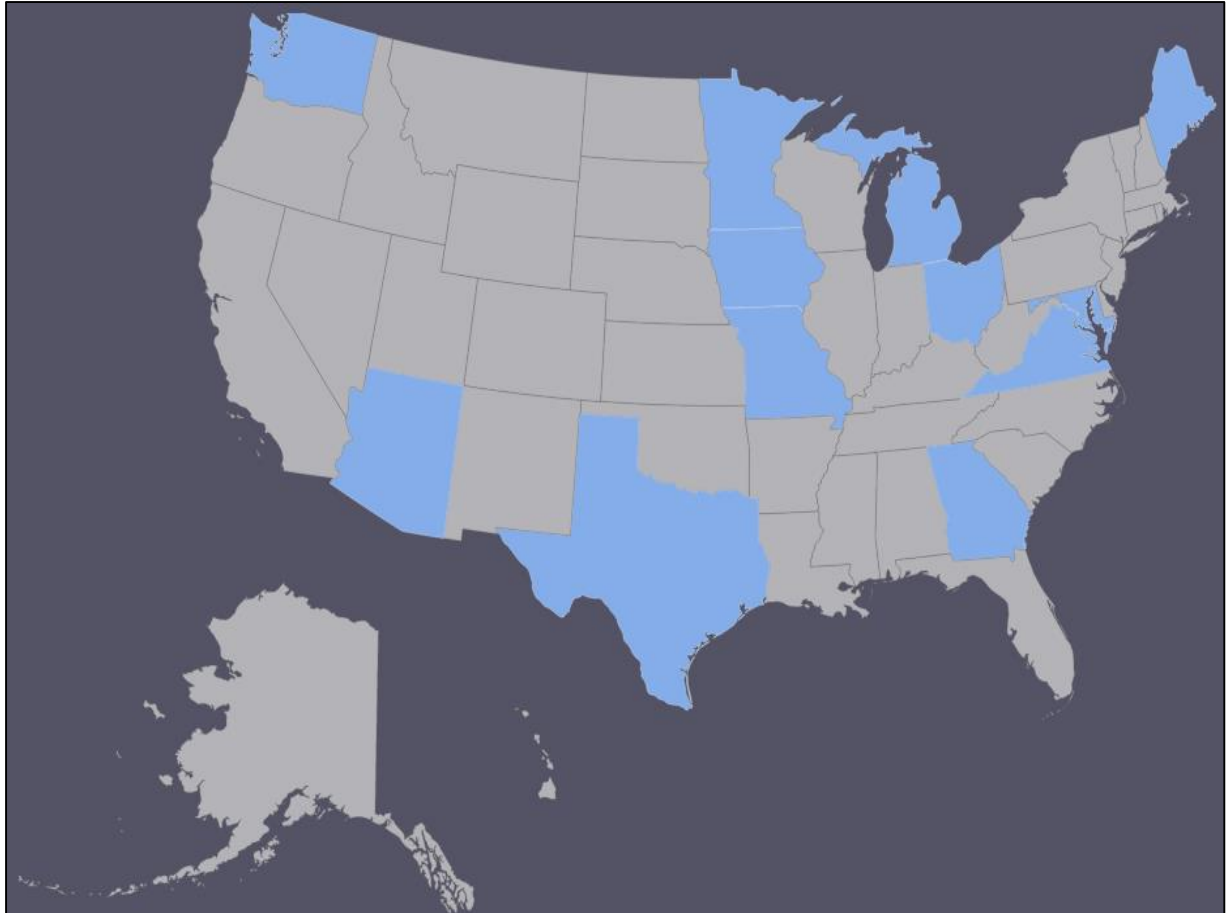


What's Hot in the States...

1. Arizona
2. Georgia
3. Iowa
4. Ohio
5. Maine
6. Maryland
7. Michigan
8. Minnesota
9. Missouri
10. Texas
11. Virginia
12. Washington





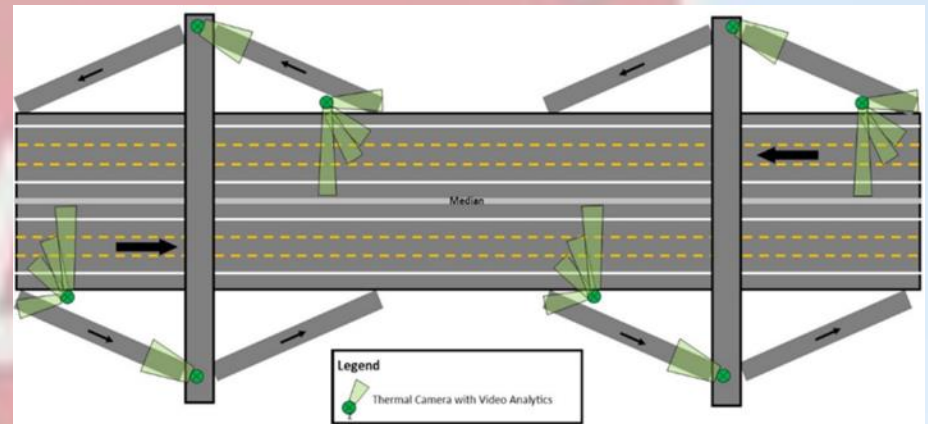
Steve Boschen

Division Director
Infrastructure Delivery & Operations Division

Wrong-Way Driving (WWD) Detection and Warning System Pilot Deployment

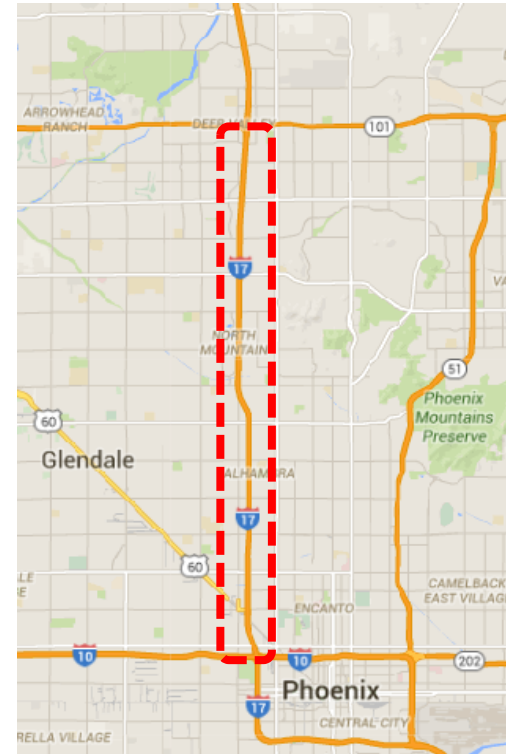


- Detection
- Notification
- Tracking
- Warning



WWD Pilot Project

- **14-Mile Pilot Section**
- **Thermal Cameras with Video Analytics**
- **Construction & System Integration - \$4.0 Million**
- **Estimated Completion Date – December of 2017**



NEPA Assignment

- **CE Assignment MOU – Fall 2017**
- **NEPA Assignment Program MOU – Spring 2018**
- **Why?**
 - **More efficient decision-making saving time and money (value added)**

What's Hot at the Georgia Department of Transportation

C. Andy Casey, PE, State Roadway
Design Engineer

Gail A. D'Avino, PhD, Assistant State
Environmental Administrator

Avoidance & Minimization Measures Meeting (A3M)

Project team meets to discuss
avoidance and minimization
measures once all environmental
resources identified

Schedule Activity (P6)

- ▶ Records point in time that these activities should already be occurring – TIME NOT ADDED TO SCHEDULE
- ▶ Occurs after “Resource Identification Complete” and Before “Environmental Receipt of Preliminary Plans” [assess effects]
- ▶ Occurs after “Develop Preliminary Cross Sections” and before “Conduct QA of Preliminary Geometry”

Process benefits

- ▶ One alternative analysis conducted (& recorded) satisfying requirements for Section 4(f), Section 106, Section 7, Section 404(b)(1)
- ▶ Record reduction in environmental impacts (environmental performance measure)



Electronic Files as the Controlling Document

2017 SCOD\SCOE Joint Annual Meeting

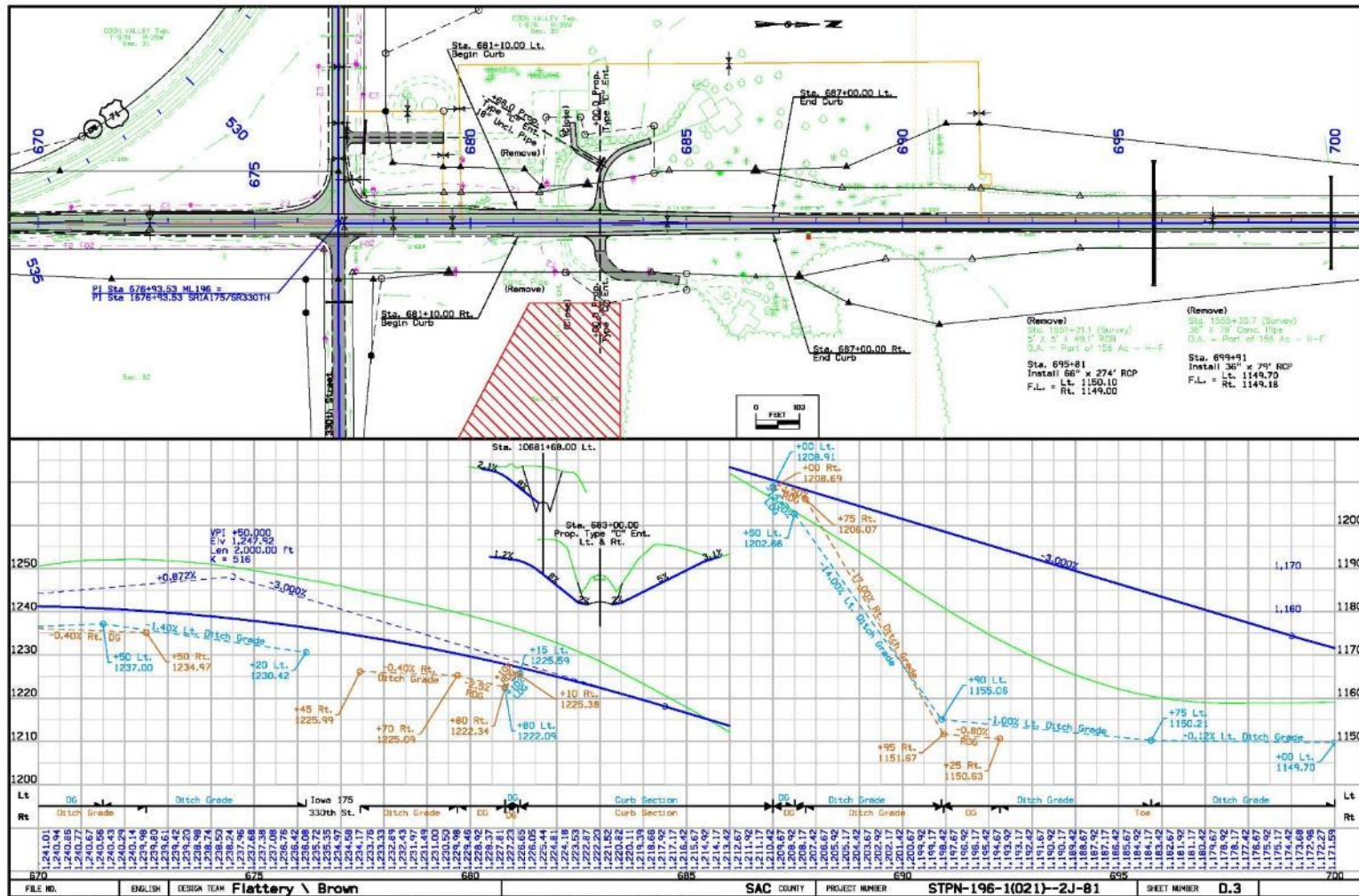
July 17, 2017

Michael J. Kennerly P.E.

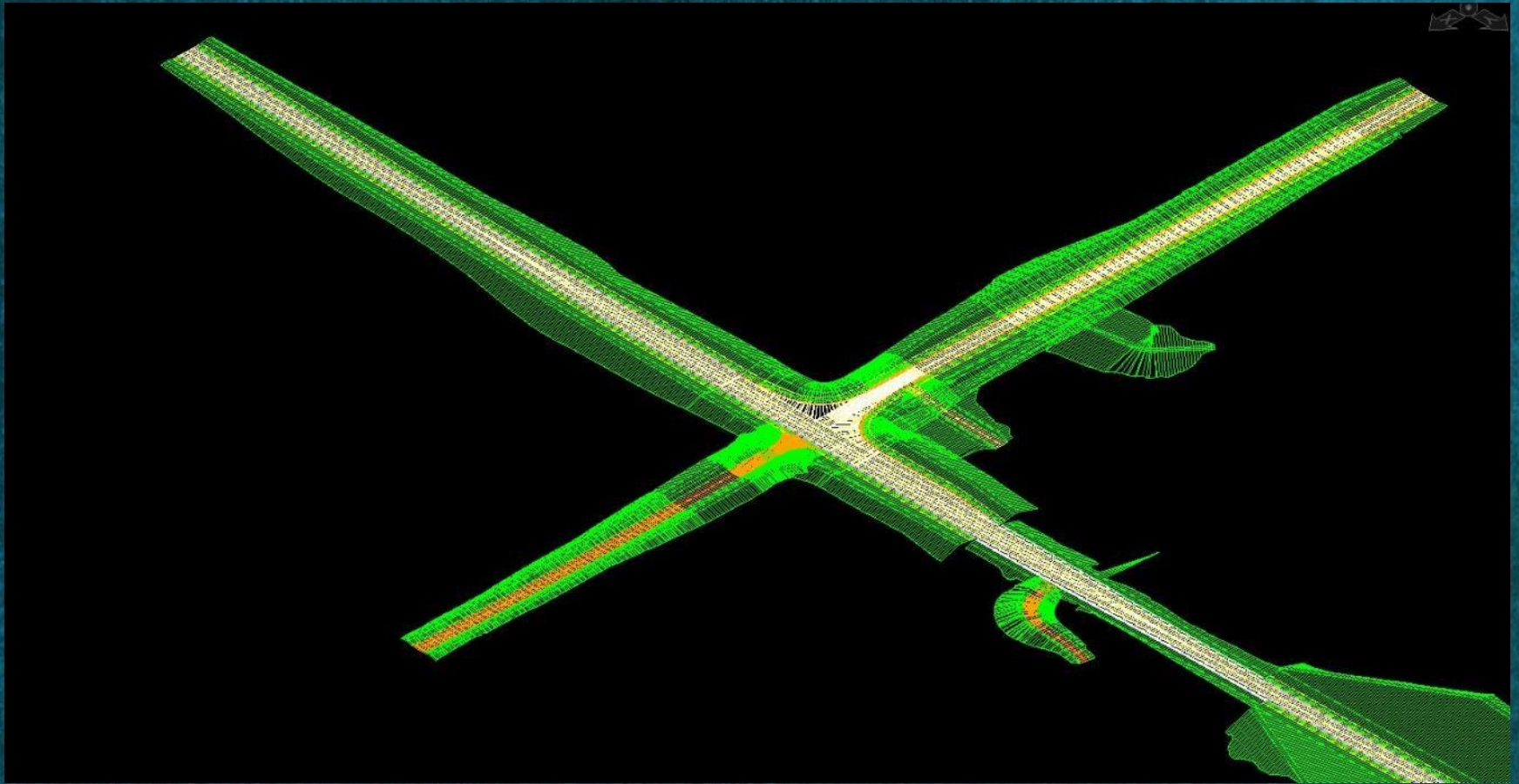
Director of the Office of Design

Iowa Department of Transportation

Moving from 2D Letting Documents



To 3D Letting Documents



Electronic File as the Controlling Document

- Phase 1
 - Pilot project in 2015
 - 6 Projects in 2016
 - All Grading, Paving and Grade and Pave projects designed in-house in 2017.
- Phase 2
 - All Consultant designed Grading, Paving and Grade and Pave projects will have the electronic files as the controlling document. Timetable TBD.
 - Currently working with a joint committee made up of representatives from the AGC, ACEC, and Iowa DOT on issues associated with the transition to the electronic file as the controlling document.
- Developing a Roadmap for a complete electronic plan that can be used through the life-cycle of the asset.

Questions

**THE ROAD TO SUCCESS
IS ALWAYS
UNDER CONSTRUCTION**



Iowa Hot Topics
AASHTO SCOE/SCOD joint meeting
July 17, 2017

Iowa DOT
Office of Location and Environment

Iowa DOT-DNR Partnership

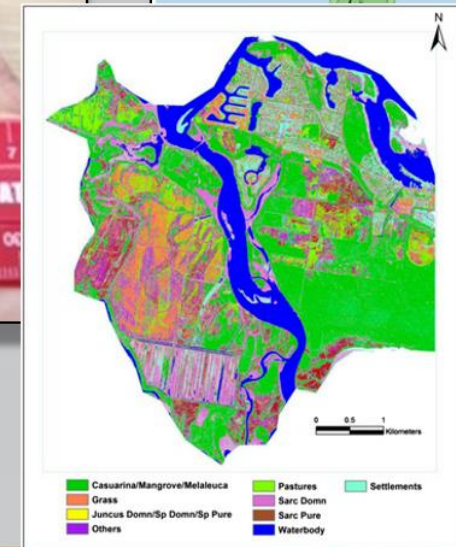
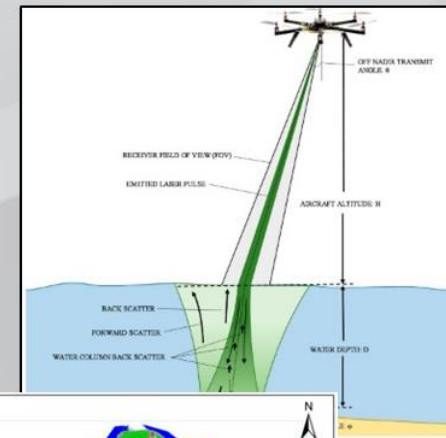
In-Lieu Fee
Stream Mitigation
Program



Wetland Banking
Feasibility Study



Using Remote Sensed Data for Environmental Assessment





**I-74 construction scheduled to start
within a month**

**Mussel Relocation – 150,000 mussels
relocated**

Project Website: I74riverbridge.com



Bradford Foley, PE

Highway Program Manager
MaineDOT

Maine Atlantic Salmon Programmatic Consultation



- USFWS
- USACE
- Maine DMR
- NMFS-NOAA

Programmatic Biological Assessment for Transportation Projects for the Gulf of Maine Distinct Population Segment of Atlantic Salmon and Designated Critical Habitat

U.S. Fish and Wildlife Service Jurisdiction



June 2016

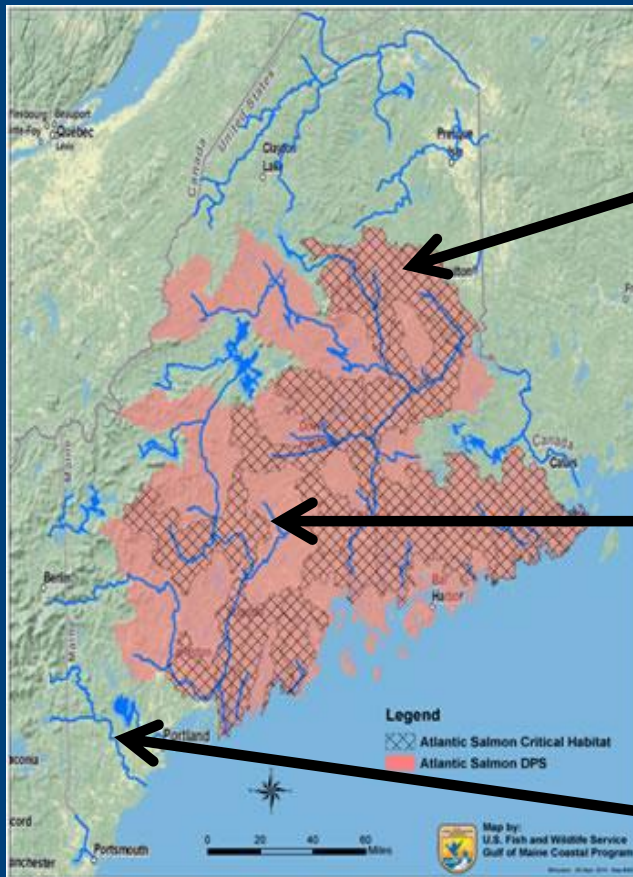
Submitted by:

Maine Department of Transportation

Federal Highway Administration

US Army Corps of Engineers

MAP Commitments



Tier 1: critical habitat

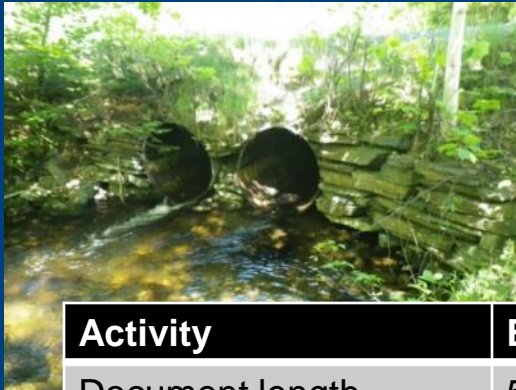
1.2 x bank full width + habitat connectivity design + BMPs

NO invert or slip lining

Tier 2: distinct population segment, no critical habitat

1.0 x bank full width + mitigation + BMPs

Tier 3: no DPS, no effect BMPs



Benefits By the Numbers

| Activity | Before MAP/ILF | After MAP/ILF |
|-----------------------------------|------------------|--------------------------|
| Document length | 50-100 pages | 1 page |
| Biologist preparation | 40 hours | 1-2 hours |
| USFWS review | 26 weeks average | 1-2 weeks |
| Consultations completed 'on time' | 8% | 100% |
| Design changes | Minimal | None |
| BMPs | Added cost/hours | Incorporated in estimate |
| In lieu fee mitigation | Unpredictable | Incorporated in estimate |
| Habitat units 'benefited' | 0 | ~685 per 3-yr work plan |
| Number of large culverts | X | 2X |

Jason Ridgway, PE
Director, Office of Highway Development

Sonal Ram, PE
Director, Office of Environmental Design

AASHTO SCOE-SCOD Meeting
July 17, 2017

e-Bidding - Currently implementing electronic bidding utilizing Bid Express with full implementation anticipated end of Summer 2017, handful of projects currently advertised and on the street, with first bid openings occurring this month.

e-Specification Book - Implemented May 2017 using online Wiki format.

e-Construction - Currently developing design standards to ensure consistent 3D file deliverable for construction.

GIS Right of Way layer - Geo-referencing plats has been ongoing for new plats but now starting an effort to geo-reference all existing (50K+) plats.

Practical Design - Implementing MDOT-wide to other non-highway business units using established MDOT Practical Design Policy.

Developing guidance for the development of Purpose and Need for ALL types of projects.

HSM - More utilization and focus on the HSM for:

- Purpose and Need development
- Goals and objectives development
- Design decisions/exceptions.

FHWA providing NHI training – July 26-27, 2017.

MASH Implementation - Having products to hit sunset dates.

SHA Bay Restoration Program

Stormwater MS4 Permit (2015-2020) –

- Bay TMDL Pollutants – Sediment, Nitrogen, Phosphorous
- Strategies – SW Facilities | Stream Restoration | Trees | Outfalls

Metrics - Impervious Acres Treatment -

5000 impervious acres in 5 years over \$500M

Planning  **Construction Completion**

Largest Environmental Program, dedicated TTF in CTP

Key Takeaways –

- Balancing cost/treatment efficiencies
- Induced inflation, Rapidly evolving industry
- Encroachment, SW Asset Management

Kristin Schuster Engineer of Design Michigan DOT

JULY 30, 2016



Environmental Services Section

- Eastern Massasauga Rattlesnake
- Health Risk Assessments
- Liaison position at USFWS

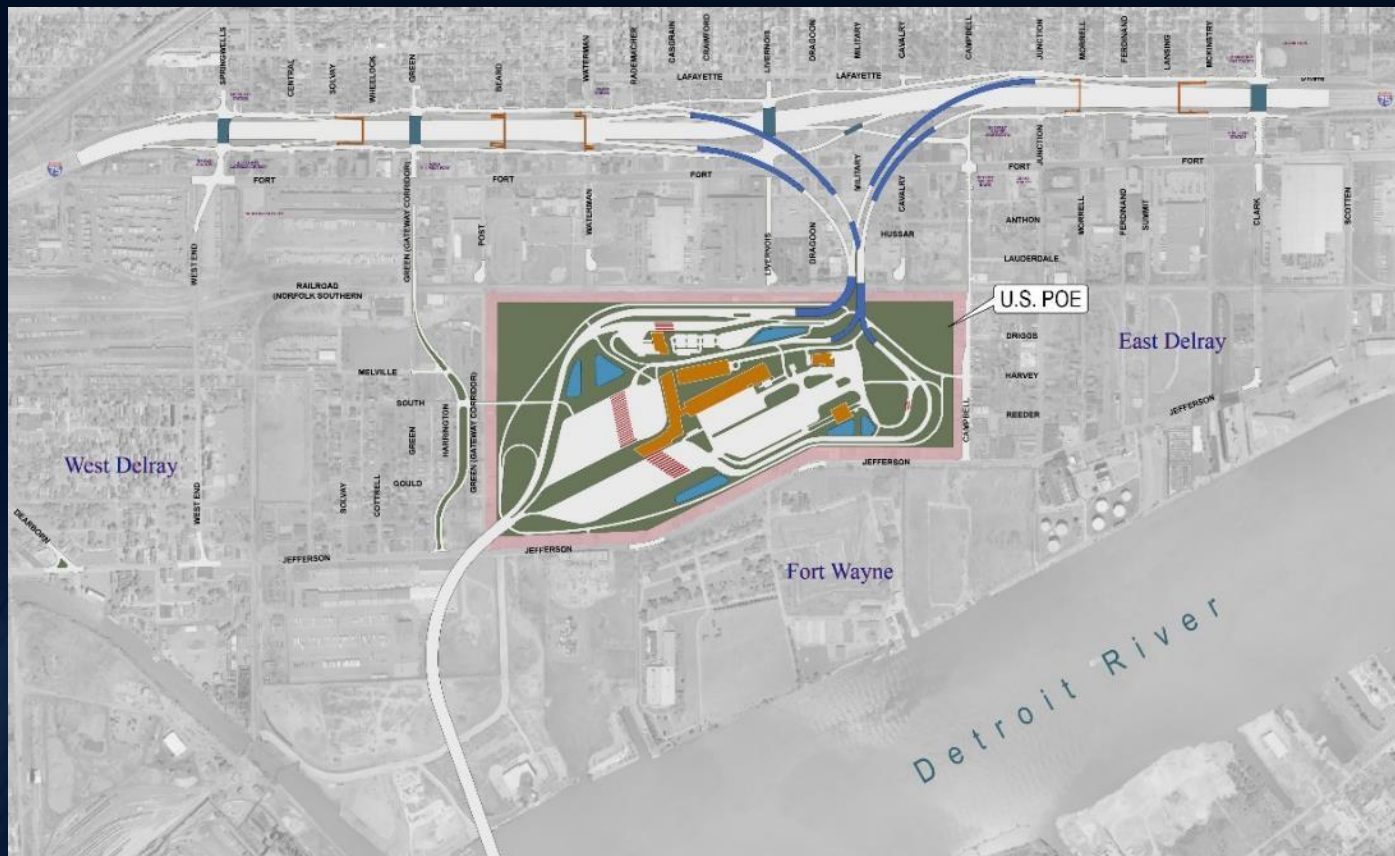


Design / Development

- Performance Based Practical Design
- Inclusion of Data as part of the construction contract
- MASH
- 30 and 50 year pavements



Gordie Howe International Bridge





SCOD SCOE

What's Hot at MnDOT?

Chris Roy, MnDOT Assistant Division Director

Lynn Clarkowski, MnDOT Director of Env Stewardship

What's Hot at MnDOT?

2017 Legislative Session in Minnesota appropriated an additional \$1+B in bonds/cash over 4 years. What's hot is delivering the additional projects utilizing innovation, alternative delivery and efficiencies. The additional funding requires 15% efficiencies.

Design – What's Hot?

- Plan Quality Issues
- Attrition with Skilled Design Staff Retiring/Moving On
- Perf Based Practical Design – Getting to Wide Implementation
- Alternative Procurement Successes – D/B and CMGC

Environmental – What's Hot?

- Pollinators

I-35 Monarch Highway

MOU, Branding

Mowing/Haying Ditch Permits

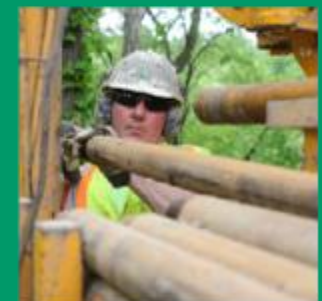
- Highway Sponsorship Program Legislation (MN Statute 160.801)
- Cultural Resources Consultation with Tribal Governments for State Funded Projects?
- Crushed Concrete Re-Use Issues



Missouri

Tim Hill, Administrator
ODOT Office of Environmental Services
Tim.Hill@dot.ohio.gov
614-644-0377

23 USC 108



OHIO DEPARTMENT OF
TRANSPORTATION

23 USC 108

- Early ROW Acq using Fed Funds
 - Allows for acquisition prior to NEPA approval- w/Fed \$
 - Can address critical path needs on your project
 - Certain rules apply(*but they are easy*)....

23 USC 108 - EARLY ROW ACQUISITION

○ Rules:

- Must clear the “act” of buying ROW- simple C1 NEPA approval for the property(ies)
- No Historic/parks
- Can’t be used as an excuse not to do something else....
- Arms length transaction... no condemnation
- Preferred alt must have been presented to public and had a chance to comment



TEXAS DEPARTMENT OF TRANSPORTATION



WHAT'S HOT IN PROJECT DELIVERY?!

1) Title VI Investigation and Resolution

*Carlos Swonke, Director
TxDOT Environmental Affairs Division*

Harbor Bridge EIS Title VI Investigation

Project Overview

- Corpus Christi, TX
- FEIS signed Nov. 25, 2014
- \$900 million Design-Build

Title VI Complaint

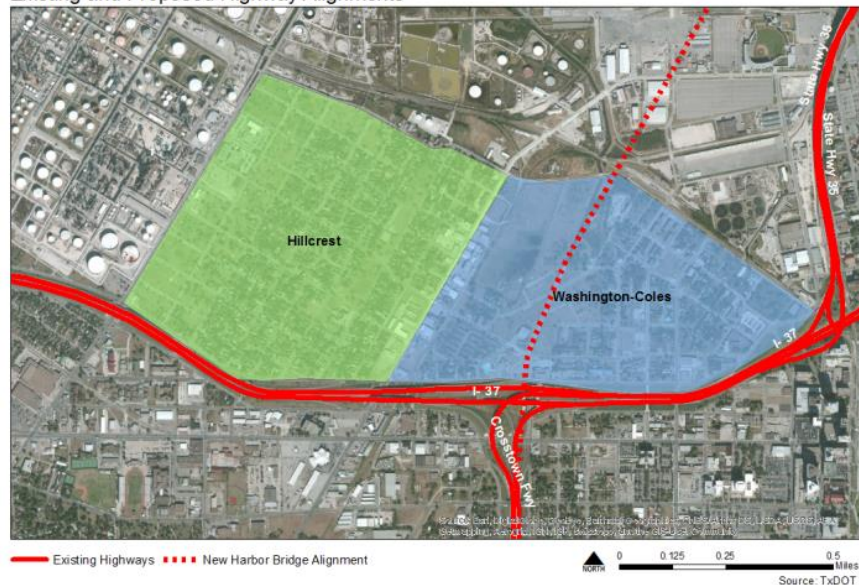
- Filed with FHWA's Office of Civil Rights on March 13, 2015 - three months after FEIS was signed, but before ROD
- TxDOT intentionally discriminated against minority residents of Hillcrest and Washington Coles by implementing discriminatory procedures during the environmental review process, including site selection and public participation

Resolution

- FHWA / TxDOT Voluntary Resolution Agreement
 - TxDOT responsible for Voluntary Acquisition Program (neighborhood buyout)
- ROD signed January 8, 2016



Existing and Proposed Highway Alignments



Title VI Investigation – Harbor Bridge EIS

- Summer 2016 – begin buyout offers
- Fall 2016 – questions: benefits for landlords, undocumented immigrants
- January 18, 2017 violation letter from FHWA
- February 1, 2017 resolution agreement with FHWA



Title VI Investigation – Harbor Bridge EIS

| Voluntary Programs in Hillcrest Neighborhood | | | | | |
|--|---------------------|----------------------|----------------|----------------|-------------------|
| Corpus Christi, Texas | | | | | |
| July 2017 | | | | | |
| | | | | | |
| Category | Eligible Properties | Requested an Offer | Offer Accepted | Offer Declined | Closing Completed |
| Owner Occupants | 209 | 128 | 37 | 2 | 8 |
| Landlords | 276 | 137 | 49 | 2 | 2 |
| Business | 13 | 5 | 0 | 0 | 0 |
| Total | 498 | 270 | 86 | 4 | 10 |
| | | | | | |
| | | | | | |
| Category | Eligible Households | Requested Relocation | Offer Accepted | Offer Declined | Vacated Site |
| Tenants | 305 | 90 | 0 | 0 | 0 |

Estimated cost \$45 million - the Port of Corpus Christi pays the first \$20 million

Interagency Collaboration – Key to Permitting Success

Angel N. Deem, Environmental Division Director

Monday, July 17, 2017

Project Challenges

- **Route 460 Commonwealth Connector**
 - Proposed 55-mile long project on new location with nearly 1,000 acres of wetland impacts
 - U.S. Army Corps of Engineers (USACE) questioned permissibility, limited funding, and public concern
- **Route 460 Project Southeast Virginia**
 - Supplemental Environmental Impact Statement prepared to reconsidered proposed improvements
 - Joint Federal Highway and USACE document
 - Identified 16-mile long project that would address Purpose and Need while reducing impacts

Permitting Challenges

- **Impacts: 35.77 acres wetland, 6,874 linear feet streams**
 - Included high ecological function, relatively uncommon in Virginia, difficult to replace or mitigate
 - Permittee responsible mitigation (restoration and preservation)



- **Interagency team for SEIS enhanced to tackle A&M and develop compensatory mitigation**

Successful Outcomes

- **Functional assessment**
 - Collaboratively developed through interagency team
 - Pulled from 2 HGM models with extensive EPA & USACE input
 - Identified functional loss and uplift requirements
- **Mitigation plan**
 - Restoration sites identified to provide functional uplift to offset impacts; preservation of cypress/tupelo to state-managed preserve to replace temporal loss
- **Permits acquired (10 months after JPA submittal)**



Washington