DOT-Freight Railroad Master Agreements – Best Practices

Community of Interest Webinar for Railroad-DOT Mitigation Strategies (R16)

February 15, 2018
Purpose of Today’s Webinar

• **Hear best practices** on developing master agreements to promote expedited project delivery.

• **Hear from BNSF, NC and TX DOT** on how their efforts are improving coordination between railroads and their respective DOT partners

• **Discuss and share information** with State DOTs and Railroads
Agenda

- Welcome
- North Carolina DOT
- Texas DOT
- BNSF Railways
- Discussion and Comments
- Open COI Meeting
A Few Housekeeping Details

• **Tell us what you think.** We want to hear from all of you on the call during the discussion segments.

• **Please add your comments to the chat box provided.**
Welcome

Presenters
• Richard E. Mullinax, Rail Signals Manager, Rail Division, North Carolina Department of Transportation
• Robert Travis, Rail Highway Section Director, Railroad Division, Texas Department of Transportation
• Taylor Smith, Manager, Public Projects, BNSF

Moderators
• Kate Kurgan, Moderator/ R16 Product Lead, AASHTO
• Pam Hutton, SHRP2 Implementation Manager, AASHTO
• Mike Loehr, R16 Subject Matter Expert
• Hal Lindsey, R16 Project Manager

Recorded presentation will be posted on the AASHTO SHRP2 website: http://shrp2.transportation.org/Pages/R16_RailroadDOTMitigationStrategies.aspx
What is SHRP2?

• The Second Strategic Highway Research Program (SHRP 2): a large scale research program designed to make significant advances in some of the most challenging areas in the highway industry
• 9-year, $232 million research program
• TRB: managed over 100 research projects, involving more than 300 research contractors
• Implementation budget of just over $170 million
SHRP2 Implementation:
INNOVATE – IMPLEMENT - IMPROVE

$155 million
FUNDING ASSISTANCE

63
SHRP2 SOLUTIONS

430+
PROJECTS IMPLEMENTED

<table>
<thead>
<tr>
<th>Category</th>
<th>Recipients</th>
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<tbody>
<tr>
<td>DOT</td>
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<td>MPO/LOCAL</td>
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<td>FEDERAL/TRIBAL</td>
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230+
RENEWAL

100+
CAPACITY

90+
RELIABILITY

11
SAFETY
SHRP2 Implementation: INNOVATE – IMPLEMENT - IMPROVE

- **304,406** Participants Engaged
- **12,378** Outreach Activities
- **16,629** Hours Technical Assistance

**RESULTS**

Save lives, money, and time

- Bridges being built more quickly
- Smoother traffic flows and less congestion
- Reduced construction costs
- Safer roadways
- Smarter environmental reviews
What is SHRP2 R16?

• Active Strategic Community of Interest
• Strategies to Improve Railroad-DOT Cooperation and Accelerate Project Delivery
• Innovation Library
  http://shrp2.transportation.org/Pages/R16_InnovationLibrary_Topic.aspx
• AASHTO Web Page Resources:
  http://shrp2.transportation.org/Pages/R16_RailroadDOTMitigationStrategies.aspx
Crossing Signals Master Agreements: North Carolina’s Experience

Richard E. Mullinax, PE, PTOE, CPM

15 February 2018
Purpose of Master Agreements

• Streamline the formal agreement process
• Time savings (eliminates need for drafting and executing individual agreements)
• Applies to crossing signalizations for
  ✓ State roads
  ✓ Municipal roads (still need agreement between NCDOT & municipality for non-State roadways)
  ✓ Preempted traffic signals
History

• Earliest NCDOT Master Agreements were with Southern Railway and Seaboard Coast Line in late 1970’s
• Minor supplements issued when Southern Railway became Norfolk Southern and Seaboard Coast Line became CSX.
• Short lines agreed to the process in early 2000’s so new agreements developed in mid-2000’s
• Agreements executed in mid-late 2000’s and remain in effect
What is a Master Agreement?

- Agreement between an agency and a railroad
- Covers language that is redundant from project to project (i.e.: DBE language, Federal Aid Policy, Circular, Conflict of Interest Statements, etc…)
- Details the process for progressing projects
- Outlines reimbursement process
- Either party can terminate with at least 60 days notice
- Current master agreement language in effect since 2008
  - 2 Class I railroads
  - 19 shortline railroad operators
Sample Master Agreement

NORTH CAROLINA STATEWIDE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

AND

R. J. CORMAN RAILROAD COMPANY
CAROLINA LINES, LLC

MASTER AGREEMENT FOR INSTALLATION, REVISION OR REPLACEMENT OF GRADE CROSSING TRAFFIC CONTROL DEVICES

August 4, 2015

THIS MASTER AGREEMENT FOR INSTALLATION, REVISION OR REPLACEMENT OF GRADE CROSSING TRAFFIC CONTROL DEVICES, hereinafter referred to as "Master Agreement," is made and entered into on the last date executed below ("Effective Date"); by and among the NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, an agency of the State of North Carolina, hereinafter referred to as the "Department" and R. J. CORMAN RAILROAD COMPANY/CAROLINA LINES, LLC, a North Carolina limited liability company, hereinafter referred to as the "Railroad." The Department and the Railroad shall be hereinafter referred to individually as a "Party" and collectively as "Parties." 

WITNESSETH

THAT WHEREAS, the parties hereto desire to install, revise, or replace automatic railway-highway grade crossing signals, gates, and traffic control devices, hereinafter referred to as "devices," at various locations throughout the State of North Carolina, including roads and streets under jurisdiction of a municipal governing authority, and to perform other work in connection therewith, the locations for said installation to be determined as hereinafter provided.

NOW THEREFORE, the Department and the Railroad do agree:

1. Designted Representatives. The Director of Rail Division, on behalf of the Department, and the General Manager, on behalf of the Railroad, and/or their designee(s) as authorized in writing, are hereby designated representatives of Department and Railroad, respectively, for the purpose of coordinating internal actions within each of the parties as necessary to plan, design, and construct said devices at various locations throughout the State of North Carolina as selected by Department in accordance with North Carolina General Statute 136-20 and/or any and all Federal Aid regulations.

2. Preliminary Engineering. After notification by letter or documentation by electronic means from Department, the Railroad shall prepare or have prepared by its consultant preliminary engineering, including all necessary plans, specifications, estimates, and materials list, incorporating any necessary field diagnostic review, and shall submit the same to the Department for approval prior to beginning each project, said preliminary engineering being incorporated within each project by reference and made a part thereof. All project work

IN WITNESS WHEREOF, this Agreement has been executed, in duplicate origina, the last day and year set out below, on the part of the Department and the Railroad by authority duly given.

ATTEST

NAME: Tamra Batts

TITLE: Secretary to Board of Transportation

DATE: 11/17/15

MAILING ADDRESS

North Carolina Department of Transportation
Rail Division, Design & Construction Branch
1305 MSC
Raleigh, North Carolina 27699-1855
ATTN: Richard E. Mullinax, PE, PT06, CPR
Rail Signals Manager Engineer
railmail@ncdot.gov
Telephone: (919) 733-8615

APPROVED BY BOARD OF TRANSPORTATION ITEM:

July 8, 2015

[Signature]
Project Progression

• NCDOT selects locations / prepares concept plan
• NCDOT authorizes railroad to prepare preliminary engineering
• Railroad to make “best effort” to provide plans, specifications, estimates, and materials list within 4 months
• NCDOT reviews and authorizes railroad to construct
• Railroad makes “best effort” to construct within 6 months
• Devices placed under the custody care of the railroad to operate and maintain after NCDOT acceptance
Sample A4PE and A4C
Sample A4PE & A4C Combined
Reimbursement

• Once authorized, railroad may submit progressive invoices up to 85% of total estimate
• Upon acceptance of project, railroad has up to 9 months to submit final invoice
• On non-State roadways, NCDOT reimburses railroad and upon completion seeks reimbursement from municipality
  ✓ Municipal reimbursement to NCDOT covered under separate agreement
Projects
Other

- Change Orders – Railroad submits revised plans and materials list with new Authorization for Construction form
- Supplemental to Master Agreement – may be issued when significant changes are required
  - Vehicle detection systems
  - Legislative / technical corrections or updates
Sample Supplemental to MA

NOW THEREFORE, the Parties wish to supplement the aforementioned Master Agreement for Installation, Revision or Replacement of Grade Crossing Traffic Control Devices whereby the following provisions are amended, revised or added:

The following items will be changed and/or deleted:

On Page 1, in the first paragraph, "This Agreement" will be deleted, and "This Master Agreement for Installation, Revision or Replacement of Grade Crossing Traffic Control Devices and heretofore referred to as "this Agreement" will be inserted.

On Page 3, the last paragraph is deleted and inserted on page 2 of 2 C.F.R. § 202.

The following provisions will be added:

19. Parties Authorized To Execute

The Parties and any purported agent acting for a Party hereby acknowledges that the individual executing the Agreement on their behalf is authorized to execute the Supplemental Agreement and that the Parties are solely responsible for such execution.

20. Compliance

The Parties hereto, and any purported agents acting for either Party, shall comply with the following federal policies: (a) f202 (Employment Opportunity) and f76 (Civil Rights Act of 1964, as amended).

21. Governing Law

The Agreement is made under, and shall be governed and construed in accordance with, the laws of the State of North Carolina.

22. Department Document Policy

It is the policy of the Department not to enter into any agreement with another party that has not been delivered by any government agency (Federal or State). By execution of this Agreement, the Railroad certifies that to its knowledge neither its agents or contractors are unbriefly.
VDS Installed by State Under Supplemental Agreement
Thank You!
Contact: remullinax@ncdot.gov
PROJECT REVIEW AND CONTRACT FLAGGING

Robert Travis, P.E.
Rail Highway Section Director
Project Challenges & Solution

- 300 Construction and Maintenance Projects per year
- 25 Different Districts = 25 ways to do them
- Texas DOT use template and/or master agreements
- Texas uses a Rail Highway Operations Manual

- Texas DOT identified that 2/3 of the projects are maintenance and partnered with the Class 1 railroads to streamline the process
  - 2 page simple agreement for flagging as needed
  - Maintenance notice if Contracted/ Approved Vendor used for flagging
  - Standard language in our plan set plans to cover insurance, etc.
Contract Flagging

- History
- Change over from Railroad employee to Approved Vendor
- Success Stories
- Contract issues
- Purchase order for State Forces
- Scope of Work Sheet
Maintenance Notification Letter

Texas Department of Transportation

January 30, 2016

January 30, 2016

MAINTENANCE NOTIFICATION

Bexar County

CCS: 0915 12-678
Project 17F7: 1
Railroad Undercrossing

OCE: 704-3922, RMP: 104-10
SH-21B in San Antonio, Texas

Roadway Maintenance

Bob Blansett
Manager, Special Projects
24195 Alcove Woodlands Rd
Spring, Texas 77379

Dear Mr. Blansett:

Please be advised that the State and/or the State’s Contractor plans to perform necessary maintenance on the above referenced location. All work will be performed at the State’s expense. The scope of work for this project consists of milling and paving the roadway as well as replacing the left turn signal head at the corner of Alcove Boulevard and SH-21B. A project location map is attached for reference.

The State and/or the State’s Contractor shall coordinate flagging protective services with HaysPav for three days of flagging, should the UPRR determine that UPRR personnel will perform flagging. All equipment in this Notice will be moved prior to UPRR personnel providing the flagging services.

The State shall require the State’s contractor to obtain and provide the State’s required Railroad Protection Liability Insurance before commencing any work on railroad property. This project is scheduled to be completed by May 2016.

If you have any questions, please contact Gabrielle Hackney at telephone number (512) 416-3282 or via email at Gabrielle.Hackney@txdot.gov. We appreciate your time and cooperation.

Sincerely,

[Signature]

Robert Truell, P.E.
Field Highway Section Director
Railroad Division

[Signature]

[Date] 1-30-2016
Maintenance Notice Letter

- Notice only signed by TxDOT and sent to Class 1 Railroad
  - Covers following activities only:
    - Pavement planning, filling and seal coat work
    - Signing and Striping of roadway
    - Bridge Maintenance and inspection
    - Common ditch and vegetation work

- Excludes any widening of the crossing, including shoulders
- Excludes major bridge work such as bridge deck replacement
- Excludes and direct payment to the Railroad by TxDOT
Scope of Work Sheet

- Scope of Work Sheet and sample Bridge and non-Bridge requirements sheets located at:
  
  http://www.txdot.gov/inside-txdot/division/rail/requirements.html

- Scope of work sheet is used in lieu of Special Provisions

- Convey Contractor vs. Railroad requirements including the following:
  - Location of the work
  - Work by Contractor vs. Railroad
  - Insurance, flagging, right of entry requirements
  - Coordination requirements and contacts
  - Emergency contact
Flagging for Emergency Work
Questions?

- Robert Travis, P.E.
  Rail Highway Section Director
  Rail Division
  Robert.travis@txdot.gov
  (512) 416-2635

Rail Highway Website
BNSF Railway Company
Public Projects Presentation
Agency Master Agreements

2018 SHRP2 Webinar

Taylor Smith
Manager Public Projects
Montana, Oregon, Northern California
BNSF Railway Public Projects Dept.

1 Director, 2 Assistant Directors, 9 Managers, 7 Project Engineers

- Warning Device Upgrades
- Grade Separations
- Crossing Closures
- Quiet Zones
- Line Relocations
- Roadway Widenings
- Private Crossing Permits
Grade Crossing Safety

How do we reduce the risks inherent with at grade crossings and deter trespassing on our network?

• Closure and Consolidation
• Grade Separations
• Section 130 Funds for safety modifications
• ROW fencing
• Site Distance improvements
• Education
Master Agreements

- Purpose is to expedite project authorization timeline while still protecting both parties
- Standard Language that is redundant can be included in MA and referenced in subsequent agreements
  - Indemnification Language
  - Safety Requirements
  - Contractor Requirements on ROW
  - Flagging Requirements
  - Invoicing and reimbursement
  - Etc
Design/Scope items under MAs

• Agreements –

• **Construction and Maintenance (C&M)**
  - Exhibit C and C1

• Schedule – 4\(^{th}\) Quarter Moratorium for track windows and form B’s

• Railroad Flagger when on BNSF property

• Railroad 3\(^{rd}\) party inspector (different from flagger and Agency inspector)

• Enhanced BNSF RR Structures Review
Construction and Maintenance Agreement

C&M Agreement (typical)

Recitals

Railroad Obligations

Agency Obligations

Joint Obligations

**Indemnification Language

**Insurance

Signatures

- Exhibits

**included in Master Agreement

Exhibits (typical)

A – Approved Plan

B – Permanent & Temporary Easements *JLL*

C – **Contractor Requirements

C1 – Agreement b/w RR and Contractor (non editable)

D – Cost estimate for RR work

E – Final Written approval from BNSF-MPP

F – BNSF Bridge Requirements

G – Total Project Estimate – for grade sep eliminating an at grade xing
Checklist for Construction on BNSF ROW

• C&M Agreement executed
• Contractor has proper insurances in hand
• Pre-construction meeting
• Agency to provide BNSF Notice to Proceed
• Safety credentials
  • Contractor Orientation
  • E-railsafe
• Safety Action Plan
• Construction Submittals reviewed and approved!
  – new requirements forthcoming...why?
Common themes

6 incidents across system in the last 2 years

• Contractor made changes to the work plan after the plan was approved and Contractor did not resubmit

• Contractor did not stop the actual work activity to re-brief when changes were made the day of

• Cranes were overloaded past specifications on crane charts

• Contractor improperly calculated or did not calculate load weights

• New requirements and protocols forthcoming
Crossing Safety - revisited

How do we reduce the risks inherent with at grade crossings, deter trespassing and reduce the risk with Agency construction projects on our network?

• Unified Agreement language
• Expectations articulated clearly throughout the design and agreement phase
• Project engagement and ownership (Agency, CM, RR, RR-3rd party inspector, RR Flagger)
• Closeout and best practices
Havre MT - Co Rd. 403 - before
Havre MT - Co Rd. 403 - after
Laurel Airport Road OP Replacement
Laurel Airport Road OP Replacement
Questions?

Taylor Smith
BNSF Manager Public Projects
2454 Occidental Ave S #2D
Seattle, WA
taylor.smith@BNSF.com
Questions?
Open Discussion with COI

• **Community of Interest (COI) Goals:**
  – To share best practices, lessons learned, challenges, accomplishments, model agreements, and processes with railroads and highway agencies, to in turn share nationwide.
  – To create a collaborative environment in which to capture the most innovative ideas from all stakeholders for expediting project delivery.

• **Activities:**
  – Annually meet face-to-face in Q2 and through these webinar (virtual) meetings in Q1, Q3 and Q4.

• **Today:**
  – Review and shape upcoming meeting agendas
  – Propose webinar and case study topics, and
  – Get general discussion of mutual topics of interest.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Details</th>
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<tbody>
<tr>
<td>8:30 – 8:45 AM</td>
<td><strong>Welcome</strong></td>
<td>• Welcome from FHWA, AASHTO, FRA and BNSF</td>
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<td></td>
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<td>• Safety moment</td>
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<td></td>
<td></td>
<td>• Housekeeping</td>
</tr>
<tr>
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<td></td>
<td>Jessica Rich, Pam Hutton, Frank Frey, French Thompson</td>
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<tr>
<td>8:45 – 9:15 AM</td>
<td><strong>Meeting Overview and Activity Recap</strong></td>
<td>• Review of meeting agenda</td>
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<td></td>
<td>• Brief overview of webinar, case study and peer exchange activity that occurred since last COI meeting</td>
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<td></td>
<td>Kate Kurgan</td>
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<tr>
<td>9:15 – 10:15 AM</td>
<td><strong>Community of Interest Update</strong></td>
<td>• Self-Introductions and Report Outs from Each COI member (DOTs and RRs), highlighting updates since last COI meeting and hot topics (Questions attached)</td>
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<td></td>
<td>All COI Members – approx. 5 minutes each;</td>
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<td></td>
<td></td>
<td>Group Discussion</td>
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<tr>
<td>10:15 – 10:30 AM</td>
<td><strong>Break</strong></td>
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<tr>
<td>10:30 – 11:15 AM</td>
<td><strong>Community of Interest Update</strong></td>
<td>• Continued COI Report Outs</td>
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<td></td>
<td>All COI Members</td>
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<td></td>
<td>Group Discussion</td>
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<tr>
<td>12:15 – 1:15 PM</td>
<td><strong>Lunch – Non-Working or Working with Topic of Choice by COI</strong></td>
<td>Hosted by BNSF</td>
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<tr>
<td>1:15 – 2:45 PM</td>
<td><strong>Campus Tour – BNSF Host</strong></td>
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<td>2:45 – 3:15 PM</td>
<td><strong>Break</strong></td>
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<td>3:15 – 4:30 PM</td>
<td><strong>Section 130 Updates and Industry Discussion – Section 130 Do’s and Don’ts</strong></td>
<td>Jessica Rich and Group Discussion</td>
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<td>4:30 – 5:00 PM</td>
<td><strong>Wrap-up and Adjourn</strong></td>
<td>Pam Hutton</td>
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<tr>
<td>5:15 – 6:00 PM</td>
<td><strong>Networking Opportunity</strong></td>
<td>All COI Members</td>
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<tr>
<td>Time</td>
<td>Session</td>
<td>Speaker(s)</td>
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<tr>
<td>8:30 – 8:45 AM</td>
<td>Recap of Day 1 and Agenda Overview</td>
<td>Jessica Rich, Kate Kurgan</td>
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<tr>
<td></td>
<td>• Safety Moment</td>
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<td>• Housekeeping</td>
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<td></td>
<td>• Recap of Day 1</td>
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<td></td>
<td>• Proposed adjustments to agenda for Day 2</td>
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<tr>
<td>8:45 – 9:15 AM</td>
<td>FRA Update</td>
<td>Frank Frey</td>
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<td>• Positive Train Controls, Regional Passenger Rail Plans, Other Issues</td>
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<td>9:15 – 10:30 AM</td>
<td>Master Agreements Facilitated Discussion / Round Table</td>
<td>TBD</td>
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<td>• RR/DOTs share latest successes and how they achieved them</td>
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<td>10:30 – 10:45 AM</td>
<td>Break</td>
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<td>10:45 – 11:15 AM</td>
<td>Topics for Future Webinars and Case Studies</td>
<td>Pam Hutton, David Solow</td>
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<tr>
<td></td>
<td>• Topics of industry interest for upcoming R16 Webinars and Case Studies</td>
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<tr>
<td>11:15 – 11:45 AM</td>
<td>Peer Exchange 2018 Agenda Planning</td>
<td>Kate Kurgan, Mike Loehr</td>
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<td></td>
<td>• COI planning for Peer Exchange in Q3 2018 in Miami (draft agenda, topics of industry interest, proposed speakers, logistics, etc.)</td>
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<tr>
<td>11:45 AM – 1:00 PM</td>
<td>Lunch – Non-Working or Working with Topic of Choice by COI</td>
<td>Hosted by BNSF</td>
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<tr>
<td>1:00 – 2:30 PM</td>
<td>Application of New Technologies - Panel Discussion (drones, nondestructive testing techniques, AskRail, etc.)</td>
<td>BNSF and other COI members to be named</td>
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<tr>
<td>2:30 – 2:45 PM</td>
<td>Break</td>
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<tr>
<td>2:45 – 3:45 PM</td>
<td>Leveraging R16 COI in 2018 and 2019</td>
<td>Group Discussion</td>
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<td>• Planning for 2019 COI; future of SHRP2’s R16 product; additional industry needs; the role of FHWA, State DOTs and partner railroads going forward</td>
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Optional Tour of New TEX-Rail Commuter System

• **Monday, March 26, 3 p.m.** prior to COI meeting.

• The tour will start and end at the Homewood Suites Fossil Creek hotel; no personal protective equipment required; no cost to attend. It will be mostly drive-by, with limited walking.

• Tour will highlight several active highway, bridge and railroad projects related to the new TEX-Rail commuter rail system currently under construction, linking downtown Ft. Worth to DFW International Airport on existing, upgraded and new freight tracks.

• This project involves collaboration between **Fort Worth Transportation Authority, DART, TX DOT, Amtrak, BNSF, UP and the FRA.**
Open Discussion with COI - Webinars

- Prior activities:
  - Sept 2016: COI Introduction
  - May 2016: Section 130 Funding
  - Sept 2017: Railroad/DOT User Manuals and Training
  - Feb 2018: Master Agreements

- Input needed for Future Webinars
  - April/May 2018: Design/Build and RR Agreements
  - Sept 2018: Flagging Agreements
  - Jan 2019: Open

- Possible Topics – Discussion
  - Innovative use of new technology, i.e. use of drones for bridge and corridor inspections,
  - Advances in grade crossing signaling and gates, etc.
  - Other? Your Ideas?
Completed or In-Process Case Studies
- Sept 2017: Section 130 Funding (Already completed)
- March 2018: Master Agreements (In process)

Suggested Case Studies:
- April/May 2018: Document Control and File Sharing between DOTs and Railroads
- June/July 2018: Design/Build and RR Agreements
- October 2018: Flagging Agreements
- Nov/Dec 2018: Open
- Feb 2019: Open

Do you have a good program or process you want to highlight and share with your colleagues?
• What keeps you up at night?
• What other topics should we be discussing as industry partners to promote increased safety, collaboration, efficiency, and time savings?
## For More Information

### Product Leads:

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<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
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<tbody>
<tr>
<td>Jessica Rich</td>
<td>FHWA Product Lead</td>
<td><a href="mailto:jessica.rich@dot.gov">jessica.rich@dot.gov</a></td>
</tr>
<tr>
<td>Pam Hutton</td>
<td>AASHTO Co-Product Lead</td>
<td><a href="mailto:phutton@aashto.org">phutton@aashto.org</a></td>
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<tr>
<td>Kate Kurgan</td>
<td>AASHTO Co-Product Lead</td>
<td><a href="mailto:kkurgan@aashto.org">kkurgan@aashto.org</a></td>
</tr>
<tr>
<td>Hal Lindsey</td>
<td>R16 Project Manager, CH2M/Jacobs</td>
<td><a href="mailto:hal.lindsey@ch2m.com">hal.lindsey@ch2m.com</a></td>
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### Additional Resources:

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<tr>
<th>Resource</th>
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<tr>
<td>GoSHRP2 Website</td>
<td><a href="http://fhwa.dot.gov/GoSHRP2">fhwa.dot.gov/GoSHRP2</a></td>
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<td><a href="http://shrp2.transportation.org/Pages/R16_RailroadDOTMitigationStrategies.aspx">http://shrp2.transportation.org/Pages/R16_RailroadDOTMitigationStrategies.aspx</a></td>
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Thank You for Joining Us!