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TOOLS FOR THE ROAD AHEAD

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Getting the Most from Your Section 130 Program

U.S. Department of Transportation
Federal Highway Administration

American Association of State Highway and Transportation Officials
AASHTO

SHRP2 SOLUTIONS
TOOLS FOR THE ROAD AHEAD

innovation ingenuity imagination invention
Every Day Counts

Getting the Most from Your Section 130 Program

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

May 16, 2017

U.S. Department of Transportation
Federal Highway Administration

American Association of State Highway and Transportation Officials
AASHTO

Purpose of Today's Webinar

- **Opportunity** for DOTs and Railroads to **Ask Questions of FHWA on the Section 130 Program**
- **Hear from Michigan DOT and Norfolk Southern** on how they work together to improve coordination and speed up project delivery
- **Discussion and Information Sharing** with State DOTs and Railroads

Agenda

- Welcome and Round Table Introductions
- Q & A Session with FHWA
- How Michigan DOT Takes Advantage of the Section 130 Program
- NS – One Railroad Perspective
- Discussion and Comments Throughout

A Few Housekeeping Details

- **Tell us what you think**. We want to hear from all of you on the call during the discussion segments.
- **Do not use your computer's audio;** use the call-in number instead.
- **Please mute your phone during the presentations. Unmute your phone to ask a question or make a comment, or you can use the chat box.**
- **Please do not put us on hold; if you need to step away, end the call and call back in** (we don't want to hear your muzak!)
- **State your name and organization before speaking.**
- **Download the agenda and PDF of this presentation from the Handouts section.**

Q & A with FHWA on Section 130 Program

Kelly Morton, PE
Transportation Specialist
FHWA Office of Safety

Questions from the COI Meeting

- Can Section 130 be used to address blocked crossings?
- How can the obligation process be streamlined to maximize Section 130 funding?
- Can we use Section 130 to address related issues such as right of way or relocating utilities?
- How can we partner with others to share funding? What other funding programs are available?
- Railroads look at corridors, not just specific intersections. Yet not all crossings along a corridor meet the criteria. How can we address this?
- What are some examples of “best practices” states?

FHWA Discussion

- Does this help answer your questions on the Section 130 Program?
- Questions or comments?
- Remember, to ask a question, please unmute your phone. You can also type any questions in the Chat Box.

How Michigan DOT Takes Advantage of the Section 130 Program

Kris Foondle

Local Grade Crossing Manager

Michigan DOT Office of Rail

Highway-Railroad Projects
DOT-RR Coordination

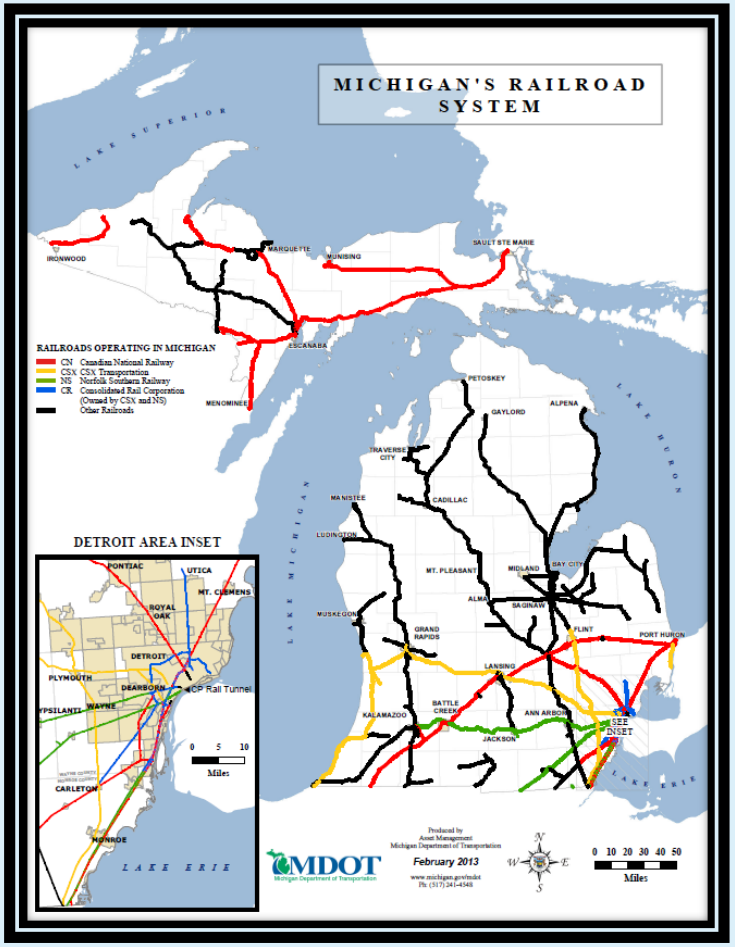
MDOT – OFFICE OF RAIL INFRASTRUCTURE & PROGRAMS

INFRASTRUCTURE:

- 4,600+ Public Crossings
- 3,600 miles of active track
- 665 State-owned miles
- 3 Class 1's: NS, CSX, CN
- 25 Shortlines
- 350 Local Road Agencies w/RR Xings

PROGRAMS:

- Asset Management
- Regulatory Compliance
- Grade Crossings & Safety
- Road Project Coordination
- Separations & Closures
- Track Relocations
- Intercity Passenger (Amtrak)
- Michigan Line/Accelerated Rail



PROJECT DEVELOPMENT FOR CROSSINGS USING MASTER AGREEMENTS

MASTER AGREEMENTS

- Executed in the 1990s
- Governs Ordered work at public crossings
- Governs Section 130 projects
- Governs road projects, including surfaces
- Covers federal & state funding
- Defines local road agency participation, as applicable
- Defines railroad participation, as applicable
- Addresses subcontracting
- Pass-through requirements

PROJECT DEVELOPMENT FOR CROSSINGS USING STANDARDIZED DOCUMENTATION

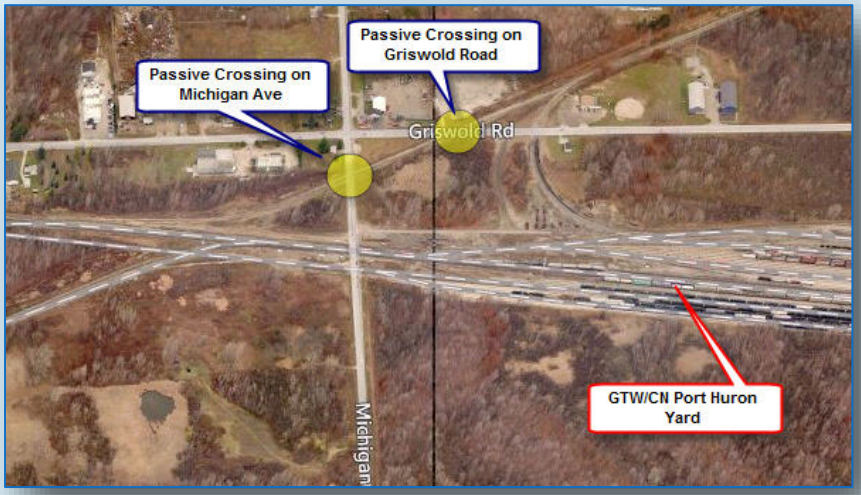
PROJECT REVIEW/APPROVAL

- Estimate Request & Review Process
  - Standard request format
  - Cost and component review
  - Not a design review
- Subcontracting
  - Continuing Contracts for Subs
  - Project-Specific Templates for Subs
- Utility Coordination
  - Guidance documents and references
- Authorization per Master Agreements
  - Specifies participation and details

PROJECT DEVELOPMENT FOR CROSSINGS PROCESS & TIMELINES

- State law defines project review process (Diagnostic Study Team Review)
- DSTR can be convened as part of Section 130 project
- DSTR can be convened as part of road project
- Scoping meetings for property management or track re-locations
- Project schedules in compliance with Orders or agreed-upon timelines

BEFORE



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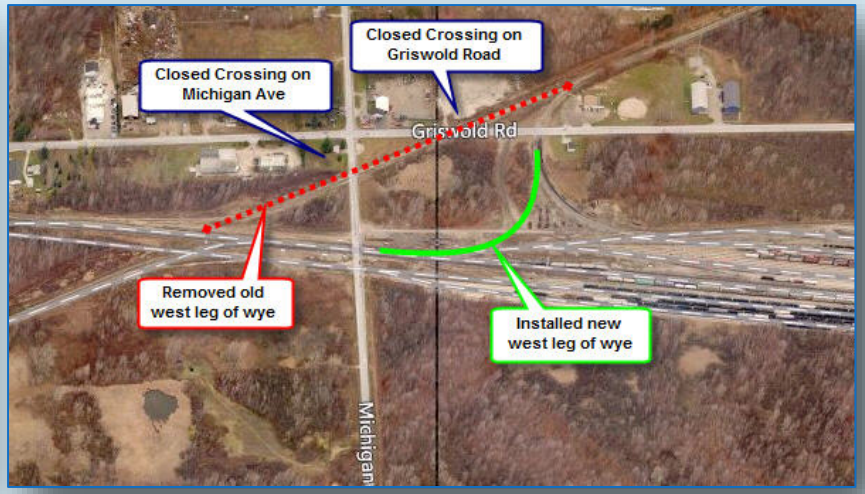
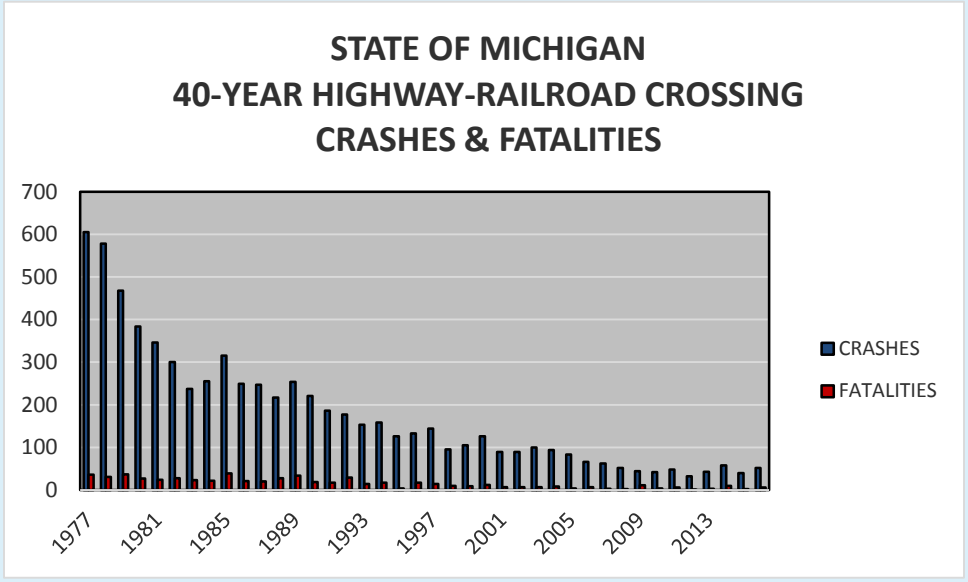


PROJECT DELIVERY MEASURABLE OUTCOMES

- Majority of projects authorized within 4-6 weeks of railroad estimate
- Most projects delivered within 12-18 months of original Order date
- Regularly spend full allocation of Section 130 Funding
- 90% reduction in crashes and fatalities over 40 years of Section 130
- Majority of crossings now have active warning systems
- Enhanced relationships for crossing closures and priority development



PROJECT DEVELOPMENT CURRENT ISSUES

RECENT ISSUES AFFECTING PROJECT DEVELOPMENT/DELIVERY

- Positive Train Control
  - Impact on Class 1s
  - Implementation, compliance, timing
- FAST Act changes
  - Increased Section 130 funding
  - More flexibility with projects
  - Same staffing levels
- Increased State Funding for Crossings
  - New surface program
  - Additional workloads on railroads
  - Additional workload on staff


MDOT
Michigan Department of Transportation
RAIL ROAD CROSSING
STOP ON RED SIGNAL
THOMAS EDISON INN
Questions/Answers
Thank You!

Discussion

- Any questions for Kris?
  - Training in good communications practices?
  - How to address staff turnover?
- For the audience:
  - How would you compare your program with what you've heard today?
  - Any other best practices you'd like to share with the COI?
- Other questions or comments?
- Remember, unmute your phone or use the chat box.

The Section 130 Program from the Railroad Perspective

Stephen Klinger
Administrator, Grade Crossing Program, Norfolk Southern

Section 130

Railroad Perspective

NS NORFOLK SOUTHERN

Norfolk Southern Railway Company Overview

- Norfolk Southern Railway Company subsidiary operates approximately 19,500 route miles in 22 states and the District of Columbia.
- Serves every major container port in the eastern United States
- Provides efficient connections to other rail carriers.
- Installs/Modifies signals at approximately 300 locations per year.

Key Factors to a Successful Section 130 Program

- Keep your program flexible!
  - A program written only to put signals on passive crossings doesn't take into consideration changes to the community using the crossing. A crossing with flashing lights may need a modification to flashing lights and gates.
  - Build a program that allows for implementation of robust corridor projects around key railroad infrastructure.
    - Railroads have always been the backbone of the American transportation infrastructure and where a railroad hub is, a town will flourish and grow. Collaboration on Section 130 programs is critical to ensure success. The earlier a community can install an overpass and close redundant roadways, the more likely the expansion of the city won't be burdened by train delays due to crew transfer points, mechanical issues on the train, etc.
    - A Section 130 should allow for corridor programs that change out of antiquated equipment. With modernized equipment, crossings can be made more conspicuous to the driver, increasing driver confidence and reducing driving delays due to false activations at crossings. Since the railroad has no authority to modify driver perception of the crossing warning devices, there is a mutual benefit for a good public partnership program that can easily be justified under Section 130 programs for safety concerns.

Key Factors to a Successful Section 130 Program

- Keep the railroad involved from the beginning!
  - At the beginning of your year after you run your various calculations to determine project locations, contact the railroad to schedule the diagnostics.
  - Work directly with the engineering office rather than the field to schedule diagnostics. Not only do field personnel change but the engineering office may have additional information for the field to present at the diagnostic.
  - The railroad's field personnel are an important part of the diagnostic process since the highway authority can only see the physical warning devices. Train detection equipment and signal controllers should be reviewed during the diagnostic review; only the railroad has access to this information.

Key Factors to a Successful Section 130 Program

- Agreements
  - Master agreements can be a large asset to progressing projects quickly! (KEEP THE MASTER AGREEMENT SIMPLE!)
  - Do not try and make a grand plan master agreement that includes Section 130 program crossings, bridge installation, roadway widening, right of way acquisition, etc. These agreements become so cumbersome that execution can be drawn out over a decade.
  - The agreement should cover:
    - When the Preliminary Engineering starts and by what means (a cover letter request referencing the master agreement and a copy of the diagnostic form and recommendations for installation).
    - How the project will be Authorized for Construction. The best process we have had is a one-page Authorization for Construction that includes the site information, reference to the master agreement, any state project number designator ,and a signature field for the railroad authorized representative and state authorized representative.
    - The authorized representative should be referenced by title in the master agreement for each party and should be delegated to a level who has the financial authority but is also easily accessible to execute the agreement.

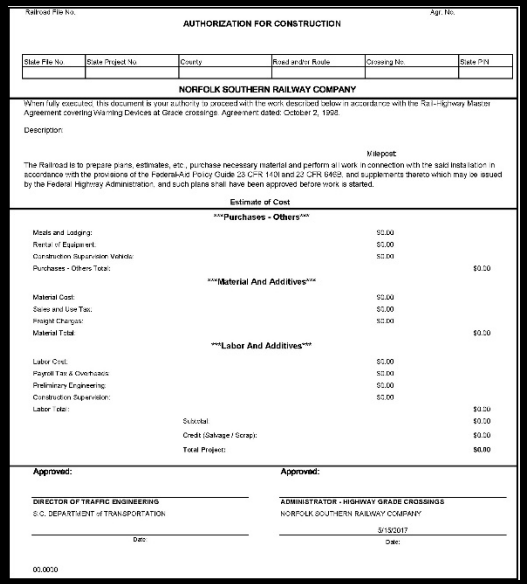
Key Factors to a Successful Section 130 Program

- Project Phasing
  - Understand the railroad's process for scheduling diagnostics, preliminary engineering & construction. Working with Class I railroads and shortline railroads can be quite different.
    - Class I railroads operate across a large number of states and typically have 1 office that deals with a large group of states. Therefore, the railroad likes to keep one procedure across all the states to maintain conformity.
    - Shortline railroads may operate only in your state and are therefore much more flexible to state procedures.
  - Understand the other railroad obligations that may delay the project (such as Positive Train Control implementation) or complexity of circuit design based on existing incompatible train signaling equipment.

Outcome of Master Agreement Programs

- Master Agreements drop project timing by approximately 2 weeks on PE portion of project and a minimum of 1 month on Construction Agreement review.
- Single point of contact on both the railroad and state side make for better team building.
- No need for a PE Agreement prior to starting a project.
- Definable process to determine what constitutes a request for PE and Authorization for Construction.
- Uniform billing procedures across projects reduces confusion from billing clerks on the railroad and state side.
- Over half of our crossing projects annually are for 4 states, which utilize master agreements.

Agreement Times



Railroad File No. Agr. No.

AUTHORIZATION FOR CONSTRUCTION

State File No.	State Project No.	County	Road and/or Route	Crossing No.	State PIN

NORFOLK SOUTHERN RAILWAY COMPANY

When fully executed, this document is your authority to proceed with the work described below in accordance with the Rail-Highway Master Agreement covering Warning Devices at Grade crossings. Agreement dated: October 2, 1992.

Description:

Milepost:

The Railroad is to prepare plans, estimates, etc., purchase necessary material and perform all work in connection with the said installation in accordance with the provisions of the Federal-Aid Policy Guide 23 CFR 140I and 22 CFR 646B, and supplements thereto which may be issued by the Federal Highway Administration, and such plans shall have been approved before work is started.

Estimate of Cost

Purchases - Others

Meals and Lodging:	$0.00	
Rental of Equipment:	$0.00	
Construction Supervision Vehicle:	$0.00	
Purchases - Others Total:		$0.00

Material And Additives

Material Cost:	$0.00	
Sales and Use Tax:	$0.00	
Freight Charges:	$0.00	
Material Total:		$0.00

Labor And Additives

Labor Cost:	$0.00	
Payroll Tax & Overhead:	$0.00	
Preliminary Engineering:	$0.00	
Construction Supervision:	$0.00	
Labor Total:		$0.00
Subtotal		$0.00
Credit (Salvage / Scrap):		$0.00
Total Project:		$0.00

Approved:

DIRECTOR OF TRAFFIC ENGINEERING
S.C. DEPARTMENT of TRANSPORTATION
Date:

Approved:

ADMINISTRATOR - HIGHWAY GRADE CROSSINGS
NORFOLK SOUTHERN RAILWAY COMPANY
5/15/2017
Date:

00.0000

- Couple Hours

- Agreed Verbiage = Secretarial Review for changes (approx. 2 weeks)
- Changed Verbiage = 1 Month Minimum

NORFOLK SOUTHERN

Discussion

- Any questions for Stephen?
- We have a few other railroads on this call - how would you compare your program with what you've heard today?
- Any other best practices you'd like to share with the COI?
- Other questions or comments?
- Remember, unmute your phone or ask your question in the Chat Box.

Closing Comments and Resources

Section 130 Resources

- Highway-Railway Grade Crossing Action Plan and Project Prioritization Noteworthy Practices
  - Published in 2016, contains a model state action plan, identifies solutions for improving safety at crossings, and has a section in Appendix C that specifically addresses blocked crossings.
- Also Section 130 Program information at: http://shrp2.transportation.org/documents/R16_Innovation_Library/FHWA/FHWA_Section_130_References-2017.pdf
- FHWA Section 130 webpage: https://safety.fhwa.dot.gov/hsip/xings/
- Kelly Morton, Transportation Specialist, FHWA, Office of Safety; 602-382-8976 or Kelly.Morton@dot.gov.

For More Information

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AASHTO Co-Product Lead
phutton@aashto.org

Kate Kurgan
AASHTO Co-Product Lead
kkurgan@aashto.org

Additional Resources:

GoSHRP2 Website:	fhwa.dot.gov/GoSHRP2
AASHTO SHRP2 Website:	http://shrp2.transportation.org
R16 Product Page	http://shrp2.transportation.org/Pages/R16_RailroadDOTMitigationStrategies.aspx

Thanks for joining us!