

MEETING MINUTES

ITE Grade Crossing Committee Meeting

Date: October 24, 2024

Time: 8:00 – 9:25 am PST

Location: Microsoft Teams meeting

Participants

Karen Hankinson	Doug Noble
Nicole Jackson	Ana Coady
Maryam Hedayati	Marco DaSilva
Jason Field	Brian Gilleran
Brent Ogden	Lauren Jumanan
Tom Lancaster	Andrew Maximous
Shayne Gill	Carmen Talavera
Rick Campbell	Louis Rubenstein
Wes McClure	Phil Poichuk
David Wilcock	Tom Urbanik
Kevin Aguigui	Joanna Bush
Gyan Sinha	Cameron Harper
Ousama Shebeeb	

AGENDA

- **Introductions**
 - Karen Hankinson started the meeting by going through introductions for all attendees.
- **General ITE News/Events** (Doug)
 - International Annual Meeting 2025 – looking for speakers/topics
 - Doug Noble mentioned that the Call for Abstracts is open with the theme *Innovative Pathways of Safer Transportation* (<https://statics.teams.cdn.office.net/evergreen-assets/safelinks/1/atp-safelinks.html>). The abstract submission deadline is December 3rd.
 - Annual meeting in Orlando, FL, from August 10-13, 2025.
 - Looking for speakers for the conference. Any ideas on topics for presentations send to Karen Hankinson and Nicole Jackson.
 - If you have any contacts for Brightline and other agencies in Orlando, please send them to Karen and Nicole.
 - The annual meeting at the Philadelphia 2024 Conference in August went very well. Rick Campbell led the tour on complex, interconnected grade crossings. The committee was well represented. Thanks to all the participants for having a strong showing at the conference.
 - For a formal tour request for the 2025 ITE Annual Meeting, a separate abstract (from the presentation or session abstract submission) needs to be submitted. In the narrative



description, link the formal tour to the actual session, which helps with tracking/logistics.

- MUTCD Certification
 - Nicole Jackson is leading the course section on Part 8 (Rail/Light Rail). ITE is now working through all the presentations and recordings that go through all the chapters of MUTCD.
 - The course is self-paced, with live sessions every 3 weeks for Q&A and discussion. There are a few quizzes along the way, and the course finishes by the end of February.
 - Karen reminded the group to check the ITE community page for free webinars for ITE members that provide excellent technical resources/information. Previous webinars can be accessible through the archives. The webinars are also applicable for PDH credits.
- **Committee Liaison Updates**
 - FHWA (TBD)
 - Karen is in coordination with FHWA. They could not join this meeting due to a conflict with the Community of Interest (COI) meeting today.
 - FRA (Brian)
 - Brian Gilleran mentioned that the 11th Edition of MUTCD, with a hot link version on the MUTCD main page, is available ([MUTCD 11th Edition - 2023 - Hotlinks Version](#)).
 - Grade Crossing Safety and Trespass Outreach are working with communities/cities on their existing quiet zones. Several of them require immediate remedial attention to avoid suspension of the quiet zone.
 - Karen mentioned that some communities/cities have not been keeping up with Quiet Zone maintenance requirements, and quiet zones have been suspended by the FRA.
 - Quiet Zone and Train Horn Rule ([Train Horn Rule and Quiet Zones | FRA](#) [CFR-2023-title49-vol4-part222.pdf](#))
 - Jason Fields mentioned a 3-year or 5-year affirmation letter that the public authority must submit. There are concerns with the timely submission of the affirmation letters. FRA sends reminder emails/letters to communities/cities.
 - Any suspension FRA contemplates is preceded by several communications with the public authority.
 - Quiet Zone is not necessarily a Silent Zone
 - Doug mentioned that the Quiet Zones topic could be a potential webinar or series for next year. Jason volunteered to present some of the challenges and pitfalls with Quiet Zones.
 - AAR/Railroads – no update provided
 - Canada (Maryam)
 - A high-frequency rail project in Canada is currently in the planning phase with increased speeds of over 200 kilometers, serving routes between Quebec City, Montreal, Ottawa, Peterborough, and Toronto.
 - Maryam volunteered to do a presentation on Whistle Cessation in Canada.
 - Transport Canada process for obtaining a quiet zone: [Apply to stop train whistling at a public grade crossing](#)
 - AREMA (Karen)
 - Committee 36 recently met an updated drawings for Manual Part 16.3.10: Recommended Instructions for Preemption Interconnection.
 - Additional information on placement issues and configuration for pedestrian signals and



gates coordinated with different Class 1 railroads was also discussed.

- **Committee Products + Task Force Updates**

- Cyclists Considerations at Grade Crossings Task Force (Karen, on behalf of Nino)
 - Send examples of bike facilities at grade crossings to Nino and Doug
 - February 2024 Quick Bites available here: [Resources - Institute of Transportation Engineers](#)
 - Next Task Force Meeting to be scheduled
 - Contact Nino if you are interested in participating: agenoese@gfnet.com
- Another Train Coming Technical Paper (Brent/Doug)
 - Brent's updates are finished. Doug is planning to have this done by the end of this year.
 - Doug mentioned Google changed its terms of use for its content: Street view from Google Maps cannot be used, and images need to be taken by an individual. (Google Guidelines: [Brand Resource Center | Products and Services - Geo Guidelines.](#))
 - Doug mentioned that the ITE website has a photo library where anyone can post photos. ITE has the right to use these photos in presentations and bases a library for members to develop content. (ITE Photo Exchange: [ITE Photo Exchange - Institute of Transportation Engineers](#))
- Roundabouts and Grade Crossings Task Force (Joanna)
 - The task force successfully created a database of the existing roundabouts with crossings, and members are performing interviews with different jurisdictions.
 - After the interviews are finished, we will look to package the information and feedback received. The task force is working with Doug and Karen to figure out how to package the information.
- Traffic Signal Maintenance at Interconnected Crossings Quick Bite (Karen)
 - Draft is underway
 - Peer Review Next (Joanna, Nicole)
 - Completion Goal: January 2025
- Recommended Practice: Preemption of Traffic Signals Near Railroad Grade Crossings + MUTCD 11th Edition Updates Task Force (Nick/Kevin)
 - Kevin Aguigui mentioned that the task force had a total of four meetings, with the last meeting having eight members in attendance. Special shoutout to Johanna Bush for providing a thorough review and also to the rest of the task force members.
 - Draft edits are nearing completion and will be finalized by November. Changes will be focused on items to be consistent with MUTCD 11th Edition.
 - Doug indicated that the changes to this recommended practice are treated as a new addition to the document instead of a minor revision.
 - The following steps will be a Peer Review panel (5-7 people) to review the draft and the committee to incorporate comments. A new document will go through an industry/public review (Incl. AREMA, AAR, FRA, FHWA, etc.) comment period lasting 45 to 60 days. The document will be finalized after board approval.
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 - Next Task Force Meeting-October 25th 10-11am
- ITE Traffic Wiki (TBD)
 - Doug mentioned that the Traffic Wiki replaces the prior edition of the Traffic Engineering Handbook as an actively contributed and peer reviewed replacement. Current request out with councils/committees to review content for consistency with



MUTCD 11th edition and updates in current practice. Doug noted that the content should be reviewed for the appropriate level of railroad grade crossing content. Maryam volunteered to help update the wiki and look for additional support for this effort. (Link: [Wiki - Institute of Transportation Engineers](#)).

- **Committee Webinars (John)**

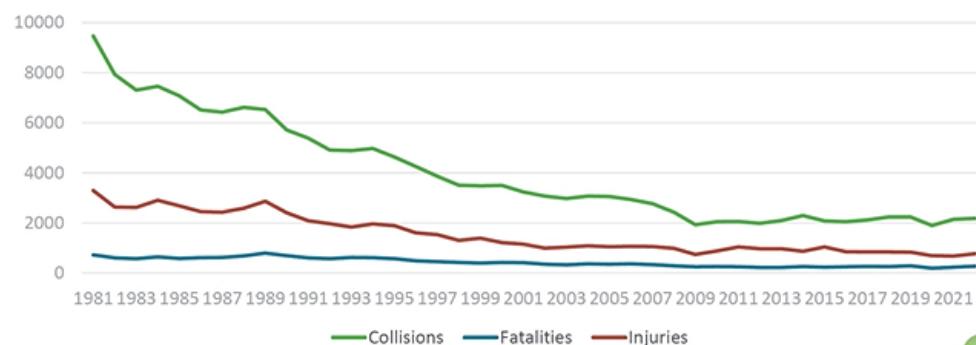
- Preemption Webinar– September 2024
 - Joint committee effort that went very well
 - Included a rail preemption presentation by Karen
- Future webinar ideas welcome
 - Quiet Zone

- **MUTCD 11th Edition Part 8 Changes - Continuation of Technical Content Discussion (Nicole)**

- Diagnostic team definition expansion was a significant addition to the 11th Edition
 - It was defined in Parts 1 and 8 that includes a group of knowledgeable representatives of the parties of interest in grade crossings
 - There is a difference in definition in the 23 CFR section
- There was a modification to the minimum track clearance distance.
- There were modifications in Part 8A regarding adjacent grade crossings within 200 feet of each other.
- Language modifications were also made in the Temporary Traffic Control section.
- Presentation slides:

Diagnostic Teams

- Since 2009, number of collisions, fatalities and injuries has remained flat
- What can we do to further reduce collisions, fatalities and injuries at grade crossings and how should we implement effective grade crossing engineering?
- It all begins with the Diagnostic Team; the definition of a diagnostic team dates back to the Federal Register Volume 40, April 9, 1975.



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Diagnostic Teams

Definition:

A group of knowledgeable representatives of the parties of interest in a grade crossing or group of grade crossings (see 23 CFR Section 109, Part 646.204).

§ 646.204 Definitions.

For the purposes of this subpart, the following definitions apply:

A diagnostic team means a group of knowledgeable representatives of the parties of interest in a railroad-highway crossing or a group of crossings.

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Diagnostic Teams

Section 8A.01 Introduction:

Grade crossings and the traffic control devices that are associated with them are unique in that in many cases, both the highway agency or authority with jurisdiction, the regulatory agency with statutory authority (if applicable), and the railroad company or transit agency are jointly involved in the development of engineering judgment or the performance of an engineering study. **This joint process is accomplished through the efforts of a Diagnostic Team made up of the highway agency with jurisdiction, the regulatory agency with statutory authority (if applicable), and the railroad company and/or transit agency (if applicable).**

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Diagnostic Teams

Standard:

The Diagnostic Team members shall make a recommendation, documented in an engineering study (see Section 8A.05), on new grade crossing traffic control systems and on proposed changes to an existing grade crossing traffic control system. The Diagnostic Team recommendation shall be made based on the Diagnostic Team's site visits, meetings, conference calls, or a combination of some or all of these methods.

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Diagnostic Teams

Among the types of changes at a grade crossing for which a Diagnostic Team shall conduct an engineering study are:

1. Additions to or modifications of the lanes approaching or traversing the grade crossing
2. Addition or removal of tracks
3. Significant changes in the number or speed of trains
4. Significant changes in the number or speed of vehicles
5. Addition of vehicle access near the grade crossing
6. Additions or modifications to sidewalks
7. Additions or modifications to bicycle lanes, especially if a counter-flow bike lane is added on a one-way street
8. Changes to roadway use, including conversion to or from one-way operation or reversible lanes; implementation of quiet zones
9. The installation of or significant operational changes to traffic control signals that might affect the grade crossing.

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Diagnostic Teams

Standard:

The appropriate traffic control system to be used at a grade crossing shall be determined based on an engineering study conducted by a Diagnostic Team involving the highway agency with jurisdiction, the regulatory agency with statutory authority (if applicable), and the railroad company and/or transit agency (as applicable).

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Diagnostic Teams

Guidance:

Among the factors that should be considered in the determination by a Diagnostic Team of which traffic control devices would be appropriate to install at a grade crossing are:

- road geometrics
- stopping sight distance
- clearing sight distance
- the proximity of nearby intersections
- adjacent driveways
- traffic volume across the grade crossing
- extent of queuing from the grade crossing
- train volume
- pedestrian and bicycle volume
- operation of passenger trains
- presence of nearby passenger station stops
- maximum allowable train speeds
- variable train speeds
- accelerating and decelerating trains
- multiple tracks
- high-speed train operation
- number of school buses or hazardous material vehicles
- the crash history at or near the location

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Minimum Track Clearance Distance

Section 8A.07

Support:

The upstream point of the minimum track clearance distance is determined in the following manner:

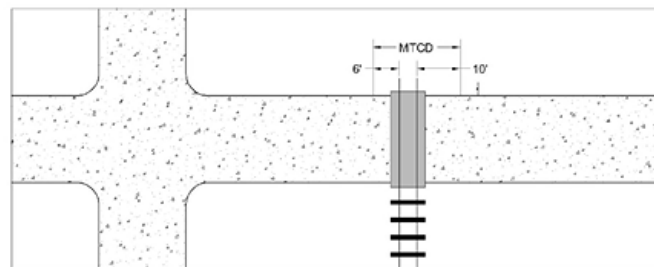
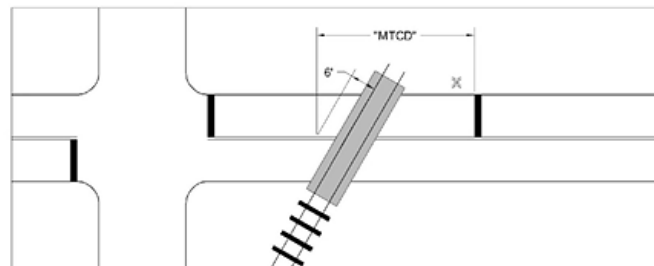
- If an automatic gate is present on the approach, the upstream point is the portion of the automatic gate arm that is farthest from the nearest rail.
- If an automatic gate is not present on the approach, the upstream point is the portion of the stop line that is farthest from the nearest rail.
- If the roadway is not paved, the upstream point is the point that is farthest from the nearest rail that is 10 feet measured perpendicular from the nearest rail.

The downstream point of the minimum track clearance distance is 6 feet beyond the track(s) or the edge of the downstream highway-highway intersection, whichever is closer, and is measured perpendicular to the farthest rail, along the center line or edge line of the highway, as appropriate, to obtain the longer distance.

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Minimum Track Clearance Distance



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Clear Storage Distance

Section 8A.07

Support:

Where a highway-highway intersection is located beyond a grade crossing, the clear storage distance defines on a lane-by-lane basis the area of the roadway between the downstream point of the minimum track clearance distance and the intersection stop line, yield line, or normal stopping point on the highway.

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Adjacent Grade Crossings

Section 8A.08

Support:

Adjacent grade crossings sometimes exist within 200 feet of each other as measured along the highway between the inside rails. These closely-spaced grade crossings sometimes result from separate railroads or from a railroad and an LRT alignment operating in parallel corridors.

Guidance:

Where adjacent grade crossings are located within 200 feet of each other along the highway as measured along the highway between the inside rails, the Diagnostic Team should consider the possibility that rail traffic might arrive at a grade crossing when rail traffic is already occupying the adjacent grade crossing.

Where the shortest distance between the tracks at adjacent grade crossings, measured along the highway between the inside rails, is 100 feet or less, the grade crossings should be treated as one individual grade crossing.

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Adjacent Grade Crossings

Section 8A.08

Guidance:

Where the shortest distance between the tracks at adjacent grade crossings, measured along the highway between the inside rails, is **more than 100 feet and less than 200 feet**, additional signs or other appropriate traffic control devices should be used to inform approaching road users of the long distance to cross the tracks.

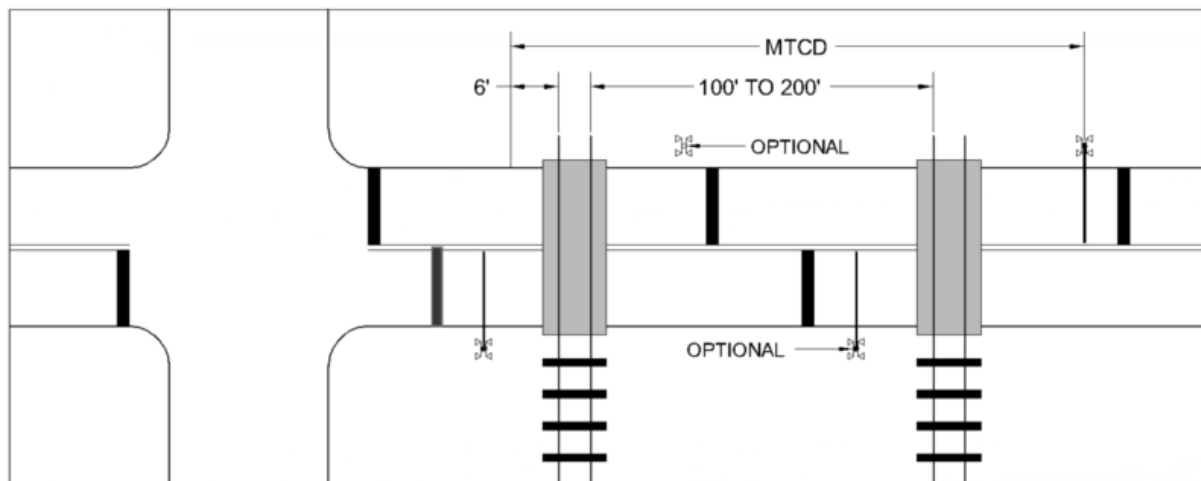
Where active traffic control devices are installed between adjacent grade crossings that are more than 100 feet apart and less than 200 feet apart as measured along the highway between the inside rails, the operation of the devices should provide additional time for vehicles to clear the extended minimum track clearance distance (see Section 8A.07) that results from the closely-spaced grade crossings.

Where the shortest distance between the tracks at adjacent grade crossings, measured along the highway between the inside rails, is **more than 200 feet**, the grade crossings should be treated as individual grade crossings and traffic control devices should be installed between the grade crossings.

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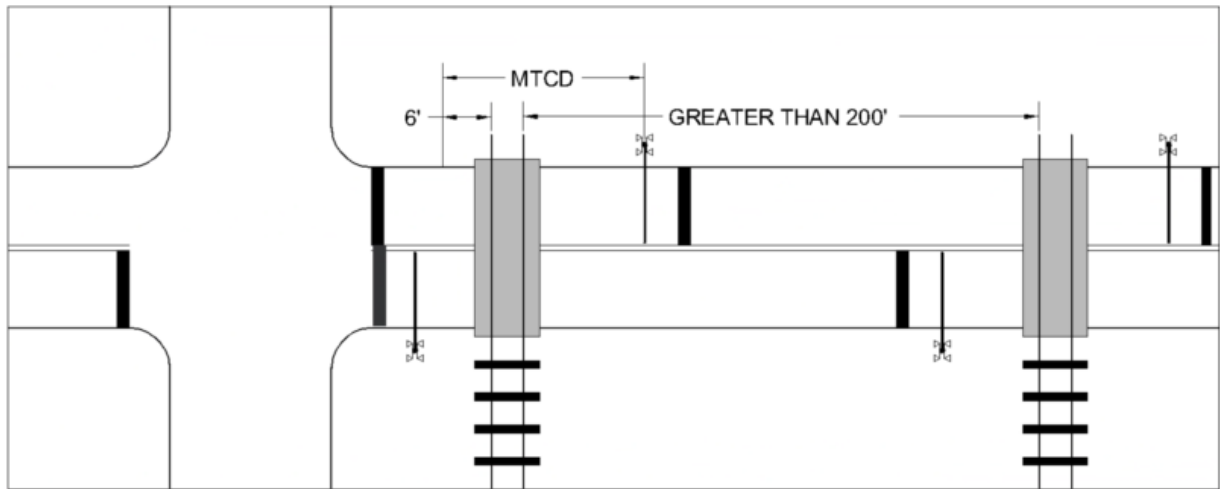
Adjacent Grade Crossings



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Adjacent Grade Crossings



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Grade Crossing Elimination

Section 8A.09

Standard:

Where a grade crossing is eliminated, the traffic control devices for the crossing **shall be removed**, and shall be covered or turned from view in the interim period prior to removal.

Guidance:

If the existing traffic control devices at a multiple-track grade crossing become improperly placed or are no longer applicable because of the removal of some of the tracks, the existing devices should be relocated and/or modified.

Where a roadway is removed from a grade crossing, the roadway approaches in the railroad or LRT right-of-way should also be removed and appropriate signs and object markers should be placed at the roadway end in accordance with Section 2C.73.

Where a railroad or LRT is eliminated at a grade crossing, the tracks should be removed or paved over.

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Temporary Traffic Control

Section 8A.13

Standard:

Traffic controls for temporary traffic control zones that include grade crossings shall be as provided in Part 6.

Guidance:

Where a temporary traffic control zone extends over an active grade crossing (see Section 6N.17), and where the direction of traffic in any lane is reversed over the grade crossing, the railroad company or transit agency should be part of the temporary traffic control planning process. Where a grade crossing warning system is not modified to support the temporary traffic control operation, at least one uniformed law enforcement officer should be in place at all times that rail traffic might approach or occupy the grade crossing.

Where traffic is detoured over an existing passive grade crossing, a temporary traffic control plan (see Section 6B.01) should be prepared.

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- **Open Forum**
 - TRB is Jan 5th to 9th, 2025.
 - Next ITE Grade Crossing Committee meeting is January 23rd, 2025, 8 am (PST)