

# SHRP2 Railroad-Department of Transportation Mitigation Strategies (R16) Community of Intertest Annual Meeting

TO: R16 Community of Interest, Kathleen Hulbert (FHWA), Pamela

Hutton (AASHTO), Kate Kurgan (AASHTO)

**PREPARED BY:** Jacobs R16 Team **MEETING DATE:** March 5-6, 2019

**VENUE:** AASHTO Headquarters, Washington, DC

# Purpose of the Community of Interest Annual Meeting

The purpose of this meeting was to gather invited members of the Community of Interest (COI), formed in support of SHRP2's Railroad-DOT Mitigation Strategies (R16) product. The goals for the participants were to enable them to share best practices, lessons learned, challenges, and accomplishments related to a variety of topics; hear from each other about industry trends and concerns; and most importantly, foster a collaborative environment in which to capture the most innovative ideas from all stakeholders for expediting project delivery. As this was the third and final annual meeting of the COI prior to the end of SHRP2 funding, this meeting also set the stage for potential extension of the program under a different framework. The COI meeting agenda is attached as Appendix A.

# **Participants**

The COI meeting included representatives from 121 state departments of transportation (DOTs) and several others that were able to join portions of the meeting by phone (Oregon, Colorado, California, Utah, Texas and Idaho), three Class 1 railroads, the American Shortline and Regional Railroad Association, FRA, FHWA, AASHTO, and Jacobs in its role as Project Manager for the R16 product. A complete list of participants is attached as Appendix B.

# **Executive Summary**

This annual COI meeting is the third of three in-person COI meetings that are included in the scope of work to implement the SHRP2 Railroad-DOT Mitigation Strategies product. The agenda was designed to continue the discussion of key topics already identified by states and railroads participating in the FHWA/AASHTO Implementation Assistance Program (IAP) and with the input of COI members. Presentations on specific topics were deliberately kept brief so that lengthy discussion periods could be accommodated and maximum input from all parties could be achieved.

<sup>&</sup>lt;sup>1</sup> Does not include phone participants.

This meeting included three of the Class 1 railroads – CSX, BNSF, and NS. The attendance of the Class 1 railroads is important because it shows that there is a broad base of common interests and concerns among the DOTs and the railroads. These concerns are often shared at various facilitated meetings requested by the DOTs participating in the program with their individual railroads. By seeing that certain issues are common across the spectrum of the DOTs and Class 1 railroads, the industry is helped as a result of the broad approach taken in the R16 implementation. The Class 1 railroads and DOTs readily agree that there is no other group like the R16 COI where the issues and challenges shared by both groups are discussed in a transparent manner with a commonly agreed goal to search for solutions and adopt best practices.

The PowerPoint presentations from the meeting are available on the AASHTO SHRP2 website at <a href="http://shrp2.transportation.org/Pages/R16 RailroadDOTMitigationStrategies.aspx">http://shrp2.transportation.org/Pages/R16 RailroadDOTMitigationStrategies.aspx</a>. Case studies, examples of agreements, operating and training manuals are available at AASHTO's R16 Innovation Library website at <a href="http://shrp2.transportation.org/Pages/R16\_InnovationLibrary.aspx">http://shrp2.transportation.org/Pages/R16\_InnovationLibrary.aspx</a>.

At the conclusion of the meeting, evaluations were distributed to the participants. Generally, the evaluators gave high marks to the exchange, finding that the content would be a benefit to their agencies. Most important were the presentations on Connected and Automated Vehicles and Section 130 Funding.

The following are key points that were made during the meeting:

- Significant progress has been made by DOTs and railroads in the areas of improved communication and collaboration. The COI has been a key facilitator for this improvement and should be continued beyond the conclusion of the SHRP2 effort.
- A single point of contact within FHWA and FRA would greatly improve communication and consistency across the program areas for both state DOTs and railroads.
- The establishment of DOT and railroad-specific Master Agreements has reduced costs for both the railroads and DOTs and has simplified their complex interactions.
- State by state/region by region inconsistent FHWA interpretation of Sec 130 rules persist; examples include preliminary engineering payments and applicability of funds.
- The adoption of new technologies, particularly connected and automated vehicles, will have a dramatic impact on the transportation industry and our collective working environments. Federal agencies overseeing its rapid development and regulation (both in the automotive and highway/rail industry) are quickly recognizing these complexities, particularly in address railroad crossing safety.
- The desire or legal ability to make use of alternative procurement methods (i.e., Design-Build and CM/GC) varies from state to state and pose a challenge for roadway projects within railroad limits.
- Issues remain when applying Section 130 funds and understanding the usage of funds. Legislative
  changes are needed to broaden the applicability of funds to reflect emerging technologies that will
  improve crossing safety. This is an area where AASHTO can provide support.

 Research into enhanced railroad crossing technologies, the hazard index, and other emerging issues should continue through AASHTO, the National Cooperative Highway Research Program (NCHRP) or other entities.

# Day 1 Overview

Day 1 of the meeting began with an overview of the agenda and SHRP2's overall effort and the *Railroad-DOT Mitigation Strategies* (R16) product more specifically. Each member of the COI then presented an update of its R16-related activity. A panel discussion of DOT and railroad key issues for improved collaboration followed these report-outs. Following a networking lunch, FHWA and AASHTO senior management hosted a panel to discuss how R16 will evolve in the future. The final session focused on joint preemption annual reviews. Day 1 wrapped-up with a recap of highlights and a networking opportunity.

# Summary of Presentations and Discussions, Day 1

#### Session 1: Community of Interest Update

Pam Hutton of AASHTO hosted these report-outs wherein each member of the COI presented an update of R16 activities.

Common themes included the following points:

- Information sharing via face-to-face meetings, virtual COI calls, webinars, and the R16 webpage has been invaluable.
- R16 has accelerated and in some cases created the opportunity to strengthen partnerships with and between railroads and state DOTs.
- Railroads have remarked that the COI meetings are the only place where they can meet and discuss issues of common interest with their railroad counterparts, often taking back ideas to replicate.
- The COI facilitates a common understanding and usage of railroad terminology, thus making communication between parties more efficient.
- Regularly scheduled meetings between the state DOT and partner railroads are widely used to maintain communication and collaboration.
- Through process diagrams and workshops, internal processes have been improved.
- Master Agreements are widely used to expedite project delivery.
- R16 COI members' input could be useful for the upcoming FAST Act reauthorization.
- Better bids are coming from design-build/alternative construction contractors because of targeted information packets and questionnaires developed by Class 1 railroads and DOTs.
- Issues that warrant continued discussion include:
  - Restructuring and reduction in force at Class 1 Railroads and its impact on DOT interface work
  - Improving Grade Crossing Safety and reduction of trespassing

- Preemption
- Section 130 and Buy America provisions
- Alternative project delivery
- Connected and automated vehicles
- Flagging coordination
- Improved coordination between FHWA and FRA
- Use and application of drones
- Electronic file sharing
- Increasing use of traffic circles adjacent to grade crossings
- There is a need for continued collaboration in the future through face-to-face meetings and potentially an online platform in the interim.
- Opportunity to integrate R16 with the National Grade Crossing Conference.
- COI is a "safe place" in which to have conversations that affect all the related agencies.

#### Session 2: DOT and Railroad Key Issues for Improved Collaboration in the Future

French Thompson of BNSF and Connie Raezer of Washington State DOT presented key accomplishments of the R16 program, and outstanding and ongoing issues to be addressed. Highlights from the discussion are below:

- Through the R16 program, important progress has been made to improve DOT and railroad communication and collaboration, but this work needs to continue to the benefit of all parties. This improved communication and collaboration also applies to federal partners FHWA and FRA.
- A LISTSERV could be developed and used to share information and best practices.
- FHWA headquarters can help facilitate conversation between FHWA division offices and DOTs/railroads.

#### Session 3: Panel with FHWA and AASHTO Senior Management

Amy Lucero of FHWA and King Gee of AASHTO provided opening remarks, commending the COI for the progress it has made to date and the high level of engagement it has demonstrated. Following their remarks, panelists Rob Mooney of FHWA and Shayne Gill of AASHTO led the balance of the session. The purpose of this session was to discuss how R16 will evolve in the future.

The following points were noted during the presentations and subsequent group discussion:

- Julie Johnston of FHWA is the point of contact for R16 post SHRP2.
- FHWA would like to host at least one face-to-face meeting per year to continue the R16 effort. It was suggested that Amtrak should be encouraged to join the group and noted that they have been invited to all prior meetings.

- The AASHTO Council on Rail or Freight states' meetings could serve as opportunities to broaden the COI. Topics for future webinars could be appropriate for Council on Rail webinars.
- FRA is hosting a Listening Session on new technology at grade crossings.
- There is a need to explore mechanisms or legislative changes to use Section 130 funds for already improved crossings; this requires DOT and AASHTO participation.
- State DOTs not currently involved in R16 should be included in future efforts.
- The AASHTO Rail Resource Center (an AASHTO technical service program) has 22 member states; each state makes an annual \$5,000 voluntary contribution.
- The AASHTO Rail Resource Center will host the R16 innovation library moving forward.
- A pooled fund, spearheaded by a state, could be a potential mechanism to continue R16.
- A state DOT inquired about FHWA's assistance with "rails to trails."
  - For safety reasons, trails next to rail lines are incompatible.
  - An inactive rail line is still of potential use to the railroad; as such, railroads won't easily abandon
    a rail line to preserve the rail corridor for future use.
  - Railroads look to purchase buffer property.
  - Municipalities should modify their zoning/land use policies adjacent to rail corridors. In many cases, land use policies allow high density development and schools to build next to long-standing railroad corridors.
- FRA's number one complaint is blocked crossings.
  - There is a difference between a blocked and occupied crossing.
  - It is cost-prohibitive for a train to be standing; the railroads aim to get from Point A to Point B as quickly as possible.

#### **Session 4: Joint Preemption Annual Reviews**

Lisa Stern of Wisconsin DOT hosted this discussion, along with a presentation from Gerald Stout and Frank Frey of FRA. The following discussion highlights were noted:

- CSX, BNSF, and NS have different processes for conducting reviews.
- On FRA's list of the 15 most dangerous crossings in the U.S., most are interconnected with traffic signals.
- FRA is proposing modifications to the National Committee responsible for changes to the Manual on Uniform Traffic Control Devices (MUTCD).
- Certain states cannot spend Section 130 funds on traffic signals.
- Preemption could be eligible under CRISI grants.

- FRA has a Rail Crossing Locator app. The state DOT is responsible for updating information on interconnected signals.
- Some DOTs and railroads believe funding for traffic counts should be eligible under Section 130.
- There is need for improved communication between local authorities, such as municipalities and counties, and railroads within their boundaries. It was suggested that a representative from the American Public Works Association or similar organization be included in future discussions on this topic.

#### Wrap-up for Day 1

The following summary of Day 1 was presented by Kate Kurgan as we wrapped up Day 1:

- DOTs and railroads should be aware of planned changes to the MUTCD.
- Three themes were consistent throughout the day: opportunity, collaboration, and communication.
- Moving forward, it was suggested that a more appropriate name for the R16 effort is "Railroad-DOT Collaboration Strategies."

### Day 2 Overview

Day 2 of the meeting began with a brief recap of Day 1 and an overview of the Day 2 agenda. Each member of the COI then presented an update of its recent successes. FHWA provided a Section 130 update. Following a lunch break, CSX hosted a session on best practices related to railroad real estate easements. The final topic of the day stimulated discussion about the advent and impact of connected and automated vehicles. The meeting concluded with a wrap-up discussion.

# Summary of Presentations, Day 2

#### Session 5: Lightening Round on DOT and Railroad Successes

Each member of the COI presented an update of its recent successes, including new accomplishments, technologies, workforce training and retention, processes and procedures, or other innovations. Highlights of the discussion included the following:

- FRA
  - FRA Administrator hosting GX Technology listening sessions
  - Grade crossing collision dashboard (GX Dash!)
    - Trespass and Suicide Dashboard to help visualize trespassing and suicide data along railroad rights-of-way
    - National Strategy to Prevent Trespassing on Railroad Property (October 2018)
  - Ongoing OIG audit on grade crossing safety, draft report expected early summer with final report in late summer or early fall
  - Ongoing audit on FRA's collection and data of grade crossing safety
  - Private crossing report in progress

 FHWA noted that it is evaluating the Section 130 program to provide as much flexibility as possible but noted there are also many legislative restrictions

#### Oregon DOT

- Developing a Cooperative Assistance Agreement with BNSF in the event of a natural or man-made emergency. The agreement does not hold either party to specific requirements but puts the contractual framework in place so that both parties can act quickly when emergencies occur. It can also be extended to other railroads.
- The state is also working with the US Department of Homeland Security on a regional resiliency assessment plan.
- BNSF added that they will likely pursue similar agreements with Texas and Louisiana as those two states are vulnerable to hurricanes and flooding.

#### District DOT

- Draft railroad manual developed internally
- Extensive staff training for coordination with railroads
- Working on master agreements but challenges are posed due to DC's anti-deficiency laws
- Major steps taken to improve invoicing
- Holding annual meetings with senior railroad leadership

#### Kentucky Transportation Cabinet

- Rail grade crossing inventory has been placed in a new FRA format
- KURTS Electronic File Sharing potential to share with other states confirmed

#### Virginia DOT

- Formalized training for contractors/consultants
- Draft railroad manual created and distributed
- Succession planning underway

#### Washington State DOT

- Providing mentoring for new project managers
- Seeing more Design-Build activity so ramping up alternative project delivery education; recent R16
   case study and UP guidelines on alternative project delivery were helpful in this regard
- Suggested to always include railroad and agency real estate staff in early project planning meetings

#### South Dakota DOT

Confirmed the value of regularly scheduled coordination meetings with the railroads

- Requested help from the Railroads to educate local government and municipalities about working with railroads on crossing and other projects; John Althof of Montana DOT echoed this request for assistance
- Confirmed value of new Section 130 training video recently released by FHWA and shown at our meeting

#### North Carolina DOT

- Vehicle radar detection for four quadrant gates— in pilot testing with NS and awaiting formal approvals from FRA; concerns remain on who pays/does maintenance
- Discussion: In Illinois, BNSF completed a research project with Illinois Commerce Commission and got a similar radar detection technology (a Wabtec product) approved under Subpart H. BNSF has an agreement with all Illinois communities on maintenance. BNSF is now specifying this technology for all four quadrant gates. BNSF and NS agree that this technology lends itself to executing long term maintenance agreements with the vendor; the railroads will not take on this responsibility or cost. It was also noted that maintenance is relatively inexpensive.

#### Norfolk Southern

- Improving near-miss reporting
- Through an aggressive Private Crossing Closure Initiative, 80% of private crossings on the NS network have been closed
- Increasing inter-departmental meetings since NS organized a little differently than the other Class
   1 railroads

#### Pennsylvania DOT

- Adopted state of the art hazard index (Safety Project Selection Tool) for selecting highest priority grade crossing improvement projects (posted to R16 webpage)
- Rolled out internal, on-line training for project managers, granting professional development hours to engineers as incentive; PennDOT open to sharing these training programs with other states by posting on R16 web page
- Improving accident prediction modeling

#### Arkansas DOT

- Increased use of master agreements with railroads
- Implementing more electronic workflow internally all reviews and approvals performed electronically within the state government; plan to extend to UP
- For statewide preliminary engineering process, UP using consultants much earlier in the process

#### Wisconsin DOT

- Agreed that offering professional development hours to incentive training is helpful
- Created new real estate agent role to coordinate with the railroads

- Increasing training for project managers
- Hiring staff to fill open positions
- For grade crossing improvements, the team performs benefit-cost analysis, further evaluates the top tier and then submits suggestions/recommendations to the commission who finally approves

#### Iowa DOT

- \$700K state matches for Section 130 improvements
- Created in-house Inventory collector app, can buy this software on-line and customize as needed
- Working with local FHWA representative on innovative projects
- Promoting crossing safety outreach videos on YouTube
- GIS web map developed for abandoned crossings

#### Montana DOT

- Inventory of crossings; inventory app, in-house
- Increasing use of Trespassing ads
- Development of priority index for grade crossing improvement projects

#### BNSF

- Public project manual created and distributed
- Created external website for public projects to make project data more accessible and streamline communication

#### Caltrans

- Hosting quarterly meetings with the railroads
- Design and traffic representatives are included for all diagnostic evaluations at grade crossings.
- Dedicated railroad procedure/policy manual being considered that will be interdivisional

#### Other discussion topics:

- Federal-aid essential videos open for local agencies
- The FAST Act requires all states to develop a grade crossing action plan. In the past, this only applied to 10 states. There is no specific timeframe for when this will be enforced.
- FHWA: When using federal funds with statement PE process, start early with the FHWA Division Administrators.
- FHWA stores data on Section 130 projects
  - USDOT crossing number needs to be added as a separate field
  - Railroads and DOTs can get access to this data through FHWA

#### Session 6: Section 130 Update

This session was moderated by Pam Hutton of AASHTO and presented by Kelly Morton of FHWA. The discussion focused on these points:

- DOTs should work with their FHWA division office to ensure Section 130 projects are coded correctly.
- Three case studies completed and available online; upcoming workshops and six listening sessions.
- 2018 Report to Congress is public information but only available through FOIA. DOTs/railroads to follow up with Kelly Morton on how to obtain a copy.
- TxDOT is using Section 130 funds to install fuel cells that enable crossing gates and signals to operate during a flooding event or extended power outage.
- There needs to be additional guidance on how to use Section 130 funds for stop-yield improvements; some Division Administrators interpret it differently.
- Indiana's Local Trax program is a \$170 million project funded by the Federal government, state, and railroads and will close 21 crossings.
- States that used Section 130 funds incorrectly (assuming 100% federal match vs. 90%) are making progress to rectify the error.
- The FHWA "Obligation Rates for the Highway Safety Improvement Program" website (<a href="https://safety.fhwa.dot.gov/hsip/gen\_info/slorhsip/">https://safety.fhwa.dot.gov/hsip/gen\_info/slorhsip/</a>) clarifies that Table 3: MAP-21 and FAST Act Cumulative RHCP Obligation Rates by State "does not include safety improvements that are planned, but not yet obligated..."

#### Session 7: Best Practices Related to Railroad Real Estate Easements

Sara French of CSX, accompanied by Troy Creasy of CSX, led this discussion. Dan Leonard of PennDOT participated to present DOT perspective. Key discussion points included:

- BNSF outsources the real estate process in contrast to CSX's in-house staff.
- CSX is able to avoid condemnation filing through its process.
- Parallel and perpendicular easements are addressed in the same manner.
- Sara holds biweekly or monthly calls with the five public project managers, attends pre-construction meetings as well.
- Design-Build projects pose a challenge.
- Make sure construction agreements have easement language.
- Regarding right-of-entry, surveyors from certain state DOTs can enter private property without permission. Similarly, state DOTs encounter crossing closures without notification.
- BNSF has a one-pager outlining the process for modifying a roadway.
- Wisconsin DOT always includes a real estate person early in the process.

#### Session 8: The Advent and Impact of Connected and Automated Vehicles (CAVs)

French Thompson of BNSF and Brian Burkhard of Jacobs led this discussion. In addition to the topics presented in the slide deck, these other ideas were discussed:

- A USDOT publication, "Preparing for the Future of Transportation," was released in October 2018 and addresses connected and automated vehicles.
- There will be changes to the MUTCD addressing CAVs, traffic circles and other issues; as always, the Railroads and DOTs need to participate and comment on proposed changes to the MUTCD.
- President Obama enacted a Federal mandate requiring all new vehicle models to have Dedicated Short Range Communications (DSRC) by 2023. This mandate has been halted by the new administration, but if approved, it will accelerate the adoption of connected and automated vehicles.
- Infrastructure required to support connected and automated vehicles could be paid by users through road-user charging. For example, user charges could be based on miles driven, vehicle weight and other factors.
- Railroads and state DOTs should take advantage of formal and informal dialogue opportunities when regulatory changes are being considered since they are the "on-the-ground" implementers and end users.

#### Wrap-up for Day 2

Katie Hulbert (FHWA), Pam Hutton (AASHTO), and Kate Kurgan (AASHTO) reiterated the key discussion points, including the value of sitting at the table together in face to face meetings, we don't know what we don't know, and confirmed that the FHWA, AASHTO and FRA are committed to serve this group. Just prior to the meeting adjournment, Pam, Kate, and Katie commended all of the COI members for their active engagement in the R16 program and handed out certificates of appreciation to the founding COI members. Hal Lindsey likewise thanked the COI for their collaboration with the Jacobs team that has supported the R16 program, noting specifically the contributions made by our three SME's (Mike Loehr, Susannah Kerr and David Solow), previous R16 Project Manager Sherry Appel and the R16 support team that includes Carly Dutkiewicz, Jen Smoker and Jenna Licursi Jamison.

# Appendix A - COI Meeting Agenda





# SHRP2 R16 Community of Interest (COI) Meeting Agenda 444 North Capitol St. NW Suite 333

This meeting is a facilitated discussion for a corps of peers and experts from lead DOTs and railroad industry to share experiences on various topics related to R16 technologies and their implementation

# Day One – March 5, 2019 AASHTO Headquarters, Washington, DC

Time	Agenda Topic	Speakers	
8:30 – 8:45 AM	Welcome		
	<ul> <li>Welcome from FHWA and AASHTO</li> <li>Safety moment</li> <li>Housekeeping</li> </ul>	Chris Newman, FHWA and Pam Hutton, AASHTO	
8:45 – 9:15 AM	Meeting Overview and Activity Recap		
	<ul> <li>Review of meeting agenda</li> <li>Brief overview of project status, including webinar, case study and peer exchange activity that occurred since last COI meeting and remaining activities</li> </ul>	Kate Kurgan, AASHTO	
9:15 – 10:15 AM	Community of Interest Report Out	All COI Members	
	<ul> <li>Self-Introductions and report outs from each COI member (DOTs and RRs), addressing the following questions:</li> <li>What value or benefits has the COI brought to each COI member over the course of the program? Be specific.</li> <li>Looking ahead, what are the key issues that still need to be addressed? Be specific.</li> </ul>	Moderated by Pam Hutton, AASHTO approx. 5 minutes each	
	<ol><li>From your perspective, what is the ideal format for the R16 program going forward?</li></ol>	Group Discussion	
10:15 – 10:30 AM	Break		
10:30 – 11:30 AM	Continuation of Community of Interest Report Out	All COI Members	
	Continued COI report outs and Group Discussion	Moderated by Pam Hutton, AASHTO	
11:30 – 12:15 PM	Panel Discussion: DOT and Railroad Key Issues for Improved Collaboration in the Future	Introduction: Pam Hutton, AASHTO	

		Presenters: French
		Thompson, BNSF
		and Connie Raezer,
		WSDOT
	Key accomplishments of R16 Program	
	Outstanding and Ongoing Issues to be addressed	
12:15 – 1:30 PM	Networking Lunch (on your own or pre-order through AASHTO)	
1:30 – 2:30 PM	Panel with FHWA and AASHTO Senior Management	Opening Remarks: Amy Lucero, FHWA and King Gee, AASHTO Panelists: Rob Mooney, FHWA and Shayne Gill, AASHTO
	<ul> <li>How R16 will evolve in the future to address ongoing and unique needs of DOTs and Railroads</li> <li>AASHTO's ongoing partnership with State DOTs and Railroads</li> <li>Group Discussion</li> </ul>	
2:30 – 3:00 PM	Break	
3:00 – 4:15 PM	Session: Joint Preemption Annual Reviews	Moderated by Lisa Stern, Wisconsin DOT Presenters: Lisa Stern; Frank Frey, FRA; and Gerald Stout, FRA
	<ul> <li>FRA has indicated that joint annual inspections of interconnected crossings should occur.</li> <li>What are other states doing to schedule, record, and follow up on these inspections?</li> <li>Are systems or policies in place that help these inspections happen in a productive and regular way?</li> <li>Group Discussion</li> </ul>	
4:15 – 4:45 PM	Wrap-up and Adjourn	Kate Kurgan, AASHTO
	<ul> <li>Day 1 summary</li> <li>Proposed adjustments to Day 2 schedule, including Lunch topic</li> </ul>	
5:00 – 6:30 PM	Optional Networking Opportunity at The Dubliner, 4 F St. NW (on your own)	All COI Members





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# Day Two – March 6, 2019 AASHTO Headquarters, Washington, DC

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Time	Agenda Topic	Speakers	
8:30 – 8:45 AM	Recap of Day 1 and Agenda Overview		
	<ul> <li>Safety moment</li> <li>Housekeeping</li> <li>Recap of Day 1</li> <li>Proposed adjustments to agenda for Day 2</li> </ul>	Katie Hulbert, FHWA and Kate Kurgan, AASHTO	
8:45 – 10:15 AM	What's New? Lightening Round on DOT and Railroad Successes: New Accomplishments, New Technologies, Workforce Training and Retention, Processes and Procedures, Other Innovations  As with the COI Report-out on Day 1, we invite each meeting attendee (by phone and in person) to come prepared to participate in this session. While not required, if you would like to support your presentation with 3 to 5 powerpoint slides, please email those ahead of the meeting to hal.lindsey@jacobs.com.	Moderated by Kate Kurgan, AASHTO  ALL MEETING ATTENDEES	
	<ul> <li>High-level (3 to 5 minute) summaries of recent accomplishments, initiatives that have been adopted or are being piloted in the subject areas included in the session title</li> <li>Group Discussion</li> </ul>		
10:15 – 10:45 AM	Break		
10:45 – 11:30 AM	Section 130 Update	Moderated by Pam Hutton, AASHTO Presenter: Kelly Morton, FHWA	

	<ul><li>Section 130 Update</li><li>Group Discussion</li></ul>	
11:30 AM – 12:30 PM	Networking Lunch (on your own or pre-order through AASHTO)	
	New Topic can be addressed or use this as flex time	
12:30 – 1:30 PM	Best Practices Related to Railroad Real Estate Easements	Moderated by Troy Creasy, CSX Presenters: Sara French, CSX and Dan Leonard, Penn DOT
	<ul> <li>Best practices related to DOT/Railroad real estate and easement negotiations</li> <li>Group Discussion</li> </ul>	
1:30 – 3:00 PM	The Advent and Impact of Connected and Automated Vehicles	Moderated by French Thompson, BNSF Presenters: French Thompson and Brian Burkhard, CAV SME
	<ul> <li>With the advent of automated vehicles, how will these vehicles interface with grade crossings?</li> <li>What technologies and infrastructure is being proposed and what parties are responsible for this implementation?</li> <li>Group Discussion</li> </ul>	
3:00 – 3:15 PM	Break	
3:15 – 4:00 PM	Wrap-up	Katie Hulbert, FHWA, Pam Hutton, AASHTO and Kate Kurgan, AASHTO
	<ul> <li>Appreciation to COI Members for investment in R16 Product</li> <li>Next Steps</li> <li>Group discussion</li> </ul>	
4:00 PM	Adjournment	

# Appendix B - Participant Contact List

Name	Organization/Agency	Job Title	Email Address
Yashar Alimohammadlou	District of Columbia DOT	Program Analyst	yashar.alimohammadlou@dc.gov
John Althof	Montana DOT	Rail-Highway Safety Manager	jalthof@mt.gov
Sherry Appel*	Appelworks	Consultant	sherryappel@gmail.com
Avital Barnea	AASHTO	Program Manager for Freight	abarnea@aashto.org
Frances Bourne	FRA	Policy Lead	frances.bourne@dot.gov
Ben Browning	Arkansas DOT	Alternative Project Delivery Director	benjamin.browning@ardot.gov
Brian Burkhard	Jacobs	Practice Lead for ITS and CAV	brian.burkhard@jacobs.com
Joe Conway	FHWA	Program Manager	joe.conway@dot.gov
Troy Creasy	CSX	Project Manager II	troy_creasy@csx.com
Monica Crider*	Idaho Transportation Department	Contracting Services Engineer	monica.crider@itd.idaho.gov
James Dahlem	FRA	Transportation Specialist	james.dahlem@dot.gov
Carly Dutkiewicz	Jacobs	Transportation Planner	carly.dutkiewicz@jacobs.com
Sara French	CSX	Real Estate Specialist	sara_french@csx.com
Frank Frey	FRA	General Engineer	frank.frey@dot.gov
Ravindra Ganvir	District of Columbia DOT	Deputy Chief Engineer	ravindra.ganvir@dc.gov
King Gee	AASHTO	Director of Engineering and Technical Services	kgee@aashto.org
Shayne Gill	AASHTO	Program Director for Multimodal Transportation	sgill@aashto.org
Brian Gilleran	FRA	Grade Crossing Safety Engineer	brian.gilleran@dot.gov

Name	Organization/Agency	Job Title	Email Address
Crystal Gitchell	ASLRRA	AVP Policy	cgitchell@aslrra.org
Aklilu Habtemariam	District of Columbia DOT	Civil Engineer	aklilu.habtemariam@dc.gov
Scott Hoftiezer*	Colorado DOT	Railroad Program Manager	scott.hoftiezer@state.co.us
Dave Huft	South Dakota DOT	Research Program Manager	dave.huft@state.sd.us
Katie Hulbert	FHWA	Transportation Specialist	kathleen.hulbert@dot.gov
Pamela Hutton	AASHTO	SHRP2 Implementation Program Manager	phutton@aashto.org
Julie Johnston	FHWA	Utility & Value Engineering Program Manager	julie.johnston@dot.gov
Maggie Kasperski	AASHTO	Marketing & Communications Manager	mkasperski@aashto.org
Starr Kidda	FRA	Engineering Psychologist	starr.kidda@dot.gov
Kris Klop	Iowa DOT	Highway-Rail Crossing Programs Manager	kristopher.klop@iowadot.us
Kate Kurgan	AASHTO	Associate Program Manager, SHRP2 Implementation	kkurgan@aashto.org
Dan Leonard	Pennsylvania DOT	Grade Crossing Engineer	danleonard@pa.gov
Hal Lindsey	Jacobs	R16 Project Manager	hal.lindsey@jacobs.com
Amy Lucero*	FHWA	Chief Technical Services Officer	amy.lucero@dot.gov
Rob Martindale*	Colorado DOT	Program Manager - Railroads	rob.martindale@state.co.us
Teresa McNamara	Caltrans	Railroad Coordinator	teresa.mcnamara@dot.ca.gov
Rob Mooney	FHWA	Project Delivery Team Leader	robert.mooney@dot.gov
Kelly Morton	FHWA	Office of Safety	kelly.morton@dot.gov
Chris Newman	FHWA	Office of Asset Management	christopher.newman@dot.gov

Name	Organization/Agency	Job Title	Email Address
Jahmal Pullen	North Carolina DOT	Engineering Coordination & Safety Manager	jmpullen@ncdot.gov
Connie Raezer	Washington DOT	Railroad Liaison	raezerc@wsdot.wa.gov
Matt Reynolds	Virginia DOT	State Utilities, Railroad and Property Manager	matt.reynolds@vdot.virginia.gov
Carlos Ruiz*	Caltrans	Rail Transportation Manager	carlos.ruiz@dot.ca.gov
Allen Rust	кутс	Rail Coordinator	allen.rust@ky.gov
Richard Shankle*	Oregon DOT	Manager, Crossing Safety Unit	richard.a.shankle@odot.state.or.us
Rebecca Snyder	CSX	Senior Supervisor Real Estate	becky_snyder@csx.com
Alana Spendlove*	Utah DOT	Statewide Railroad and Utilities Director	aspendlove@utah.gov
Lisa Stern	Wisconsin DOT	Chief of Railroads & Harbors	lisa.stern@dot.wi.gov
Gerald Stout*	FRA	S&TC Safety Inspector	gerald.stout@dot.gov
Jo Strang	ASLRRA	SVP Safety and Regulatory Policy	jstrang@aslrra.org
French Thompson	BNSF	Director of Public Projects	french.thompson@bnsf.com
Robert Travis*	Texas DOT	Rail Highway Section Director	robert.travis@txdot.gov
Barbara Waite*	Idaho Transportation Department	Railroad & Utility Manager	barbara.waite@itd.idaho.gov
Cayela Wimberly	Norfolk Southern	Grade Crossing Safety Director	cayela.wimberly@nscorp.com

<sup>\*</sup>Phone participant