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
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
Bradford Foley, PE

Highway Program Manager
MaineDOT
Maine Atlantic Salmon Programmatic Consultation

- USFWS
- USACE
- Maine DMR
- NMFS-NOAA
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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Before MAP/ILF</th>
<th>After MAP/ILF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document length</td>
<td>50-100 pages</td>
<td>1 page</td>
</tr>
<tr>
<td>Biologist preparation</td>
<td>40 hours</td>
<td>1-2 hours</td>
</tr>
<tr>
<td>USFWS review</td>
<td>26 weeks average</td>
<td>1-2 weeks</td>
</tr>
<tr>
<td>Consultations completed ‘on time’</td>
<td>8%</td>
<td>100%</td>
</tr>
<tr>
<td>Design changes</td>
<td>Minimal</td>
<td>None</td>
</tr>
<tr>
<td>BMPs</td>
<td>Added cost/hours</td>
<td>Incorporated in estimate</td>
</tr>
<tr>
<td>In lieu fee mitigation</td>
<td>Unpredictable</td>
<td>Incorporated in estimate</td>
</tr>
<tr>
<td>Habitat units ‘benefited’</td>
<td>0</td>
<td>~685 per 3-yr work plan</td>
</tr>
<tr>
<td>Number of large culverts</td>
<td>X</td>
<td>2X</td>
</tr>
</tbody>
</table>
Presented by Integrated Designs, Inc.

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.


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  I  Stream Restoration  Trees  I  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

Eric Schroeter, Missouri State Design Engineer
eric.schroeter@modot.mo.gov
Tim Hill, Administrator
ODOT Office of Environmental Services
Tim.Hill@dot.ohio.gov
614-644-0377
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
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
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
### Voluntary Programs in Hillcrest Neighborhood

**Corpus Christi, Texas**

**July 2017**

<table>
<thead>
<tr>
<th>Category</th>
<th>Eligible Properties</th>
<th>Requested an Offer</th>
<th>Offer Accepted</th>
<th>Offer Declined</th>
<th>Closing Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Occupants</td>
<td>209</td>
<td>128</td>
<td>37</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Landlords</td>
<td>276</td>
<td>137</td>
<td>49</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Business</td>
<td>13</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>498</strong></td>
<td><strong>270</strong></td>
<td><strong>86</strong></td>
<td><strong>4</strong></td>
<td><strong>10</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Eligible Households</th>
<th>Requested Relocation</th>
<th>Offer Accepted</th>
<th>Offer Declined</th>
<th>Vacated Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenants</td>
<td><strong>305</strong></td>
<td>90</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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 permittability, 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) required

• 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)**
Getting Green and Practical

THAT’S HOT!

Megan White, P.E., Environmental Services Director
AASHTO SCOE/SCOD in Des Moines, IO
July 17, 2017
Changing Planning & Project Delivery

Practical Planning

Practical Design

Multidisciplinary, Multimodal, Multiagency
Welcome to the Corridor Sketch Database
May 12, 2017

If you have questions, please contact:
Dan Cote
Systems and Data Analyst
360.705.7890 (PBX 7890)
coteyd@wsdot.wa.gov
Design/Environment: What Works Where and Why?