

### SSI 8: Enhancements to Trackside Warning Devices (TWD) *Dec. 14, 2021*

Effective on Jan. 1, 2022, a number of enhancements will be made to field detectors.

The BNSF Signal Engineering Office performed a braking study for longer trains at all 5A detectors, which are in place to protect bridges, tunnels and other structures. Under current rules, it is possible for defects detected during train passage to reach the structure before the crew is able to come to a complete stop.

As a result, the following changes will be put into place beginning on Jan. 1, 2022:

#### Real-time Defect Announcement

- If a defect is detected during train passage, a radio message of “You have a defect”, followed by the first defect detected, will be announced.

#### Train Crew Actions

- 5B Detectors
  - The only change is the addition of the first defect detected being announced during train passage. Crew actions remain the same for train handling.
- 5A Detectors
  - As soon as the message “You have a defect” is transmitted, provide warning to other trains and stop immediately.

#### Additional Instructions for 5A Detectors

- If a train is stopped on top of the detector, a post train alarm message will be transmitted summarizing defect(s) detected followed by “Out”.
  - Detector post train alarm message may identify more than one defect. Inspect train for all reported defects before proceeding.
  - Upon moving, the train defect detection will continue for the remainder of the consist. Additional defects may be identified and transmitted with invalid axle designation. Inspect both sides of the train from the last reported defect.

#### 5A Detectors Special Condition: Preparing to Stop

- Post train alarm message with “Train Too Slow” is transmitted.
  - If a train slowed below 20 MPH while crossing a detector in preparation to stop, follow train crew actions for announced alarm message.
  - Report “Train Too Slow” with alarm to Train Dispatcher.

Knowing the exposures present, ways to control the risk to those exposures, and cues to pause the work throughout the day can help ensure everyone returns home safely at the end of the workday.