSSING SAFETY.

Not later than 1 year after the date of enactment of this Act, the Secretary shall provide guidance to railroads on strategies and methods to prevent pedestrian accidents, incidents, injuries, and fatalities at or near passenger stations, including—

- (1) providing audible warning of approaching trains to the pedestrians at railroad passenger stations;
  - (2) using signs, signals, or other visual devices to warn pedestrians of approaching trains;
  - (3) installing infrastructure at pedestrian crossings to improve the safety of pedestrians crossing railroad tracks;
  - (4) installing fences to prohibit access to railroad tracks;
- and
- (5) other strategies or methods as determined by the Secretary.

# Structure of the Guidance Manual – released April 20, 2012



- Hazard analysis approach to enhancing safety
- **Fencing at or near passenger platforms**
- Passenger stations in multiple track territory
- ADA considerations, swing gates, safe access for all users
- Accommodating high passenger and train volumes
- **Infrastructure at pedestrian crossings to improve safety**
- Station signing and the importance of maintenance
- **Train-borne and station-sited audible and visual warnings**
- Enforcement initiatives at or near passenger stations
- Public outreach and crossing safety education programs

# Train-Borne Audible and Visual Warnings

- Governed by State law
- Usually done through R.R. operating rules.
- Not required by FRA's Quiet Zone rule



# Quiet Zones

## FRA's Train Horn Rule

### *§ 222.27 - How does this rule affect pedestrian grade crossings?*

- (a) Pedestrian grade crossings located within the boundaries of a quiet zone must be included in the quiet zone calculations.
- (b) Pedestrian grade crossings that are located in New Quiet Zones or New Partial Quiet Zones must be evaluated by a diagnostic team.
- (c) Advance warning signs. No train horn signage.

# Station-Sited Audible and Visual Warnings

- Guide pedestrians to proper crossing points
- Indicate when it is appropriate to cross
- Can specify:
  - Train arrival track
  - Train destination, and
  - Location of certain cars within the train
  - Train approach
  - Direction of train
  - Does train serve this station
  - Possibly, train speed on approach
  - **High-speed trains approaching – visibility is impeded**

**LOOK FOR TRAINS  
IN BOTH DIRECTIONS**





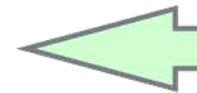
“...Expect a train on any track, at any time, from any direction.”



Passenger Station  
Safety Issues  
in  
Multiple Track  
Territory

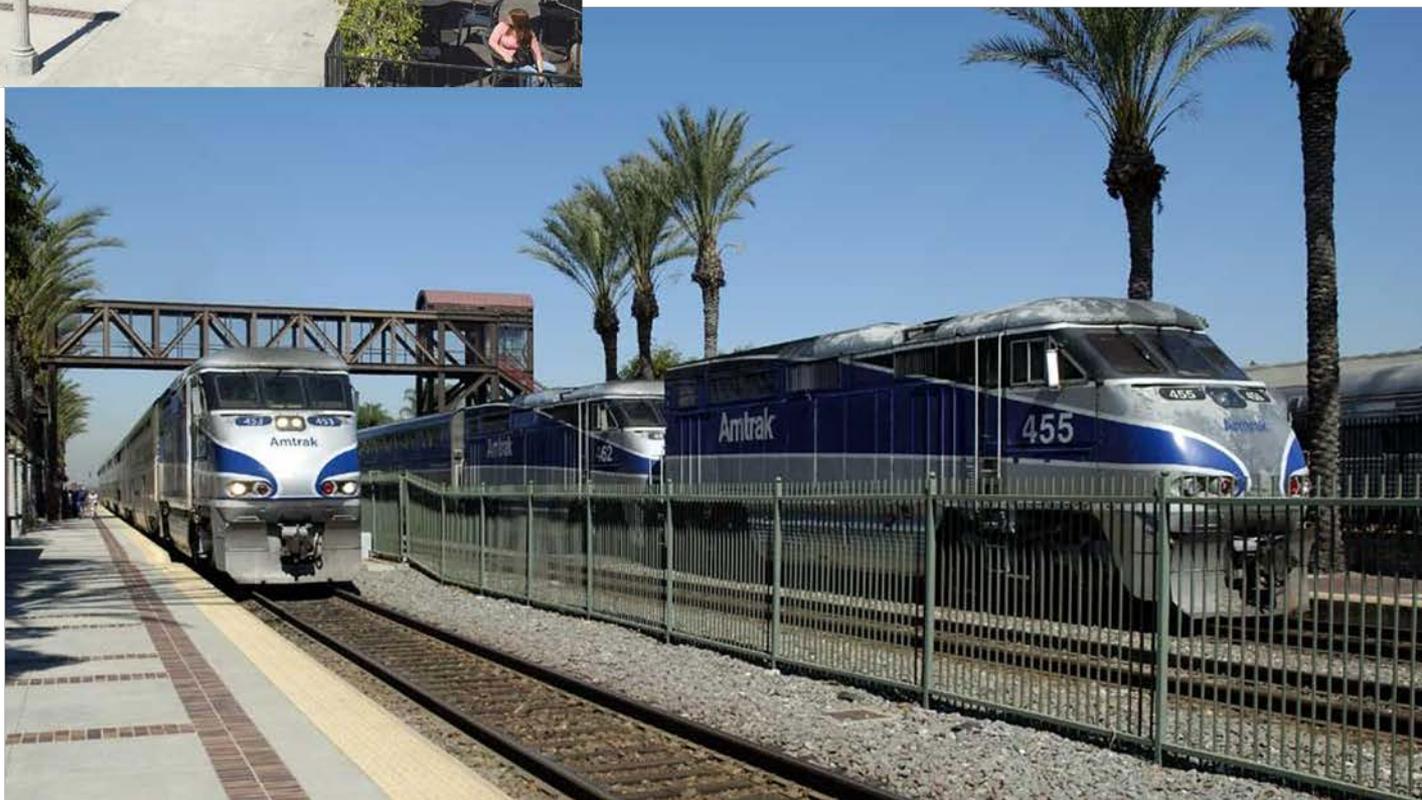
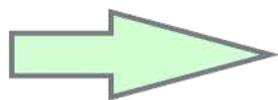
# Station-Sited Audible and Visual Warnings

- **Second Train Coming information.**
- **Both an audio and visual component.**
- **Distinctive messages stand out.**
- **Train direction and if train stops here.**
- **Approaching trains may be obscured by standing trains in station.**



Significant volumes  
of mainline freight  
traffic move  
all throughout  
the day and night...

...while busy  
passenger  
schedules  
run all day  
long.





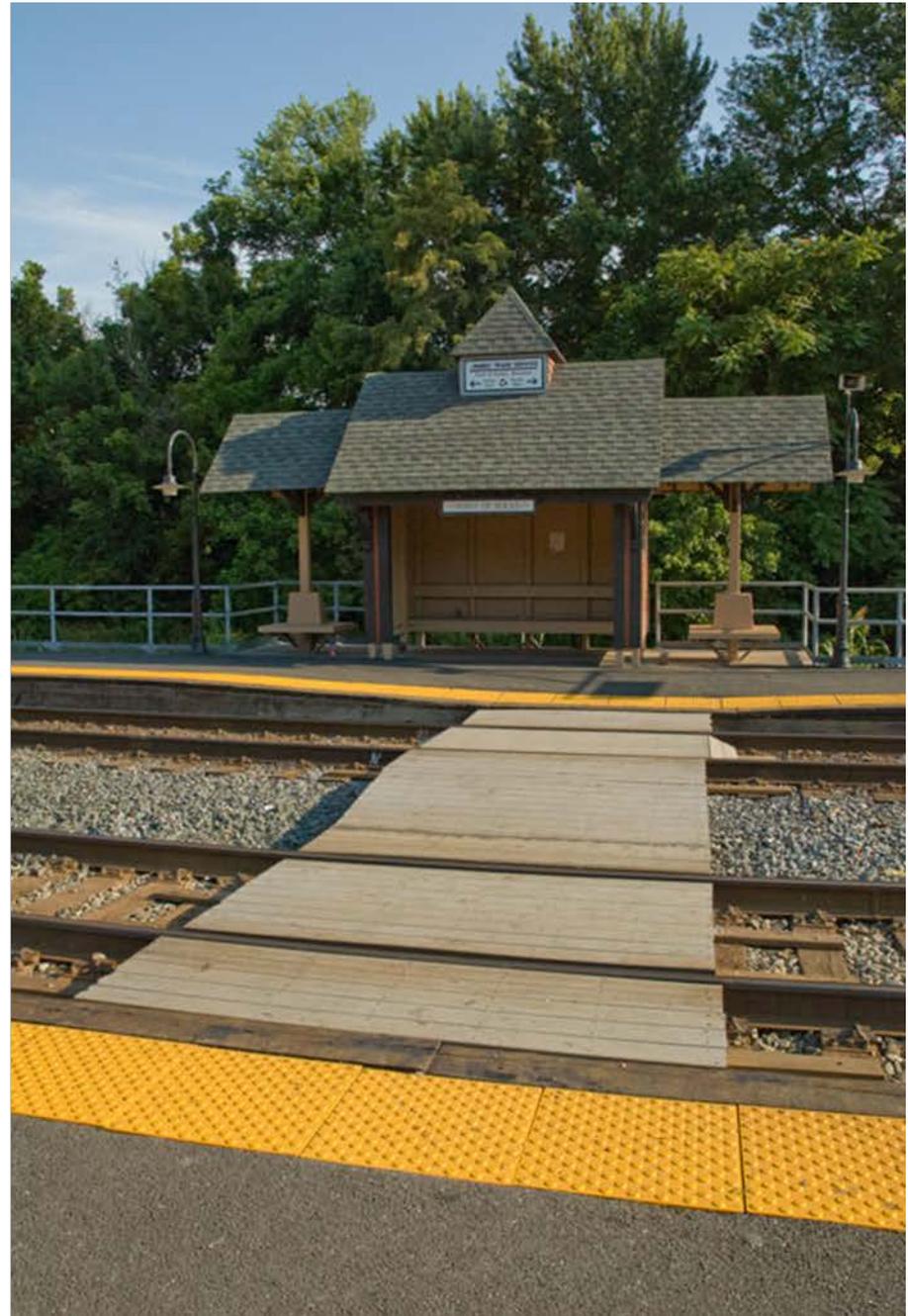
# Infrastructure improvements to channelize pedestrian flows



# The Chicane Method



**Infrastructure  
within  
Passenger  
Stations  
-  
ADA  
Consideration**



# Intertrack Fencing at Stations



# Tell them where NOT to go...



# Emergency Notification System (ENS)

MUTCD Emergency Notification Sign



The Final Rule Design



# Devices not currently shown in the MUTCD

The Federal Highway Administration is the custodial agency for the MUTCD. FHWA has established a process for the incorporation of new devices into the Manual.

Agencies utilizing devices that are not currently included in the Manual are strongly encouraged to participate in the MUTCD experimentation and interim approval process, which is described in detail in Section 1A.10 of the Manual.

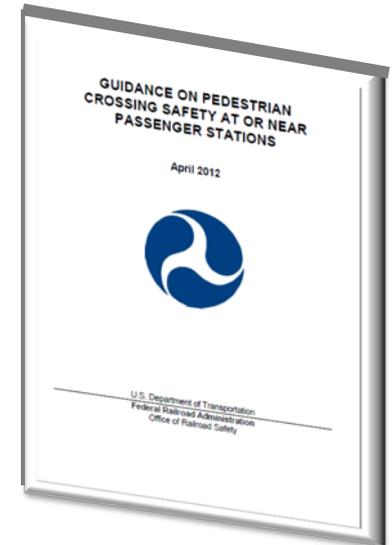
# FRA's Guidance Manual now available

- Input was solicited and received from many sources in industry and government.
- Document has been reviewed by several of FRA's Safety Partners.

Document is available on FRA website:

- click on the **Press Room** tab,
- then scroll to **Press Releases** to **4/20/2012** for the link.

[http://www.fra.dot.gov/rrs/downloads/PedestrianCrossingSafetyat\\_orNearPassengerStations.pdf](http://www.fra.dot.gov/rrs/downloads/PedestrianCrossingSafetyat_orNearPassengerStations.pdf)





**Thank-you!**

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